# Art Therapy and Eating Disorders: A Mixed Methods Investigation

Submitted by

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**Figure 1**

*Photographic Detail of Process 1*

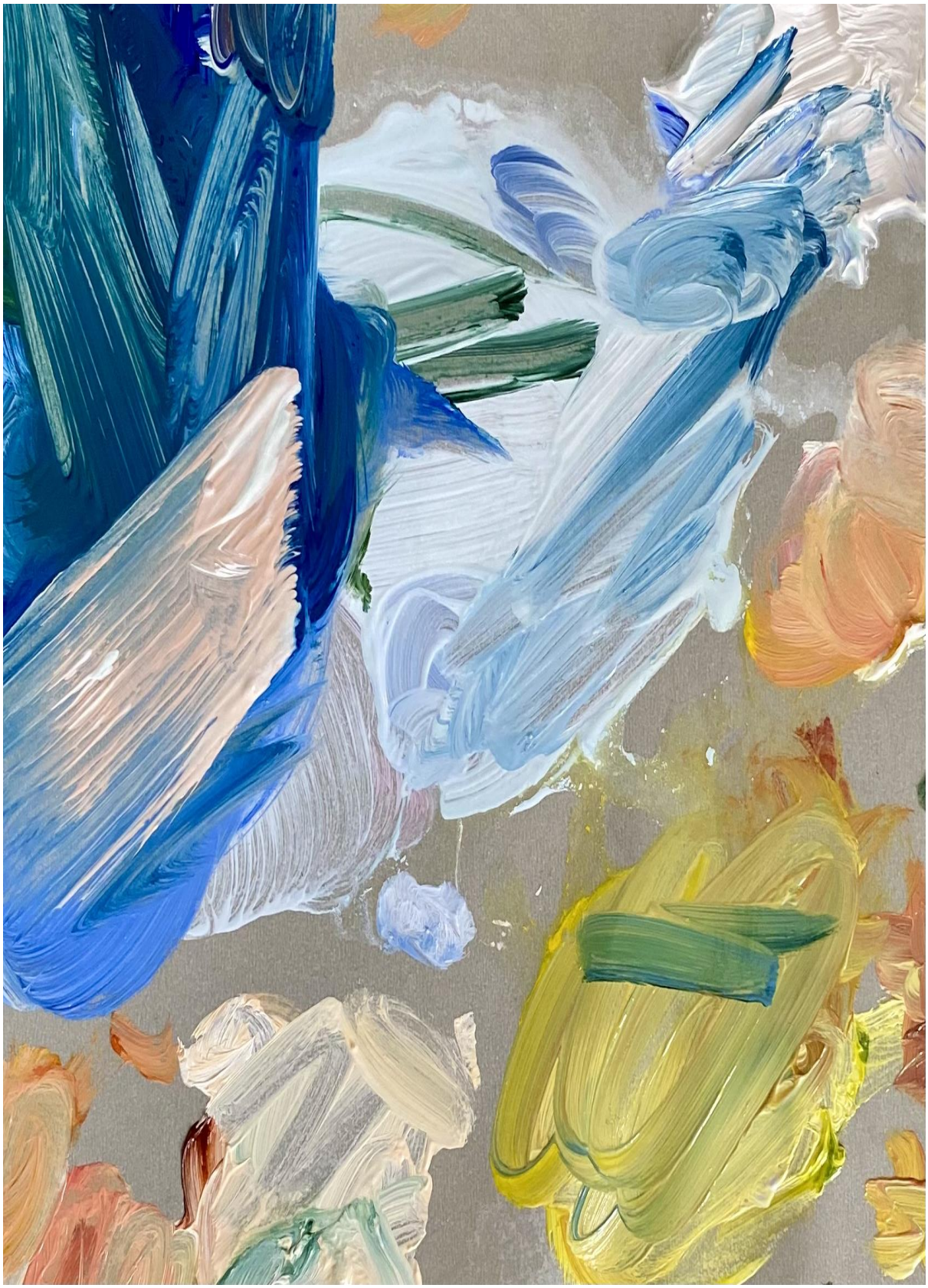
**Table of Contents**

**List of Figures**

**List of Tables**

**Figure 2**

*Photographic Detail of Palette 1*



**Abstract**

The aim of this thesis was to evaluate the effectiveness and acceptability of art therapy for people with eating disorders. This evaluation also included a focus on the possible impact of art therapy on feelings of shame. First, a systematic review of the available evidence on the use of art therapy for people with eating disorders was completed and was guided by the Joanna Briggs Institute for conducting systematic reviews. Second, a mixed methods feasibility study evaluated the feasibility of conducting a large-scale randomised controlled trial. Six feasibility domains proposed by Bowen and colleagues were investigated, including *demand, implementation, practicality, limited efficacy, adaptation,* and *acceptability*. Nine adults with anorexia nervosa took part in 1.5-hour group art therapy sessions twice a week across an 8-week Day Patient Program at the Royal Melbourne Hospital, Victoria, Australia. Interviews were conducted at weeks 4 and 8, and data were analysed using thematic analysis. Outcome measures included the World Health Organisation Quality of Life Instrument – Short Version and the Experience of Shame Scale, and both were measured at five timepoints (at baseline and weeks 2, 4, 6 and 8). In addition, the Session Rating Scale was administered after each session. A convergent, parallel mixed analysis design was used to integrate methods. The systematic review identified three mixed methods case series studies. Qualitative findings showed that art therapy promoted self-expression, self-awareness, new perspectives, pride and distraction. Quantitative findings indicated significant improvements in quality of life and mental health outcomes. Although, findings were limited due to poor study quality. The feasibility study showed that conducting a large-scale randomised controlled trial would only be feasible if key issues could be addressed, such as high attrition rates. However, art therapy was shown to be acceptable, practical to run, and adaptable. Qualitative findings showed that art therapy facilitated self-expression, flexibility, accomplishment and connectedness in participants. No adverse events were recorded. Overall, the evidence for art therapy for eating disorders is lacking and further research is required to determine the effectiveness and acceptability of art therapy for eating disorders.

*Keywords:* art therapy, eating disorders, mixed methods, systematic review, feasibility study

**Statement of Authorship**

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis accepted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

The feasibility study presented in Chapter Four was approved by the Melbourne Health Human Research Ethics Committees (HREC/48205/MH-2018), was also noted as being externally approved by the La Trobe University Human Ethics Committee. This work was supported by an Australian Government Research Training Program Scholarship.

Signed: Caryn Griffin

Date: 16 April 2021

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I am grateful to the women who participated in this research project who offered their time and shared their experiences. I want to also acknowledge the staff at the eating disorders unit at the Royal Melbourne Hospital who helped to make this research project possible, in particular Helen Kelly and Loida Dimapilis-Kanniah. Thank you to my partner, Holly, whose reassurance, thoughtfulness and humour encouraged my writing and also provided much needed distractions. Lastly, thank you to family and friends who listened to my dilemmas and triumphs while undertaking this research.

**Figure 3**

*Photographic Detail of Process 2*

## Chapter One: Introduction and Overview

Food nourishes and enriches lives, provides energy to fulfil potentials, and offers sustenance on the most basic human level. However, when relationships to food and eating are out of balance, the impact on the life of an individual is immense. For example, preoccupations with food, weight and appearance can jeopardise health and harm relationships. Self-starvation goes against an inherent drive to exist, while overconsumption can damage the body and cause the mind to suffer. How the body can be pushed to either extreme presents confusion and mystery around food-related illnesses. *Eating disorders* is a term that refers to a series of mental illnesses that comprise unhealthy and complex relationships to food, and produce often debilitating, isolating, and sometimes fatal effects. The experience of living with an eating disorder impacts an increasing number of people worldwide, carries severe implications to quality of life, and offers no easy treatment solution (Deloitte Access Economics, 2020; Hay et al., 2014).

The idea for this thesis emerged out of an impactful experience as an art therapy student on placement at an adult eating disorders unit. This placement took place as part of my Master's level training over eight months during 2016 at the Royal Melbourne Hospital in Melbourne, Victoria, Australia. My role included running group and individual art therapy sessions for inpatients, outpatients and day patients. Hearing and witnessing the stories of the clients who took part in the art therapy sessions showed me first-hand the impacts of eating disorders on individual lives, as well as the complexities of these illnesses. I also became aware of the benefits that art therapy seemed to offer clients, such as temporary relief from distress, or an outlet for the expression of challenging emotions, such as shame. Beyond personal perceptions, little is known about the use of art therapy as a treatment for people with eating disorders.

The broad aim of this thesis was to evaluate the effectiveness and acceptability of art therapy for people with eating disorders. An additional component of the evaluation included whether art therapy can lower feelings of shame. This thesis is overwhelmingly about adults, as

defined by the Victorian State healthcare system (18 to 65 years) (Department of Health and Human Services, 2020), however in the systematic review detailed in Chapter Three, adolescents are also included.

Five chapters contribute to this thesis. Chapter One is a brief overview of the thesis. Chapter Two provides an in-depth overview of the category of mental illnesses referred to as eating disorders, explores the presence and impacts of shame in this population and offers a review of the related art therapy literature. Chapter Three presents a systematic review of the available evidence on the use of art therapy for people with eating disorders, which was guided by the Joanna Briggs Institute (JBI) for conducting mixed methods systematic reviews (Lizarondo et al., 2020a). The aim of the review was to determine the effectiveness of art therapy as well as to investigate the experiences, attitudes and perspectives of people with eating disorders towards art therapy interventions. Qualitative, quantitative, and mixed methods studies were included in the eligibility criteria. Findings showed that art therapy offered several benefits for people with eating disorders, including the promotion of self-expression, self-awareness, new perspectives, pride and distraction. However, the strength of these findings was limited due to the poor methodological quality of the studies. The review process resulted in recommendations for further art therapy research to be conducted with this population to substantiate the findings, including randomised controlled trials (RCT) to produce greater evidence of effectiveness.

Chapter Four presents a mixed methods feasibility study, the aim of which was to evaluate the feasibility of conducting a large-scale RCT using key focus areas for feasibility proposed by Bowen et al. (2009). The feasibility study involved a case series of nine adults with anorexia nervosa (AN) who took part in 1.5-hour group art therapy sessions twice a week across an 8-week Day Patient Program at the Royal Melbourne Hospital. The sessions followed structured and open studio approaches, and incorporated a wide range of art materials to offer participants a range of cognitive, sensory and symbolic experiences. Two semi-structured interviews were conducted at weeks 4 and 8, and data were analysed using thematic analysis (TA). Outcome measures relating to quality of life

and experiences of shame were assessed at baseline and weeks 2, 4, 6 and 8. In addition, a scale that gained an appreciation of what participants thought of the art therapy sessions was administered after each session. Qualitative and quantitative methods were integrated using a convergent, parallel mixed analysis design to investigate six domains of feasibility, including *demand, implementation, practicality, limited efficacy, adaptation,* and *acceptability*. Results showed that conducting a large-scale RCT would only be feasible if key methodological issues could be addressed, such as high attrition rates leading to missing data. However, feasibility was shown in relation to the acceptability of art therapy to the participants, the practicality of running the sessions, and the ability to adapt the art therapy intervention to respond to the research environment.

Chapter Five is a discussion of the findings of this thesis, including evidence for the effectiveness and acceptability of art therapy for people with eating disorders, the feasibility of conducting a large-scale randomised controlled trial (RCT), and a discussion of art therapy and shame. Strengths, limitations and recommendations for future studies are presented alongside a summary of implications for practice. Broadly, this thesis found that the current evidence for art therapy for eating disorders is lacking. However, several benefits were shown from the qualitative research component that are worthy of greater inquiry. Further high-quality research is required to evaluate the effectiveness and acceptability of art therapy for eating disorders.

**The Presence and Function of Images in the Thesis**

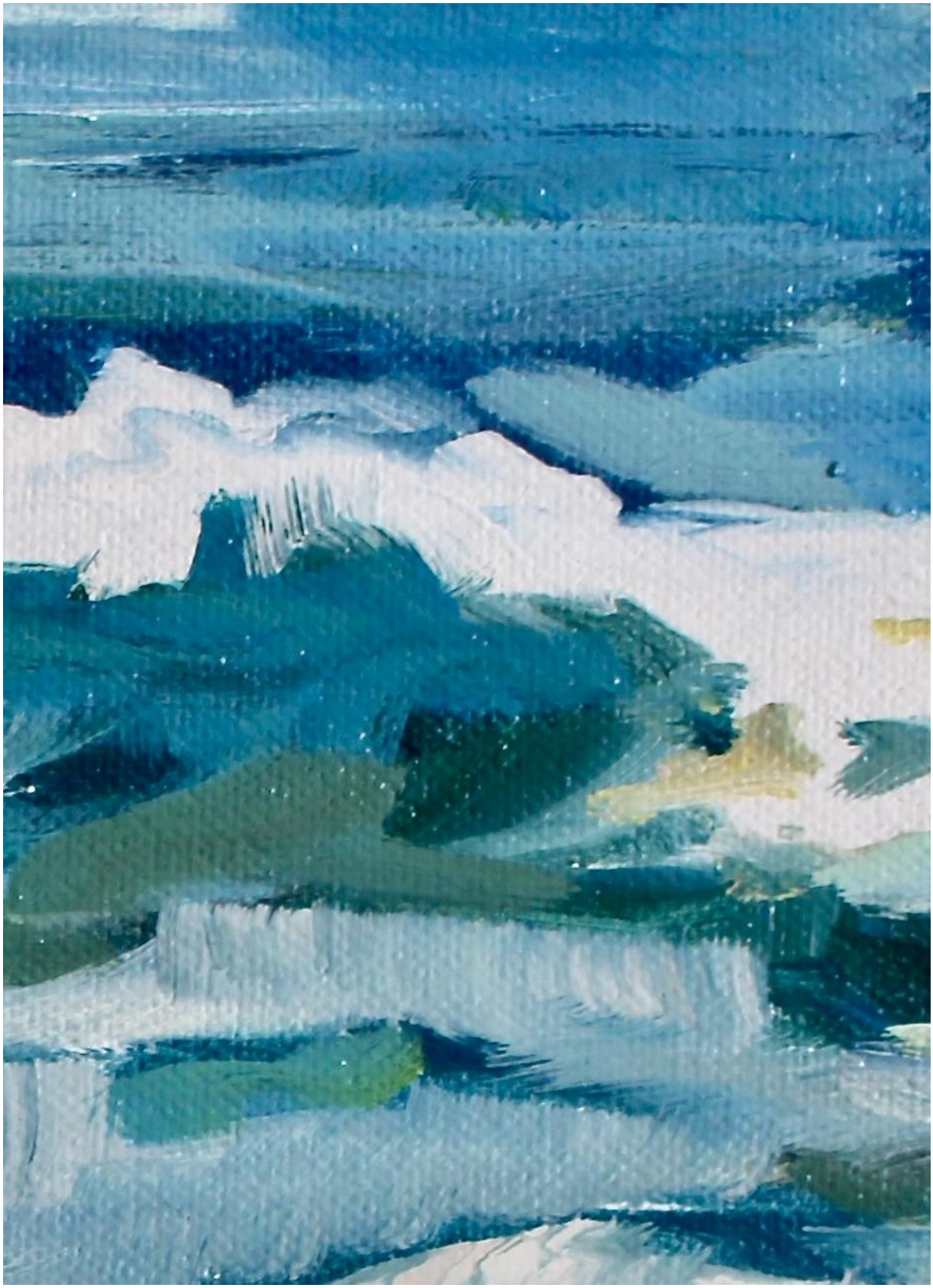
Images are presented in this thesis and serve two separate functions: first, to offer image-based insight into my self-reflective practice during the period of undertaking this study, and second, to provide a visual understanding of the art therapy sessions offered to participants in the feasibility study. Photographic details of artworks that I created and the palettes that I used while undertaking this investigation visually describe aspects of my immersion in self-reflection using paint on canvas. These have a process-oriented focus, with specific emphasis on mark-making, brushstrokes, colour-mixing and a layering of paint. These images are incorporated as visual breaks between chapters

(Figures 1-5, 9, 19, and 23-25). In addition, photographic details are included in Chapter Five – the final chapter – to convey how my practise as an artist has functioned in parallel to my role as a researcher, both reinforcing my sense of art-based ways of knowing myself and offering a space for reflection during the conceptualisation and writing of this thesis. Specifically, the focus on mark-making and process act as metaphors for the development of my thinking. I have not undertaken any analysis of my own art made concurrent with conducting this thesis.

The images presented in Chapter Four – the feasibility study – are my visual descriptions of the activities that took place during the group art therapy sessions. The artworks made by participants were not collected as data for the study to mitigate against any risk that they may feel judged or exposed through their images. This was a decision made when developing the feasibility study design. Therefore, the art seen in this chapter was created by me, either during the art therapy sessions alongside participants, or as a reconstruction afterwards to demonstrate the activity.

**Figure 4**

*Photographic Detail of Process 3*



## Chapter Two: Eating Disorders, Shame and the Role of Art Therapy

### Overview of Eating Disorders

Eating disorders involve the presence of distorted thoughts and behaviours to do with food and eating, weight control, and body image (American Psychiatric Association, 2015). Eight types of feeding and eating disorders are described by the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5), four of which are considered to be major disorders that occur in adolescence and adulthood: *anorexia nervosa* (AN), *bulimia nervosa* (BN), *binge eating disorder* (BED) , and *other specified feeding and eating disorders* (OSFED) (American Psychiatric Association, 2015). AN is defined by a significantly lower body weight than what is developmentally expected, an intense fear of weight gain, and body image disturbance (American Psychiatric Association, 2015). Two subtypes of AN have been identified: *restricting type* and *binge eating/purging type*, in which cross over between the subtypes is highly common. BN involves repeated episodes of binge eating, followed by compensatory purges to prevent weight gain, alongside significant body weight and shape concerns (American Psychiatric Association, 2015). BED is defined by frequently occurring binge eating, where affected individuals feel a lack of control and distress during binge episodes (American Psychiatric Association, 2015). Lastly, OSFED encompasses various eating and food behaviours that do not neatly fit into the other categories (i.e. purging, night eating syndrome, or atypical AN, BN, or BED) (American Psychiatric Association, 2015).

A systematic review that examined evidence from 94 studies across America, Europe and Asia found that the estimated lifetime prevalence of eating disorders was 8.4% for women and 2.2% for men (Galmiche et al., 2019). Moreover, the point prevalence of eating disorders more than doubled over the study period from 2000-2006 (3.5%) to the period 2013-2018 (7.8%), indicating an alarming rate of growth for eating disorders internationally (Galmiche et al., 2019). This review also identified a high rate of eating disorders in adolescents, with a point prevalence of 5.7% (Galmiche et al., 2019). In addition, a growing body of literature indicates that eating disorders occur in older

adults, over 65 years old, and the elderly (Fadgyas Stanculete et al., 2019). One study identified a point prevalence rate of 3.25% in participants – 342 Portuguese women aged between 65 to 94 years old (Conceição et al., 2017). Broadly, OSFED and BED appear to be the most widespread disorders, followed by BN then AN (Galmiche et al., 2019; Micali et al., 2017). Most commonly, the onset of eating disorders occurs during adolescence, however it may occur at any age and can go undiagnosed and untreated for many years (Bulik et al., 2012; Hart et al., 2011). Despite the concerning prevalence rates and seriousness of eating disorders, the causes of these illnesses are poorly understood. The following section explores this issue further, specifically focusing on risk factors that are associated with eating disorders.

**Risk Factors for Eating Disorders**

No single cause has been identified as the reason for an eating disorder to develop, rather research suggests that multiple contributing factors are at play. Some researchers have suggested that eating disorders are manifestations of psychological disturbances that may be credited to past trauma, abuse or abandonment (Delvecchio et al., 2014). Exposure to trauma has been found to be an important area for further research in this clinical group (Backholm et al., 2013), but to attribute to trauma alone is overly simplistic. Recent developments in the field have associated eating disorders with additional factors, such as genetic and environmental (Campbell et al., 2011; Mazzeo & Bulik, 2009; Schur et al., 2009). For example, an elevated risk of developing AN or BN has been recorded where a biological relative has had the disorder, demonstrating potential genetic vulnerabilities (Yilmaz et al., 2015). Further, environmental stress early in life has been found to result in specific temperaments and psychological traits that underpin eating disorders (Halmi et al., 2012; Mazzeo & Bulik, 2009). An example of this can be seen in perfectionism and rigidity in childhood, both of which are found to be precursors to the development of abnormal eating behaviours and weight-related concerns later in life (Halmi et al., 2012). Underpinning traits that have been associated with AN include low self-worth, inflexible thinking, the need to control one's environment, restrained emotional expression and minimal social spontaneity (American Psychiatric

Association, 2015; Thornton et al., 2011). Whereas high impulsivity and sensation-seeking behaviours have been found to underpin BD and BED (Combs et al., 2011; Kenyon et al., 2012). In addition, a growing body of research centres on how early environmental influences, such as malnutrition and stress, may alter genetic expression, which in turn increases the susceptibility to develop an eating disorder (Campbell et al., 2011; Yilmaz et al., 2015). Clearly genetic and environmental risk factors tell an important story about how vulnerabilities to eating disorders begin early in life.

In addition to the impacts of genetic and environmental influences associated with eating disorders, certain sociocultural factors are also considered to be associated with developing an eating disorder. Messages of "good" and "bad" foods along with ideal body type preferences across different cultures are thought to internalise harmful food biases and unhelpful body image standards in children (Mazzeo & Bulik, 2009). Moreover, anxieties and stress may be expressed differently across cultures, impacting on how an individual shows their emotions. In circumstances where emotional expression is limited or internalised, an eating disorder could be an adaptive response to coping (Witztum et al., 2008). One prevailing, yet outdated cultural stereotype is that only young, White, affluent women are most affected by eating disorders (Soutter, 2017). However, it is widely recognised that eating disorders can occur across race, gender, age, class, sexual orientation and place (Gordon, 2001; Pike et al., 2014; Samuels & Maine, 2012).

Despite this gain in knowledge, further inquiry is needed to investigate how people across differing sociocultural groups experience eating disorders and access treatment. Studies suggest that excessive exercise may be a more heavily used behaviour to control weight and shape in men, as opposed to restrictive eating and purging as seen in women (Anderson & Bulik, 2004; Lewinsohn et al., 2002). One reason that men are underreported in the research may be due to an embarrassment for disclosing a stereotyped "female" illness (Thapliyal & Hay, 2014). This stereotype may also be the reason that eating disorders go undiagnosed or unrecognised in men when presenting to medical centres (Bryant-Jefferies, 2005). Further, eating disorder diagnoses may be underreported in people

from lower socio-economic backgrounds or disadvantaged communities due to limited access to health-care or due to financial stress (Hay & Carriage, 2012). An example of this can be seen in Aboriginal and Torres Strait Islander peoples, who are believed to experience eating disorders on the same level as non-Indigenous Australians (Hay & Carriage, 2012). An underreporting of eating disorders in Indigenous Australians is thought to relate to social and financial disadvantage, which impacts on access to health services (Hay et al., 2014).

Nevertheless, there is one component of the young, White female stereotype that seems to hold some truth: sex. Risk estimates for developing AN or BN describe a disparity between females and males, a 10:1 ratio (American Psychiatric Association, 2015). The media has long been blamed for promoting unrealistic body standards in women, and more recently, easy access to online pro-AN and eating disorder forums encourage and even glamorise eating disorders in girls (Rodgers et al., 2015; Soutter, 2017). Further, alongside the increased risk associated with biological sex, the impact of gender identity and sexual orientation on the development of eating disorders is gaining greater attention. People who are transgender report a significantly higher rate of eating disorders and compensatory behaviours when compared to those who are cisgender (Diemer et al., 2018; Simone et al., 2020). Higher rates of eating disorders in transgender individuals may in part be contributed to a higher frequency of body dissatisfaction among this cohort (Hepp & Milos, 2002). Sexual minority (i.e. lesbian, gay and bisexual) youth report higher levels of disordered eating and weight control when compared to their heterosexual peers (Simone et al., 2020), including increased rates of purging, fasting, and/or using diet pills (Institute of Medicine, 2011). Overall, these disparities may reflect broader systemic issues that continue to see complexities in relation to women, transgender and sexual minorities being subject to greater discrimination than heterosexual, cisgender men (Institute of Medicine, 2011; Stice et al., 2004). Overall, an understanding into the far-reaching spread of eating disorders across sociocultural boundaries demonstrates the truly complex nature of these illnesses.

**Burdens of Eating Disorders**

Eating disorders present multifaceted health and psychosocial burdens to the affected individuals, their surrounding caregivers and friends, to healthcare systems, and to the broader community. The unique cruelty of an eating disorder is seen in that food is essential to survive. Most people seamlessly integrate this basic need into daily life without great forethought. For a person with an eating disorder, thoughts of food can be all-encompassing and form part of an everyday struggle. For an individual with AN, for example, eating difficulties are further confounded by cultural and social celebrations where the "sharing of a meal" with family or friends is the norm. For those with BN and BED, extensive secrecy and shame surrounding their bingeing or purging episodes induce feelings of powerlessness and defectiveness on an often daily basis (American Psychiatric Association, 2015). Importantly, the increase in severity of an eating disorder directly correlates with a decrease in health-related quality of life (Jenkins et al., 2011), and detrimental effects can be seen in the social, personal and professional lives of those affected. Indeed, many people with eating disorders experience social isolation and are unable to fulfil their career or academic potentials (American Psychiatric Association, 2015; Jenkins et al., 2011). Furthermore, relapse rates remain high among this population, which in some cases, can present as a lifelong preoccupation with the illness (Carter et al., 2004; Grilo et al., 2012).

The resulting economic burden from eating disorders is vast. One Australian report estimated that the cost to society in terms of cost of care, productivity cost, and loss of economic efficiency was worth AU$69.7 billion in 2012 (Butterfly Foundation, 2012). Similarly, the cost of eating disorders in the United States during 2018-2019 was estimated to be worth US$64.7 billion (Deloitte Access Economics, 2020). Comorbid mental health conditions alone are understood to contribute to higher annual healthcare costs, higher rates of unemployment, and lower earnings when compared to both individuals with and without eating disorders who do not have mental health comorbidities (Samnaliev et al., 2015). These findings suggest that comorbid mental health

conditions need to be considered when treating individuals with eating disorders to reduce the burden of disease more broadly.

Undoubtedly, comorbidities contribute further stress and upheaval to this already vulnerable population. This highlights that the burden of disease is not isolated to the direct effects from the eating disorder alone. Comorbid mental health conditions are experienced at a high rate in this population, particularly depressive disorders, anxiety disorders, bipolar and related disorders, and less so, substance-related disorders (American Psychiatric Association, 2015; Hudson et al., 2007; Swinbourne et al., 2012). Studies conducted in the United States show that comorbid mental health conditions are prevalent in almost half of all individuals with eating disorders, which is significantly higher than in the general population (Hudson et al., 2007; Swanson et al., 2011). Major depressive disorders are particularly high, estimated to occur in individuals with AN at a rate of 40% and BN at a rate of 50% (Hudson et al., 2007). The presence of comorbid depressive symptoms has been found to hinder treatment by interfering with early intervention efforts and increasing rates of drop out during treatment (Masheb & Grilo, 2008; Von Brachel et al., 2014). Another comorbid presentation among those with AN or BN is the reduced ability to identify or differentiate emotions, also known as *alexithymia* (Speranza et al., 2007). Disturbingly, AN has the highest recorded levels of mortality than any psychiatric disorder, with suicide being one of the leading causes of death in this population (Chesney et al., 2014).

Finally, physical comorbidities are also common and varied as the body is subjected to intense nutritional deprivation. Osteoporosis, loss of hair, infertility, changes in brain structure and a poor immune system can occur as a result of malnutrition (Katzman, 2005), while excessive weight contributes to an increased risk of heart disease, obesity and various cancers (Berkus, 2017). Further, chemical imbalances from fluctuating blood sugar levels and a loss of electrolytes due to purging contribute to dehydration, poor concentration and irrational thinking (Berkus, 2017). Comorbid mental health conditions as well as physiological changes as a result of the eating disorder highlight the complex burdens on those affected and the challenges of treating these illnesses.

**Current Treatment Guidelines / Deficits of Treatment**

Entering into treatment for an eating disorder can be extraordinarily complex for the individual, their family and also for health professionals. Goss and Allan (2010) hypothesised that eating disorders may serve a functional purpose in an individual's life, specifically to regulate affect. While eating disorders carry harmful implications for the body and mind, their role in numbing or replacing emotions can produce an illness that is very much intertwined with the individual's life and identity. These complexities must be considered in approaches to treatment and highlight the need for a collaboration of disciplines. Indeed, clinical guidelines recommend multidisciplinary approaches to treat eating disorders, ranging from pharmacological, dietetic, medical, familial and psychological care to maximise chances of recovery and improved quality of life (Hay et al., 2014; National Institute for Health Care Excellence, 2017). When integrated, these treatments work to not only restore an individual's weight to a normal body mass index (BMI), but to also reduce harmful eating behaviours, inaccurate shape and weight perceptions, and to manage mental and physical comorbidities (Hay et al., 2015). Further, due to the complex nature of these disorders, evidence-based practice and eating disorder specific training for health professionals is crucial to ensure safe and effective treatment, as well as a high quality of care (Hurst et al., 2020; McLean et al., 2020).

While there is greater evidence in psychological treatment approaches for some eating disorder types, for others there are no conclusive treatment paradigms. Further, the success of different evidence-based treatments may depend on the age of the client. For example, family-based treatment has been shown to be one of the most effective treatments for adolescents with AN, but not for adults with AN, where no single approach is agreed upon (Agras & Robinson, 2008; Chavez & Insel, 2007). However, a systematic review of randomised controlled trials (RCT)s found that cognitive-behavioural therapy (CBT) is frequently recommended for individuals with AN (Bulik et al., 2007), and this is also a widely used treatment for BN and BED (Linardon et al., 2017). An enhanced form of CBT, CBT-E (which includes the added component of addressing the over-evaluation of shape and weight), has been shown to be a versatile treatment for eating disorders (De

Jong et al., 2018). Additionally, behavioural weight loss management has been found to be an effective short-term treatment for BED (Hay, 2013). Other recommended psychological treatments include interpersonal psychotherapy and dialectical behaviour therapy for both BN and BED (Hay et al., 2014), and mindfulness for BED (Kristeller & Wolever, 2010). Further interventions are needed to address not only the symptoms of eating disorder, but also commonly occurring comorbid conditions, such as depressive disorders. A systematic review by Rodgers and Paxton (2014) found that prevention and early intervention programs for people with eating disorders were limited in their success in reducing depressive symptoms. This review highlighted the need for greater interventions that can address both the eating disorder and comorbid conditions, such as depression, to improve treatment outcomes. Further research investigating additional treatment options would clearly benefit this population. What is known, is that meaningful engagement in therapy is crucial to motivate change (Hay et al., 2014). This typically involves a collaborative approach between clinicians and client so that recovery can be worked on together and treatment is not seen as demeaning or punishing (Hurst et al., 2020).

Deficits in treatment not only exist in relation to tackling comorbid conditions, but also occur as a result of the challenging nature of eating disorders, and a lack of awareness of eating disorders across cultures. Often, the chronic nature of eating disorders involves a commitment to lengthy interventions to achieve a full remission of symptoms or to attain significant improvements (Wilson et al., 2007). Ambivalence towards recovery from an eating disorder often hinders the recruitment of this client group to participate in treatment and also in research (Agras et al., 2004). This is particularly true of AN, where distorted thinking plays a role in denial and further confounds early intervention and treatment efforts. Additionally, the risk and presence of medical complications and intensive inpatient care mean that some individuals with AN cannot consent to take part in studies (Wilson et al., 2007). Further, a lack of awareness of how eating disorders are experienced across ethnicities contributes to deficits in treatment. A 2012 study among ethnic minorities in the United Kingdom revealed that service providers were inadequately versed in the needs of ethnic minority

people, which resulted in a reluctance of individuals to seek help and as a consequence, an underdiagnosis or misdiagnosis of these illnesses (Chowbey et al., 2012). Clearly, deficits in treatment exist through the challenges of recruiting individuals to studies, and through a lack of awareness of how eating disorders are experienced across cultures.

**Shame: A Contributing Factor**

Shame is a complex and destructive emotion that is thought to play an integral part of the phenomenology of eating disorders. John Bradshaw (1988), an early writer on the phenomenon of shame, categorised it into two fundamental categories: *healthy* shame and *toxic* shame. While healthy shame is socially shaped to ensure a level of knowing right from wrong, toxic shame is defined as a damaging judgement of oneself that is rooted in traumatic interpersonal experiences, as well as personal feelings of failure (Bradshaw, 1988). A feature of shame is seen in the comparison of oneself against internalised or externalised ideals (Lewis, 1971). Chronic experiences of failing to live up to internal and external ideals amplify feelings of shame and unworthiness. As an individual psychological experience, the particularly painful nature of toxic shame to one's core sense of self can be seen in the feeling that "I" am incompetent, bad or unworthy (Lewis, 1971). As an interpersonally related experience, shame is induced through an expectation or belief that others will perceive one as not good enough, unworthy or flawed (Bradshaw, 1988). Several authors have hypothesised that shame plays a role in the formation and maintenance of eating disorders (Bruch, 1974; Cook, 1994; Frank, 1991), with further interest in this area expanding over the past two to three decades (Duarte et al., 2016; Duarte & Pinto-Gouveia, 2017; Steindl et al., 2017; Troop & Redshaw, 2012). A systematic review that examined evidence from 24 studies found that shame was more common in people with AN and BN when compared to people without these conditions, and levels of shame were positively associated with severity of symptoms and the onset of eating-related difficulties (Blythin et al., 2020). Furthermore, a higher propensity to feeling toxic shame (including a greater sense of worthlessness and frequent negative self-attribution) is thought to be experienced

by people with eating disorders more so than in other clinical and non-clinical groups (Cesare et al., 2016; Frank, 1991; Gee & Troop, 2003; Masheb et al., 1999; Troop et al., 2008).

Shame can be experienced in several ways by people with eating disorders and can be detrimental to treatment efforts. Firstly, research suggests that early adversity in an individual's life may contribute to feelings of shame that are defended against by using eating disorder behaviours, such as attempts to control eating or using eating to numb feelings (Goss & Gilbert, 2002; Treasure et al., 2012). Paradoxically, shame is also seen to be induced during and after engaging in these very behaviours used to defend against shame. For example, an episode of bingeing is accompanied by a sense of loss of control, which leads to feelings of embarrassment, shame and disgust at oneself (American Psychiatric Association, 2015; Berkus, 2017). Thus, shame is both seen in the prompting of eating disorder behaviours and the result of those behaviours, demonstrating how a cycle of bingeing can occur (Deaver et al., 2003). Another way of understanding how shameful bingeing and purging can impact people with eating disorders is by considering *fear of exposure,* which is a key experience associated with shame (Tangney & Salovey, 2010). This involves a fear that others will perceive how defective and worthless that person is, and this helps to explain the intense secrecy surrounding bingeing or purging episodes.

Secondly, the stigma associated with eating disorders in society amplifies the shame experienced by affected individuals, which in turn contributes to self-blaming attitudes. High levels of blame are directed towards this client group, with commonly held beliefs among the general public that eating disorders are self-inflicted, are a means for attention-seeking, and that "normal" eating is based on willpower alone (Crisp, 2005; Easter, 2012; McLean et al., 2014). This level of external blame has been found to be greater for people with eating disorders than for any other mental health disorder (Crisp, 2005; Easter, 2012). It is not surprising that a by-product of these unsupportive attitudes translates into a high prevalence of self-blame in this population, as public stigma and shame associated with the illness is internalised (Corrigan et al., 2006). The combination of self-blame and the anticipation of blame from others acts as a barrier to seeking and accessing

treatment (Hepworth & Paxton, 2007; Swan & Andrews, 2003). Research shows that shame is not only responsible for delays in treatment, but that it may also predict the extent of eating disorder behaviours (Ali et al., 2020; Swan & Andrews, 2003; Troop & Redshaw, 2012). Further, shame has been found to inhibit disclosure during treatment, which can lead to poorer patient outcomes (Swan & Andrews, 2003).

Thirdly, intense shame can be felt in accordance with one's self-perceived body size, where distorted body image is a key feature of eating disorders. Shame has long been present in women's attitudes towards their bodies, which can be partially attributed to appearance-driven cultures that hold unrealistically high expectations for women and girls (Durkin & Paxton, 2002). More recently, literature has explored how men are similarly subjected to certain body standards that may contribute to body-related shame (Barlett et al., 2008). Constant self-comparisons against unrealistic body standards perpetuate feelings of falling short. One response to the intense scrutiny of body image is evident in AN, where a never-ending pursuit of thinness causes the body to waste away quite literally. Parallels can be drawn here to the desire to shrink or to disappear, which has been identified as an experience of shame (Tangney & Salovey, 2010). The ways in which shame is experienced by people with eating disorders clearly demonstrates how this damaging emotion plays a multifaceted and devastating role in their lives.

Despite the evidence showing the high presence and detrimental impacts of shame in people with eating disorders, little knowledge exists on the most effective way to therapeutically address negative levels of shame. Goss and Allan (2009) have suggested that treating the eating disorder alone is not sufficient to address and minimise the harm that shame carries in this population. However, addressing shame in a therapeutic relationship poses several challenges. For example, even though disclosing eating disorder behaviours in therapy may be necessary, it can be a highly shame-inducing experience and might frequently be avoided by clients (Skårderud, 2007b; Swan & Andrews, 2003). Further, silence is a central behavioural expression of shame, and this may complicate relationship building and dialogue with the therapist (Skårderud, 2007b). Nevertheless,

since there is a positive association between shame and eating disorders, researchers suggest that by addressing shame, eating pathology may also decrease (Kelly et al., 2014; Stice, 2002). As such, trying to address negative levels of shame has become a focus of eating disorder treatment (Gale et al., 2014; Goss & Allan, 2009; Kelly et al., 2014; Steindl et al., 2017; Swan & Andrews, 2003). Commonly, studies in this area focus on promoting factors seen to defend against shame in order to lessen its impacts. For example, much focus has centred on promoting self-compassion using compassion-focused group therapy (Gale et al., 2014; Holtom-Viesel et al., 2014; Kelly et al., 2014; Steindl et al., 2017) and compassionate letter writing (Showell, 2012). In some studies, self-compassion was found to minimise shame and also eating pathology (Gale et al., 2014; Kelly et al., 2014). Showell (2012) found that although participants were held back by self-criticism, compassionate letter writing promoted their capacity for self-care. Emotion-focused therapy is another practice that is used to minimise shame by fostering emotional processing skills and emotional literacy in the broader field of mental health (Greenberg & Iwakabe, 2011). Despite the harmful effects of shame to people with eating disorders, there is limited research that has investigated treatments that may alleviate the experience of shame in this population.

**Overview of Art Therapy and Eating Disorders**

Art therapy may be an effective additional treatment option to address negative levels of shame not able to be replicated in other psychotherapies. Art therapy, as defined by the Australian, New Zealand and Asian Creative Arts Therapies Association (ANZACATA, 2019), utilises art materials in therapy for the purpose of self-expression and personal development in the presence of a qualified art therapist. Grounded in a recognition that all people are inherently creative, arts-based methods are harnessed to resolve conflict, to cope with challenging events and to enrich daily life (Karkou & Sanderson, 2006; Rubin, 2001). Art therapy is a novel therapy that is primarily used alongside medical, pharmacological or psychotherapeutic treatments (Gilroy, 2006). Literature on the use of art therapy for clients who have eating disorders existed as early as the 1980s (Amari, 1986; Conroy et al., 1986; Crowl, 1980; Mitchell, 1980; Morenoff & Sobol, 1989; Naitove, 1986; Wolf

et al., 1986), and scholarly interest in this field has continued since then (Edwards, 2005; Holmqvist & Lundqvist Persson, 2012). Despite the growing literature over the past 40 years, limitations exist on the benefits of art therapy to this population. Frisch et al. (2006) found that although art therapy is commonly utilised in specialised residential services for people with eating disorders, there has been little evaluation of its effectiveness. Nevertheless, the available literature that has accumulated over the past several decades indicates important understandings and theoretical underpinnings into the use of this novel treatment.

Reviews of the literature show that the use of art therapy with this population is dominated by small qualitative studies and, mostly, *case vignettes* (descriptive examples of working with clients) (Chaves, 2011; Edwards, 2005; Wood, 1996). Early case vignettes outlined seminal theories of art therapy processes with people with eating disorders, and these have been integral to subsequent research and practice in the field. One such theoretical position was that the images produced by clients with eating disorders could *reveal inner truths* into the extent of their illness. Crowl (1980) suggested that negative issues associated with eating disorders (such as distorted self-image, poor self-esteem, and issues with control) could be seen in the drawings of clients. This idea was supported by subsequent authors who noted recurring patterns and symbols in the artworks of clients with eating disorders (Acharya et al., 1995; Crowl, 1980; Levens, 1994; Luzzatto, 1994; Mitchell, 1980; Murphy, 1984; Naitove, 1986; Schaverien, 1994; Ticen, 1990; Wolf et al., 1985). In addition to this, the way in which art materials were used were seen to signify progress in treatment (Conroy et al., 1986; Ticen, 1990). For example, when working with clients with BN, Ticen (1990) noted that “the more traumatised the victim, the more restricted the art will be”, and that as treatment progresses “the imagery will gradually become more fluid, more colourful, more integrated and more dynamic” (p.18). By bypassing defence mechanisms found in verbal language (such as intellectualisation and rationalisation), art therapy was seen to offer a unique avenue to engage clients with eating disorders who were particularly prone to relying on such defences to hide and deny the true nature of their illness (Hinz, 2006).

Another idea presented through early case vignettes was that art materials could imitate the role of food, whereby clients would symbolically enact eating disorder behaviours through their relationship with the art materials (Levens, 1987; Rust, 1994; Schaverien, 1994). For instance, clients with AN would restrict their use of art materials in the way that food is restricted, while clients with BN would use excessive amounts of art materials that led to mess-making, symbolic of a binge and purge cycle (Levens, 1987; Matto, 1997; Schaverien, 1994; Ticen, 1990). Schaverien (1994), a highly respected author in the field, argued that through the symbolic representation of eating disorder behaviours, clients could begin to come to terms with and safely express their harmful coping strategies. Ultimately, early theoretical writings explored how art-making offered clients with eating disorders avenues to communicate with the therapist through their artworks and through the art materials.

The role of art materials continues to be an important consideration in more recent art therapy literature, albeit with greater focus on the expressive and rewarding potentials of materials. Interest in the relationship between art therapy and neuroscience is growing, specifically the way in which certain art materials (such as sensory and tactile materials) may assist in affect regulation and self-soothing (King, 2016; Lusebrink, 2010; Lusebrink & Hinz, 2020; Misluk-Gervase, 2020). These developments have impacted on how art therapists view the role of art materials in therapy. For example, Misluk-Gervase (2020) proposed a model of working with clients with AN using specific art materials to address the unique needs of this client group who suffer poor brain functioning due to malnourishment. Additionally, the very physicality involved in much art-making has been described as offering clients with eating disorders a chance to experiment with a wide range of materials of varied textures and consistencies that would normally be limited or avoided if they were food items (Betts, 2007). Interest in the role of art materials extends to the tangible nature of the resulting artwork. Several qualitative studies reported that participants with eating disorders gained feelings of mastery from the skills learned in using art materials, and accomplishment from the final product (Anzules et al., 2007; Chaves, 2011; Cooper & Milton, 2003; Edwards, 2005; Ki, 2011). Engagement

with art materials and the resulting artwork are undoubtedly unique and important contributions that art therapy has been seen to offer this population across the decades.

On a broad level, the current literature on the use of art therapy for people with eating disorders offers rich insights and perspectives into its potential benefits as a therapeutic intervention. However, when considered more closely, limitations exist in the current knowledge because of much of that knowledge comes from qualitative studies with small sample sizes and a reliance on case vignettes. Deficits also exist in the use of art therapy across a broad range of demographics and contexts. Along with limited literature involving male participants (Beck, 2007; Chaves, 2011; Lock et al., 2018; Naitove, 1986; Thaler et al., 2017), the majority of case vignettes and studies report only on participants with AN and, to a lesser extent, BN. Additionally, most of the context for art therapy has taken place in clinical group settings, with limited studies describing individual sessions (Beck, 2007; Horrex, 1999; Jeong & Kim, 2006), or art therapy within community contexts (Ki, 2011). Furthermore, studies often fail to identify the socioeconomic or demographic background of individuals, which does not offer a clear picture into how art therapy interventions are experienced by people with eating disorders across differing cultural contexts. Clearly, further research is needed to determine the effectiveness of art therapy across a range of contexts. Despite the lack of RCTs and limited quantitative evidence, the extensive qualitative knowledge that has accumulated over the past 40 years illustrates the potential benefits of art therapy to this population.

**Art Therapy: A Novel Treatment Option**

Several lines of inquiry into the benefits of art therapy to people who have eating disorders have been highlighted in the available qualitative literature, and these are worthy of further investigation. These include broad psychosocial benefits, along with the positive impacts that art therapy may have on affected individuals with high levels of toxic shame. Firstly, nonverbal processes in art therapy may offer unique opportunities to address shame that could bypass the

challenges of verbalising shame experiences. Discussions of shame experiences are frequently avoided in talk therapies due to their particularly painful nature (Skårderud, 2007b). Further, words alone have been described as inadequate to express the complex experience of shame (Greenberg & Iwakabe, 2011). The shortfalls of verbal language may be addressed in art therapy where the client has opportunities to explore their experiences on visual, sensory and symbolic levels. A common finding in the recent literature is that the use of symbolism and nonverbal processes in art therapy encourage self-expression by offering a space for thoughts and feelings that may be too challenging to express verbally (Anzules et al., 2007; Chaves, 2011; Edwards, 2005; Horrex, 1999; Jeong & Kim, 2006; Matto, 1997; Sporild & Bonsaksen, 2014; Thaler et al., 2017). In one study, a participant described the expressive freedom that art-making offered, saying: “letting my hands and emotions go. That gave me freedom where expression is concerned. There were no barriers.” (Anzules et al., 2007, p. 74). This greater capacity for expression may offer a more authentic way to work with shame as well as other related emotions.

Another way in which art therapy may be beneficial to people with eating disorders is its distinctive focus on the strengths rather than the weaknesses of the client. Art therapists working within a person-centred framework encourage clients to draw on inner resources and resilience to problem solve and initiate change (Rogers, 2016). From a strengths-based and person-centred perspective in art therapy, the client is seen as the expert of their experience. A focus on strengths rather than weaknesses may be well-received by this population, particularly when a reluctance to recover from the eating disorder may still be present. This form of therapy is unlikely to draw criticism from the resistant client who may be unwilling to depart from their eating disorder and who views traditional treatment methods as punishing or demeaning. Further to this, art therapy with a strengths-based focus was shown to promote self-compassion and alleviate the effects of trauma-related shame in two studies with adolescents and adults (Joseph & Bance, 2019; Wilson & Fischer, 2018). The potential for art therapy to be an acceptable treatment for a generally resistant client group by offering strengths-based support is arguably worthy of greater research attention.

A similarly strengths-based element of art therapy can be seen in its promotion of personal agency (the power an individual feels over their own life) through the use of the body in therapy, and the mastery of art materials (Rogers, 2016). The direct use of the body in art-making could prove beneficial to this population since the body represents a site of psycho-physical disconnection in people with eating disorders (Hinz, 2006). The experiential nature of art therapy has the potential to support participants to play an active role in their own healing by engaging the body and facilitating a renewed integration between body and mind. An Australian study found that art-making offered a transformative and empowering experience for individuals with a range of mental health conditions participating in art therapy (Van Lith et al., 2011). The findings of this study support the notion that learning to use and mastering art processes in therapy may be similarly empowering for individuals with eating disorders, who are likely to experience multiple levels of disempowerment, including that of high levels of shame.

Art therapy may provide pathways to alleviate the burden of common comorbid presentations that frequently accompany eating disorders, further empowering this population. Comorbid mental health conditions, particularly major depressive disorders, have been highlighted as additional serious concerns for people with eating disorders, and remain an area that requires greater consideration in treatment (Rodgers & Paxton, 2014). A 2013 literature review on art therapy as a treatment for depression found that not only could art therapy be conducted successfully across various clinical contexts, but this form of therapy was found to encourage healing mechanisms for people experiencing depression, including fostering self-expression, creativity and sensory stimulation (Blomdahl et al., 2013).

Additionally, the role of group art therapy has been identified to lower feelings of social isolation, promote feelings of connectedness and normalise shared experiences in people with eating disorders (Ball & Norman, 1996; Chaves, 2011; Cooper & Milton, 2003; Fitzsimmons & Levy, 1997; Johnson & Parkinson, 1999; Sporild & Bonsaksen, 2014; Thaler et al., 2017; Wood, 2000). Johnson and Parkinson (1999) observed a process of healing in group art therapy in the way that

members could recognise their own experiences and feelings in the artworks of others. Several authors have highlighted that the therapeutic factors of group therapy can be seen as being particularly helpful to this client population, such as the instillation of hope, cohesion, social skill development and catharsis (Ball & Norman, 1996; Johnson & Parkinson, 1999; Sporild & Bonsaksen, 2014; Yalom, 2005). These therapeutic factors could work to reduce the impacts of comorbid mental health conditions, such as depression. Ultimately, art therapy is a novel form of therapy that may offer benefits to this population, but it needs further inquiry, particularly in the form of systematic reviews, and further rigorous research investigation to strengthen the evidence base.

**Rationale for a Systematic Review**

Destructive relationships with food and eating carry grave consequences. Eating disorders severely impact the quality of life of many affected individuals, including the ability to sustain relationships, secure career and academic opportunities, and to lead satisfying and fulfilling lives. The prevalence of living with an eating disorder continues to grow and treatment is often complex, lengthy and expensive (Deloitte Access Economics, 2020; Hay et al., 2014). Alongside significant comorbid mental and physical health conditions that place added pressure on the individual as well as on health services, the experience of shame has been found to delay treatment and maintain the destructive cycle of the illness (Hepworth & Paxton, 2007; Swan & Andrews, 2003). Art therapy is a unique form of therapy that could offer this client group nonverbal ways to express challenging emotions, such as shame, that contribute to the undermining of recovery efforts. Further, corporeal engagement in therapy, as occurs in art-making, may provide an additional empowering element towards motivating people with this disorder to form healthier relationships with their bodies. Indeed, neighbouring creative arts therapies indicate a range of benefits of the use of non-verbal and expressive interventions with people with eating disorders. These benefits include safely and effectively addressing body image issues in dance movement therapy (Savidaki et al., 2020), and reducing post-meal anxiety using music therapy (Bibb et al., 2019). The current study dedicates itself

to visual art therapy alone, and limited knowledge exists as to what art therapy can offer this client group.

There are currently no systematic reviews exploring the use of art therapy for people with eating disorders. What does exist is one outdated narrative literature review that focuses on art therapy in Britain (Wood, 1996), two unpublished literature reviews embedded in dissertations (Chaves, 2011; Edwards, 2005), and a systematic review that focuses on art therapy for a range of psychosomatic disorders, not only eating disorders (Holmqvist & Lundqvist Persson, 2012). A comprehensive and transparent systematic review would address this gap in knowledge by identifying more recent studies in this field and by determining what overall findings can be drawn when using art therapy with this population. Further, a systematic review will highlight possible research limitations and appropriate pathways for further investigation. With this need in mind, the following chapter presents a systematic review that investigates the effectiveness of art therapy for people with eating disorders, as well as their experiences and perceptions of art therapy.

**Figure 5**

*Photographic Detail of Palette 2*

## Chapter Three: Systematic Review

When an individual develops an eating disorder, there is wide impact on their life, family and friends, the health system, and the broader community. The effects are experienced both on an individual level in terms of impact to health-related quality of life, as well as on a broader level in the form of detrimental social and economic outcomes (Butterfly Foundation, 2012; Jenkins et al., 2011). As highlighted in Chapter Two, eating disorders are a growing concern due to rising prevalence rates, severe psychosocial burdens, and often complex and lengthy treatment pathways (Deloitte Access Economics, 2020; Hay et al., 2014).

Literature relating to the use of art therapy to treat eating disorders has existed as early as the 1980s, however there is limited rigorous evidence supporting this novel treatment. Nevertheless, the available literature highlights several potential benefits of art therapy to this population. For example, studies suggest that non-verbal processes in art therapy offer an opportunity for the expression of challenging emotions associated with the experience of having an eating disorder (Chaves, 2011; Jeong & Kim, 2006; Sporild & Bonsaksen, 2014). Further, interest in the relationship between art therapy and neuroscience points to the unique soothing effects of certain art materials on the regulation of affect (Lusebrink & Hinz, 2020). Despite art therapy being commonly used as a treatment for people with eating disorders, there is limited evidence of its effectiveness (Frisch et al., 2006). A preliminary search of databases (CINAHL, PsychINFO, MEDLINE and EMBASE) was undertaken in April 2020 to identify any relevant mixed methods or systematic reviews. None were found. To date, three narrative reviews of the literature on the use of art therapy for people with eating disorders have been published, but they are generally dated and did not use a systematic approach (Chaves, 2011; Edwards, 2005; Wood, 1996). Clearly, a rigorous and transparent systematic review of the literature is warranted to contribute to the evidence base.

## Aim

The aim of this study was to systematically review the evidence for the effectiveness of art therapy for people with eating disorders in clinical and community settings. The research questions included:

- Is art therapy effective for people with eating disorders?
- What are the experiences, attitudes and/or perspectives of people with eating disorders toward art therapy interventions?

Both qualitative and quantitative studies are well-positioned to answer the review questions, since they focus on different facets of a phenomenon of interest (i.e. the effectiveness of art therapy interventions, and how this client group perceives the interventions) (Lizarondo et al., 2020a). An understanding of the current evidence will highlight the limitations, benefits and acceptability of art therapy as it is experienced by people with eating disorders. This information is necessary to inform clinical practice and identify further avenues of enquiry.

## Methods

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009). Each step of the report is detailed using the PRISMA checklist (Appendix A) and guided by the approach recommended by the Joanna Briggs Institute (JBI) for conducting mixed methods systematic reviews (Lizarondo et al., 2020a). The JBI is an international research organisation that aims to promote the synthesis and utilisation of evidence to improve healthcare practices and health outcomes (Joanna Briggs Institute, 2020).

### *Inclusion Criteria*

**Population.** The review considered studies that included participants who had an eating disorder diagnosis of any kind and duration, as well as those of any age, gender or sex. Due to the

high rate of comorbid mental illness and physical diseases in people with eating disorders (Hay et al., 2014), comorbid diagnoses were permitted. Participants receiving care for their eating disorder in clinical or community contexts were eligible.

**Intervention.** Individual or group art therapy interventions were considered for this review. A definition of art therapy was taken from the Australian, New Zealand and Asian Creative Arts Therapies Association (ANZACATA, 2019), which emphasises art therapy as the use of art materials for therapeutic means under the guidance of a qualified art therapist. Any intervention that focused on a combination of creative arts therapies (such as with movement or music therapy) were excluded unless the specific effects of the art therapy approach were discernible. The intervention may have been run for any length of time in community or clinical contexts, and participant consent prior to the intervention was a requirement for this review.

**Phenomena of Interest.** The qualitative component of this review considered studies that investigated the perspectives, attitudes and experiences of people with eating disorders who had received art therapy at some point during their treatment. Studies were only considered if they clearly detailed how they captured the experiences of participants, such as by using interviews, focus groups, or qualitative questionnaires.

**Outcomes.** The quantitative component of this review considered studies that included the following outcomes: health-related quality of life, mental health and other factors that are associated with eating disorders. Examples of outcome measures that would meet the outcomes include the Eating Attitudes Test (EAT-26), Depression Anxiety Stress Scale (DASS), or Experience of Shame Scale. In addition, outcomes that reported on participant satisfaction with the art therapy intervention were included. Only studies that clearly outlined the measures used to collect data were considered.

**Context.** This review considered studies set in clinical or community contexts that offered treatment to people with eating disorders. This included hospital day patient, inpatient or outpatient programs, as well as community services. Studies conducted in any country were considered.

**Types of Studies.** This review considered quantitative, qualitative and mixed methods studies. To assess study eligibility, Levels I - IV from the National Health and Medical Research Council (NHMRC) levels of evidence were used (Coleman et al., 2009) (Table 1). To evaluate the effectiveness of art therapy for people with eating disorders, quantitative study designs were included such as randomised controlled trials (RCT), non-RCTs and case series. To understand the perspectives and experiences of participants with eating disorders taking part in art therapy interventions, we included qualitative research designs. These included designs such as phenomenology, grounded theory, feminist research, and ethnography. Mixed methods studies were considered if data from the quantitative and qualitative components could be clearly extracted. Case vignettes and case studies were excluded as they are not included in the NHMRC levels of evidence hierarchy, due to their higher potential for confounding and bias (Coleman et al., 2009). Only English-language studies were included, and no date range was imposed. Lastly, unpublished and ongoing studies that met the inclusion criteria were also included to address potential publication bias.

**Table 1**

*NHMRC Evidence Hierarchy* (Coleman et al., 2009)

| Level | Intervention |
|---|---|
| I | A systematic review of level II studies |
| II | A randomised controlled trial |
| III-1 | A pseudorandomised controlled trial |
| III-2 | A comparative study with concurrent controls (non-randomised, cohort, case-control, interrupted time series studies) |
| III-3 | A comparative study without concurrent controls (historical control study, two or more single arm study, interrupted time series with a control group) |
| IV | Case series with either post-test or pre-test/post-test outcomes |

***Search Strategy***

The search strategy followed a process that aimed to find both published and unpublished studies. First, a limited search of CINAHL was undertaken in March 2020, followed by an analysis of article titles, abstracts and index terms in order to locate appropriate key words to identify relevant studies. Next, the keywords were used to inform the search strategy and were adapted to each information source when a second search for studies was conducted in April 2020. During this time, the following databases were searched: CINAHL (EbscoHOST); PsychINFO (OvidSP); MEDLINE (OvidSP); EMBASE (OvidSP); The Cochrane Central Register of Controlled Trials; ProQuest Central; PROSPERO; PDQ Evidence; and AMED. Each search was documented in Endnote (X9). As an example, the PsychINFO search strategy is presented in Table 2, and this strategy was tailored to suit the other databases. Each group, as seen in Table 2, was combined with AND until the options were exhausted.

**Table 2**

*PsychINFO Search Strategy*

| Group | Search Terms |
|---|---|
| Eating disorder | "eating disorders" OR "eating disord*" OR "feeding and eating disorder* OR "anorexia nervosa" OR anore* OR "binge eating disorder" OR "binge eating" OR "binge eating disord*" OR binge?eat* OR "bulimia nervosa" OR bulimia OR bulim* OR osfed OR "other specified feeding and eating disorders" OR ednos OR "eating disorders not otherwise specified" |
| Art therapy | "art therapy" OR "creative arts therapy" OR "art* therap*" OR "art* psychotherap*" OR "creative psychotherap*" OR "creative therap*" OR "drawing therap*" OR "painting therap*" |
| Study design | "randomised controlled trial" OR rct OR "clinical trial" OR intervention OR "controlled trial" OR qualitative OR quantitative OR study OR clinical OR mixed?method* OR "mixed method*" OR research |

Online trial registers and thesis catalogues were searched for ongoing and unpublished material, including: World Health Organisation International Clinical Trials Registry Platform (http://www.who.int/ictrp/en/); Clinicaltrials.gov (https://clinicaltrials.gov/); Open Access Theses and Dissertations (https://oatd.org); ProQuest Dissertations and Theses

(https://pqdtopen.proquest.com/). Relevant grey literature sources, including conference proceedings and additional studies were identified by searching citation indexes on Google Scholar and by contacting relevant experts in the field. A hand search in the following journals was conducted during April 2020: Canadian Art Therapy Association Journal, The Arts in Psychotherapy, International Journal of Art Therapy, and the Journal of the American Art Therapy Association. Finally, the reference lists of all potentially suitable papers were hand searched in order to identify additional studies.

***Study Selection***

Studies that were detected in the search and that met the inclusion criteria were merged using Endnote (X9) and duplicates were removed. Working independently, my primary supervisor (PF) and I screened titles and abstracts, removing ineligible studies. Next, we obtained and screened full texts, and disagreements were resolved through discussion. Where necessary, study authors were contacted to determine eligibility issues or to obtain missing data, however no additional detail was provided by these authors.

***Assessment of Study Quality***

A second supervisor (MC) and I independently appraised the methodological quality of the included studies using the Mixed Methods Appraisal Tools (MMAT) version 2018 (Hong et al., 2018). The MMAT tool is a critical appraisal tool that is used to appraise studies that are included in mixed methods systematic reviews. It can assess the quality of qualitative, quantitative RCTs, quantitative non-RCTs, quantitative descriptive, and mixed methods studies. The MMAT is efficient and user friendly, and has been found to be robust with a high content validity when used in systematic reviews that incorporate a variety of study designs (Hong et al., 2019). The tool first requires a response to two screening questions to determine if the study is empirical or not. Next, each study is rated against a set of questions that determine methodological quality regarding qualitative and quantitative components, and mixed methods integration. Answers range from *yes*, *no* or *can't tell*.

The purpose of the MMAT is to provide a presentation of the quality rating of each of the five criteria, rather than to provide an overall quality score (Hong et al., 2018). Studies were not excluded based on the quality rating as this would have limited the scope of this review, rather study quality was identified to evaluate the validity and/or trustworthiness of a study. Disagreements that arose between us were resolved through discussion with a third supervisor (KL). Outcomes listed in a study's methods were checked to identify if they were reported in the results in order to identify potential reporting bias. Three quantitative results were found in mixed methods studies, and as such, funnel plots were not appropriate (Anzules et al., 2007; Chaves, 2011; Thaler et al., 2017).

***Data Extraction***

I extracted the following information that related to study characteristics, which was checked for accuracy by my primary supervisor (PF): authors, year published, study design, setting, participant details (including age, sex and eating disorder diagnoses), art therapy intervention (including model and duration), qualitative data collection methods, and the NHMRC levels of evidence ranking. Quantitative information extracted included: author (date), outcome domains, outcomes measures, time points, results and *p* values. Study information was checked for accuracy by my primary supervisor (PF) and disagreements were resolved though discussion with a second supervisor (MC).

For the qualitative component, a supervisor (MC) and I independently extracted study information and qualitative findings for each study using the JBI QARI Data Extraction Tool for Qualitative Research (Lizarondo et al., 2020a) (Appendix B and Appendix C), and disagreements were resolved through discussion. Using this tool, qualitative findings and their illustrations were extracted and assigned a level of credibility. A *finding* was defined as a verbatim extract of a theme or metaphor that was identified as a result of data analysis in a study. A finding was identified through repeated readings of each study. An *illustration* was defined as either a participant voice, fieldwork observations, or other data that supported each finding. Based on the degree of support

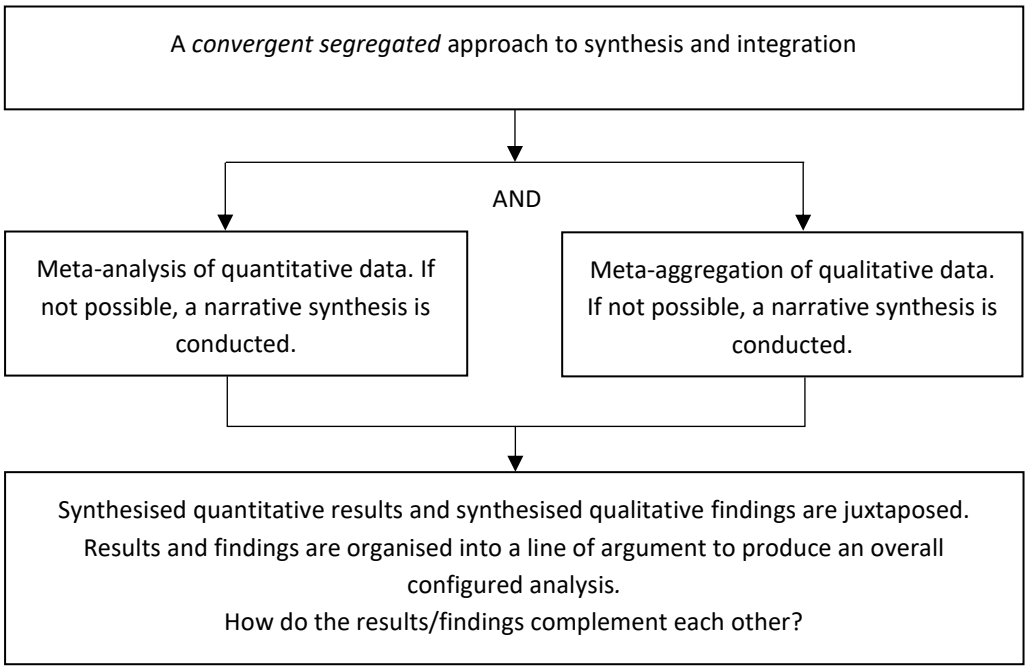
that an illustration offered the associated finding, a level of credibility was assigned to each finding (Lizarondo et al., 2020a). Three levels of credibility were allocated: (i) *unequivocal* – an illustration supported the finding beyond reasonable doubt; (ii) *credible* –an illustration lacked a clear association to the finding; (iii) *not supported* – the finding did not have an accompanied illustration to support it.

***Data Synthesis and Integration***

A *convergent segregated* approach was used to synthesise and integrate qualitative and quantitative data, as recommended by the JBI Manual for Evidence Synthesis (Lizarondo et al., 2020a). This approach consists of a separate qualitative synthesis and quantitative synthesis, followed by an integration of the findings derived from each of these syntheses (Lizarondo et al., 2020a). Figure 6 outlines the steps taken for the synthesis of results. Due to limited quantitative and qualitative evidence found, meta-analysis and meta-aggregation were not appropriate. Thus, each data set was analysed concurrently using narrative synthesis before integration.

**Figure 6**

*Convergent Segregated Approach* (Lizarondo et al., 2020a)




For quantitative outcome measures, mean and standard deviation at baseline and follow up, and the associated *p* value, were described in the results. Qualitative data synthesis followed a three-step process that was undertaken by me and checked for accuracy by my primary supervisor (PF) (Lizarondo et al., 2020a). First, I examined the extraction of findings from all included studies that were assigned a credibility level of *unequivocal* or *credible*. This step ensured that only supported findings were included in the next step. Second, where there were at least two findings of sufficiently similar concepts across the studies, a category was developed to describe the findings.[1] Third, a qualitative thematic analysis table was created.

Using a convergent segregated approach, quantitative evidence and qualitative evidence were integrated using a narrative synthesis (Figure 6). First, study information was grouped and

[1] The term "themes" has been used in this review, even though the JBI Manual for Evidence Synthesis recommends the term "categories" to describe the findings. This is because "themes" is more in line with the qualitative research methods used throughout this thesis.

textually described under separate headings. This process offered a preliminary mapping of commonalities and differences between studies. Next, the results of effectiveness of the art therapy interventions with clients with eating disorders were compared to the findings of the experiences of participants. The aim of integrating each data set was to achieve a greater depth of understanding where one data set could be juxtaposed against the other to offer insights into the review questions. Five guiding questions were utilised during this process, as laid out by the JBI Manual for Evidence Synthesis for a convergent segregated approach (Lizarondo et al., 2020b, para. 25). The first question has been addressed in the results section of this review, and the remaining four questions have been addressed in the discussion. They include:

1. Are the results/findings from individual syntheses supportive or contradictory?
2. Does the qualitative evidence explain why the intervention is or is not effective?
3. Does the qualitative evidence help explain differences in the direction and size of effect across included quantitative studies?
4. Which aspects of the quantitative evidence are/are not explored in the qualitative studies?
5. Which aspects of the qualitative evidence are/are not tested in the quantitative evidence?

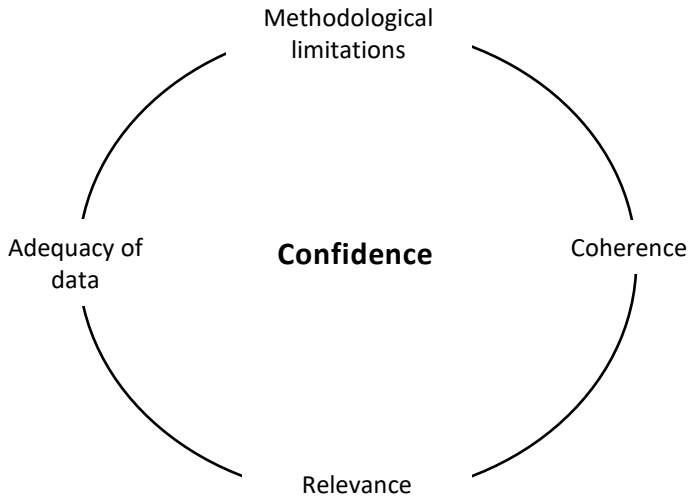
***Assessment of Confidence in the Review Findings***

My primary supervisor (PF) and I used the GRADE-CERQual (Confidence in the Evidence from Reviews of Qualitative research) approach to ascertain the certainty of the qualitative review findings (Lewin et al., 2018). The CERQual has been used extensively in Cochrane reviews, several World Health Organisation guidelines, and the Norwegian and Swedish Institutes of Public Health (Lewin et al., 2018). CERQual evaluates the confidence of individual review findings in qualitative evidence syntheses by rating the coherence of a review's findings as *high, moderate, low* or *very low.*

Figure 7 illustrates the four considerations that contribute to the confidence rating, including: *methodological limitations* of studies contributing to the review's findings, the *relevance* of the included studies to the review questions, the *coherence* of the review finding (how well the finding is supported by the data), and the *adequacy of the data* (in terms of richness and quantity) informing the review finding (Lewin et al., 2018). The final assessment was based on consensus, and a detailed justification for the confidence assessment of each review finding is attached as Appendix D. According to the JBI Manual for Evidence Synthesis for systematic reviews, assessing the confidence in the integration of qualitative and quantitative findings is complex and not recommended (Lizarondo et al., 2020a). Therefore, the CERQual assessed the confidence in the qualitative review findings only.

**Figure 7**

*The CERQual Approach* (adapted from Lewin et al., 2018, p. 5)




## Results

### *Study Inclusion*

Figure 8 presents the process of study selection for this review, including the number of studies at each stage of the process, using a PRISMA flow chart (Moher et al., 2009). A total of three

mixed methods studies were identified as eligible for this review (Anzules et al., 2007; Chaves, 2011; Thaler et al., 2017), one of which was an unpublished thesis (Chaves, 2011). All three studies were included and contributed to both the qualitative and quantitative components of this review. For those studies that were not included, Table 3 outlines the reasons why they were excluded during the full-text assessment.

**Figure 8**

*PRISMA Flow Diagram of Included Studies* (Moher et al., 2009)

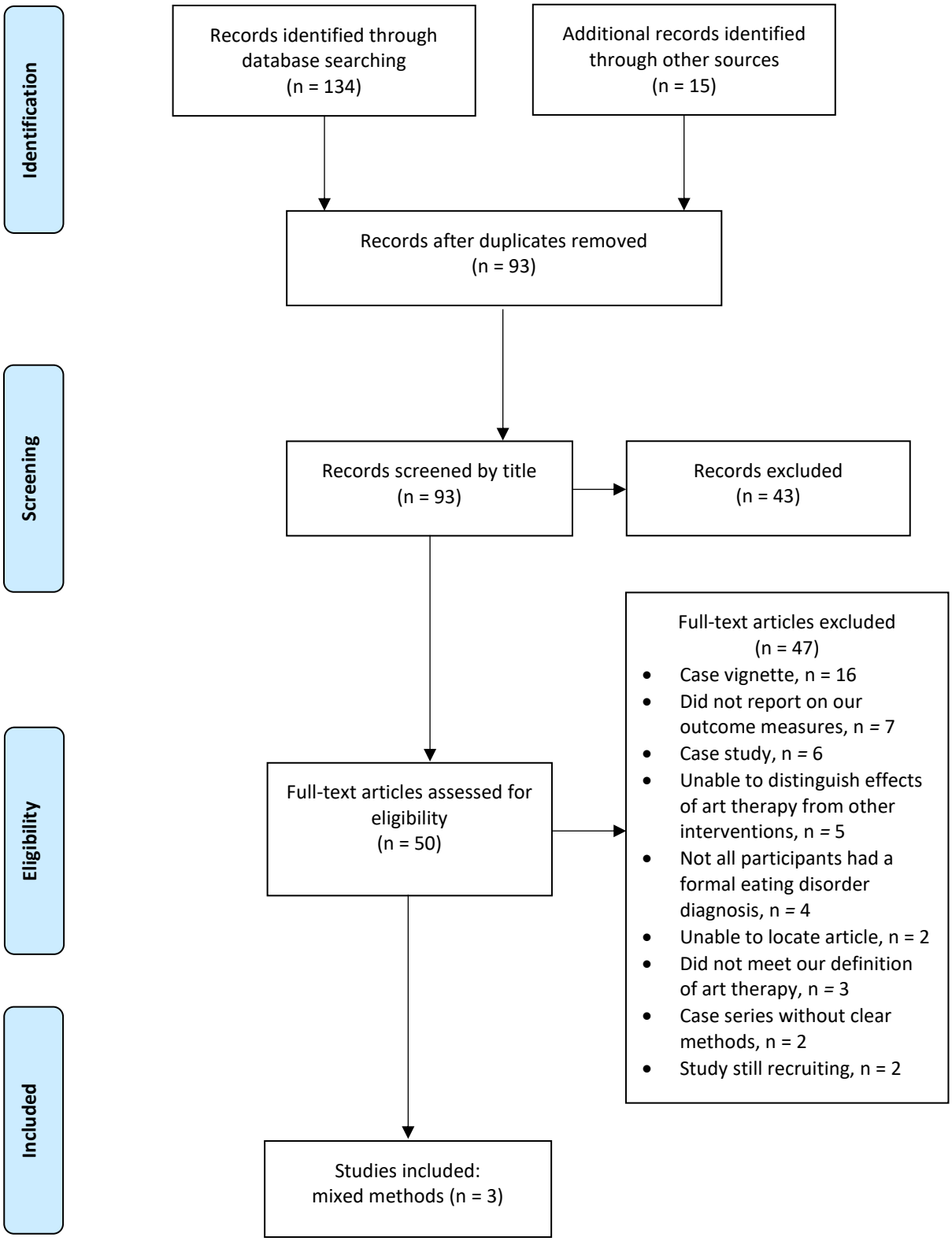


**Table 3**

*Excluded Studies (n = 47)*

| Reasons for Exclusion (number of studies) | Studies |
|---|---|
| Case vignette (16) | Amari (1986); (Conroy et al., 1986); Crowl (1980); Fitzsimmons and Levy (1997); Fleming (1989); Johnson and Parkinson (1999); Luzzatto (1994); Matto (1997); Misluk-Gervase (2020); Morenoff and Sobol (1989); Murphy (1984); Rust (1994); Schaverien (1994); Sporild and Bonsaksen (2014); Ticen (1990); Wolf et al. (1985) |
| Did not report on our outcome measures (7) | Frisch et al. (2006); Guez et al. (2010); Holmqvist and Lundqvist Persson (2012); Kessler (1994); Rabin (1987); Rehavia-Hanauer (2003); Thomas et al. (2014) |
| Case study (6) | Acharya et al. (1995); Beck (2007); Horrex (1999); Jeong and Kim (2006); Steinbauer et al. (1999); Steinbrenner et al. (2002) |
| Unable to distinguish specific effects of art therapy from other interventions (5) | Diamond-Raab and Orrell-Valente (2002); Harnden (1995); Levens (1994); Lock et al. (2018); Naitove (1986) |
| Not all participants had a formal eating disorder diagnosis (4) | Ball and Norman (1996); Cooper and Milton (2003); Edwards (2005); Schattie (2018) |
| Unable to locate article (2) | Li (2013); Makin (1994) |
| Did not meet our definition of art therapy (3) | Hodge and Simpson (2016); Ki (2011); Pray (2016) |
| Case series without clear methods (2) | Hinz and Ragsdell (1990); Hunter (2016) |
| Study still recruiting (1) | Buntinx and Goossens (n.d.) |
| Study not yet recruiting (1) | Letamendia and Olivier (n.d.) |

### *Methodological Quality*

The quality of the included studies was appraised using the MMAT critical appraisal tool (Table 4). Overall, the studies were of variable quality. Studies performed the poorest in relation to the mixed methods criteria, and none of the studies adequately addressed the possible presence of divergencies and inconsistencies between qualitative and quantitative results. Anzules et al. (2007) performed the poorest across all criteria relating to the quality of the qualitative, quantitative and mixed methods components. This study did not provide adequate explanation of data collection or analysis methods, nor did it offer a transparent description of the participants. Further, this study did not adequately integrate the qualitative and quantitative evidence to draw logical conclusions. The unpublished thesis from Chaves (2011) was of mostly high quality across all domains, but specifically

in the qualitative component. This study only scored poorly in relation to the risk of non-response bias. This was due to the withdrawal of two participants, with a lack of explanation as to how this departure impacted on the overall quantitative scores. Lastly, the study from Thaler et al. (2017) showed rigour in its quantitative components, variable quality for its qualitative methods, and it was unclear as to whether the mixed methods integration and justification was adequate.

**Table 4**

*MMAT Quality Assessment*

| MMAT Criteria | Study | | |
|---|---|---|---|
| | Anzules, 2007 | Chaves, 2011 | Thaler, 2017 |
| **Qualitative** | | | |
| Appropriate approach to answer research question | | | |
| Adequate data collection methods | | | |
| Findings adequately derived from data | | | |
| Interpretation substantiated by data | | | |
| Coherence between data sources, collection, analysis and interpretation | | | |
| **Quantitative** | | | |
| Sampling strategy relevant to answer research question | | | |
| Sampling representative of target population | | | |
| Appropriate measurements | | | |
| Low risk of nonresponse bias | | | |
| Appropriate statistical analysis | | | |
| **Mixed Methods** | | | |
| Adequate rationale for using mixed methods | | | |
| Components effectively integrated | | | |
| Adequate interpretation of integrated results | | | |
| Divergences and inconsistencies addressed | | | |
| Adherence to quality criteria of each method | | | |

*Note.* Red signifies *no*, orange signifies *can't tell*, green signifies *yes*

### *Characteristics of Included Studies*

All studies used a mixed methods case series design incorporating either a post-test, or pre-test/post-test component (Table 5). Two studies were conducted in Canada (Chaves, 2011; Thaler et al., 2017), and one in Switzerland (Anzules et al., 2007). All three studies were set in clinical settings, with one study also involving an excursion to an art museum (Thaler et al., 2017). The number of participants varied greatly between studies, with 8 participants included in one study (Chaves, 2011),

14 in a second (Anzules et al., 2007), and 78 in a third (Thaler et al., 2017). One study failed to report on age, sex or eating disorder subtypes (Anzules et al., 2007). Adolescents and adults were included in one study (Chaves, 2011), and adults in another (Thaler et al., 2017).

All studies involved group art therapy interventions that were delivered over a period of 6 weeks in one (Anzules et al., 2007) and 4 weeks in a second study (Chaves, 2011). A third study involved 11 single sessions over a period of 20 months (Thaler et al., 2017). Of the three included studies, all used self-report questionnaires for the quantitative component, and for the qualitative component, two used qualitative interviews (Anzules et al., 2007; Chaves, 2011), and one an open-ended questionnaire (Thaler et al., 2017).

**Table 5**

*Study Characteristics*

| Author (Date) | Study Design | Study Aim | Setting | Participants | Intervention | Qualitative Measures | NHMRC Level |
|---|---|---|---|---|---|---|---|
| Anzules (2007) | Mixed methods; case series | To improve self-esteem and body image | Clinical outpatient and inpatient program, Switzerland | n = 14 (sex and age not reported)<br><br>ED[a] subtypes: not reported | *Model:* Group session; each session involved: body awareness, art-making, discussion<br><br>*Art materials*: not reported<br><br>*Duration:* 6 weekly 2-hour sessions (repeated with 3 different groups) | Semi-structured interview (2 months post-intervention)<br><br>Arts-based evaluation pre-test/post-test | IV |
| Chaves (2011) | Mixed methods; case series | To explore the efficacy of making "therapeutic art books" and its impacts on negative mood states and self-esteem | Clinical day treatment and inpatient program, Canada | n = 8 (7 females, 1 male; 12-20 years)<br><br>ED subtypes:<br>AN[b] (n = 7)<br>EDNOS[c] (n = 1) | *Model:* Group session; creating a "therapeutic art book"<br><br>*Art materials:* 6" x 8" art book (other materials not reported)<br><br>*Duration:* 4 weekly 3.5-hour sessions | Semi-structured in-depth interview after the final session (post-intervention) | IV |
| Thaler (2017) | Mixed methods; case series | To evaluate the suitability of the art therapy program for participants (in terms of acceptability and tolerability) | Clinical day patient program, Canada | n = 78 (76 females, 2 males; 18-60 years)<br><br>ED subtypes:<br>AN (restrictive type n = 23, binge-purge type n = 22)<br>BN[d] (n = 13)<br>OSFED[e] (n = 19)<br>ARFID[f] (n = 1) | *Model:* Group session; each session involved: thematic guided tour of art museum, followed by art therapy session and discussion<br><br>*Art materials:* free choice (such as drawing, painting, collage)<br><br>*Duration:* 4.5-hour single session (intervention repeated 11 times over 20 months; group sizes for each visit not reported) | Questionnaire including five open-ended questions at the end of the single session | IV |

[a]Eating Disorder (ED); [b]Anorexia Nervosa (AN); [c]Eating Disorder Not Otherwise Specified (EDNOS); [d]Bulimia Nervosa (BN); [e]Other Specified Feeding and Eating Disorders (OSFED); [f]Avoidant Restrictive Food Intake Disorder (ARFID)

### *Quantitative Findings*

Quantitative data from the mixed methods studies were extracted and are summarised in Table 6. Outcome measures across the three studies evaluated a variety of factors, including self-esteem, mood, body dissatisfaction, and eating preoccupations and urges. All studies reported statistically significant changes as a result of the intervention, however these results are limited because of potential confounding and ascertainment bias from there being no comparison group, randomisation and blinding.

**Table 6**

*Quantitative Findings of the Included Studies*

| Author (Date) | Outcome Domains | Outcome Measures[a] | Time Points | Results |
|---|---|---|---|---|
| Anzules et al. (2007) | Self-esteem | SEI | Baseline to 6 weeks and follow up at 2 months (n = 3) | Moderate to clinically significant increase in self-esteem |
| Chaves (2011) | Self-esteem related to art therapy | HARTZ AT-SEQ | Baseline to 4 weeks (n = 2) | No significant findings |
| | Global self-esteem | RSE | Baseline to 4 weeks (n = 2) | No significant findings |
| | General distress | SUDS | After each session (n = 4) | No significant findings |
| | Mood states:<br>(i) depression<br>(ii) anger<br>(iii) anxiety<br>(iv) shame | VAS | | No significant findings over time. Improvement in mood after first session only.<br>(i) $p \leq .10$[b]<br>(ii) – (iv) $p \leq .05$ |
| Thaler et al. (2017) | Body dissatisfaction | BSS | All outcomes were measured from baseline to after single session (n = 2) | No significant impacts on body dissatisfaction ($p < .05$) |
| | Mood | POMS-BI | | A slight reduction (in global anxiety ($p = .017$), a higher level of tiredness ($p = .032$) and disagreeability ($p = .049$) |
| | Eating preoccupation and urges | VAS | | Smaller urge to eat a meal ($p = .034$) |

[a]Coopersmith's Self-Esteem Inventory (SEI); Hartz Art Therapy Self-Esteem Questionnaire (HARTZ AT-SEQ); Rosenberg Self-Esteem Scale (RSE); Subjective Units of Distress Scale (SUDS); Visual Analogue Scale (VAS); Body Satisfaction Scale (BSS); Profile of Mood States (POMS-BI); [b]study did not report exact *p* values

The study by Chaves (2011) found that participants' mood improved significantly after the first session only. Anzules et al. (2007) reported a "moderate and clinically significant" improvement in their self-esteem measure (Coopersmith's Self-Esteem Inventory) from baseline to 6 weeks, then again at 2 months post-intervention, although no measure of statistical significance was reported (p.75). Thaler et al. (2017) recorded both beneficial and not beneficial changes across two scales. The Profile of Mood States used in this study recorded a statistically significant reduction in global anxiety, however higher levels of tiredness and disagreeability in participants after the intervention were also recorded. In addition, this study recorded a significant change in just one of 12 items on the Eating Preoccupations and Urges scale, which indicated participants had a smaller urge to eat a meal or a snack after the intervention. However, it was unclear whether this was a beneficial or harmful effect. Additionally, a program satisfaction survey that was administered at the end of this study recorded high satisfaction among participants with the intervention (Thaler et al., 2017). This survey indicated that 37.5% of participants were *very satisfied* with the intervention, and that 48.6% were *mostly satisfied* (Thaler et al., 2017).

***Qualitative Findings***

During qualitative data synthesis, five themes were developed to describe findings that were sufficiently similar in concept in at least two studies, as per the data synthesis process. These five themes are tabulated in Table 7 and include: (i) *art therapy promotes self-expression*, (ii) *new perspectives are discovered through art therapy*, (iii) *self-awareness is enhanced through art therapy*, (iv) *art therapy offers a distraction and a break,* and (v) *pride in oneself is supported by art therapy.* Of the studies, one contributed to all themes (Chaves, 2011), a second contributed to three themes (Thaler et al., 2017), and a third contributed to two themes (Anzules et al., 2007). Although the JBI Manual for Evidence Synthesis recommends reducing themes further under *synthesised findings* (Lizarondo et al., 2020a), a discussion with my supervisors led to an agreement that the five themes sufficiently described the results and no further synthesis was necessary. The five themes are described in detail below.

**Table 7**

*Qualitative Thematic Analysis*

| Author (date) | Themes | | | | |
|---|---|---|---|---|---|
| | **Art therapy promotes self-expression** | **New perspectives are discovered through art therapy** | **Self-awareness is enhanced through art therapy** | **Art therapy offers a distraction and a break** | **Pride in oneself is supported by art therapy** |
| Anzules et al. (2007) | | | ✓ | | ✓ |
| Chaves (2011) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Thaler et al. (2017) | ✓ | ✓ | | ✓ | |
| **Description of the theme** | The expression of thoughts and feelings is promoted through art-making, and the artwork is found to express more than words can. | The understanding of others is enhanced and an opportunity to discover new perspectives is achieved through art therapy. | An opportunity to learn more about oneself, including a greater awareness of thoughts and feelings, is realised through art therapy. | A distraction and a break are offered by art therapy through a focus on the present moment. | Pride in oneself is enhanced as a result of art therapy, including through feelings of confidence and increased self-esteem. |
| **CERQual confidence** | Low | Low | Very low | Low | Very low |
| **Explanation of confidence in the finding** | The finding was graded as low confidence due to substantial concerns regarding adequacy of the data that was only seen in two studies. Further, the extent of coherence is unclear due to limited data. | The finding was graded as low confidence due to substantial concerns regarding adequacy of the data that was only seen in two studies. Further, the extent of coherence is unclear due to limited data. | The finding was graded as very low confidence due to moderate to significant methodological limitations, limited coherence, and significant concerns regarding adequacy of the data. | The finding was graded as low confidence due to substantial concerns regarding adequacy of the data that was only seen in two studies. Further, the extent of coherence is unclear due to limited data. | The finding was graded as very low confidence due to moderate to significant methodological limitations, limited coherence, and significant concerns regarding adequacy of the data. |

**Art Therapy Promotes Self-Expression.** The promotion of self-expression as a result of art-making in art therapy was a finding in two studies (Chaves, 2011; Thaler et al., 2017). This theme was shown to be a major theme in Chaves (2011), with 66% of participants contributing to this theme. This experience was defined across studies as the increased ability for participants to express themselves, both verbally and non-verbally through art-making. For example, a participant from one study reported "the one picture says so much you know" (Chaves, 2011, p. 93). The visual and non-verbal aspects of art therapy were also highlighted through the quotes offered in the study from Thaler et al. (2017), with one participant reporting: "I love the opportunity to let out my emotions, state of being, in another way than speech or writing" (p. 3).

**New Perspectives Are Discovered Through Art Therapy.** Two studies supported the notion that art therapy could offer new perspectives in the form of learning opportunities, and increased understandings of others (Chaves, 2011; Thaler et al., 2017). Gaining new perspectives of other group members was experienced through observing others' artworks and thought processes during art therapy. One participant in the study from Chaves (2011) revealed how "working together we kind of saw a little more of each other's opinions and creativity and got a better feel for each other" (p. 93). Similarly, an illustration offered by Thaler et al. (2017) revealed how one participant showed an appreciation of "learning about the history of the artworks, what each individual can perceive in the same image" (p. 3). However, the number of participants that contributed to this theme was not reported. Further, participants in Thaler et al. (2017) viewed a visit to an art museum during the intervention as a unique learning opportunity due to the array of artworks on display and the art history provided by the facilitators.

**Self-Awareness Is Enhanced Through Art Therapy***.* Art therapy led to an increase in self-awareness in two studies through honest dialogues (Anzules et al., 2007), and the visual portrayal of thoughts and feelings (Chaves, 2011). This theme was reported by half of participants in one study (Chaves, 2011), however the second study did not report on the number of participants contributing to this theme (Anzules et al., 2007). Both studies suggested that participants could reflect more

deeply during art therapy, leading them to learn more about themselves. One participant reported that art therapy is a place "to come to talk about yourself, to discover yourself, to be honest with yourself" (Anzules et al., 2007, p. 74). Further, in another study, participants were able to gain a greater awareness of their thoughts and feelings, and the artwork was found to enhance an awareness of their illnesses (Chaves, 2011). One participant reported "it kind of makes me more aware of what I'm thinking or how I'm feeling or things like that" (Chaves, 2011, p. 93).

**Art Therapy Offers a Distraction and a Break.** Findings from two studies highlighted the role art therapy could play in distraction from challenging thoughts and feelings, and a focus back on the present moment (Chaves, 2011; Thaler et al., 2017). Art therapy offered a break for participants who could focus on the physical art materials and the act of creating. This theme was reported by 66% of participants in the study from Chaves (2011), however the number of participants that contributed to this theme in the study from Thaler et al. (2017) was not reported. In one study, a participant described the creation of their art book as an immersive experience that offered an escape from their surroundings, stating "it just kind of takes me away from everything else" (Chaves, 2011, p. 93). Another participant in the study from Thaler et al. (2017) outlined: "we can think of other things during that time. Our brain frees itself" (p.3).

**Pride in Oneself Is Supported by Art Therapy.** Two studies found that art therapy supported feelings of pride in participants, and this was achieved through a sense of greater confidence, enhanced self-esteem, and an access to inner resources (Anzules et al., 2007; Chaves, 2011). Pride and a sense of increased confidence were reported by up to half of participants in Chaves (2011), and an undisclosed amount in Anzules et al. (2007). For participants in both studies, feelings of pride emerged through the realisation that they had previously underestimated their creative abilities. In one study, a participant stated "it's kind of made me realise that I'm more creative than I give myself credit for" (Chaves, 2011, p. 94) , and the second study, one participant reported "I underestimated myself and didn't think I was capable of doing what I did and of having any ideas. I am proud and I've rarely been that in my life" (Anzules et al., 2007, p. 74).

### *Integration of Quantitative and Qualitative Findings*

The quantitative and qualitative findings demonstrate some support for art therapy as an intervention for eating disorders, however there were some inconsistencies as well. Only the study from Anzules et al. (2007) demonstrated clear support across the quantitative and qualitative data. This study recorded significant improvements in the self-esteem outcome measure, and this was backed up by the benefits shown through the qualitative synthesis, including that art therapy promotes self-awareness and supports pride. However, the quantitative and qualitative components in Chaves (2011) and Thaler et al. (2017) showed some inconsistencies. No change to the self-esteem or mood scales were recorded by the end of the intervention in the study from Chaves (2011), nor were changes recorded in the majority of items from Thaler et al. (2017). Despite this, these two studies both recorded several benefits in the qualitative synthesis, including that art therapy promotes self-expression, supports the discovery of new perspectives and offers a break from the realities of the eating disorder. Further, one item from an outcome measure in Thaler et al. (2017) showed a higher level of disagreeability as a result of the intervention, which is contradictory to the only beneficial qualitative findings. Overall, the qualitative and quantitative syntheses show mixed support across the findings.

### *Robustness of the Qualitative Synthesis*

Predominantly, the qualitative review findings were classified as being of *low* to *very low* in confidence using the CERQual approach, due to several limitations (Table 7). For example, only two studies contributed to each review finding, posing major concerns relating to adequacy of the data, and this also limited the extent of the coherency of each finding. Further, one study in particular showed major methodological limitations (Anzules et al., 2007), resulting in the *very low* confidence assessment for the findings that this study contributed to. Comprehensive justifications for the CERQual confidence ratings are outlined in Appendix D.

**Discussion**

This review aimed to investigate the effectiveness of art therapy for people with eating disorders, as well as how this client group experienced and perceived art therapy. Qualitative, quantitative and mixed methods studies were sought to answer the research questions by offering a range of data relating to both effectiveness and perception. Three mixed methods studies met the inclusion criteria, and the recent distribution of study dates suggests that research in this area is relatively new, limited to the past 14 years (Anzules et al., 2007; Chaves, 2011; Thaler et al., 2017). Qualitative findings of this review highlighted a range of benefits of art therapy for people with eating disorders. In contrast, quantitative findings revealed very few significant effects of art therapy on health-related quality of life and/or mental health outcomes in this population. The limited studies included in this review and the heterogeneity between them mean that definitive conclusions cannot be drawn. Importantly, the evidence is not sufficiently robust to determine the effectiveness of art therapy in the treatment of eating disorders.

The qualitative findings offered rich accounts of the benefits of art therapy to this population using participant experiences and perspectives. The five themes that emerged from the qualitative synthesis are consistent with previous reviews of the literature relating to art therapy for people with eating disorders. This is especially true of the promotion of self-expression in participants, which is consistently found across the art therapy evidence base for this population (Chaves, 2011; Edwards, 2005; Sporild & Bonsaksen, 2014; Wood, 1996). The only study that did not support this finding was from Anzules et al. (2007). Despite this, the quotes offered by participants in this study clearly linked to the theme of self-expression. For example, one participant was quoted: “letting my hands and emotions go. That gave me freedom where expression is concerned” (Anzules et al., 2007, p. 74).

A noteworthy qualitative finding was the emergence of pride in participants that was seen in two studies (Anzules et al., 2007; Chaves, 2011). For someone with an eating disorder, harmful

methods of controlling eating habits may lead to a greater sense of pride and achievement (Butterfly Foundation, 2012; Faija et al., 2017). Receiving a sense of pride from art-making may be an alternative strategy to increase feelings of accomplishment, as suggested by this review finding. Art therapy was also found to provide an opportunity for new perspectives (Chaves, 2011; Thaler et al., 2017) and for greater self-awareness (Anzules et al., 2007; Chaves, 2011). These two themes suggest that art therapy may allow participants to challenge the rigidity and perfectionism that often accompany eating disorders (Halmi et al., 2012), as well as to learn more about themselves that may be separate from the identity that is entwined with the eating disorder. Separating a sense of self from an identity that is enmeshed with an eating disorder has been shown to be crucial to support recovery (Williams et al., 2016). Lastly, the opportunity for a distraction and a break during art therapy through focus on the present moment was a theme that was echoed by participants in two studies (Chaves, 2011; Thaler et al., 2017). This theme suggests that the physical and tangible nature of art-making may provide a unique way to engage this client group to offer relief from obsessive thoughts of food or eating disorder related behaviours that can be all-consuming for some people. Although only three studies contributed to the themes of this review, the benefits are noteworthy and highlight the potential for art therapy to address a range of issues and offer a variety of opportunities to this vulnerable client group.

The quantitative findings from the studies analysed provide limited evidence to this review. Despite all studies reporting moderate to statistically significant outcomes, only one study demonstrated transparent methods and clear data to support this result (Thaler et al., 2017). The other two studies offered poor transparency of either data analysis or quantitative methods, limiting the strength of the findings. For example, the statistically significant improvement in mood reported by Chaves (2011) took place after the first session only (i.e. at 1 week), however the authors did not identify what time point was considered most meaningful, and no statistically significant changes were recorded at the end of the intervention (i.e. 4 weeks). Further, Anzules et al. (2007) reported a moderate to clinically significant increase in participants' self-esteem, however inferential statistical

analyses were not reported to support this finding (e.g. point estimates, confidence intervals or *p* values). Furthermore, the end timepoint for the self-esteem tool was 2 months after the intervention, exposing a risk that any change noted could have been confounded by such issues as regression to the mean or natural resolution (Landorf, 2016). Overall, these factors limit the meaning of this positive score as it relates to people with eating disorders.

The one study that offered transparent reporting of data and was of adequate methodological quality was from Thaler et al. (2017). This study indicated that the art therapy intervention led to a minor decrease in global anxiety in participants. Since anxiety disorders are prevalent among this population (American Psychiatric Association, 2015), the opportunity for art therapy to relieve anxiety is worthy of further investigation. Despite this positive finding, further rigorous research in the form of RCTs is needed to support and generalise this finding. In addition, harms recorded by Thaler et al. (2017) included a higher level of disagreeability and tiredness after the intervention, which the authors reported may have been due to the length of the single session design (4.5 hours). It would therefore also be worth cautiously considering intervention duration for this physically vulnerable population in future art therapy studies.

Two further methodological issues that may explain the poor quantitative data that contributed to this review include: (i) the potential lack of time to measure meaningful change, and (ii) whether the outcome measures were appropriate. The authors of two studies indicated that the brief nature of the interventions was likely insufficient to record notable changes in outcome measures (Chaves, 2011; Thaler et al., 2017). The outcome measures may also not have been responsive to change in the condition (Revicki et al., 2008). The use of appropriate (i.e. validated) outcome measures needs to be carefully considered in future research.

The concept of shame was noted in only one study. A Visual Analogue Scale was used by Chaves (2011) to record four common mood states, one of which was shame. Self-reported levels of shame lowered by the end of the intervention, however this was not shown to be statistically

significant. This may have been due to a lack of statistical power (Type 2 statistical error) as a result of a small sample size and variability in the data. Despite evidence showing the integral role of shame to the phenomenology of eating disorders (Blythin et al., 2020), a gap in research exists as to how art therapy may impact this harmful emotion.

There was limited evidence for the effectiveness for art therapy across the studies, but the high rate of compliance and positive qualitative findings may indicate the acceptability of this intervention among this cohort. Only two out of eight participants withdrew early from the study from Chaves (2011), however authors stated that this was due to their hospital discharge rather that their unwillingness to complete their participation in the study. Further, the high rate of satisfaction with the intervention that was recorded using the program satisfaction survey in the study from Thaler et al. (2017) contributes to an explanation of the benefits indicated in the qualitative synthesis. Despite few findings being supported by both evidence syntheses, the benefits seen in the qualitative synthesis may help to explain the low rates of attrition across the studies.

The difference in purpose of each method – qualitative and quantitative – may explain why there were differences in the findings of each method. For example, the qualitative findings across studies did not report on changes in mood, whereas most quantitative measures were interested in this phenomenon. Scales used in the study from Thaler et al. (2017) measured body dissatisfaction, eating disorder urges and mood, however qualitative questions related only to the experience of participating in the intervention. The authors did not clearly state the reason that a mixed methods approach was utilised, for example if it was used to validate findings using qualitative and quantitative data sources, or to use one method to support the other. Future studies should more clearly articulate their reasoning for using a mixed methods approach.

Furthermore, several interesting and potentially relevant studies that did meet the NHMRC evidence levels were excluded from this review as a result of unclear terms or the use of a combination of interventions. For example, one study that investigated the feasibility of conducting

an RCT involving art therapy with adolescents was excluded due to its focus on a combination of art therapy alongside family-based therapy, which meant that it was not possible to distinguish the effects of art therapy as a sole intervention (Lock et al., 2018). Further, two studies were excluded due to the lack of formal eating disorder diagnoses of participants (Edwards, 2005; Schattie, 2018). Another study by Ki (2011) was excluded due to the intervention being defined as an "art-based support group" rather than art therapy. For a population that is often ambivalent towards recovery, removing the label "therapy" may indeed be a strategic move to recruit participants. However, using unclear or broad terms present a challenge to the conduct of systematic reviews such as this one. Greater consideration of this issue is recommended to future researchers.

Interestingly, the role of art materials was barely mentioned across the three included studies. Anzules et al. (2007) did not report the kinds of art materials involved, offering instead three images of an art therapy directive. Thaler et al. (2017) described the act of viewing and learning about artworks during the museum visit – indicating an emphasis on the visual sense, and the value of looking and appreciating art. The authors of this study reported that the participants were "encouraged to express themselves in the medium of their choice (e.g. drawing, painting, collage, etc.)", however no further mention of the participant artworks or the choice of art media involved was discussed (Thaler et al., 2017, p. 2). Lastly, Chaves (2011) outlined the use of 6 x 8 inch art books, however did not describe the art materials used to fill these books. The three studies demonstrated a lack of reporting of not only the artworks created by participants, but also the qualities of the art materials offered and how these may have facilitated expression and/or impacted on the participants. The underreporting of the outlines of the sessions, as well as the choice of art materials makes replication of the interventions challenging, if, indeed, they were to be replicated in practice or future studies. Further, there is a missed opportunity to discuss how art therapy processes (i.e. art-making and the use of art materials) contributed to the experience of participants and the outcomes of the interventions.

***Generalisability***

The three included studies stemmed from the Global North region (e.g. one study conducted in Switzerland and two in Canada) (Dados & Connell, 2012), and focused entirely on people receiving treatment from clinical services, either as inpatients, day patients or outpatients in hospital settings. This is consistent with a narrative review of the literature by (Ki, 2011),who identified a lack of research investigating community-based art therapy interventions for people with eating disorders. A large gap in understanding the effectiveness of art therapy and the experiences of clients from Global South regions in community settings is evident. Additionally, when pooling the data from the two included studies that recorded participant demographic details, only 3 out of 86 participants were male, and almost three quarters of participants had a diagnosis of anorexia nervosa (AN) (Chaves, 2011; Thaler et al., 2017). Males are largely underrepresented in the broader literature, as are the eating disorder subtypes that are far more prevalent than AN: binge eating disorder (BED), other specified feeding and eating disorders (OSFED) and bulimia nervosa (BN) (Galmiche et al., 2019; Micali et al., 2017). Further, participants included in the systematic review were aged between 12 to 60 years, however only one study contributed data from adolescents (Chaves, 2011), and there were no data on eating disorders in those over 60 years and the elderly. Due to the limitations of this review, therefore, generalisations are difficult to make in relation to the effectiveness of art therapy for people with eating disorders.

***Strengths and Limitations***

A major strength of this review is that it is the first of its kind that used a rigourous, systematic approach to assess the use of art therapy for people experiencing eating disorders. Several factors contributed to the rigour of this review, including a wide number of databases included in the search, and extensive hand-searching in relevant journals. The high number of excluded studies at the final stage of the study selection process (n = 47; see Table 3, p.52) relative to the three included studies reflects the strict eligibility criteria of this review. Many of the studies

identified through the search fell outside of the NHMRC evidence levels that formed the foundation of study selection (Coleman et al., 2009). Using the NHMRC as a guide led to the exclusion of common study types in this field (i.e. case studies and case vignettes), which have been instrumental to the formation of knowledge and evidence in art therapy in general (Gilroy, 2006; Kapitan, 2011). The strict eligibility criteria ensured a high standard and comprehensiveness in this review, however, limited its scope through the rejection of potentially rich and informative qualitative research. This review also adhered to recognised guidelines for reporting and conducting a systematic review (Lizarondo et al., 2020a; Moher et al., 2009). In addition, quality assessments were performed on the qualitative findings of this review (using the CERQual Approach), as well as on each individual study contributing to this review (using the MMAT). As a result, this review has presented rigourous and vital new material to grow art therapy's evidence base in eating disorder treatment.

There are several limitations that need to be considered with the findings of this review. First, a major limitation was the small number of included studies, and the lack of experimental study designs, such as RCTs, that are considered the highest form of evidence according to the NHMRC levels of evidence when evaluating the effectiveness of an intervention (Coleman et al., 2009). Second, the absence of control groups in the included studies meant that it was impossible to determine if findings were affected by confounding variables (e.g. natural resolution and regression to the mean), resulting in poor internal validity (Landorf, 2016). Third, the three included studies showed variable quality when using the MMAT, with clear deficits in the integration of synthesis of the mixed methods components. Further, the findings of this review were assessed as only *low* or *very low* in certainty using the CERQual approach due to often poor study quality and limited studies supporting each finding. Fourth, all but one study failed to report adequately on possible harmful effects of art therapy (e.g. adverse events) (Thaler et al., 2017). This may have been due to reporting bias, since all studies were conducted by art therapists, which may have led to researcher allegiance to the intervention. Fifth, this systematic review endeavoured to include all relevant studies on art therapy and eating disorders, however some potentially appropriate studies may not have been

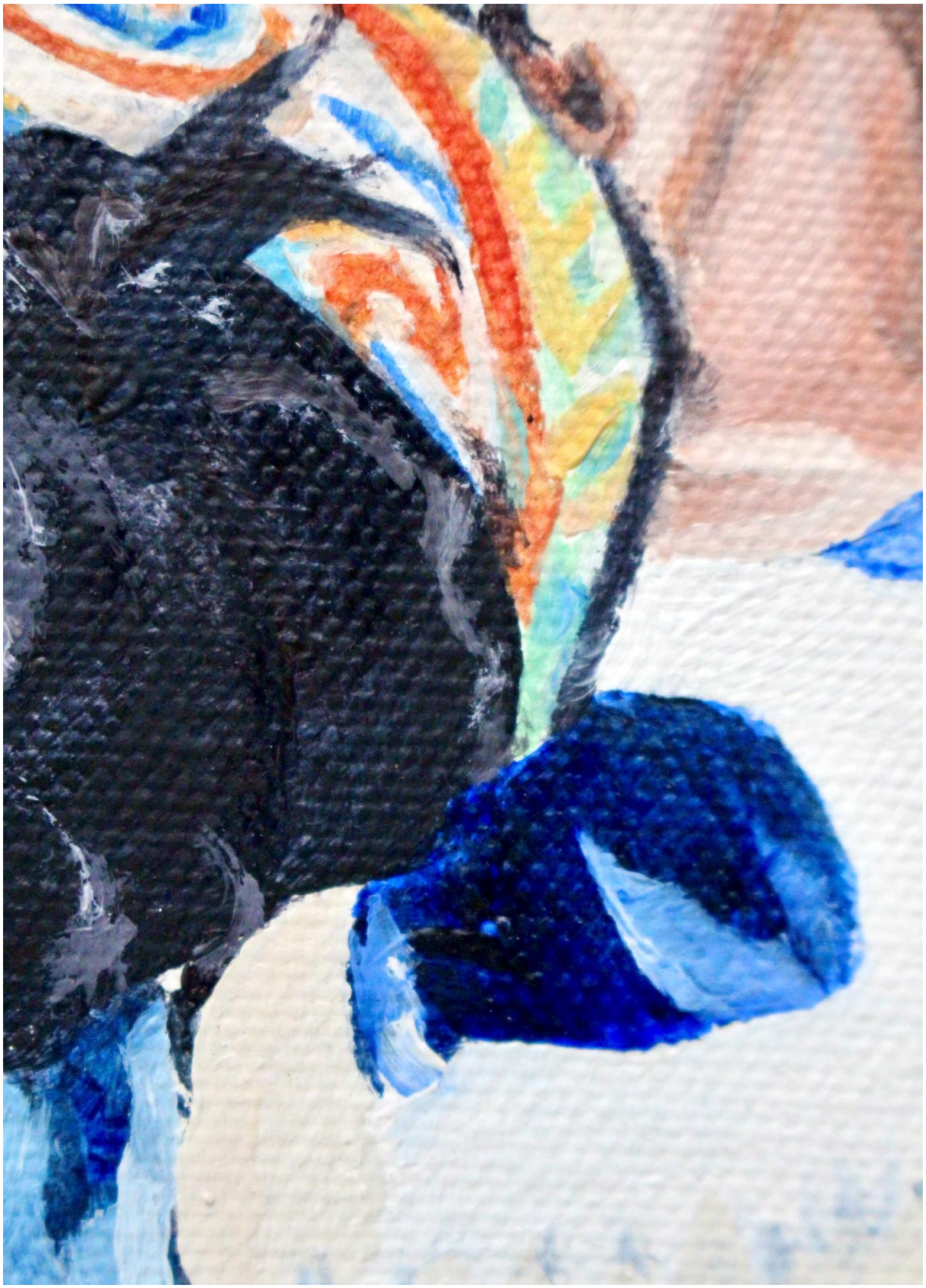
identified due to the English-only language restrictions of the search, and the difficulty in locating all unpublished material. A proportion of art therapy research is also published in books (Gilroy, 2006) and the databases searched may not have identified relevant book chapters.

**Conclusion**

From the limited number of studies that were eligible to be included in this review, art therapy was found to provide benefits to people suffering eating disorders by means of promoting self-expression, self-awareness, fostering new perspectives, offering a form of distraction, and a sense of pride. Quantitative findings showed benefits that art therapy offered participants (including improved self-esteem, slightly reduced anxiety, and participant satisfaction), as well as some harms (such as increased disagreeability and tiredness). However, quantitative and qualitative findings were limited due to poor reporting, variable study quality, a lack of a comparison group, and *low* to *very low* confidence in the themes found through this review. The results of this review are not generalisable to the majority of those living with eating disorders due to the limited number of studies conducted with a select few in clinical settings located in Global North regions. Despite the limitations of this review, a step towards generating a larger evidence base for art therapy and people with eating disorders has been gained. This review has found a large gap in evidence, especially with the absence of controlled trials, and an outcome of this review is to call for more high-quality studies (such as RCTs) to explore the effectiveness and acceptability of art therapy for this population. Although preliminary, the findings of this review contribute understandings to how art therapy can be used with eating disordered populations with beneficial effects. A further outcome of this review is to call for larger, hypothesis-generating qualitative research, as well as additional quantitative and mixed-methods research.

**Figure 9**

*Photographic Detail of Process 4*



## Chapter Four: Feasibility Study

The findings of the systematic review presented in Chapter Three highlighted substantial gaps in relation to art therapy research for people with eating disorders and identified key areas for further investigation. Importantly, only three case series studies were identified, which included small sample sizes, no control comparison groups, and were of variable methodological quality (Anzules et al., 2007; Chaves, 2011; Thaler et al., 2017). Quantitative findings contributed little evidence of effectiveness to the systematic review in terms of mental health and quality of life outcomes. Outcome measures evaluated self-esteem, mood (including shame), body dissatisfaction, and eating preoccupations and urges. Despite little evidence for the effectiveness of art therapy in the systematic review, qualitative findings provided a preliminary understanding of the benefits that art therapy may offer people with eating disorders. For example, thematic synthesis identified that art therapy promoted self-expression, new perspectives, self-awareness, pride, and a form of distraction for participants across the three studies.

Considering the gap in the literature relating to high-quality research, this chapter presents a *feasibility* study that investigated preliminary research processes and parameters for a large-scale randomised controlled trial (RCT). A definition of a feasibility study was taken from Bowen et al. (2009), who described it as a "study that can help investigators prepare for full-scale research leading to intervention" (p. 453). Feasibility studies help to determine whether further investigation of an intervention is appropriate, and whether aspects of the research process (such as recruitment strategies and outcome measures) may require modification or change (Bowen et al., 2009). One previous study investigated the feasibility of conducting an RCT involving art therapy with adolescents, however, it did not use a recognised feasibility framework, and focused on the effectiveness of a combination of therapeutic treatments, including family-based therapy with either art therapy or cognitive remediation therapy (Lock et al., 2018). That study found that it would be feasible to conduct an RCT, however given the study design using a combination of therapy forms it was not possible to distinguish the feasibility of art therapy as a sole intervention.

**Aim**

The aim of this feasibility study was to explore the key methodological issues for a future large-scale RCT, and to generate hypotheses specifically related to the effectiveness and acceptability of art therapy for adults living with eating disorders. Feasibility was evaluated using six domains of study feasibility identified by Bowen et al. (2009), which include the following:

1. *Demand* – the rate of recruitment of participants
2. *Implementation* – the execution of the art therapy intervention
3. *Practicality* – the extent of participant engagement with research activities and any adverse events
4. *Limited efficacy* – the degree of promise that the art therapy intervention shows to being effective
5. *Adaptation* – whether the art therapy intervention can respond to the research environment
6. *Acceptability* – satisfaction and suitability of art therapy based on the experiences and perspective of participants

**Research Team and Reflexivity**

For transparency, this section describes information about my qualifications, my relationship to the study setting, processes that ensured reflexivity, and contributions made to this research project. I have previously completed *Bachelor of Fine Arts* and *Master of Art Therapy* degrees and am registered with the Australian, New Zealand and Asian Creative Arts Therapies Association (ANZACATA, 2019). From February until November 2016, I was an art therapy student on placement where the study presented in this chapter was conducted. After this time, I was briefly employed (for 5 weeks) by the organisation to run art therapy groups during a Day Patient Program from November until December 2016. Therefore, I was familiar with the space, the routines of the organisation, many of the staff, and also the theories and clinical skills in working with this client

population. The study described in this chapter took place between January until June 2019. I did not know any of the participants of this study prior to the study commencing and all participants were made aware upon initial contact that the study was part of my student research project.

Regular supervision with my three supervisors (PF, KL and MC) was paramount to the undertaking of this study, as it offered opportunities for reflexivity, including discussions about best practice, research processes and ethical conduct (Fox & Allan, 2014). Supervision meetings supported my reflexivity as a researcher by encouraging understandings of the intersecting methods used in this study, and my impact on participants as both the researcher and facilitator of the art therapy groups. I led all components of the study, including enrolling participants, facilitating the art therapy sessions, collecting all data (including conducting the interviews), transcribing, and analysing the data, as well as writing the research study. As well as providing regular supervision, my three supervisors contributed to the design of the study, supported data analysis procedures, and proof-read the thesis in its various stages. One additional member of the research team, Helen Kelly (HK), was a clinical nurse educator at the setting and assisted with site-specific duties, such as enrolling participants.

## Methods

This study is reported in accordance with the Consolidated Standard of Reporting Trials (CONSORT) extension for randomised pilot and feasibility trials (Eldridge et al., 2016), the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007), and the Good Reporting of Mixed Methods Studies (GRAMMS) (O'Cathain et al., 2008).

### *Study Type and Design*

This feasibility study involved a repeated measures design that aimed to investigate an art therapy intervention for adults living with eating disorders who attended a Day Patient Program at the Eating Disorders Unit at the Royal Melbourne Hospital, Melbourne, between January and June 2019. An exploratory framework was used to gather preliminary data on the feasibility of running a

large-scale RCT and to generate hypotheses (Creswell & Clark, 2017). The framework for determining study feasibility was informed by Bowen et al. (2009). Although this framework identifies eight domains to assess feasibility, only six were deemed relevant to this study: *demand, implementation, practicality, limited efficacy, adaptation,* and *acceptability*. The remaining two (*integration* and *expansion*) relate to the extent that an intervention can fit and expand within an organisation. These were not deemed relevant to this study, since art therapy was already an integral service offered at the site. A mixed methods approach was deemed most appropriate to address the six domains of feasibility, and it has been suggested by Bowen et al. (2009) that mixed methods "might yield more innovative feasibility results" (p. 457). In addition to gaining a deeper understanding of issues of feasibility, integrating quantitative and qualitative data also allowed for the generation of hypotheses for further exploration.

The qualitative component of this study utilised a phenomenological method, consistent with interpretive approaches that value subjective experience and propose that meaning is constructed between individuals, objects or actions (Hesse-Biber & Leavy, 2011). Phenomenology centres on the lived experience of an individual or several people in relation to a phenomenon (Creswell, 2018; Daly, 2007). This approach has been used to prioritise participant voices and perspectives to gain a deeper understanding of the feasibility of running art therapy in the research environment most particularly from the participant lived experience perspective. Semi-structured interviews were utilised to generate knowledge about the participants' direct experiences of taking part in art therapy. This was a crucial element of this study, particularly due to the limited available research that has investigated the use of art therapy with clients with eating disorders. By adopting this methodology, the aim was to "give voice" to the participants, thereby building knowledge of how this client group experiences and perceives art therapy.

### *Ethics Approval*

Ethics approval was granted from the Melbourne Health Human Research Ethics Committee (HREC/48205/MH-2018) and was also noted as being externally approved by the La Trobe University Human Ethics Committee. The letter of approval is attached as Appendix E. Art therapy was only one aspect of the Day Patient Program and participation in the study was voluntary. A Consent Form was completed by all study participants (Appendix F), and data were collected only from the participants who agreed to take part in the study.

### *Study Population*

**Eligibility Criteria.** Participants were included in the study if they were: (i) enrolled in a Day Patient Program between January and June 2019 at the John Cade Unit, Royal Melbourne Hospital, (ii) aged between 18 and 65 years, (iii) willing and able to give informed consent, (iv) willing and able to complete questionnaires and participate in interviews, and (v) able to speak and read basic English. Due to the high rate of psychological comorbidities found in adults with eating disorders (Hay et al., 2014), participants with diagnoses such as depressive or anxiety disorders were included.

**Setting and Schedule.** The study was conducted at the adult Eating Disorders Unit at the Royal Melbourne Hospital in Melbourne, Australia. This site was identified as highly relevant to this research project as it is a public hospital that is representative of a diverse adult population within a large metropolitan and regional catchment area. The 8-week Day Patient Program ran between 9.30 am and 3.30 pm Mondays to Fridays (finishing on Thursday during the final week). Multidisciplinary care included individually tailored treatment plans that consisted of nutritional support, psychology, social work, and ward rounds. Groups were scheduled throughout each week, including acceptance and commitment therapy, food challenges, mindfulness, a body image group, and art therapy.

The study schedule is outlined in Table 8. The schedule was repeated twice to include participants from two separate Day Patient Programs. The first 8-week Day Patient Program took place from 22nd January until 15th March 2019, and the second took place from 7th May until 28th

June 2019. Participants were recruited over a 1-month period during January 2019 for the first Day Patient Program, and then again from mid-April to early May 2019 for the second Day Patient Program.

**Table 8**

*Study Period Schedule* (Chan et al., 2013)

| | **Study Period[a]** | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Enrolment** | **Allocation** | **Post-Allocation** | | | | | | | | | | | | | | | |
| **Timepoint** | Jan 2019 | Jan 2019 | Week 1 | | Week 2 | | Week 3 | | Week 4 | | Week 5 | | Week 6 | | Week 7 | | Week 8 | |
| **Session type** | | | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | |
| **Enrolment:** | | | | | | | | | | | | | | | | | | |
| Screening | X | | | | | | | | | | | | | | | | | |
| Consent | X | | | | | | | | | | | | | | | | | |
| Allocation | | X | | | | | | | | | | | | | | | | |
| **Intervention:** | | | | | | | | | | | | | | | | | | |
| Art Therapy | | | ◆ | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ◆ |
| **Measures:** | | | | | | | | | | | | | | | | | | |
| Baseline Demographic | | X | | | | | | | | | | | | | | | | |
| ESS[b] | | X | | | | X | | | | X | | | | X | | | | X |
| SRS[c] | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X |
| WHOQOL-BREF[d] | | X | | | | X | | | | X | | | | X | | | | X |
| Interview | | | | | | | | | | X | | | | | | | | X |

[a]This schedule was repeated twice over two separate Day Patient Programs – this schedule is for the first program in January 2019; [b]Experience of Shame Scale (ESS); [c]Session Rating Scale (SRS); [d]World Health Organisation Quality of Life Instrument – Short Version (WHOQOL-BREF)

**Recruitment Procedure.** A purposive sampling strategy was used. Recruitment involved the following four steps.

1. Each participant was approached in-person by HK and me, and verbally invited to take part in the study. The participant was provided with relevant trial information and given a Participant Information sheet and a Consent Form (Appendix F) that included all study information, participant obligations and details on how to withdraw from the study if they changed their mind at any point. Potential participants had a period of up to 4

weeks to decide to take part in this study, depending on when the Day Patient Program in which they are enrolled began.

2. Participants were screened for eligibility.
3. The Consent Form (Appendix F) was signed and returned by the participant prior to the beginning of the Day Patient Program.

***Art Therapy Intervention***

Participants took part in 1.5-hour group art therapy sessions twice a week across the 8-week Day Patient Program, amounting to a total of 15 sessions. Each week of the intervention comprised two different art therapy approaches, which from here on will be referred to as *Session A* (conducted during the first session of the week) and *Session B* (conducted during the second session of the week) – a detailed explanation of the two sessions is provided in the next section below. The aim of offering two art therapy approaches in parallel throughout the intervention was to gain insight into the acceptability of these differing methods with this population.

*Person-centred* and *recovery-oriented* frameworks underpinned the art therapy approach, wherein participants were seen as the experts of their experiences, and were invited to draw on personal strengths and resources to initiate change (Australian Health Ministers Advisory Council, 2013; Rogers, 2016). A person-centred approach is responsive to the emerging needs of individuals during therapy (Rogers, 2016), and therefore my approach as an art therapist and artist was to be flexible to the needs of the participants and tailor the sessions to these needs where appropriate. The recovery-oriented framework values and seeks to promote the identity and lived experiences of people living with a mental illness beyond the limitations of their diagnosis (Australian Health Ministers Advisory Council, 2013). Together, these approaches aim to maximise self-determination, self-management, choice, and positive risk-taking, which are recognised as key values to support the recovery of adults with eating disorders (Hay et al., 2014). To this effect, as the facilitator of the art therapy sessions, I made art alongside participants to further encourage an atmosphere that was

non-hierarchical and to promote a treatment alliance (Moon, 2016). This offered opportunities for choice, control and autonomy for the participants; factors that are particularly relevant to this population where ambivalence towards treatment and recovery are common hurdles (Agras et al., 2004; Hay et al., 2014). An additional purpose of this was to alleviate potential feelings within the client of being watched or observed when art-making, which could cause self-doubt or shame in a client group with typically elevated traits of perfectionism. Creating art alongside clients in art therapy has been a contentious professional issue, however has also been described as a constructive intervention, including being similar to an attuned conversation when focused on awareness and engagement with the clients (Fenner & Byrne, 2019).

**Session A.** Each week, participants attended a structured art therapy session that incorporated warm-ups, themes and closing rituals (Table 9). Session A followed a typical structure of a group art therapy session (Liebmann, 2004), and is outlined in Table 10. An overview of the program was offered in the first session, along with a discussion of group boundaries, such as confidentiality, the focus on the process of making art rather than the outcome, and the guidelines for commenting on other group members' artworks.

**Table 9**

*Art Therapy Session Outlines*

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | **Session A – Theme-based** | | | | |
| **Warm up** | Scribble on a page | Spraying inks on paper as a group | Blind drawings using both hands | Clay throwing | Round-robin visual poem | Sensory guessing with eyes closed | Group drawing at arm's length | Purposively selecting materials |
| **Theme** | *Simple forms,* gentle introduction to art-making using collage | *Flexibility,* working with fluid paint | *Identity,* creating a self-box | *Letting go, holding on,* creating symbols from clay | *Transformation,* repurposing words to create new meanings through poetry | *Sensory meaning making,* using symbols in nature | *Connection,* creating a group artwork using drawing, painting and collage | *Growth/ Nourishment,* terrarium making |
| **Closing** | Letter to the artwork | Letter to the artwork | Letter to the artwork, and/or a letter from the artwork | Letter to the artwork, and/or a letter from the artwork | Letter to the artwork, and/or a letter from the artwork | Letter to the artwork, and/or a letter from the artwork | Discussion and reflection on the group's process | Group reflection on participation in the program |
| **Materials** | Coloured origami paper, scissors, glue, A3 paper, oil pastels | Inks, paper, paints, brushes, palette knives, sponges, squeeze bottles, tape | Mixed media including cardboard boxes, feathers, wire, wool, paint, etc. | Clay, paper clay, sculpting tools, water, coloured markers | Scissors, magazines, book pages, glue | Natural materials (including driftwood, shells, leaf skeletons, etc.), glue, tiles | Pastels, paints, collage material, large paper roll | Plants, soil, pots, mosaicking media, glue, miniature figurines, paint, paper, charcoal |
| | | | | **Session B – Open Studio** | | | | |
| **Demonstration** | Visual diary making | Using with fluid materials | Exploring clay | Making slime | Ink marbling | Lino-printing | Using crepe paper with water | N/A |
| **Materials** | Access to all materials in the art room | | | | | | | |

**Table 10**

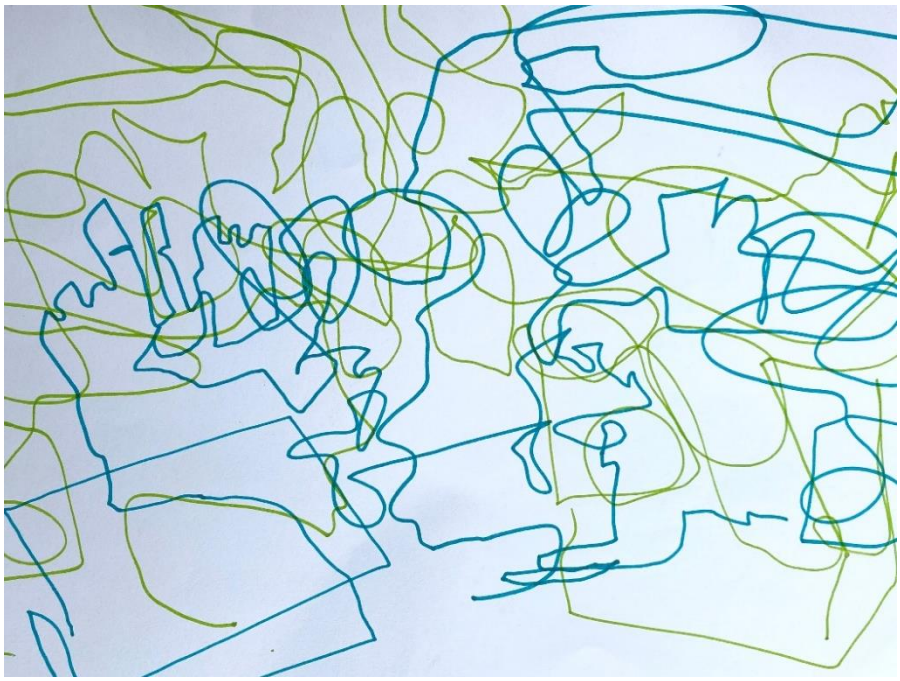
*Typical Art Therapy Group Session Structure* (Liebmann, 2004)

| Warm-Up | Main activity | Discussion | Total time |
|---|---|---|---|
| 20 minutes | 60 minutes | 10 minutes | 1.5 hours |

***Warm-Ups.*** A range of quick experiential warm-ups were used to transition participants to the art therapy sessions by way of releasing tension, focusing on the present moment, and orienting to the art therapy space. For example, *blind drawings* involved each participant drawing objects in front of them without looking at the paper (Figure 10). This process of creating continuous lines aimed to draw participants into the present moment and spark creative imagination without the intention of creating an aesthetically pleasing outcome. Another warm-up involved an invitation to throw balls of wet clay against a wooden panel (Figure 11). This process aimed to relieve tension and activate creative engagement.

**Figure 10**

*Warm-Up: Blind Drawing*



*Note.* Artwork made alongside participants during Week 3 (author's artwork)

**Figure 11**

*Warm-Up: Clay Throwing*

*Note.* Recreation of warm-up from the Week 4 art therapy group (author's artwork)

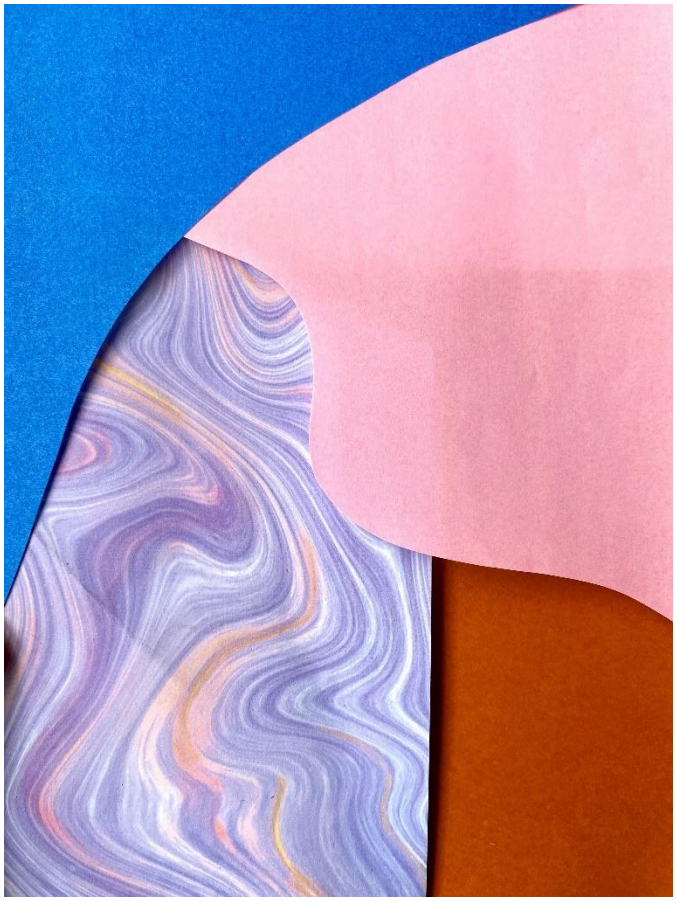
***Themes.*** Themes were informed by the art therapy literature, such as well-known group experiential activities (Liebmann, 2004; Luzzatto & Gabriel, 2000). In addition, my own work as a clinician with people with eating disorders contributed to many of the session ideas and material choices. Themes focused on mobilising strengths, building interpersonal connections, and promoting inner resources in keeping with psychosocial goals of eating disorder treatment programs (Centre of Excellence in Eating Disorders, 2017). An additional aim of the themes was to build resilience to shame by promoting factors that may protect against shame such as empathy, connection, power, and freedom (Brown, 2006).

Themes moved from providing containment and structure at the beginning of the intervention, to group art-making as the participants bonded over time. For example, Week 1 utilised collage to minimise apprehension that art therapy required artistic skill (Figure 12). Collaborative poetry writing in Week 5 provided avenues to connect non-verbally with fellow group members (Figure 13). This led to the emergence of metaphors for personal and group journeys.

Finally, Week 8 offered participants an opportunity to reflect on and recognise their experience of being part of the art therapy program through personalised terrarium-making (a miniature garden contained in a pot or vessel) (Figure 14). Words of encouragement and hope were written by the participants on composting paper and buried in the soil to eventually nourish the plant, a metaphor for the human life.

**Figure 12**

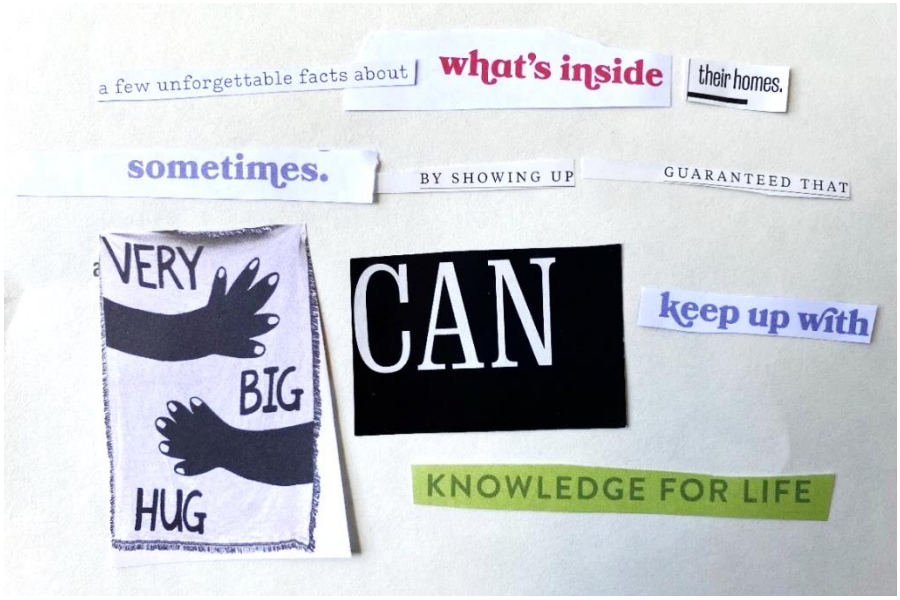
*Week 1: Simple Forms – Collage*



*Note.* Recreation of artwork from the Week 1 art therapy group (author's artwork)

**Figure 13**

*Week 5: Transformation – Visual Poem*




*Note.* Recreation of artwork from the Week 5 art therapy group (author's artwork)

**Figure 14**

*Week 8: Growth/Nourishment – Terrarium-Making*

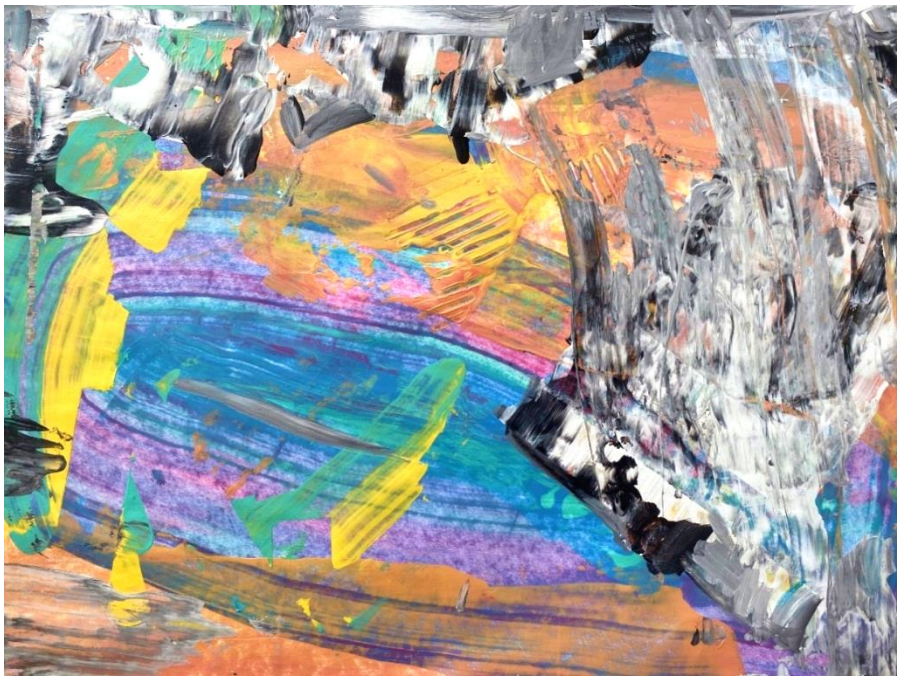
*Note.* Recreation of artwork from the Week 8 art therapy group (author's artwork)

***Closing.*** Towards the end of each session, participants discussed their artworks, and were invited to write a letter to their artworks. The process of letter-writing was to provide reflective distance and to articulate meaning held within their artworks through a different mode of expression. Letter-writing has been used in art therapy practice to enhance emotional expression and reflection on artworks (Fenner & Mohamad, 2019), and has been found to offer a depth of emotional expression for adults with eating disorders alongside several other benefits (Ramsey-Wade et al., 2020).

***Materials.*** A range of materials were offered to provide avenues for self-expression and experimentation (see Table 9, p.79). The Expressive Therapies Continuum (Kagin & Lusebrink, 1978) informed the choice of materials for both Session A and Session B throughout the intervention. This framework speaks to the effect of a range of different art materials and art processes (i.e. sensory, symbolic, cognitive) on creative expression, thinking and emotion (Hinz, 2009; Lusebrink & Hinz, 2020). By using a range of materials, participants were encouraged to shift beyond habituated, controlled and familiar forms of visual expression. The purpose of this was to encourage a freedom of expression, and a flexibility when approaching art-making. For example, Week 2 invited participants to use acrylic paint in irregular ways, such as by pouring, scraping, blending and wiping (Figure 15). An example of the use of sensory materials can be seen in Week 6, where natural materials were used to engage touch and smell when art-making (Figure 16).

**Figure 15**

*Week 2: Flexibility – Experimentation with Paint*



*Note.* Artwork made alongside participants during Week 2 (author's artwork)

**Figure 16**

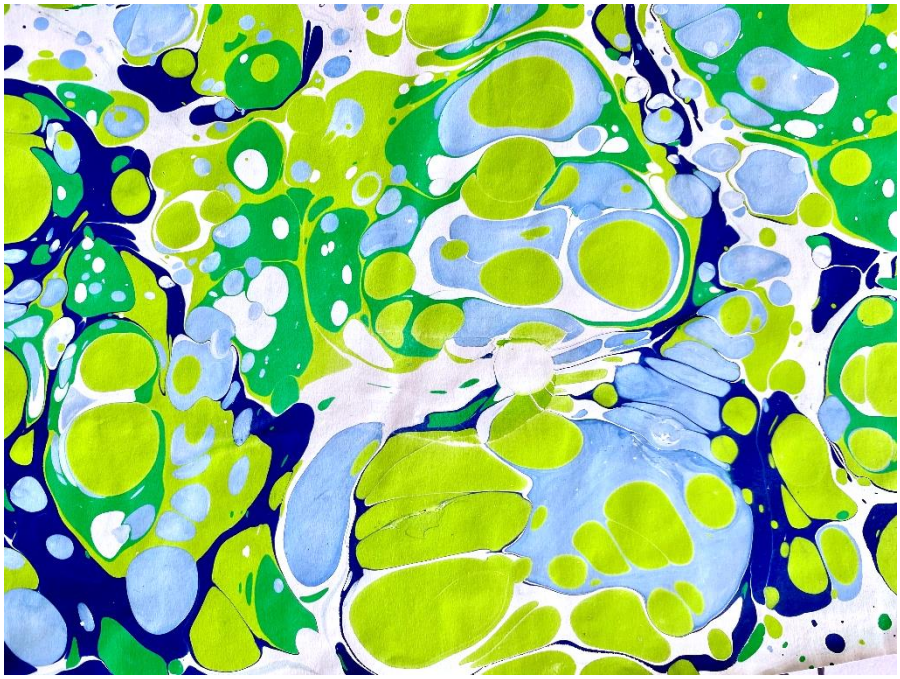
*Week 6: Sensory Meaning Making – Using Natural Materials*

*Note*. Recreation of artwork from the Week 6 art therapy group (author's artwork)

**Session B.** The second session each week followed an *open studio* approach (Allen, 1995). The open studio emphasised self-directed artistic processes, outcomes that encouraged individual decision-making and agency, and processes identified as beneficial to adults experiencing mental health issues in a variety of settings (Finkel & Bat Or, 2020; Kramer, 2000). This approach contrasted with the theme-oriented sessions, and in doing so, more diverse data on the acceptability of different approaches to art therapy were captured. When designing the sessions, a discussion with my supervisors took place about the prospect that some participants may feel anxious at creating art without any direction, particularly due to the high prevalence of anxiety among this client population (Swinbourne et al., 2012). Therefore, a brief demonstration on how to use a specific art material (i.e. clay) or art technique (i.e. ink marbling, Figure 17) was offered in the first 10 minutes of the session (Table 2). Each participant then chose if they wanted to follow the demonstration or focus on their own style of art-making for the remainder of the session.

**Figure 17**

*Week 5: Open Studio – Ink-Marbling*



*Note.* Recreation of artwork from the Week 5 art therapy group (author's artwork)

***Data Collection***

A *Participant Data Collection Form* was administered at baseline to each participant once a consent form had been received (Appendix G). The purpose of this form was to collect demographic and participant characteristic data (e.g., name, date of birth and gender), as well as to record contact details to later inform participants of the outcomes of the study. Data obtained from this form were entered into a Microsoft Excel spreadsheet (Microsoft 365, Microsoft) for the purpose of record keeping, and stored securely on the Royal Melbourne Hospital and La Trobe University servers. Data could only be accessed by my supervisors and I using password protected computers. Using this spreadsheet, each participant was allocated a participant number (i.e. from Participant 1 to Participant 9), and from then on, only participant numbers were used for data collection, analysis and reporting processes. Quantitative and qualitative data were collected concurrently in the form of questionnaires and audio recordings from interviews. Two questionnaires were administered at 5 time-points (baseline, then weeks 2, 4, 6 and 8), and one questionnaire was administered at 15 time-points (immediately after each art therapy session). Interviews were conducted twice at 4 weeks and at 8 weeks. The most meaningful time-point to this study was at the end of the intervention, at 8 weeks, which was considered the endpoint for the study.

**Primary Outcome: To Measure Feasibility for a Large-Scale RCT**

The primary study outcome was to gain an understanding about the feasibility of conducting a large-scale RCT to evaluate the effectiveness of art therapy with adults living with eating disorders. Measures used to assess each of the six domains of study feasibility identified to be relevant to this study are outlined below.

***Demand.*** Demand was calculated as the rate of recruitment of participants to the study.

***Implementation.*** Attrition rates and adherence were recorded as factors that may affect the implementation, or delivery, of the intervention. Attendance was recorded in an excel spreadsheet after each art therapy session.

***Practicality***. Practicality was measured by recording any adverse events, and also whether participants completed each questionnaire at the intended time-point successfully. This gave an indication as to whether the quantity of questionnaires was sufficient or presented as a burden on participants. Lastly, an analysis of the cost of running the study was carried out to determine the dollar amount needed to run a larger trial.

***Limited Efficacy.*** The extent to which art therapy may be an effective intervention for adults living with eating disorders was tested using two questionnaires that measured changes to quality of life and experiences of shame. These questionnaires were chosen as they measure important areas of interest that have been identified for this client group (Agras et al., 2004; Blythin et al., 2020). Both questionnaires were administered at 5 time-points after Session B: baseline and weeks 2, 4, 6 and 8. The first questionnaire was the World Health Organisation Quality of Life Instrument – Short Version (WHOQOL-BREF) (The WHOQOL Group, 1998) (Appendix H), which consists of 26 items that measure four broad domains: physical health, psychological health, social relationships, and environment. The range of scores for each domain is 4-20, with higher scores reflecting a more positive perception of quality of life. This measure was developed to be culturally sensitive and for use cross-culturally as a quality of life instrument for assessing participant perceptions in relation to their culture, concerns and value systems. This scale has been shown to be valid and reliable with good psychometric properties and internal consistency (Berlim et al., 2005; Skevington et al., 2004).

The second questionnaire was the Experience of Shame Scale (Appendix I). This is a 25-item scale that reports on participant experiences of three shame types (characterological, behavioural and bodily). Answers to the 25 questions included *not at all* (1 point), *a little* (2 points), *moderately* (3 points), and *very much* (4 points). Greater levels of shame are represented by higher scores (with a total range of 25-100). The Experience of Shame Scale has been shown to be valid, reliable and consistent (Andrews et al., 2002), including with adults with eating disorders (Kelly & Carter, 2014; Kelly & Tasca, 2016). The original scale reported on experiences over the past year, however personal communication with the developer of the scale (Bernice Andrews, 2017) confirmed that the

scale may be used reliably at different time points. Furthermore, there are several studies that have used the Experience of Shame Scale to assess changes over time periods less than one year (ranging from two weeks to six months), with good internal consistency and reliability (Kelly et al., 2009; Resick et al., 2008).

***Adaptation.*** The Session Rating Scale was used to collect continuous client feedback on the therapeutic alliance, the suitability of the art therapy framework (i.e. preferences towards unstructured or structured sessions), and whether the topics that emerged in the sessions were relevant to the participants (Duncan et al., 2003) (Appendix J). These data were collected after each session, and as a result, the information received from the Session Rating Scale meant that the art therapy sessions could be tailored to the better suit the needs of the participants. Further, data collected from the Session Rating Scale was used to provide valuable insights about the suitability of the different art therapy approaches (i.e., theme-oriented or open studio) to this population. The Session Rating Scale consists of a 4-item visual analogue scale (VAS) that is measured according to where the participant places a mark on a 10 cm line (with lower scores reflecting poorer session experience). The four items include: (i) relationship, (ii) goal and topics, (iii) approach or method, and (iv) overall alliance. The scale was filled out after each session and the scores were combined to calculate an overall score out of 40. The Session Rating Scale has been found to have good psychometric properties and has been found to be valid and reliable when compared to lengthier self-report measures (Duncan et al., 2003).

***Acceptability.*** Semi-structured interviews were completed twice by participants (at the end of Week 4 and Week 8) and were used to gain an understanding of participant experiences and perspectives of art therapy, thus measuring the acceptability of the intervention. Interviews were conducted to allow detailed information to be elicited from participants, contributing to a thorough understanding of their perspectives (Byrne, 2004). Interviews were based on (but not dictated by) an Interview Guide that was informed by the Interpretive Phenomenological Analysis interview guidelines by Smith and Osborn (2015) (Appendix K). The interview questions were not tested prior

to their use in this study. They aimed to prioritise personal meaning making of lived experiences through open-ended interviewing techniques (Smith & Osborn, 2015). The interviews took place in either the art therapy room, or a neighbouring private room at the setting, at the choice of the participant. The artworks that the participant created up until each interview were laid out in front of the participant as a foundation for discussion. Images were not analysed at any point during the study, rather participants gave verbal meaning to their artworks during the interviews. Reflective listening was incorporated to check the accuracy of my understandings as the interviewer, to ensure the participants felt heard, and to build trust.

**Sample Size Justification / Data Saturation.** As this was a feasibility study, a formal sample size estimate to be able to detect clinically meaningful effects in this population in relation to art therapy interventions was not determined. For the qualitative component of this study, "meaning" rather than "frequency" was of most interest to reach a level of data saturation (Braun & Clarke, 2021; Liamputtong, 2013). A total of 10 adults were enrolled across the two Day Patient Programs, and one person declined to take part in the study, citing an unwillingness to share personal details. Therefore, this study included nine participants, which was deemed an appropriate number to reach a level of qualitative data saturation (Guest et al., 2006), and to provide rich, meaningful data to address the research questions (Braun & Clarke, 2021).

### *Data Analysis*

**Statistical Analysis.** For continuously scored data, such as the WHOQOL-BREF and Experience of Shame Scale, means and standard deviations were calculated if the data were normally distributed. Distributions of such data were assessed graphically (via inspection of histograms) and by assessing skewness and kurtosis values, with values of ≥ -3 to ≤ +3 considered to represent a normal distribution (Peat & Barton, 2005). For continuous data that were not normally distributed, medians and ranges were calculated. To achieve the planned statistical analyses, IBM SPSS Statistics version 26.0 (IBM Corp, Armonk, NY) was used. Statistical significance was set at $p <$

.05 (i.e. α was set at .05). As this is only a feasibility study, substitution strategies for missing data (e.g. multiple imputation) (Sterne et al., 2009) were not performed, however missing data were descriptively reported.

**Qualitative Analysis.** Qualitative data were analysed using reflexive thematic analysis (TA) (Braun & Clarke, 2006, 2019). Braun and Clarke (2006) emphasised that the identification of themes is an inductive and iterative process that derives from the transcripts through interpretation by the researcher. Interpreting themes using reflexive TA requires transparent and active roles of the researcher because the construction of themes may be influenced by their biases, assumptions and experiences (Braun & Clarke, 2019, 2021). Therefore, researcher reflexivity and collaboration were instrumental to this process due to the subjective nature of interpretation. In this study, a *theme* was defined as a central concept that united patterns of shared meaning in the dataset (Braun & Clarke, 2021), and was prevalent in the responses of at least four participants. Six participants took part in the interviews, and shared meaning in the responses of four participants was deemed to be an appropriate number to meet the definition of a theme. The thematic synthesis process was checked for accuracy and consistency at each step by the primary supervisor (PF) to reduce interpretive bias through triangulation. First, I transcribed the audio recording from the digitally recorded interviews by hand. I then identified statements of meaning and keywords across the transcripts and tabulated them along with the corresponding quotes and participant numbers in a Word document. This step identified 124 key words and statements. From this, 40 rudimentary themes were identified and tabulated using thematic synthesis via a reduction from individual responses to common themes. The 40 themes were condensed into 21 themes through a process of pairing and collapsing themes that were alike. A final reduction to six overarching themes were identified by grouping at least two themes that were sufficiently similar (Van Lith et al., 2011). Finally, a narrative account was produced to support the *acceptability* component of the results using interpretation of the themes. Appendices L and M provide examples of the thematic analysis procedures.

**Mixed Method Analysis.** A convergent, parallel mixed analysis design was used where both data sets were prioritised equally throughout the process (Creswell & Clark, 2017). First, the qualitative and quantitative data sets were analysed independently, as described above. Second, the quantitative findings were used to shed light on the qualitative findings, and vice versa. This process was conducted by me and my primary supervisor (PF), and disputes that arose were rectified through discussion with a second supervisor (KL). Lastly, the juxtaposition of findings was integrated using a narrative synthesis in the results under the six domains of feasibility that are of interest to this study: *demand, implementation, practicality, limited efficacy, adaptation,* and *acceptability.* The integration of data sets provides rich and in-depth understandings of the phenomena of interest (Osborne, 2008). A comparison of the two data sets offered insight into the primary objective of this study relating to the feasibility of conducting a large-scale RCT, including any research problems that may arise in future study trials.

## Results

### *Participant Characteristics*

Nine women aged between 18 to 43 years (M = 27.11 years; SD = 8.13) consented to participate in the study. All participants were diagnosed with anorexia nervosa (AN), six of whom had a specific subtype recorded (n = 5: restrictive subtype; n = 1 binge/purge subtype). Several psychological comorbid diagnoses were recorded for five of the participants, including anxiety (n = 3), depression (n = 2), borderline personality disorder (n = 1), and schizoaffective disorder (n = 1).

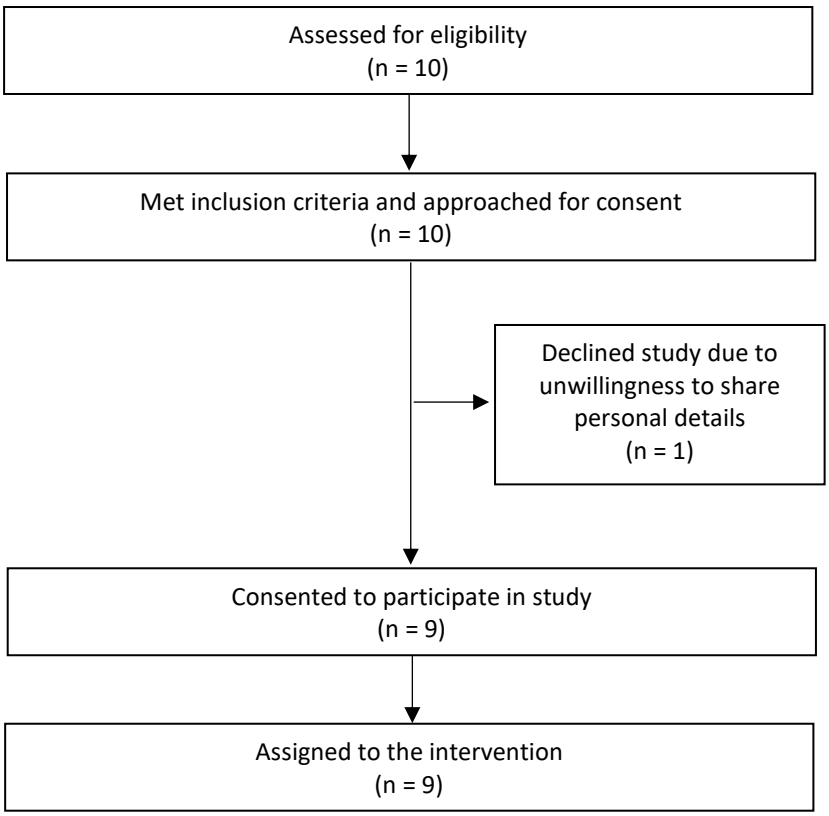
### *Demand*

Ten adults who enrolled in two Day Patient Programs between January 2019 and May 2019 were assessed for eligibility and approached with information about the study. One participant declined to take part, citing an unwillingness to share personal details. The overall recruitment rate was 90%, with nine adults consenting to be part of the study. Of the nine participants who enrolled, one opted only to take part in the interviews, similarly citing an unwillingness to share personal

details in the quantitative questionnaires. Figure 18 outlines the flow of participants through the study.

**Figure 18**

*Participant Flowchart* (Eldridge et al., 2016)




***Implementation***

The 8-week art therapy intervention was delivered as planned despite subsequent missing data (Table 11) and attrition. The session outlines (see Table 9, pg. 79) were closely followed, which demonstrated successful intervention adherence (i.e. the degree to which I as the art therapist followed the intervention protocol). Five participants left the study due to withdrawing from the Day Patient Program. Reasons given for withdrawal fell into one of two categories: (i) participants felt that the Program did not align with their stage of readiness for recovery, (ii) a consensus was reached among the treatment team that the Program was not the best treatment option for the

participant at that particular time. Examples for the latter reason include that a participant was not able to adhere to their meal plan or repeatedly missed groups. Once a participant had withdrawn from the Day Patient Program, they were automatically withdrawn from the art therapy study, since they no longer met the requirements for enrolment (i.e. participation in the Day Patient Program). Other reasons for missing data included participants not attending certain sessions due to a variety of reasons (i.e. medical and social work appointments, and family visits), and due to one participant only willing to take part in interviews and not quantitative outcome measures. This participant cited privacy concerns as the reason for this.

**Table 11**

*Missing Data*[a]

| Outcome measure | Timepoint[b] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Week 1 | | Week 2 | | Week 3 | | Week 4 | | Week 5 | | Week 6 | | Week 7 | | Week 8 |
| | | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A |
| **WHOQOL-BREF**[c] | 1 | | | | 3 | | | | 4 | | | | 5 | | | 5 |
| **ESS**[d] | 1 | | | | 3 | | | | 4 | | | | 5 | | | 5 |
| **SRS**[e] | | 1 | 2 | 4 | 3 | 3 | 6 | 6 | 4 | 4 | 6 | 7 | 6 | 6 | 7 | 5 |

[a]Numbers represent number of participants with missing data (total sample n = 9); [b]15 sessions over eight weeks. Session Rating Scale was recorded after each session, WHOQOL-BREF and ESS were recorded at baseline and at 2-week intervals; [c]World Health Organisation Quality of Life Instrument – Short Version (WHOQOL-BREF); [d]Experience of Shame Scale (ESS); [e]Session Rating Scale (SRS)

Overall, 45.8% of quantitative data were missing (103 out of 225 responses). A detailed overview of missing data is presented in Table 11. At Week 1, data from only one participant were missing, and this increased by the end of the study, where data from five participants were missing. This is reflective of the rise in attrition over the course of the study. Of the nine participants, six took part in the interviews: five of whom took part in both interviews (at weeks 4 and 8), and one of whom took part in only one interview (week 4). This occurred because three participants left the Day Patient Program before the first interview was conducted (at week 4) and one person left before the second interview was conducted (at week 8).

***Practicality***

Participants completed the research tasks and the cost of running art therapy at the setting was low. All participants completed the administered questionnaires at the correct time points when they were present, apart from one occasion, where a participant did not complete a Session Rating Scale after a session. This occurrence was an oversight by me and was unlikely due to the burden of filling out this brief scale. Overall, the participants showed no resistance to completing the research tasks, apart from the one participant who opted not to complete the quantitative outcome measures due to privacy concerns. No negative effects on the participants were recorded or observed. The art therapy sessions were conducted in an accessible and dedicated art room at the setting. Art supplies were purchased using a Graduate Research Grant of AUD$600 from La Trobe University to supplement the already existing art materials at the setting.

***Limited Efficacy***

For the WHOQOL-BREF, skewness and kurtosis values ranged from 0.11 to 1.25 and -2.01 to 1.92, respectively, across the four domains at baseline (Table 12). For the Experience of Shame Scale, skewness was 0.95 and kurtosis was -0.38. Hence the data from both measures were considered normally distributed at baseline. As the proportion of missing data was large (45.8%), significance testing (i.e. hypothesis testing) was not undertaken. Instead, the data are presented descriptively without a statistical comparison between pre-test and post-test scores. If large amounts of data are missing (i.e. over 40%), then results should only be considered as hypothesis generating (Jakobsen et al., 2017).

**Table 12**

*WHOQOL-BREF and Experience of Shame Scale Data*

| Outcome Measure | Domain | Timepoint[a] | N | Skewness | Kurtosis | Mean (SD[b]) or *Median (IQR[c]) |
|---|---|---|---|---|---|---|
| **WHOQOL-BREF[de]** | **Physical Health** | 1 | 8 | 1.19 | 0.80 | 59.38 (11.08) |
| | **Psychological** | | | 1.25 | 1.92 | 40.75 (10.82) |
| | **Social Relationships** | | | 0.11 | -1.27 | 41.38 (9.50) |
| | **Environment** | | | 0.20 | -2.01 | 65.50 (12.50) |
| | **Physical Health** | 2 | 6 | 1.18 | 3.23 | *63.00 (4.75) |
| | **Psychological** | | | 2.13 | 4.82 | *44.00 (15.25) |
| | **Social Relationships** | | | 0.00 | 1.06 | 50.00 (12.60) |
| | **Environment** | | | 0.56 | 1.79 | 77.17 (10.13) |
| | **Physical Health** | 3 | 4 | -0.65 | -1.12 | 67.60 (8.17) |
| | **Psychological** | | | 1.53 | 2.17 | 52.60 (17.17) |
| | **Social Relationships** | | | 0.61 | -3.33 | *44.00 (6.00) |
| | **Environment** | | | 0.51 | -0.61 | 73.80 (5.02) |
| | **Physical Health** | 4 | 4 | -0.86 | -1.29 | 70.50 (5.75) |
| | **Psychological** | | | 1.23 | 2.36 | 57.75 (8.02) |
| | **Social Relationships** | | | -0.54 | 0.98 | 51.50 (15.80) |
| | **Environment** | | | -0.45 | -1.97 | 80.00 (13.83) |
| | **Physical Health** | 5 | 4 | 0.28 | 1.54 | 81.25 (5.32) |
| | **Psychological** | | | 0.51 | -3.14 | *59.50 (28.00) |
| | **Social Relationships** | | | 0.00 | -6.00 | *53.00 (6.00) |
| | **Environment** | | | 0.00 | -3.53 | *81.50 (22.00) |
| **Experience of Shame Scale[f]** | **Not applicable** | 1 | 8 | 0.95 | -0.38 | 61.13 (13.02) |
| | | 2 | 6 | -0.08 | 2.25 | 54.17 (9.56) |
| | | 3 | 5 | 1.15 | 2.16 | 52.40 (14.06) |
| | | 4 | 4 | -1.10 | 1.04 | 47.50 (9.11) |
| | | 5 | 4 | 0.86 | -0.29 | 40.00 (5.29) |

[a]Timepoints 1, 2, 3, 4, and 5 were at baseline and weeks 2, 4, 6 and 8, respectively; [b]Standard Deviation (SD); [c]Inter-Quartile Range (IQR); [d]World Health Organisation Quality of Life Instrument – Short Version (WHOQOL-BREF); [e]Higher scores indicate better quality of life (range 0-100); [f]Higher scores indicate worse levels of shame (range 25-100)

Data from the WHOQOL-BREF was not found to be normally distributed at all timepoints (Table 12), so general trends in the data are not provided. Whereas, the Experience of Shame Scale was shown to be normally distributed at all timepoints, with skewness and kurtosis values ranging between -1.10 to 1.15 and -0.38 to 2.25, respectively (Table 12). Although significance testing was not appropriate given the high rate of missing data, a general improvement in the experience of

shame can be seen at each timepoint, with the mean baseline score at 61.13 and the post-test score at 40.

***Adaptation***

Due to the high rate of missing data for the Session Rating Scale (51.9%), statistical analysis was not performed. Data from the Session Rating Scale, however, provided valuable and immediate insight into participants' perceptions of each art therapy session. Adapting the art therapy intervention to meet the needs of participants was made possible by viewing the responses to the Session Rating Scale after each session. The person-centred framework that guided the art therapy sessions also made adaptation possible, where control, choice and self-determination were promoted in participants. Data for the Session Rating Scale was not found to be normally distributed at all timepoints (Table 13). The creators of the Session Rating Scale indicated that any score under 36 may be a source of concern (Duncan et al., 2003).

**Table 13**

*Session Rating Scale Data*

| Timepoint[a] | N | Skewness | Kurtosis | Mean[b] (SD[c]) or *Median (IQR[d]) |
|---|---|---|---|---|
| **1** | 8 | -0.37 | 0.93 | 34.20 (3.72) |
| **2** | 7 | -0.10 | -0.80 | 38.60 (1.17) |
| **3** | 5 | -2.19 | 4.81 | *39.50 (6.55) |
| **4** | 6 | -0.63 | -1.02 | 39.07 (0.97) |
| **5** | 6 | 0.51 | -1.15 | 37.70 (1.54) |
| **6** | 3 | -1.73 | † | † |
| **7** | 3 | -1.18 | † | † |
| **8** | 5 | -0.34 | -2.42 | 38.20 (1.69) |
| **9** | 5 | -1.73 | 2.85 | 39.40 (0.87) |
| **10** | 3 | 1.73 | † | † |
| **11** | 2 | † | † | † |
| **12** | 3 | -0.78 | † | † |
| **13** | 3 | -1.60 | † | † |
| **14** | 2 | † | † | † |
| **15** | 4 | -1.92 | 3.72 | *39.90 (1.33) |

[a]Session Rating Scale was recorded after each session; [b]Higher scores indicate better client satisfaction regarding therapeutic alliance and session impact (range 0-40); [c]Standard Deviation (SD); [d]Inter-Quartile Range (IQR); †Statistical analysis was not performed due to insufficient sample size

### *Acceptability*

A total of 11 interviews were conducted with six participants (participants 1, 5, 6, 7, 8 and 9), lasting an average of 14 minutes. From the data analysis, 21 themes were identified, which were grouped under six overarching themes (Table 14), including: (i) *art therapy offers a space for self-expression, self-regulation and containment*, (ii) *unfamiliar areas of self are explored during art-making as participants step outside of their comfort zones*, (iii) *art therapy supports flexible attitudes, challenges perfectionistic ideals and enhances openness to the art-making process*, (iv) *the art therapy group offers a sense of connectedness, understanding and acceptance*, (v) *the qualities of art materials when making art promotes feelings of empowerment and accomplishment, and facilitates*

*meaning making*, and (vi) *art materials that emphasise sensory experiences provide channels for tension release, pleasure and (psychological) grounding*. These overarching themes demonstrate the multifaceted experiences of participants who took part in the art therapy intervention and indicate a strong acceptability to it. They are described in further detail below.

**Table 14**

*Thematic Synthesis Table*

| Overarching Themes | Themes (number contributing participants) | Quotes |
|---|---|---|
| **1. Art therapy offers a space for self-expression, self-regulation and containment** | 1. Emotional expression and externalisation are facilitated through art-making, as the artwork can act as a container for overwhelming emotions (n = 6) | *"I found art therapy helped as a creative outlet to kind of release all of the emotion stuff during the course of the Day Program."* (Participant 9)<br>*"Emotionally I feel clear. And like I'm doing something with my emotions rather than just sitting there with them… it can kind of come out in what you're making."* (Participant 8) |
| | 2. The non-verbal nature of art therapy offers an alternative means to explore issues (n = 6) | *"You're not thinking about and talking about how you feel all the time. Sometimes it's good to just maybe put it down on paper."* (Participant 6) |
| | 3. Absorption in art-making offers participants a break from the overall intensity of eating disorder treatment by providing space for relaxation, anxiety relief and pleasure (n = 6) | *"It's nice to just like be able to be doing something that is like therapeutic, and also sort of like anxiety relieving."* (Participant 1)<br>*"I feel more peaceful just sitting in the art room doing my work."* (Participant 5)<br>*"It can get a bit intense talking about body image and like sort of harsher ways of dealing with the disorder at times. But this is… it still focuses on the positive things but it's a lot more relaxed and it's nice to break up the day with something intense and then something chill and, you know, not have it focused completely on just eating disorders."* (Participant 7) |
| | 4. Participants are able to take charge of their recovery by moving at their own pace through therapy (n = 4) | *"You can still think about things, but like process in your own time, rather than just like having to, like, be in a group, and just be like constantly confronted."* (Participant 1)<br>*"I loved it, because you can relate it to yourself no matter what, rather than just general groups."* (Participant 5) |
| **2. Unfamiliar areas of self are explored during art-making as participants step outside of their comfort zones** | 5. The art-making process promotes opportunities for play and experimentation (n = 6) | *"I just went a bit wild with the paint and the glitter and mirrors and stuff, but I think um… the lack of organisation with it made me feel really happy with it."* (Participant 7)<br>*"Experimenting with colours, and finding what works, and they're bright and colourful, just a bit of fun I guess. It got you to be creative."* (Participant 5) |

| Overarching Themes | Themes (number contributing participants) | Quotes |
|---|---|---|
| | 6. By offering structure in the art therapy sessions, the therapist supports participants to step outside of their comfort zones (n = 6) | *"Like obviously at home I can do whatever I want, but it's like I'm probably going to fall back into what I usually do. So, it's nice to like have like a dedicated time like every week to be doing art. And like have a new prompt or like trying a new medium…"* (Participant 1) |
| | 7. Connection to an unfamiliar or neglected creative self is facilitated during art therapy (n = 4) | *"I feel like I'm in tune more with the creative side which was there before the eating disorder reared its head up."* (Participant 9)<br>*"I'm more open and adaptable… a bit more creative than I thought that I was."* (Participant 6) |
| **3. Art therapy supports flexible attitudes, challenges perfectionistic ideals and an openness to the art-making process** | 8. The ability to be uncontrolled and messy in art-making encourages a sense of letting go and a feeling of pleasure (n = 4) | *"I like splattering paint around. I think, like, what I make is quite… it contrasts a lot with my… how I perceive myself anyway. Like… in the… perfectionist kind of controlled sense. It's very not controlled."* (Participant 8) |
| | 9. Engaging with new and different materials in art therapy promotes flexibility and adaptability (n = 4) | *"I think maybe it's opened me up to maybe doing some more of it. And doing different things, trying stuff out which I would never have thought of before."* (Participant 6)<br>*"It's made me feel like that I don't need to be so rigid with it, and you can explore different things and still create something really unique and interesting even though it's not perfect."* (Participant 7)<br>*"I feel like it's changing my brain to be ok with doing things more flexibly, rather than rigid."* (Participant 9) |
| | 10. Deep-seated perfectionistic attitudes towards art-making are challenged, allowing for a greater acceptance of the process of art-making and the finished artworks (n = 5) | *"Before I touched the paper I would've wanted in my mind, like, an exact outline of what the end result would be. And then I would've set some sort of expectation that it had to be… a certain, like, aesthetic standard. Like, looking really good. Whereas with this it's just… yeah, free flowing… with not many expectations."* (Participant 9) |
| | 11. A lack of control inherent in some group art-making activities lowers pressure on oneself and encourages participation (n = 4) | *"I normally… in the past I don't think I've really liked doing group stuff because it never turns out the way that I maybe envisioned it would. But, lack of control I think with art is maybe a good thing. It makes you a bit more adaptable sort of thing… see things from a different view."* (Participant 6) |

| Overarching Themes | Themes (number contributing participants) | Quotes |
|---|---|---|
| **4. The art therapy group offers a sense of connectedness, understanding and acceptance** | 12. Belonging to a group enables participants to view the therapeutic process of other group members, facilitating understanding towards others (n = 5) | *"It's interesting to see how different people, interpret a prompt if we are given one, or like, see what they do and how they use the materials."* (Participant 1)<br>*"I like it in a group, I think it helps, um, just sort of see that everyone's on a different path and completely different interests and what they get out of the activity and stuff, it's really interesting."* (Participant 7) |
| | 13. Making art in a group contributes to a sense of collaboration and togetherness, while still offering opportunities for individuality (n = 5) | *"You get to know people in the group more and that helps when you are doing a group program."* (Participant 1)<br>*"We all contributed, but at least we could find our own little personalised bit, like you go 'I did that'…"* (Participant 5) |
| | 14. The non-judgmental art therapy space offers an opportunity to make art without worrying about what others think (n = 5) | *"It's good to know that it's just… this is just for me, I can burn it all at the end, like it doesn't matter. It's um… it doesn't need to be good for an assessment, it's just… how I'm feeling in the moment, and that's all right."* (Participant 7) |
| | 15. Creating poetry in a group is engaging, binding and unexpected (n = 4) | *"It's sort of the power of words instead of, um… the visual aspect of it, which was really interesting. It's like art from a different direction."* (Participant 7)<br>*"Yeah, it was everyone contributing. And even if it didn't kind of go the way that I would have written it, like, it was ok."* (Participant 6) |
| **5. The qualities of art materials when making art promotes feelings of empowerment and accomplishment, and facilitates meaning making** | 16. Art therapy offers a space for the emergence of memories, inspires personal symbols and meaning making (n = 6) | *"I had been up at mum and dad's place like the week before. So I think that was more, like, representing the countryside, like what I had driven past, maybe? Yeah."* Participant 6)<br>*"Like the meanings of the fig leaves and stuff like that… it just brought up a lot of… the secretive, and like the change, and the new life and stuff like that."* (Participant 1) |
| | 17. The tangible nature of the artworks supports feelings of accomplishment and productivity (n = 5) | *"You actually persist and then you can look back and say, oh I actually made this, like, I achieved something tangible in the session…"* (Participant 7)<br>*"Looking back on the all the art, it's kind of like, oh, I have actually done a lot."* (Participant 1) |
| | 18. Using art materials that are easier to control or that are familiar promote feelings of security (n = 4) | *"I usually just like using pencils where I've got, like, control over it and I can make it neat."* (Participant 6)<br>*"I've always clung to drawing and sketching because I know that, like, I feel like I'm good at it."* (Participant 7) |

| Overarching Themes | Themes (number contributing participants) | Quotes |
|---|---|---|
| | 19. Externalising thoughts and feelings through a visual medium allows for distancing, and in turn provides greater insights into the self (n = 4) | *"Mostly when I'm doing stuff a lot of thoughts not going into it, but then when I look back I can kind of put some thought into what I've done. Or create a meaning for it. So, at the time I'm not necessarily thinking of anything, but afterwards I can."* (Participant 6) |
| **6. Art materials that emphasise sensory experiences provide channels for tension release, pleasure and (psychological) grounding** | 20. Visual elements of colour can elicit strong emotions, have self-soothing effects or signify personal styles (n = 4) | *"Cold colours… it just reminds me of the ocean. It makes me really calm, where I feel really happy and calm."* (Participant 7)<br><br>*"I just feel like all of these emotions bubbling up, especially with colour. I don't know what it is…Especially red."* (Participant 9)<br><br>*"I seem to have gone for all the same kind of colours… maybe that shows that I'm, like, forming kinds of habits, I go for the same kinds of things all the time without even realising."* (Participant 6) |
| | 21. The sensory qualities of modelling clay, slime and natural materials relieve tension in the body and inspire playfulness and pleasure (n = 5) | *"When I'm squeezing the magic clay … like I was really squeezing it… it was just so, like, a satisfying feeling. I was like, oh..! Release… maybe release of tension? Including throwing the clay… oh, it was so good!"* (Participant 9)<br><br>*"Just having… something beautiful that's connected to the earth in your pocket makes you feel that much better about being grounded and stuff."* (Participant 7) |

**Art Therapy Offers a Space for Self-Expression, Self-Regulation and Containment.**

Overwhelmingly, participants reported that art therapy facilitated emotional expression, externalisation and containment, noting that art can "manage that bubble up of emotion". Non-verbal processes in art therapy offered participants alternative avenues to explore issues without the need to vocalise what is going on for them. Participants voiced that they were in control of their individual paths through therapy, that they could "process in your own time" without feeling "constantly confronted" and explore issues relevant to themselves. By being drawn into art-making, participants were offered "anxiety-relieving", "peaceful" and pleasurable experiences that alleviated the intensity of the Day Patient Program.

**Unfamiliar Areas of Self Are Explored During Art-making as Participants Step Outside of Their Comfort Zones.** Art therapy facilitated positive risk-taking whereby participants could experiment by "fooling around" with art materials and push the boundaries of their comfort zones by engaging in art-making in a supportive environment. Connection to a creative self was promoted, with one participant noting that "I feel like I'm in tune more with the creative side, which was there before the eating disorder reared its head up". Play and experimentation with a variety of media was facilitated and this was found to be satisfying and enriching – "I just went a bit wild with the paint… the lack of organisation with it made me feel really happy with it".

**Art Therapy Supports Flexible Attitudes, Challenges Perfectionistic Ideals and Enhances Openness to the Art-making Process.** Broader self-perspectives were gained from engaging in art therapy, where participants discovered they were "more open and adaptable" than they thought. Flexibility and adaptability were promoted in participants through an engagement with a range of art materials, and many agreed that creating art that was uncontrolled offered a sense of pleasure. One participant described how she felt that art therapy was "changing her brain to be ok with doing things more flexibly, rather than rigid". The challenge to participants' perfectionism offered opportunities to accept the process of making with less emphasis given to the finished artwork, allowing art-making to be "free flowing… with not many expectations". Creating art with the group

lowered feeling of pressure placed on themselves and offered the experience of making and seeing "from a different view".

**The Art Therapy Group Offers a Sense of Connectedness, Understanding and Acceptance.** Participants experienced group art therapy as non-judgemental and binding, offering differing points of view that promoted an understanding that "everyone's on a different path" with "completely different interests". Making art in a group allowed participants to contribute to the group while still maintaining their individuality – "we all contributed, but at least we could find our own little personalised bit". The process could be unexpected and engaging, particularly in relation to a group poetry making activity, which was described as "art from a different direction" where it was ok if the process "didn't kind of go the way" that each participant had wanted it to.

**The Qualities of Art Materials When Making Art Promotes Feelings of Empowerment and Accomplishment, and Facilitates Meaning Making.** The specific nature of certain art materials elicited a range of experiences in participants when art-making. Certain art materials instilled a greater sense of security, such as using pencils to draw, because participants felt that they "were good at it", had "control over it" and "can make it neat". The resulting artworks from art therapy led to feelings of accomplishment, because participants felt they "achieved something tangible in the session". At times participants found that expression through art materials allowed for meaning making to emerge, offered distancing, and provided insight - "the meanings of the fig leaves… just brought up a lot of… the secretive, and like the change, and the new life".

**Art Materials That Emphasise Sensory Experiences Provide Channels for Tension Release, Pleasure and (Psychological) Grounding.** Sensory and tactile art materials, such as slime and clay, were found to offer a "release of tension" and promote pleasure in participants. Colour was seen to elicit powerful feelings in participants and have self-soothing effects – "cold colours… it reminds me of the ocean. It makes me really calm, where I feel really happy and calm". Personal styles when art-

making were realised through repeated patterns of colour for some participants who were at times surprised that “I go for the same kinds of things all the time without even realising”.

**Discussion**

The study presented in this chapter examined the feasibility of conducting a future large-scale RCT using six domains of study feasibility, including *demand, implementation, practicality, limited efficacy, adaptation, and acceptability* (Bowen et al., 2009). A further aim of the study was to generate hypotheses relating to the effectiveness and acceptability of art therapy for adults who have eating disorders. The findings revealed feasibility issues relating to *implementation* and *limited efficacy*, which means that conducting a large-scale RCT would not be feasible unless key issues are addressed. Specifically, the high rates of attrition and missing data meant that significance testing could not be undertaken. Despite these limitations, several aspects of feasibility were identified in relation to *demand, practicality, adaptation and acceptability*. The high rate of recruitment demonstrated a positive demand, no adverse events were recorded, and the intervention was able to be adapted to suit the research environment and the needs of participants. Further, the qualitative component of this study found that art therapy was an acceptable treatment for participants, and the TA identified several hypotheses for further exploration. Overall, the findings indicated that participants perceived clear benefits of taking part in art therapy, and exposed several limitations that contribute to understandings that are paramount to informing a large-scale RCT.

The high rate of attrition and missing data exposed key feasibility issues relating to *implementation* and *limited efficacy*. Attrition is a major issue in studies involving adults with AN (Abd Elbaky et al., 2013; Abd Elbaky et al., 2014), more so than in studies of other mental health disorders and other eating disorders (Fassino et al., 2009). In the present study, all participants had a diagnosis of AN and 33% of participants dropped out of treatment. This rate sits at the lower range of dropouts reported in a review of multiple outpatient treatment services for people with AN where 29%-73% of participants left (Fassino et al., 2009). Substantial missing data meant that

significance testing was not undertaken, and this limited the contribution of quantitative evidence to this study. This finding indicates that a large-scale RCT would not be feasible unless issues of attrition and missing data are addressed. This is in contrast to another study that showed that it would be feasible to conduct an RCT involving art therapy, however this study differed in its focus on a combination of therapeutic treatments, including family-based therapy with either art therapy or cognitive remediation therapy with adolescent participants (Lock et al., 2018). In addition, a systematic review and RCT that focused on attrition from diverse treatment programs by people with eating disorders identified a range of factors that contributed to dropouts, including a diagnosis of AN (in particular with a purge subtype), personality disorders and other psychiatric comorbidities, and poorer eating disorder related quality of life (Abd Elbaky et al., 2013; Abd Elbaky et al., 2014). All nine participants recruited into the feasibility study had AN, five of whom had comorbid psychological disorders, such as anxiety, depression and borderline personality disorder. This may offer an insight into the high rate of dropouts in this study. Reasons given for dropping out were either voluntary (where participants did not feel that the program aligned with their readiness for recovery), or involuntary (where the treating team did not believe that the Day Patient Program was the best treatment option for that person at that time). One strategy that may improve adherence in future clinical trials is to only include participants who self-report a motivation to recover from their eating disorder. Further research investigating attrition minimisation strategies among this population would clearly be beneficial.

Despite the attrition that affected the study, a large-scale RCT would be feasible when the feasibility domains of *demand, practicality, adaptability,* and *acceptability* are considered. The rate of recruitment was high in the present study (90%), indicating a positive demand for art therapy among this sample. In addition, the art therapy intervention was found to be practical to run, recorded no adverse events, and was responsive to the research environment. Sessions could be tailored to the emerging and changing needs of participants by viewing responses to the Session Rating Scale after each session, and by working within a person-centred framework. For example,

the score after the first sessions was 34.20, indicating a cause of concern since it fell below what the creators of the scale indicate as an appropriate score (between 36 and 40) (Duncan et al., 2003); although, it is recognised the score falls just outside the appropriate range and no statistical comparison could be made to infer if this was, indeed, an issue of concern. Nevertheless, this score likely represents initial feelings of anxiousness and fear that often occur during a first group psychotherapy session (Yalom, 2005). From this initial response, the following session was adapted to focus more on creating a comfortable environment in which to make art and get to know other participants in the group. This was achieved through the visual diary making activity, where participants worked at their own pace. Offering an adaptable psychotherapeutic intervention is particularly relevant to this population who can experience transformation over the intensive 8-week Day Patient Program. Following strict, individually tailored meal plans, and adhering to treatment requirements can be incredibly challenging for people who may not be ready to recover (Agras et al., 2004; Halmi, 2013). Further, intensive group treatment programs for people with eating disorders, such as the 8-week Day Patient Program in the present study, leave little room for a break from eating, food, and weight related concerns. However, interviews revealed that participants found absorption in art-making "anxiety-relieving", "peaceful" and offered a break from the overall intensity of the other treatments incorporated into the Day Patient Program. This finding could inform how art therapy is delivered during such programs, specifically with a focus on person-centred practices that incorporate broad process-focused themes or an open studio approach, rather than using food, body image and eating behaviour themes to guide sessions. Vital to the recovery of people with eating disorders is a sense of autonomy and personal responsibility during treatment, as opposed to being passive recipients of treatment (Darcy et al., 2010; van der Kaap-Deeder et al., 2014). Indeed, participants reported satisfaction at being able to work at their own pace in art therapy on issues they perceived as relevant.

*Acceptability* towards art therapy as a treatment for this sample was revealed in the interviews, which contributed detailed and compelling accounts of the experiences of participants.

This is despite the interviews only lasting for an average of 14 minutes, which was shorter than anticipated. The interview length was adapted to suit each participant's tolerability and desire and contributed information into the feasibility and design of interviews for future research. Findings revealed that art therapy offered opportunities for emotional self-expression, flexibility, and connectedness, while also encouraging participants to engage in positive risk taking by stepping outside of their comfort zones. The promotion of self-expression is a common finding among art therapy research with a range of mental health conditions (Van Lith et al., 2011; Van Lith et al., 2013), and was a key finding with people with eating disorders in the systematic review presented in Chapter Three. Verbally disclosing eating disordered thoughts and behaviours can be highly shame-inducing , and silence induced by shame can hinder the therapeutic relationship (Skårderud, 2007b). The findings of this study suggest that art therapy could play a role in facilitating self-expression without the need for challenging self-disclosure due to its non-verbal processes. Further, art-making can bring form to experience where words alone may be inadequate to address the complex experiences of shame (Johnson, 1990).

A hypothesis identified in this study that is worthy of further investigation is the capacity for art therapy to promote areas seen to support recovery in adults with eating disorders. Characteristics that are reported to be vital in the recovery from an eating disorder include a strong therapeutic alliance, motivation to change, social support, and developing an identity outside of the eating disorder (Federici & Kaplan, 2008). In the interviews, participants reported on the non-judgemental nature of the art therapy groups, which also facilitated a greater understanding of other group members. Further, participants reported connecting with unfamiliar, creative parts of themselves. Connection to a creative self was further strengthened through feelings of accomplishment at creating tangible artworks. Gaining pride from art-making was a key theme identified in the systematic review presented in Chapter Three, and has also been shown to be a common finding in the use of art therapy in mental health recovery more broadly (Van Lith et al., 2011). When an eating disorder becomes part of a person's identity, recovery can be especially

challenging (Williams et al., 2016). By engaging with a creative self and gaining a sense of pride through art-making, art therapy could support people with eating disorder to develop an identity beyond the illness.

Another important study finding for future exploration is the impact of art therapy on the cognitive flexibility of people with eating disorders. Cognitive flexibility is defined as the ability to adjust thinking or attention in response to the demands of a present situation (Dahlgren et al., 2019). Poor cognitive flexibility is considered a neurobiological trait in the development and maintenance of AN (Tchanturia et al., 2011), and has also been identified as a trait across the spectrum of eating disorders (Smith et al., 2018; Wu et al., 2014). The TA that was used in the present study identified that art therapy supported flexible attitudes, challenged perfectionistic ideals, facilitated positive risk-taking and experimentation during art-making. One participant described that she felt art therapy was "changing my brain to be ok with doing things more flexibly, rather than rigid". Another participant echoed this sentiment, saying "it's opened me up to… doing different things, trying stuff out which I would never have thought of before". One reason for the flexible response to art-making could be due to the wide range of art materials that are offered in art therapy that support varied sensory, cognitive, symbolic, and affective experiences. Indeed, different art materials were found to elicit a range of responses in the participants. For example, sensory and tactile materials, such as slime and clay, offered participants an experience of a "release of tension" and pleasure. The diverse experiences offered in art therapy could be seen to benefit participants' flexibility when engaging in new activities. The effect of specific art materials on people with eating disorders has been previously theorised (Misluk-Gervase, 2020), but no rigorous studies have been conducted. Further, the art therapy sessions seemed to have impacted on participants' perceptions of themselves as flexible, such as one participant who reported that she was "more open and adaptable" than previously thought. Whether art therapy can improve the cognitive flexibility of people with eating disorders by challenging rigid thinking patterns through engagement in creative and expressive processes is worthy of greater attention.

A noteworthy discussion point is the difficulty of addressing shame in this study. The attempt to measure this complex and multi-faceted emotion using a 25-item scale is a clear limitation, particularly due to the challenge of using scales that can distinguish and measure a specific emotion (Strongman, 1987). Despite this limitation a trend in the Experience of Shame Scale showed improvements in participants' levels of shame from baseline to post-test. However, this preliminary finding is limited due to the high rate of missing data. An additional way in which shame could be seen to have had influence in the study is in the reasons given by two people for not participating in research activities. For example, shame has been found to impact self-disclosure in therapeutic relationships with people with eating disorders (Swan & Andrews, 2003), and may have contributed to an unwillingness of participants to share personal information. One participant declined to take part in the quantitative questionnaires, citing an unwillingness to disclose personal details. This was the same reason provided by the person who declined to take part in the study, and has been similarly reported as a reason for people not signing up for past research (Skårderud, 2007a). Their privacy concerns may have been due to a *fear of exposure*, an experience associated with shame that involves a concern that others will perceive a person's inadequacies (Tangney & Salovey, 2010). This study indicates that the effects of shame in this context may need to be considered in the recruitment and design of future studies.

***Generalisability***

Due to methodological weaknesses (such as the absence of a control comparison group and a small sample size), the outcomes of this study lack generalisability beyond the sample studied. All participants were diagnosed with AN, which is not representative of the spectrum of eating disorders, nor the most common eating disorder subtypes (i.e. OSFED and BED) (Galmiche et al., 2019). Likewise, this is not representative of the majority of people who live with an eating disorder in the community, since many of these individuals may not seek treatment at a hospital or volunteer for research projects related to eating disorders (DeBar et al., 2009). Nevertheless, the data generated by this study have produced valuable hypotheses for further studies. Regarding

applicability, researchers should consider ways to improve intervention adherence and increase sample sizes to counter the high attrition and missing data. In doing so, this could improve the feasibility of conducting a large-scale clinical trial. If art therapy is found to be beneficial in further research, such as in large-scale clinical trials, this could have a major impact on the use of art therapy in clinical settings for adults with eating disorders.

***Strengths and Limitations***

This is the first study to investigate the feasibility of conducting a large-scale RCT to specifically evaluate the effectiveness of art therapy for adults with eating disorders. Moreover, the mixed methods design of this study not only generated important avenues for further research, but its exploratory nature also identified key feasibility considerations in terms of *implementation* and *limited efficacy*. A major strength of this study is seen in the use of an accepted framework to investigate feasibility, i.e. the framework from Bowen et al. (2009). An additional strength was the use of semi-structured interviews to present the views and experiences of participants towards the intervention in an unbiased manner. This method allowed for rich and complex data to emerge from personal storytelling about their experiences that is not prevalent in past art therapy research with people with eating disorders. Further, the person-centred framework of art therapy was shown to be acceptable, and the range of art materials used in the sessions provided participants diverse and flexible experiences. Another strength was seen in actions taken to ensure the trustworthiness of the qualitative data, including the primary supervisor (PF) checking the data accuracy at each step of the TA process. Finally, the study showed that art therapy is a strengths-based approach that provides a novel, innovative and non-pharmacological treatment that was easily integrated into a clinical eating disorder treatment program.

There are also several limitations of the present study that may have impacted on the findings that need to be considered in the design of future large-scale trials. First, the present study is a case series study that lacks comparison to a control group. Hence, there is a possibility of

confounding due to participants not being randomised into groups, with a comparison between the experimental (i.e. art therapy) group and a control group. Second, the non-blinding of participants subjected the study to potential issues of bias (e.g. performance bias). Third, measuring the complex emotion of shame using a 25-item scale may be considered not ideal since shame may be experienced differently by each person, and may also be experienced unconsciously. Similarly, the WHOQOL-BREF is a generic quality of life scale that is not specifically targeted to people with eating disorders. Researchers should, therefore, consider using outcome measures that have been shown to be relevant to people with eating disorders. Fourth, the results of the Session Rating Scale may have been influenced by the Hawthorn or Rosenthal effects since the scale was filled out directly after the art therapy sessions took place and were handed straight to me by participants. There is also a risk that interview responses were tailored to please me, since I conducted both the art therapy sessions and interviews. Finally, the study did not document participants' artworks. The reason for this was to mitigate adding to participants' experiences of shame, such as feelings of exposure or judgement at having their artworks photographed and recorded. Future studies should consider how to involve the artworks of participants in a sensitive manner alongside their own interpretations of their artworks. Upon reflection, a question could have been included on the Participant Data Collection Form at baseline as to whether the participant would say "yes" or "no" to having their artworks photographed even though they would not be used for the present study.

**Conclusion**

Currently, few studies have investigated the effectiveness of art therapy for adults with eating disorders, and methodological limitations in the research mean that conclusions are difficult to draw. This study begins to address these current gaps in research by growing the evidence base for this novel, cost-effective and non-pharmacological treatment. The findings of this study identified feasibility issues relating to *implementation* and *limited efficacy*, which indicate that a large-scale RCT would not be feasible given the high rates of attrition and missing data. However, feasibility was shown in relation to *demand, practicality, adaptability* and *acceptability.* For example,

there was a high rate of recruitment, no adverse events, and the interviews demonstrated several perceived benefits of art therapy by participants. These benefits included opportunities for emotional self-expression, flexibility, accomplishment, and connectedness. Although the results may not be generalisable beyond the studied sample, the knowledge generated from this study relating to this innovative treatment is beneficial. A recommendation of this study is that future research should consider methods to improve intervention adherence and minimise missing data, as well as to substantiate the findings and investigate the hypotheses that have been generated by the study.

**Figure 19**

*Photographic Detail of Process 5*

# Chapter Five: Summary of Findings

Individuals living with eating disorders experience multifaceted health and psychosocial burdens, often face constant challenges related to food and body shape concerns, and typically encounter lengthy and complex treatment pathways. Despite the many advantages that current multidisciplinary interventions offer this population (Hay et al., 2014), treatment success is still not guaranteed, which can be observed by the high relapse rates and often chronic nature of the disorders (Carter et al., 2004; Grilo et al., 2012). Clearly, further research that evaluates additional treatment options is needed, and this thesis set out to investigate art therapy as one such option. This thesis formed out of my personal experience of being an art therapy student on placement at an adult eating disorders unit where I perceived several benefits that art therapy offered participants. A particular interest of mine was if and how art therapy could address the high levels of shame experienced by this population. Accordingly, this thesis investigated the effectiveness and acceptability of art therapy for people with eating disorders, and evaluated whether art therapy could lower shame in this population. Two interrelated studies were conducted to address these aims, including a systematic review and a feasibility study. This final chapter summarises the key findings of the thesis, examines its strengths and limitations, and discusses implications for future research and practice.

## Summary and Discussion of Key Findings

### *Evidence for the Effectiveness of Art Therapy for People with Eating Disorders*

A key finding of this thesis is that there are major gaps in the current evidence base related to art therapy for people with eating disorders. As a result, it is difficult to determine the effectiveness of art therapy as a treatment for this population. The systematic review outlined in Chapter Three identified that the evidence is limited in both quantity and quality. This situation exists as there are only a small number of mixed methods case series studies (i.e. no control comparison group), each study included only a small sample size, and they were predominantly

poorly reported in regard to research methods and results (Anzules et al., 2007; Chaves, 2011; Thaler et al., 2017). These limitations mean that quantitative findings from the three studies offer little evidence of effectiveness in relation to mental health and quality of life outcomes. Statistically significant findings included an increase in participants' self-esteem (Anzules et al., 2007), improved mood after the first session (Chaves, 2011), and a reduction in global anxiety (Thaler et al., 2017). One study also recorded an increase in disagreeability and tiredness, and a smaller urge to eat a meal after the 4.5-hour single session (Thaler et al., 2017). However, due to the limitations of these single group studies, it cannot be inferred that these findings are due to art therapy alone; that is, confounding and bias may have influenced the results. Similarly, quantitative findings from the feasibility study presented in Chapter Four offered little evidence for the effectiveness of art therapy. For example, the collected data from the World Health Organisation Quality of Life Instrument – Short Version (WHOQOL-BREF) and the Experience of Shame Scale were impacted by the high rate of missing data, which meant that significance testing was not appropriate.

Despite the lack of evidence for effectiveness identified by this thesis, the absence of randomised controlled trials (RCT) in the systematic review and lack of outcome-based findings in the feasibility study do not, without further evaluation, imply ineffectiveness (Altman & Bland, 1995) Rather, this thesis has highlighted the need for further high-quality art therapy research, particularly in the form of RCTs, to evaluate the effectiveness of art therapy for people with eating disorders. Conducting RCTs will improve the generalisability of results, as well as control for causality, biases and confounding effects where case series studies cannot (Landorf, 2016). Several RCTs evaluating art therapy have focused largely on its effectiveness in reducing depressive symptoms or improving quality of life, such as in adults who have mental health disorders (Blomdahl et al., 2018; Crawford et al., 2010; Haeyen et al., 2018; Nan & Ho, 2017), cancer (Egberg Thyme et al., 2009; Jang et al., 2016; Monti et al., 2006; Öster et al., 2006), or who have experienced a stroke (Kongkasuwan et al., 2016). Findings from these trials reveal predominantly beneficial results, and also demonstrate that RCTs evaluating art therapy are feasible to conduct with people who have a range of psychological

and physical illnesses. Further, the beneficial findings indicate that art therapy might also have positive impacts on adults with eating disorders, such as improved quality of life and depressive symptoms. Indeed, and as described in Chapter Two of this thesis, a comorbidity of a depressive disorder has been shown to occur in as many as 50% of people with eating disorders (Hudson et al., 2007).

Broadly, clinical and community contexts where art therapists practice are and will continue to request evidence for effectiveness (Gilroy, 2006), and RCTs are often regarded as the most valid form of evidence in healthcare (Coleman et al., 2009). However, a recommendation of this thesis is for future art therapy researchers to consider using mixed methods in the design of RCTs to allow for both the evaluation of effectiveness and the investigation of diverse experiences of participants with eating disorders to be expressed. As shown in this thesis, mixed methods can strengthen and expand upon study findings. Using only quantitative methods in research into psychotherapies has been criticised for reducing the experiences, complexities and differences of individuals to single classifications and statistical endpoints (Gilroy, 2006). Further, outcome measures in quantitative research may not take into account contextual factors that might affect treatment, such as the impact of the therapist or the therapeutic relationship (rather than the intervention) on the improvements of participants (McLeod, 2011). Overall, studying effectiveness is crucial to position art therapy as a viable treatment for people with eating disorders. However, qualitative methods should not be overlooked since they are essential to gaining a full appreciation of how art therapy can support understanding the experience and dilemmas posed by these disorders, and potential ways beyond ill health into the process of recovery.

### *Art Therapy as an Acceptable Treatment for People with Eating Disorders*

Despite the limited quantitative evidence from both the systematic review and feasibility study presented in this thesis, qualitative findings from both studies offered compelling accounts of participants' experiences of art therapy interventions. One major finding of this thesis is that art

therapy is an acceptable treatment for people with eating disorders. This was shown through the themes developed in both the systematic review and feasibility study, which are similar in many respects. The five themes identified in the systematic review included: (i) *art therapy promotes self-expression*, (ii) *new perspectives are discovered through art therapy*, (iii) *self-awareness is enhanced through art therapy*, (iv) *art therapy offers a distraction and a break,* and (v) *pride in oneself is supported by art therapy.* The six overarching themes in the feasibility study comprised: (i) *art therapy offers a space for self-expression, self-regulation and containment*, (ii) *unfamiliar areas of self are explored during art-making as participants step outside of their comfort zones*, (iii) *art therapy supports flexible attitudes, challenges perfectionistic ideals and enhances openness to the art-making process*, (iv) *the art therapy group offers a sense of connectedness, understanding and acceptance*, (v) *the qualities of art materials when making art promotes feelings of empowerment and accomplishment, and facilitates meaning making*, and (vi) *art materials that emphasise sensory experiences provide channels for tension release, pleasure and (psychological) grounding*.

Several similarities can be seen across the themes, such as both studies identified that art therapy offered participants opportunities for self-expression through art-making, new perspectives and openness to the art-making process, as well as a sense of pride and accomplishment from the resulting artworks. Further, individual themes that contributed to the overarching themes in the feasibility study also overlapped with themes identified in the systematic review. For example, participants experienced greater insights and awareness into the self through art therapy, and art therapy facilitated a distraction and break from the experiences of illness and treatment. These similar findings across the studies in this thesis support previous findings from narrative literature reviews on the use for art therapy with people with eating disorders (Chaves, 2011; Edwards, 2005; Wood, 1996). Further, these findings are congruent with benefits identified in art therapy research that include participants with a broader range of mental health diagnoses (Scope et al., 2017; Van Lith et al., 2011).

Despite only three studies with small sample sizes being included in the systematic review, and a sample of only nine participants in the feasibility study, the qualitative findings in this thesis demonstrate a clear perception from participants of the benefits of art therapy, which indicate that further investigation is warranted. Additional studies with larger sample sizes would be worthwhile, which could investigate issues such as the capacity for art therapy to promote self-expression for people with eating disorders. Restricted emotional expression has been associated with the experience of having an eating disorder (American Psychiatric Association, 2015), and the opportunity to externalise thoughts and feelings through art-making in a non-verbal and non-confrontational way could be highly beneficial for those who may struggle to recognise and verbalise their emotional experiences. Another important pathway to explore is the mastery and control that art therapy has been shown to offer people with eating disorders included in this thesis. Gaining feelings of pride and control through art-making may counter harmful ways that someone with an eating disorder may seek to feel accomplishment, such as by controlling eating habits (Butterfly Foundation, 2012; Faija et al., 2017). A further avenue to investigate that was identified in this thesis is the capacity for art therapy to promote flexibility and counter rigidity in people with eating disorders. High perfectionism and cognitive inflexibility have been attributed to eating disorders (Halmi et al., 2012; Tchanturia et al., 2011), and if it is shown that art materials and therapeutic art processes improve cognitive flexibility, this could have major implications on how art therapy is used with this population.

In addition to increased sample sizes, in-depth interviews will contribute more meaningful and detailed knowledge to future qualitative enquiries with people with eating disorders. In-depth interviews were initially planned for in the feasibility study presented in Chapter Four of this thesis, however the interviews only lasted an average of 14 minutes. The length of the interviews was adapted to suit the acceptability and desire of the participants, including fitting into their treatment schedules, but an effect of this may have been that more detailed accounts may not have been captured. Other studies evaluating psychosocial group interventions with adults with anorexia

nervosa (AN) have used a structured focus group (Larsson et al., 2018), and self-report qualitative questionnaires (Lloyd et al., 2014; Money et al., 2011). Whereas studies investigating the experience of adults living with AN or recovering from AN have reported in-depth interviews lasting up to 1 hour (Faija et al., 2017; Robinson et al., 2015; Smith et al., 2016). It may be that providing feedback on participating in an intervention as opposed to talking about the experience of living with an eating disorder is more challenging for these individuals. This may be associated with a desire to *people please* or to avoid situations that could be confronting. Since I both facilitated the art therapy groups and interviews in the feasibility study, providing direct and honest feedback about the sessions in a face-to-face interview could have been challenging for participants. Future studies may consider whether an external interviewer might be more acceptable for adults with AN to allow for longer interviews and more in-depth discussions. Alternatively, the use of open-ended questionnaires may be used or an interview approach which incorporates art-making into the process.

The qualitative findings identified in this thesis highlight the benefits of capturing the lived experiences of people with eating disorders. This is evident in the range of qualitative findings that have contributed to knowledge and identified further pathways for investigation, which is in contrast to the limited quantitative findings that have added to this thesis. Facilitating semi-structured interviews allowed for the elaboration of spontaneous views of participants and offered insights into their process of using art materials and also their perspectives on art therapy. This is particularly beneficial to art therapy research with this client group considering the limited knowledge that exists in this field. Future art therapy researchers should continue to incorporate qualitative methods in their study designs to allow for the generation of hypotheses for further investigation. Another way in which participants' expression of their experience of non-verbal processes in art therapy could be captured would be to incorporate arts-based research methods into future study designs. Arts-based research looks beyond the constraints of discourse to understand experiences which cannot be defined through written or spoken communication (Barone, 2011). Responses in arts-based research can be collected from nondiscursive means,

including through images (Leavy, 2008). This form of research may contribute to a greater understanding participants' experiences of using art materials and their engagement with art therapy processes.

The finding that art therapy was an acceptable treatment for participants is particularly positive, since ambivalence to treatment and recovery can be common barriers for people with eating disorders (Agras et al., 2004; Halmi et al., 2005). This suggests that the approach used in the feasibility study that valued choice, autonomy and control for participants may have been well-suited to their needs. The non-pathologising and strengths-based approach used in the feasibility study can be seen to be underpinned by a *salutogenic model*, which focuses on factors that support health rather than those that contribute to disease (Antonovsky, 1996). This approach is in contrast to the focus on illness in earlier art therapy studies. As outlined in Chapter Two, early theoretical positions indicated the potential for art therapy to reveal the inner truths of people with eating disorders by noting recurring patterns and symbols in their artworks (Acharya et al., 1995; Crowl, 1980; Luzzatto, 1994; Ticen, 1990). In addition, art materials and how they were used were thought to symbolise food and eating behaviours, such as people with AN were seen to restrict how they used materials just as they would restrict their use of food (Levens, 1987; Rust, 1994; Schaverien, 1994). In contrast, the approach used in the feasibility study moved away from interpreting participants artworks, and instead encouraged participants to voice their own interpretations of their artworks during the interviews. The absence of photographs of participants' artworks in this thesis may also be understood as a commitment to minimising analysis of the artworks by anyone other than the makers themselves.

Similarly, instructive activities, such as the "draw your eating disorder" directive (Hinz, 2006), were not incorporated into the sessions. This was to move away from a focus on deficits and to acknowledge that participants cannot only be understood through the lens of their eating disorder. The indirect approach used in the sessions can be seen to promote the development of aspects of the self outside of the eating disorder, which has been shown to be vital to recovery

(Federici & Kaplan, 2008). Although very unwell, people with eating disorders may be able to reconnect with their functional selves and slowly reclaim their sense of self in ongoing recovery. By underpinning the art therapy sessions with a focus on a range of sensory, affective and cognitive experiences, participants were offered opportunities to take part in new experiences and to recognise their own metaphors through their process of engaging with art materials and art-making. The focus on process aimed to promote the unique strengths of each participant through choice, control and self-determination, which are key factors shown to support the recovery of people with eating disorders (Hay et al., 2014). The process-oriented approach used in the feasibility study has not been widely documented in art therapy studies investigating people with eating disorders, and more research into the acceptability of this approach in comparison to symbolic and instructive approaches would be beneficial.

***The Feasibility of Conducting a Large-Scale RCT***

Results from the feasibility study presented in Chapter Four of this thesis revealed that several issues need to be addressed before a large-scale RCT can take place. The high rates of attrition and missing data exposed issues relating to *implementation* and prevented *limited efficacy* testing. The high rate of attrition that led to missing data (45.8%) meant that significance testing was not undertaken. As discussed in Chapter Four, attrition is prevalent in eating disorder research (Abd Elbaky et al., 2014; Fassino et al., 2009), and will likely continue to present a major challenge in future art therapy investigations. Similarly, of the three studies included in the systematic review presented in Chapter Three of this thesis, one was also affected by dropouts (two out of eight participants withdrew early) (Chaves, 2011). The second study did not report if dropouts occurred due to a general underreporting of methods and outcomes in this study (Anzules et al., 2007), and the third study did not report early withdrawals, however it did indicate that two participants did not take part in questionnaires without providing a reason for this (Thaler et al., 2017). These instances of attrition and potential non-compliance in the studies included in the systematic review confirm the challenges that are faced by art therapy researchers when studying this population.

Factors that have been found to contribute to treatment attrition among people with eating disorders include a diagnosis of AN, psychiatric comorbidities, and poorer eating disorder related quality of life (Abd Elbaky et al., 2013; Abd Elbaky et al., 2014). As described in Chapter Two of this thesis, eating disorders have been shown to negatively affect quality of life (Butterfly Foundation, 2012), and psychiatric comorbidities are also highly prevalent in people with eating disorders (Hudson et al., 2007; Swanson et al., 2011). Therefore, attrition will likely continue to be a challenge, and greater investigation into ways to improve treatment adherence are necessary.

Despite the challenges found in the feasibility study in Chapter Four, viability of conducting a large-scale RCT was shown in relation to *demand, practicality, adaptability* and *acceptability*. For example, *demand* was shown in the high recruitment rate of participants in the feasibility study (90%). *Practicality* was demonstrated through the occurrence of no adverse events and by participants taking part in research activities (such as attending art therapy sessions and completing questionnaires) when they were present. Using the feedback from the Session Rating Scale after each session, the art therapy sessions could be tailored to better suit the needs of the participants, indicated the *adaptability* of art therapy. Further, as already discussed, qualitative findings revealed a strong *acceptability* towards the intervention, and this was also the case in the findings of the systematic review presented in Chapter Three. This indicates that the studies included in the systematic review supported aspects of feasibility seen in Chapter Four. Notwithstanding the challenges of conducting a large-scale RCT that relate to attrition, the benefits and feasibility shown across several feasibility domains justify the need for further evaluation of art therapy research.

***Art Therapy and Shame***

Experiences of shame in participants was not a major finding observed in the systematic review or the feasibility study presented in Chapters Three and Four of this thesis, respectively. Indeed, only one study in the systematic review included shame as an outcome measure, but that study reported no significant findings (Chaves, 2011). In addition, the amount of missing data related

to the Experience of Shame Scale in the feasibility study presented in Chapter Four of this thesis was too great to permit significance testing, so it is unclear from the work undertaken in this thesis if art therapy is effective for reducing shame in this population. Greater consideration of how to address and measure shame in participants is needed to grapple with the harmful effects of this emotion for people with eating disorders, such as self-blaming attitudes that lead to delays in treatment (Ali et al., 2020), and low self-worth that perpetuates eating disorder behaviours (Deaver et al., 2003). However, current measures may be inadequate to fully assess the experience of shame and its many effects on an individual. For example, this was seen in the use of the 25-item Experience of Shame Scale used in the feasibility study to measure an emotion that may be experienced uniquely, and not necessarily consciously, by each individual. A deeper understanding of the experience of shame in people with eating disorders is necessary, and this may be achieved through further qualitative research to allow participants to voice their experiences directly. In addition, future art therapy research may seek alternative means to measure or understand shame experiences that may not be adequately put into words, such as through arts-based research methods. Triangulating art-based methods with qualitative and quantitative methods may offer greater opportunities to understand shame in participants, while also appreciating its non-verbal aspects.

Despite the limited evidence in relation to shame in this thesis, the qualitative findings provided some indications as to how shame could be addressed using art therapy. For example, participants in both the systematic review and feasibility study described the benefits of expressing themselves non-verbally through art-making. The experiential quality of art therapy is a key component that sets it apart from discursively focused therapies, and this allows for the internal expression and recognition of painful and shameful experiences without the need for verbal articulation. Communication in art therapy is multi-layered, and may take place interpersonally (with the therapist or in a group) or internally (Karkou & Sanderson, 2006). The opportunity to process shame internally and privately through art-making may be particularly beneficial for people with eating disorders, since discussing shame in therapy can in itself be shame-inducing (Dearing &

Tangney, 2011). Further, the opportunity to share and witness similar experiences in a group dynamic could offer opportunities for connection and mutual support that have been shown to minimise the isolating effects of shame (Brown, 2006).

**Generalisability of Thesis Findings**

The findings from this thesis have limited generalisability due to the small sample sizes of the studies included in the systematic review and of that recruited in the feasibility study. Importantly, the participants reported on in the systematic review and included in the feasibility study cannot be implied to represent the broader population of people who experience eating disorders. For example, many people with these disorders may not receive a diagnosis, enter a healthcare system, or seek treatment for their disorder (DeBar et al., 2009; Hart et al., 2011). All studies in the systematic review were set in clinical contexts, and this setting was the same for the feasibility study. Further, all nine participants in the feasibility study were diagnosed with AN, which is the least common eating disorder after binge eating disorder (BED), other specified feeding and eating disorders (OSFED), and bulimia nervosa (BN), respectively (Galmiche et al., 2019; Micali et al., 2017). Of the two studies that did report specific eating disorder diagnoses in the systematic review (Chaves, 2011; Thaler et al., 2017), the most prevalent diagnosis was also AN. Further, adults between 18 and 65 years of age were the main focus of this thesis, with only one study in the systematic review including adolescent participants (Chaves, 2011). Given that eating disorders often present during adolescence and have been shown to be highly prevalent in this age group (one systematic review indicated a point prevalence of 5.7%) (Galmiche et al., 2019), this is an important population to include in future research to enhance generalisability. The findings of this thesis also cannot be generalised to older adults, 65 years of age or older. Limited but growing evidence suggests that eating disorders occur later in life in women and men, including as a late onset, relapse of an earlier eating disorder, or as a chronic presentation of an eating disorder that developed in adolescence or adulthood (Fadgyas Stanculete et al., 2019; Lapid et al., 2010).

In addition to the overrepresentation of adult participants with AN who received care in clinical contexts in this thesis, all studies included in the systematic review and the feasibility study took place in the Global North. Indeed, there is a general lack of research on cross-cultural presentations and treatments for eating disorders among diverse groups (Hay et al., 2014). Inadequacies have been identified when diagnosing, referring and treating ethnic minorities for eating disorders by healthcare providers (Marques et al., 2011). Further, the vast majority of participants included in the systematic review were cisgender women, as were all participants in the feasibility study. This echoes the underrepresentation of cisgender men and transgender participants in eating disorder research more broadly (Diemer et al., 2018; Thapliyal & Hay, 2014). The lifetime prevalence estimate for eating disorders among men has been found to be 2.2% (Galmiche et al., 2019), and self-reported eating disorders were found in one study to be 15 times higher in transgender people than in cisgender people (Diemer et al., 2018). Clearly a major gap exists in art therapy research related to cultural and gender diverse populations that needs to be addressed, and this affects the generalisability of the thesis findings.

**Recommendations for Research and Practice**

To expand on the knowledge generated in this thesis, the issues identified in the feasibility study presented in Chapter Four need to be addressed before a large-scale RCT can be conducted to evaluate the effectiveness of art therapy for people with eating disorders. Greater understandings of how to improve the adherence of participants is necessary to address the high rates of attrition and missing data that occurred in the feasibility study. Further, limitations identified in the systematic review would also need to be addressed. For example, valid outcome measures for this population that are sensitive to change would need further consideration for future trials. Clear articulation of the primary outcome measure and primary endpoint is also needed in future trials. In addition, to improve the generalisability of results from future research, studies need to include more diverse populations, including participants from Global South regions, transgender, and cisgender men, and a range of eating disorders diagnoses, including BN, OSFED and BED. This is particularly due to the

current overrepresentation of cisgender women with AN receiving care from clinical, Global North regions, as identified by the systematic review. As outlined in Chapter Two of this thesis, ethnic minorities, gender diverse and socially disadvantaged individuals face greater challenges when accessing and receiving treatment for eating disorders (Bryant-Jefferies, 2005; Chowbey et al., 2012; Hay et al., 2014; Simone et al., 2020).The lack in knowledge of art therapy with participants over 65 years also needs greater consideration in future research.

Given the breadth of information and responses that can be elicited using mixed methods, this study design was particularly beneficial to address the aims of this thesis. Using mixed methods in future studies may similarly challenge and expand on research questions relating to effectiveness and acceptability. However, as the systematic review identified, it would be beneficial for researchers to provide clear reasoning for undertaking a mixed methods study, as well as report these methods more transparently. One way for future researchers to ensure quality and transparency when reporting their methods and results would be to appraise their own studies alongside quality appraisal tools, such as the Mixed Methods Assessment Tool (MMAT) used in the systematic review (Hong et al., 2018), and mixed methods reporting guidelines, such as the Good Reporting of Mixed Methods Studies (GRAMMS) used in the feasibility study (O'Cathain et al., 2008). Further, it would be worthwhile for researchers to use clear terms in their research, such as, the word “therapy” when referring to art therapy interventions, or by including the medical diagnoses of participants. Doing so would allow studies to be eligible for future systematic reviews that will grow the evidence base of art therapy.

The qualitative data presented in this thesis have been overwhelmingly positive, highlighting several benefits of art therapy for people with eating disorders. Art therapists working with this population should consider how to continue to offer benefits recorded across both studies, and that are particularly relevant to people with eating disorders. For example, the promotion of self-expression where emotional expression is often restrained or challenging (American Psychiatric Association, 2015). Other benefits, such as feelings of pride, provide a preliminary understanding of

the importance of what art therapy can offer participants with eating disorders. What would enhance the understandings of these benefits would be greater transparency when reporting on art therapy interventions, processes and materials. The lack of comprehensive reporting of these elements across the included studies in the systematic review limited the understanding of the effects of art therapy for participants, as well as making it impossible to replicate the interventions. In contrast, the feasibility study showed how art materials affected individuals, such as a release of tension that was experienced by some when using sensory materials. Greater investigation into the effects of art materials and art therapy processes on participants would benefit future researchers and practitioners. Further, the potential of a process-oriented approach that is also underpinned by a salutogenic model in contrast to symbolic and instructive approaches that focus on illness deficits is worthy of further investigation. Given the complexity of treating people with eating disorders, art therapists working with this population need to adopt flexible program designs that are responsive to individual needs.

Lastly, given the harmful effects and prevalence of shame in people with eating disorders (Blythin et al., 2020), further research is needed to investigate if art therapy can address shame in this population. There was not enough data in this thesis to indicate if art therapy can address this emotion and measuring such a complex emotion was found to be a challenge. Art therapy research needs to consider how to measure and offer opportunities for the expression of shame, such as by triangulating quantitative and qualitative methods with arts-based research methods. Arts-based research methods may enhance understandings of participant experiences by allowing for the non-verbal expression of shame, and this may diversify and enrich qualitative and quantitative data.

**Self-Reflections on the Research Process**

As an artist and art therapist, making art throughout the forming of this thesis has been instrumental to how I have made sense of and reflected on my experience of the process. As my first research endeavour, I found the task of integrating the different research approaches a challenge,

and by making art I attempted to reflect on this experience and further my learning. A focus on developing a deep understanding of the lived experience of my participants was countered by the impersonal data created using the various statistical measures. My experience of integrating and presenting the narrative of these perspectives is reflected in Figure 20. This offers a visual metaphor for this experience. In this image I applied charcoal and oil pastel on cartridge paper. Unlike the dusty and fragile nature of charcoal, oil pastels are sticky, dense and resistant to water. When the two overlap, the oil pastel grips the charcoal dust tightly, creating a deeply intense colour. When water is added, as presented in Figure 21, the charcoal changes shape as it takes on the fluidity and movement of the water, whereas the oil pastel responds with resistance, gripping the paper tightly and causing beads of water to form on its surface. Figure 22 shows the water in conflict, as it is both absorbed by the charcoal and rejected by the oil pastel. The push and pull that I felt when wrestling with the integration of the findings can be seen in how the water is both part of and separate from the artwork.

**Figure 20**

*Self-Reflection Using Charcoal and Oil Pastel*

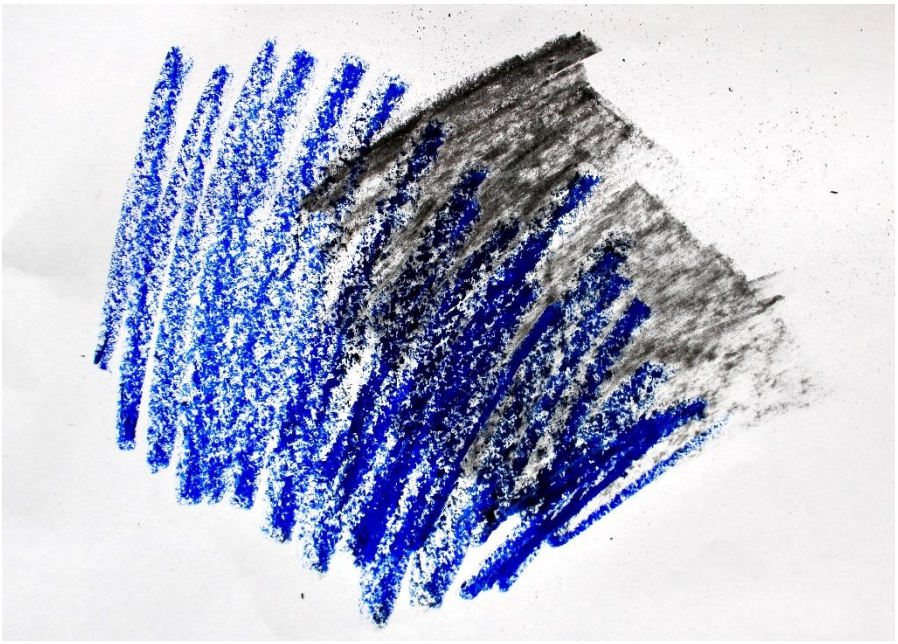


**Figure 21**

*Adding Water to the Self-Reflection*

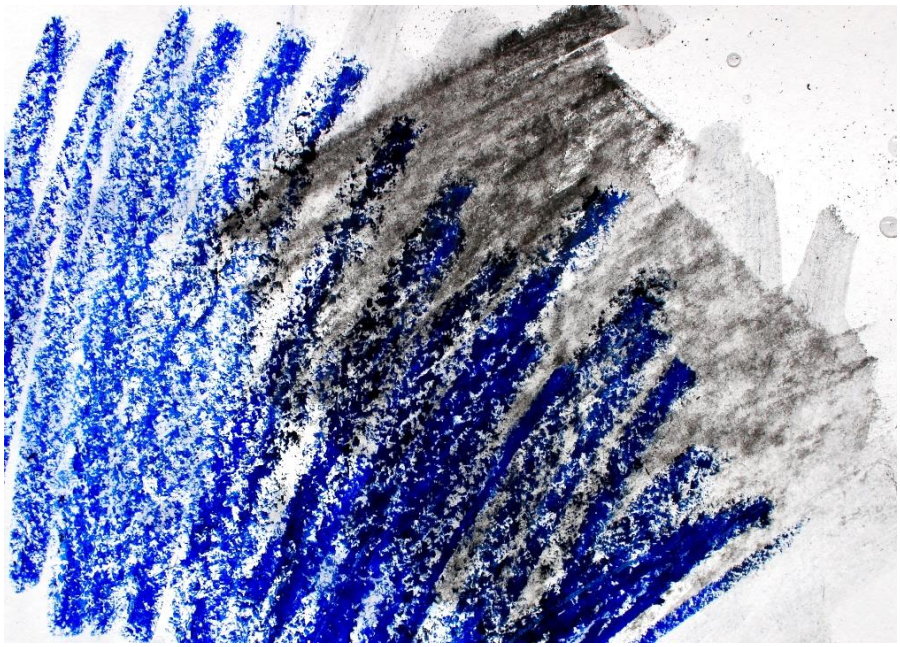
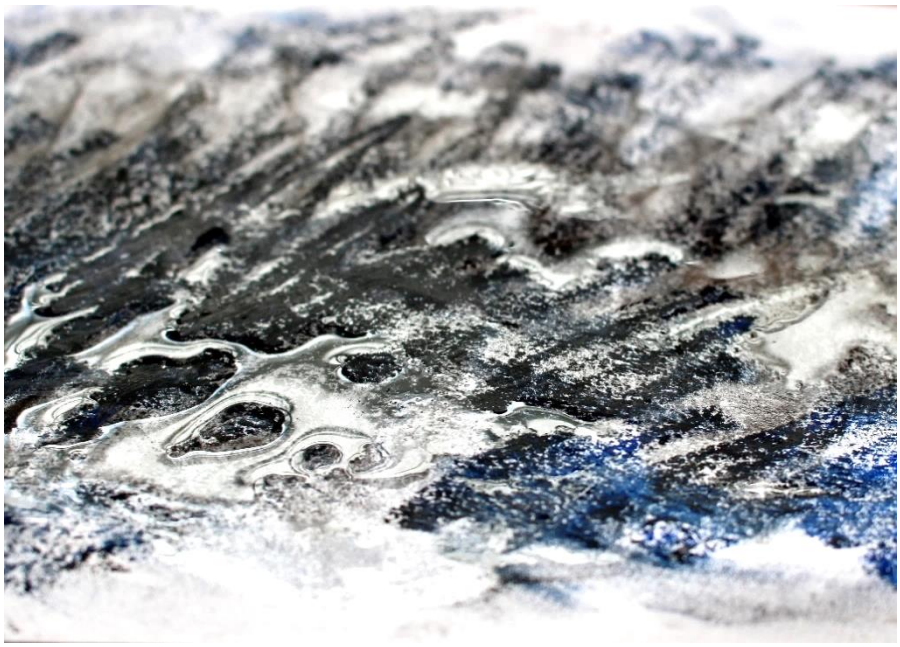


**Figure 22**

*Water in Conflict*



The images throughout this thesis are united by their focus on *process.* For example, the photographic details of mark-making using paint on canvas and on palettes are indicative of the process of making and metaphor for the development of my thinking. In addition, the images of the art therapy activities in the feasibility study highlight the way in which the activities in the sessions focused on interactions with art materials over symbolic representations and instructions. Combined, the images in this thesis demonstrate the process-oriented framework that underpinned this thesis and allude to the experiential development of this thesis. The images expand on the sentences and paragraphs by offering insight into my process of becoming a researcher through metaphor, colour, shape and mark-making. The images also refer to the emotions that supported the writing of this thesis.

**Strengths and Limitations of this Thesis**

A major strength of this thesis is that it comprises two linked studies – a systematic review and a feasibility study – which has not been previously conducted. The systematic review presented in Chapter Three was the first of its kind to investigate the effectiveness of art therapy for people with eating disorders, as well as their perceptions and experiences of this intervention. In addition, it offered an overdue and rigourous update of the art therapy research. Likewise, the feasibility study presented in Chapter Four, which aimed to evaluate the feasibility of conducting a large-scale RCT, has not previously been undertaken. These two studies have contributed to knowledge, exposed gaps in the research, identified challenges of embarking on research with this population, and identified important pathways for further investigation. In addition, the mixed methods design of this thesis was a major strength because it synthesised a range of qualitative and quantitative findings that provided a multidimensional understanding of the effectiveness and acceptability of art therapy for people with eating disorders. In particular, the qualitative component of this thesis is specifically valuable as it offered participants opportunities to voice their lived experience. An additional strength is the use of accepted frameworks to guide the studies in this thesis, including the feasibility framework from Bowen et al. (2009) and the Joanna Briggs Institute approach for

conducting mixed methods systematic reviews (Lizarondo et al., 2020a). Further, relevant reporting guidelines were followed, including the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009), the Consolidated Standard of Reporting Trials (CONSORT) extension for randomised pilot and feasibility trials (Eldridge et al., 2016), the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007), and the GRAMMS (O'Cathain et al., 2008). Lastly, a strength of this thesis is the use of images for self-reflective purposes that provides a visual representation of my process of becoming a researcher.

Several limitations of this thesis also need to be acknowledged. One major limitation is the small sample sizes included in the systematic review and the feasibility study, which meant that conclusions were difficult to draw. Although the qualitative component of both studies offered rich and detailed accounts of the experiences of participants, the limited sample overall impacted the generalisability and application of the findings of the thesis. Further, the studies that contributed to this thesis were all case series studies that lacked randomisation and blinding, and this limits the confidence of the thesis findings. These factors may have caused performance bias, and suggest that confounding variables (such as natural resolution) may have impacted results, leading to poor internal validity (Landorf, 2016). Another limitation of this thesis was the lack of efficacy testing, such as the inability to perform a meta-analysis in the systematic review due to only three case series studies with heterogenous methods being identified, and the high rate of attrition and missing data that affected significance testing in the feasibility study. Further, the qualitative findings of the systematic review were found to be of *low* to *very low* certainty when using the Confidence in the Evidence from Reviews of Qualitative research (CERQual) approach. A reason for this was the variable study quality, which was also indicated by the MMAT, such as due to weak reporting of methods and results. Limitations were seen in relation to evaluating the effectiveness of art therapy to reduce shame in participants in the feasibility study, particularly in the use of a questionnaire to measure changes in a complex emotion that may be experienced differently by each person. A further limitation was seen in the lack of generalisability of the findings of this thesis, not only due to

the small number of included studies, but also because of the lack of diversity of participants who all received treatment in Global North regions, and who were predominantly adult women under 65 years of age with AN. Lastly, as a White, privileged woman undertaking art therapy research, I acknowledge that the lens that I have brought to all elements of this thesis (including the design, data collection, analysis, synthesis, and writing of this thesis) is a limiting factor since it encompasses my underlying assumptions, prejudices and perceptions.

**Conclusion**

Eating disorders are devastating illnesses that have wide-ranging and limiting impacts on individual lives. The expressive and non-verbal aspects of art therapy may benefit people with eating disorders by offering an outlet for the expression of challenging emotions, such as shame, which has been found to contribute to eating disorders. This thesis investigated the effectiveness and acceptability of art therapy for people with eating disorders. Although key findings of this thesis indicated an overall lack of evidence for effectiveness and that a large-scale RCT will only be possible if key issues are addressed, several benefits of art therapy to people with eating disorders were identified that offer an appreciation of this innovative treatment. These benefits included the promotion of self-expression, pride and self-awareness in participants, and distraction from the intensity of the illness and treatment. The knowledge generated in this thesis identified hypotheses for further exploration, including whether art therapy can improve the cognitive flexibility of people with eating disorders, and whether the qualities of a process-oriented art therapy approach may be more appropriate than symbolic and instructive approaches. Although the findings of this thesis cannot be generalised beyond the included samples, the understandings produced contribute valuable data to current gaps in evidence and have indicated that further research is warranted. In addition, the findings of this thesis contribute to conceptual, practical and experiential ways of working with people with eating disorders and have positioned art therapy as a novel and expressive treatment that is worthy of greater attention.

**Figure 23**

*Photographic Detail of Palette 3*

## Appendix A

*PRISMA Checklist* (Moher et al., 2009)

| Section/topic | # | Checklist item | Reported on page # |
|---|---|---|---|
| **TITLE** | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | 39 |
| **ABSTRACT** | | | |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | N/A |
| **INTRODUCTION** | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | 39 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | 40 |
| **METHODS** | | | |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | N/A |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | 40-42 |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | 43-44 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | 43 |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | 44 |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | 45-46 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | 45-46 |

| Section/topic | # | Checklist item | Reported on page # |
|---|---|---|---|
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | 44 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | 47 |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$) for each meta-analysis. | 46-48 |
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | 48-49 |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | N/A |
| **RESULTS** | | | |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | 49-52 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | 53-55 |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | 52-53 |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | 56-57 |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | 57-60 |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | 61 |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | N/A |
| **DISCUSSION** | | | |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | 62-67 |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | 67-69 |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 69 |
| **FUNDING** | | | |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | N/A |

# Appendix B

## Table B1

*JBI QARI Data Extraction Tool for Qualitative Research – Anzules et al. (2007)*

| | |
|---|---|
| **Record Information** | |
| **Reviewer** Caryn Griffin | **Date** 11 September 2020 |
| **Author** Anzules et al. | **Year** 2007 |
| **Journal** EDN Summer | **Record Number** 1 |
| **Study Description** | |
| *Methodology* | Not reported. |
| *Method* | The art therapy program "took place over a 6-week period and consisted of six weekly sessions, each lasting two hours. Each session was broken down into three phases: phase one helps the patient to become aware of his/her body; phase two brings this awareness to creative artwork; phase three is a discussion about the pictorial art creation" (p. 72).<br>"A semi-structured questionnaire was created to provide an update two months after participation in the workshop…. On average, the semi-structured interviews lasted between 25 and 45 minutes" (p. 74).<br>"Expressive evaluation: to measure patients' creative processes and personal evolution" (p. 74). |
| *Phenomena of interest* | An "…art therapy workshop that awakens patients' sensory and emotional dimensions, and has the dual aim of improving self-esteem and body image" (p. 72). |
| *Setting* | "Therapeutic Teaching Service for Chronic Illnesses (SETMC) at the University Hospitals of Geneva…either through an out-patient follow-up programme or in-patient hospitilisation" (p. 72). |
| *Geographical* | Geneva, Switzerland. |
| *Cultural* | Not reported. |
| *Participants* | "A total of 14 obese patients suffering from eating disorders took part" (p. 72).<br>Sex, age and eating disorder subtypes were not reported. |
| *Data analysis* | "After being re-transcribed, the interviews were used for a content analysis based on different criteria: expectations, motivation, feelings, benefits, gains, enjoyment, resources, changes, expression (mode) and negative points" (p. 74). |
| *Authors' conclusions* | "The workshop helped participants to discover new ways of thinking about the problems which afflict and challenge them" (p. 75).<br>"We are convinced that art therapy provides tools which allow patients to renew contact with themselves and their own values because it reawakens and rekindles their own creative potential" (P. 76).<br>"Participating in an art therapy workshop gives patients access to their own resources, allowing them to find the tools necessary to reinforce their own personalities and to improve their self-esteem" (p. 76). |
| *Comments* | The authors data analysis method was not made transparent, participant details were lacking, and a clear description of the art therapy intervention was lacking. Minimal quotes/illustrations were offered to support the findings. |
| **Complete:** Yes ✓ | No |

**Table B2**

*JBI QARI Data Extraction Tool for Qualitative Research – Chaves (2011)*

| | |
|---|---|
| **Record Information** | |
| **Reviewer** Caryn Griffin<br>**Author** Chaves<br>**Journal** *Electronic Theses and Dissertations* | **Date** 11 September 2020<br>**Year** 2011<br>**Record Number** 3 |
| **Study Description** | |
| *Methodology* | "The theoretical framework for the proposed study involved a constructivist perspective for the qualitative approach" (p. 37). |
| *Method* | "The creation of therapeutic art books to increase self-esteem was examined" (p. 36).<br>"Book group took place every Friday afternoon from 1:30pm to 5pm. Participants in the book group were asked to participate in this study after being admitted to the EDU program, before their first book group" (p. 46).<br>"Patients… attended four to six book groups" (p. 47).<br>"All participants were interviewed about their experience using the therapeutic art book technique at the conclusion of the study" (p. ii).<br>"Interviews were 20 to 30 minutes in length with each participant being asked a standard set of interview questions. These interviews were recorded and transcribed" (p. 54). |
| *Phenomena of interest* | "The examination of the effectiveness of an art therapy intervention to increase the self-esteem of adolescents diagnosed with eating disorders, to improve participants' affective states, and to investigate what occurs for participants during this intervention in regards to their recovery and self-esteem" (p. 7). |
| *Setting* | "The Eating Disorders Unit (EDU) at The Children's Hospital in Aurora" (p. 36). |
| *Geographical* | Aurora, Canada |
| *Cultural* | "All eight participants identified as Caucasian. Half of the participants reported having previous experience with art, either in school classes, because of exposure from relatives, or from previous art therapy experience" (p. 49). |
| *Participants* | "Eight eating disorder patients (adolescent individuals) in the inpatient unit and the residential day treatment unit" (p. 41).<br>"Seven females and one male. Participants ranged from 12 to 20 years old, with the average age being 16 years old. Seven of the eight participants in the study had a diagnosis of Anorexia Nervosa. The remaining study participant had a diagnosis of Eating Disorder Not Otherwise Specified" (p. 49). |
| *Data analysis* | "Data was analysed qualitatively using thematic content analysis" (p. 55). |
| *Author's conclusions* | "From participant interviews, four major themes were identified including art as distraction, significant difference from written journal, increased understanding of others, and art expressing more than words" (p. ii).<br>"Future research should focus on either viewing the art work as art therapy, regardless of medium, and hone in on more specific aspects of usefulness of an intervention with this population or should introduce questions related to the medium" (p. 78). |
| *Comments* | The author's methods were clear and transparent. Many quotes were offered to illustrate the findings. |
| Complete: Yes ✓ | No |

**Table B3**

*JBI QARI Data Extraction Tool for Qualitative Research – Thaler et al. (2017)*

| | |
|---|---|
| **Record Information** | |
| **Reviewer** Caryn Griffin<br>**Author** Thaler et al.<br>**Journal** The Arts in Psychotherapy | **Date** 11 September 2020<br>**Year** 2017<br>**Record Number** 2 |
| **Study Description** | |
| *Methodology* | Not reported. |
| *Method* | Questionnaire including five open-ended questions at the end of the single session |
| *Phenomena of interest* | To evaluate "the suitability of the art therapy program for patients being treated for eating disorders (in terms of acceptability and tolerability)" (p. 1). |
| *Setting* | "A visit to Montreal Museum of Fine Arts followed by an art therapy workshop that was provided to several groups of adult patients from the Douglas Institute's Eating Disorders Program" (p. 1). |
| *Geographical* | Montreal, Canada |
| *Cultural* | An undisclosed number of participants were French speaking. |
| *Participants* | "The resulting sample consisted of 78 patients: 76 women and 2 men. Average age was 27.55 years (*SD*=9.65; range 18-60 years). Mean Body Mass Index (BMI) was 19.17 (range 13.2-34.1, *SD*=3.65). Breakdown of eating disorder diagnoses, according to DSM-5 criteria, was as follows: n=23 (29.5%) with AN-Restrictive subtype; n = 22 (28.2%) with AN-Binge/Purge subtype; n = 13 (16.7%) with Bulimia Nervosa; n = 19(24.4%) with Other Specified Feeding or Eating Disorder (OSFED); and n = 1 (1.3%) with Avoidant Restrictive Food Intake Disorder (ARFID)." (p. 3). |
| *Data analysis* | "Data were analysed using the thematic analysis method proposed by Braun and Clarke" (p. 3). |
| *Authors' conclusions* | "On the whole, our observations converge on the conclusion that the Sharing the Museum program implicating eating-disordered participants offered many benefits that were nicely ancillary to formal eating-disorder treatment. Our observations also rule out concerns that there could have been adverse reactions to the program. Together, available indications encourage continued experimentation and work with such partnerships implicating community and clinical organizations" (p. 6). |
| *Comments* | The authors' methods were mostly clear and transparent. Many quotes were offered to illustrate the findings. |
| Complete: Yes ✓ | No |

# Appendix C

## Table C1

*Qualitative Data Extraction Form – Anzules et al. (2007)*

| Finding | Illustration | Evidence | | | Category |
|---|---|---|---|---|---|
| | | Unequivocal | Credible | Unsupported | |
| Access to own inner resources is gained through art therapy | "I underestimated myself and didn't think I was capable of doing what I did and of having any ideas. I am proud and I've rarely been that in my life." (p. 74) | | ✓ | | Pride in oneself is supported by art therapy |
| Art therapy promotes self-awareness | "To come and talk about yourself, to discover yourself. To be honest with yourself." (p. 74)<br>"I was surprised by this dialogue inside me which reflected exactly what was happening to me at that time in my life. Things I didn't get…it allowed me to go a bit further." (p.74) | | ✓ | | Self-awareness is enhanced through art therapy |
| Art therapy improves self-esteem | "I underestimated myself and didn't think I was capable of doing what I did and of having any ideas. I am proud and I've rarely been that in my life." (p. 74) | | ✓ | | Pride in oneself is supported by art therapy |

Extraction of findings complete? Yes ✓ No

**Table C2**

*Qualitative Data Extraction Form – Chaves (2011)*

| Finding | Illustration | Evidence | | | Category |
|---|---|---|---|---|---|
| | | Unequivocal | Credible | Unsupported | |
| Art as distraction | "It feels like an escape, it gives me something else to focus on." (p. 55)<br>"I just lose myself in the particulars of the task and it takes my mind off of whatever emotions I was feeling." (p. 93)<br>"It just kind of takes me away from everything else. Kind of like a break." (p. 93) | ✓ | | | Art therapy offers a distraction from thoughts and emotions |
| Significant difference from journal writing | "Journaling doesn't always help me because it can encourage me to ruminate." (p. 56)<br>"I sometimes have trouble with journals because I have so many thoughts I can't get them all out, like I forget some or something. Sometimes I can't get the words out right." (p.93) | | ✓ | | N/A |
| Increased understanding of others | "You can learn a lot about the people around you by looking at their book." (p. 93)<br>"Working together we kind of saw a little more of each others' opinions and creativity and got a better feel for each other." (p. 93) | ✓ | | | New perspectives are discovered through art therapy |
| Art expressing more than words | "Sometimes a picture can say much more than words." (p. 56)<br>"With art you can just make a picture. The one picture says so much you know." (p. 93)<br>"A picture is worth a thousand words. It is different to express yourself through art instead of words. It feels more creative." (p. 3) | ✓ | | | Art therapy promotes self-expression |
| Increased self-awareness | "It kind of makes me more aware of what I'm thinking or how I'm feeling or things like that..." (p. 93)<br>"It's (doing art) made me think more about the emotions I have, made me realize more things about myself. It's made me discover more things about myself." (p. 93) | ✓ | | | Self-awareness is enhanced through art therapy |

| Finding | Illustration | Evidence | | | Category |
|---|---|---|---|---|---|
| | | Unequivocal | Credible | Unsupported | |
| Increased communication | "It's helped me communicate with others about myself in general, I mean what my interests are, what my mood is at the time, what my worries are, or anxieties are." (p. 94)<br>"I think it helped me be able to say the things that I wasn't sure how to say." (p. 94) | ✓ | | | N/A |
| Increased pride | "Sometimes I would be kind of proud (of my art). Like I accomplished this and I really liked how it turned out." (p. 94)<br>"I'm proud about the artwork that I've made and so it's nice to just look at the things that I've made and feel good about them." (p. 94) | ✓ | | | Pride in oneself is supported by art therapy |
| Increased sense of relief | "Usually after sharing a page I would feel relieved and that felt really good to just get it out and talk about it." (p. 94)<br>"I think it's made it easier to recover. Cause you're not like all flooded with emotions and filled with them. You can just let them out." (p. 94) | ✓ | | | N/A |
| Fear of judgement | "I was afraid of being judged on it (my artwork) I guess, but I wasn't (judged)." (p. 94) | ✓ | | | N/A |
| Marker of progress | "It's given me something that I can look back on in the future and just remember how far I've come." (p. 94)<br>"I think it just kind of makes me happy because it makes me realize how long I've been in program and how much I've improved and stuff." (p. 94) | ✓ | | | N/A |
| Increased confidence | "I think the book made me feel a lot more confident, a lot more trustworthy in myself." (p. 59)<br>"I know now that I can be creative and artistic." (p. 94)<br>"It's kind of made me realize that I'm more creative than I give myself credit for." (p.94) | ✓ | | | Pride in oneself is supported by art therapy |

Extraction of findings complete? Yes ✓ No

**Table C3**

*Qualitative Data Extraction Form – Thaler et al. (2017)*

| Finding | Illustration | Evidence | | | Category |
|---|---|---|---|---|---|
| | | Unequivocal | Credible | Unsupported | |
| Program as a whole as pleasing and enriching experience | "Although I would have chosen different category of artwork, it was enriching and I very much appreciated the outing." (p. 3)<br>"A nice outing to discover and do something different." (p. 3) | ✓ | | | N/A |
| Distraction from thoughts that usually inhabit the mind facilitated by the program | "I liked the therapy workshop as it helped me change my mind and be more present." (p. 3)<br>"[Most appreciated aspect of the program] Doing arts and crafts because it's a different activity that I'm not used to doing and is another form of expression and of relaxation. We can think of other things during that time. Our brain frees itself." (p. 3) | ✓ | | | Art therapy offers a distraction from thoughts and emotions |
| Doing something different and changing settings | "[Most appreciated aspect of the program] The change in routine from the hospital, time goes by faster." (p. 3)<br>"A nice outing to discover and do something different." (p. 3) | ✓ | | | N/A |
| Art therapy as a means for self-expression, self-regulating and creativity | "Interesting, because I had the chance to express myself through my drawings." (p. 3)<br>"I love the opportunity to let out my emotions, state of being, in another way than speech or writing." (p. 3) | ✓ | | | Art therapy promotes self-expression |
| Creating and being creative | "I really loved creating and being able to freely express my creativity." (p. 3) | ✓ | | | N/A |
| Making/doing art with a variety of materials | "It was fun. I adored having access to a lot of materials for art-making and having competent people nearby to answer my question." (p. 3) | ✓ | | | N/A |

| Finding | Illustration | Evidence | | | Category |
|---|---|---|---|---|---|
| | | Unequivocal | Credible | Unsupported | |
| Means for self-expression, including emotions, and for creative expression | "Interesting, because I had the chance to express myself through my drawings." (p. 3)<br>"I love the opportunity to let out my emotions, state of being, in another way than speech or writing." (p. 3) | ✓ | | | Art therapy promotes self-expression |
| Sharing and witnessing art responses | | | | ✓ | |
| Museum visit as opportunity for discovery and learning | "I appreciate discovering the presented artworks, I would even like to see more." (p. 3)<br>"[Most appreciated aspect of the program] Learning about the history of the artworks, what each individual can perceive in a same image." (p. 3) | ✓ | | | New perspectives are discovered through art therapy |
| Interesting and stimulating learning opportunity | "I would have loved to see more. I loved the diversity of art works and the guide's explanations." (p. 3)<br>"[Most appreciated aspect of the program] Learning about the history of the artworks, what each individual can perceive in a same image." (p. 3) | ✓ | | | New perspectives are discovered through art therapy |
| Discovering new perspectives | "[Most appreciated aspect of the program] Learning about the history of the artworks, what each individual can perceive in a same image." (p. 3) | ✓ | | | New perspectives are discovered through art therapy |
| Personal and professional qualities of the personnel | "Very pleasant. We were very well received with very kind staff." (p. 3)<br>"It was fun. I adored having access to a lot of materials for art-making and having competent people nearby to answer my question." (p. 3)<br>"Thank you to the museum and to the intervention staff for taking such good care of us. I feel taken in charge. Love it!" (p. 3) | ✓ | | | N/A |

Extraction of findings complete? Yes ✓ No

# Appendix D

## Table D1

*CERQual Evidence Profile: Art Therapy Promotes Self-Expression*

| | |
|---|---|
| | **CERQual Component Assessments** |
| *Methodological Limitations* | Minor to moderate methodological limitations due to poor reporting on intervention details from both studies. |
| *Coherence* | The extent of coherence is poor due to limited data, but compelling illustrations were offered from both studies to support the finding. |
| *Relevance* | Minor concerns regarding relevancy due to the studies meeting the context specified in the review questions. |
| *Adequacy* | Significant concerns regarding adequacy of the data due to only two studies contributing thin data to the finding. |
| | **Overall CERQual Assessment** |
| Low confidence | Due to substantial concerns regarding adequacy of the data and poor coherence. |
| | **Contributing Studies** |
| Chaves (2011); Thaler (2017) | |

## Table D2

*CERQual Evidence Profile: New Perspectives are Discovered Through Art Therapy*

| | |
|---|---|
| | **CERQual Component Assessments** |
| *Methodological Limitations* | Minor to moderate methodological limitations due to poor reporting on intervention details from both studies. |
| *Coherence* | The extent of coherence is poor due to limited data, but compelling illustrations were offered from both studies to support the finding. |
| *Relevance* | Minor concerns regarding relevancy due to the studies meeting the context specified in the review questions. |
| *Adequacy* | Significant concerns regarding adequacy of the data due to only two studies contributing thin data to the finding. |
| | **Overall CERQual Assessment** |
| Low confidence | Due to substantial concerns regarding adequacy of the data and poor coherence. |
| | **Contributing Studies** |
| Chaves (2011); Thaler (2017) | |

**Table D3**

*CERQual Evidence Profile: Self-Awareness is Enhanced Through Art Therapy*

| | |
|---|---|
| | **CERQual Component Assessments** |
| *Methodological Limitations* | Major concerns regarding methodological limitations due to poor reporting from one study on participant details, and data analysis methods. |
| *Coherence* | The extent of coherence is poor due to limited data, and minimal illustrations was offered from one study to support the finding. |
| *Relevance* | Minor concerns regarding relevancy due to the studies meeting the context specified in the review questions. |
| *Adequacy* | Significant concerns regarding adequacy of the data due to only two studies contributing thin data to the finding. |
| | **Overall CERQual Assessment** |
| Very low confidence | Due to moderate to significant methodological limitations, limited coherence, and significant concerns regarding adequacy of the data. |
| | **Contributing Studies** |
| Anzules (2007); Chaves (2011) | |

**Table D4**

*CERQual Evidence Profile: Art Therapy Offers a Distraction and a Break*

| | |
|---|---|
| | **CERQual Component Assessments** |
| *Methodological Limitations* | Minor to moderate methodological limitations due to poor reporting on intervention details from both studies. |
| *Coherence* | The extent of coherence is poor due to limited data, but compelling illustrations were offered from both studies to support the finding. |
| *Relevance* | Minor concerns regarding relevancy due to the studies meeting the context specified in the review questions. |
| *Adequacy* | Significant concerns regarding adequacy of the data due to only two studies contributing thin data to the finding. |
| | **Overall CERQual Assessment** |
| Low | Due to substantial concerns regarding adequacy of the data and poor coherence. |
| | **Contributing Studies** |
| Chaves (2011); Thaler (2017) | |

**Table D5**

*CERQual Evidence Profile: Pride in Oneself is Supported by Art Therapy*

| **CERQual Component Assessments** | |
|---|---|
| *Methodological Limitations* | Major concerns regarding methodological limitations due to poor reporting from one study on participant details, and data analysis methods. |
| *Coherence* | The extent of coherence is poor due to limited data, and minimal illustrations was offered from one study to support the finding. |
| *Relevance* | Minor concerns regarding relevancy due to the studies meeting the context specified in the review questions. |
| *Adequacy* | Significant concerns regarding adequacy of the data due to only two studies contributing thin data to the finding. |
| **Overall CERQual Assessment** | |
| Very low confidence | Due to moderate to significant methodological limitations, limited coherence, and significant concerns regarding adequacy of the data. |
| **Contributing Studies** | |
| Anzules (2007); Chaves (2011) | |

## Appendix E

*Ethical Approval Letter*

MELBOURNE HEALTH

Office for Research
The Royal Melbourne Hospital
Level 2 South West
300 Grattan Street
Parkville VIC 3050
Australia

Telephone: +61 3 9342 8530
Facsimile: +61 3 9342 8548
Email: research@mh.org.au
thermh.org.au
ABN 73 802 706 972

**MELBOURNE HEALTH HUMAN RESEARCH ETHICS COMMITTEE**

**ETHICAL APPROVAL**

Ms Helen Kelly
Clinical Nurse Educator
John Cade Unit
The Royal Melbourne Hospital

20 December 2018

Dear Ms Helen Kelly,

**HREC Reference Number:** HREC/48205/MH-2018

**Melbourne Health Site Reference Number:** 2018.317

**Project Title:** Effectiveness and acceptability of art therapy as a treatment for adults with eating disorders: a mixed methods study

---

I am pleased to advise that the above project has **received ethical approval** from the Melbourne Health Human Research Ethics Committee (HREC). The HREC confirms that your proposal meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). This HREC is organised and operates in accordance with the National Health and Medical Research Council's (NHRMC) National Statement on Ethical Conduct in Human Research (2007), and all subsequent updates, and in accordance with the Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95), the Health Privacy Principles described in the Health Records Act 2001 (Vic) and Section 95A of the Privacy Act 1988 (and subsequent Guidelines).

**HREC Approval Date:** 19/12/2018

**Ethical approval for this project applies at the following site:**

| Site |
|---|
| Royal Melbourne Hospital |

**Approved Documents:**

The following documents have been reviewed and approved:

| Document | Version | Date |
|---|---|---|
| Protocol | 2 | 02 December 2018 |
| Patient Information Sheet and Consent Form | 2 | 02 December 2018 |
| Appendix F – Interview Schedule | 2 | 02 December 2018 |

## Appendix F

*Consent Form*

Consent Form - *Adult providing own consent*

| | |
|---|---|
| Title | Effectiveness and acceptability of art therapy as a treatment for adults with eating disorders: a mixed methods study |
| Protocol Number | 2018.317 |
| Project Sponsor | La Trobe University |
| Principal Investigator | Helen Kelly |
| Associate Investigators | Caryn Griffin, Patricia Fenner, Karl Landorf & Matthew Cotchett |
| Location | Eating Disorders Program, John Cade Unit, Royal Melbourne Hospital |

Consent Agreement

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research described in the project.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the project without affecting my future health care.

I understand that I will be given a signed copy of this document to keep.

Declaration by Participant – for participants who have read the information

Name of Participant (please print) _____

Signature _____ Date _____

Declaration by Senior Researcher†

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

Name of Study Doctor/
Senior Researcher† (please print) _____

Signature _____ Date _____

† A senior member of the research team must provide the explanation of, and information concerning, the research project.

Note: All parties signing the consent section must date their own signature.

## Appendix G

*Participant Data Collection Form*

LA TROBE UNIVERSITY

School of Psychology and Public Health
Discipline of Art Therapy

Mailing address
School of Psychology and Public Health
La Trobe University
Victoria 3086 Australia

T + 61 3 9479 3759
E c.griffin@latrobe.edu.au
latrobe.edu.au/

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Participant Data Collection Form

| | |
|---|---|
| Project Title | Effectiveness and acceptability of art therapy as a treatment for adults with eating disorders: a mixed methods study |

| | | | |
|---|---|---|---|
| First Name: | | Last Name: | |
| Sex: | Male ☐ | Female ☐ | |
| Gender: | Male ☐ | Female ☐ | Non-Binary ☐ |
| Date of birth: | / / | | |
| Address: | | | |
| Contact number: | | | |
| Email address*: | | | |

*We will contact you using this email address to notify you of the study results once the research project is complete

## Appendix H

*WHOQOL-BREF Questionnaire* (The WHOQOL Group, 1998)

MSA/MNH/PSF/97.6
Page 2

I.D. number

ABOUT YOU

**Before you begin we would like to ask you to answer a few general questions about yourself: by circling the correct answer or by filling in the space provided.**

**What is your gender?** Male Female

**What is you date of birth?** _____ / _____ / _____
Day / Month / Year

**What is the highest education you received?**
None at all
Primary school
Secondary school
Tertiary

**What is your marital status?**
Single Separated
Married Divorced
Living as married Widowed

**Are you currently ill?** Yes No

**If something is wrong with your health what do you think it is?**_____**illness/ problem**

Instructions

**This assessment asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.**

**Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last two weeks. For example, thinking about the last two weeks, a question might ask:**

| | | Not at all | Not much | Moderately | A great deal | Completely |
|---|---|---|---|---|---|---|
| | Do you get the kind of support from others that you need? | 1 | 2 | 3 | 4 | 5 |

**You should circle the number that best fits how much support you got from others over the last two weeks. So you would circle the number 4 if you got a great deal of support from others as follows.**

| | | Not at all | Not much | Moderately | A great deal | Completely |
|---|---|---|---|---|---|---|
| | Do you get the kind of support from others that you need? | 1 | 2 | 3 | 4 | 5 |

**You would circle number 1 if you did not get any of the support that you needed from others in the last two weeks.**

**Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.**

| | | Very poor | Poor | Neither poor nor good | Good | Very good |
|---|---|---|---|---|---|---|
| 1(G1) | How would you rate your quality of life? | 1 | 2 | 3 | 4 | 5 |

| | | Very dissatisfied | Dissatisfied | Neither satisfied nor dissatisfied | Satisfied | Very satisfied |
|---|---|---|---|---|---|---|
| 2 (G4) | How satisfied are you with your health? | 1 | 2 | 3 | 4 | 5 |

The following questions ask about **how much** you have experienced certain things in the last two weeks.

| | | Not at all | A little | A moderate amount | Very much | An extreme amount |
|---|---|---|---|---|---|---|
| 3 (F1.4) | To what extent do you feel that physical pain prevents you from doing what you need to do? | 1 | 2 | 3 | 4 | 5 |
| 4(F11.3) | How much do you need any medical treatment to function in your daily life? | 1 | 2 | 3 | 4 | 5 |
| 5(F4.1) | How much do you enjoy life? | 1 | 2 | 3 | 4 | 5 |
| 6(F24.2) | To what extent do you feel your life to be meaningful? | 1 | 2 | 3 | 4 | 5 |

| | | Not at all | A little | A moderate amount | Very much | Extremely |
|---|---|---|---|---|---|---|
| 7(F5.3) | How well are you able to concentrate? | 1 | 2 | 3 | 4 | 5 |
| 8 (F16.1) | How safe do you feel in your daily life? | 1 | 2 | 3 | 4 | 5 |
| 9 (F22.1) | How healthy is your physical environment? | 1 | 2 | 3 | 4 | 5 |

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

| | | Not at all | A little | Moderately | Mostly | Completely |
|---|---|---|---|---|---|---|
| 10 (F2.1) | Do you have enough energy for everyday life? | 1 | 2 | 3 | 4 | 5 |
| 11 (F7.1) | Are you able to accept your bodily appearance? | 1 | 2 | 3 | 4 | 5 |
| 12 (F18.1) | Have you enough money to meet your needs? | 1 | 2 | 3 | 4 | 5 |
| 13 (F20.1) | How available to you is the information that you need in your day-to-day life? | 1 | 2 | 3 | 4 | 5 |
| 14 (F21.1) | To what extent do you have the opportunity for leisure activities? | 1 | 2 | 3 | 4 | 5 |

| | | Very poor | Poor | Neither | Good | Very good |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | poor nor good | | |
| 15 (F9.1) | How well are you able to get around? | 1 | 2 | 3 | 4 | 5 |

The following questions ask you to say how **good or satisfied** you have felt about various aspects of your life over the last two weeks.

| | | Very dissatisfied | Dissatisfied | Neither satisfied nor dissatisfied | Satisfied | Very satisfied |
|---|---|---|---|---|---|---|
| 16 (F3.3) | How satisfied are you with your sleep? | 1 | 2 | 3 | 4 | 5 |
| 17 (F10.3) | How satisfied are you with your ability to perform your daily living activities? | 1 | 2 | 3 | 4 | 5 |
| 18(F12.4) | How satisfied are you with your capacity for work? | 1 | 2 | 3 | 4 | 5 |
| 19 (F6.3) | How satisfied are you with yourself? | 1 | 2 | 3 | 4 | 5 |
| 20(F13.3) | How satisfied are you with your personal relationships? | 1 | 2 | 3 | 4 | 5 |
| 21(F15.3) | How satisfied are you with your sex life? | 1 | 2 | 3 | 4 | 5 |
| 22(F14.4) | How satisfied are you with the support you get from your friends? | 1 | 2 | 3 | 4 | 5 |
| 23(F17.3) | How satisfied are you with the conditions of your living place? | 1 | 2 | 3 | 4 | 5 |
| 24(F19.3) | How satisfied are you with your access to health services? | 1 | 2 | 3 | 4 | 5 |
| 25(F23.3) | How satisfied are you with your transport? | 1 | 2 | 3 | 4 | 5 |

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

| | | Never | Seldom | Quite often | Very often | Always |
|---|---|---|---|---|---|---|
| 26 (F8.1) | How often do you have negative feelings such as blue mood, despair, anxiety, depression? | 1 | 2 | 3 | 4 | 5 |

Did someone help you to fill out this form?.....

How long did it take to fill this form out?.....

**Do you have any comments about the assessment?**

---

---

**THANK YOU FOR YOUR HELP**

## Appendix I

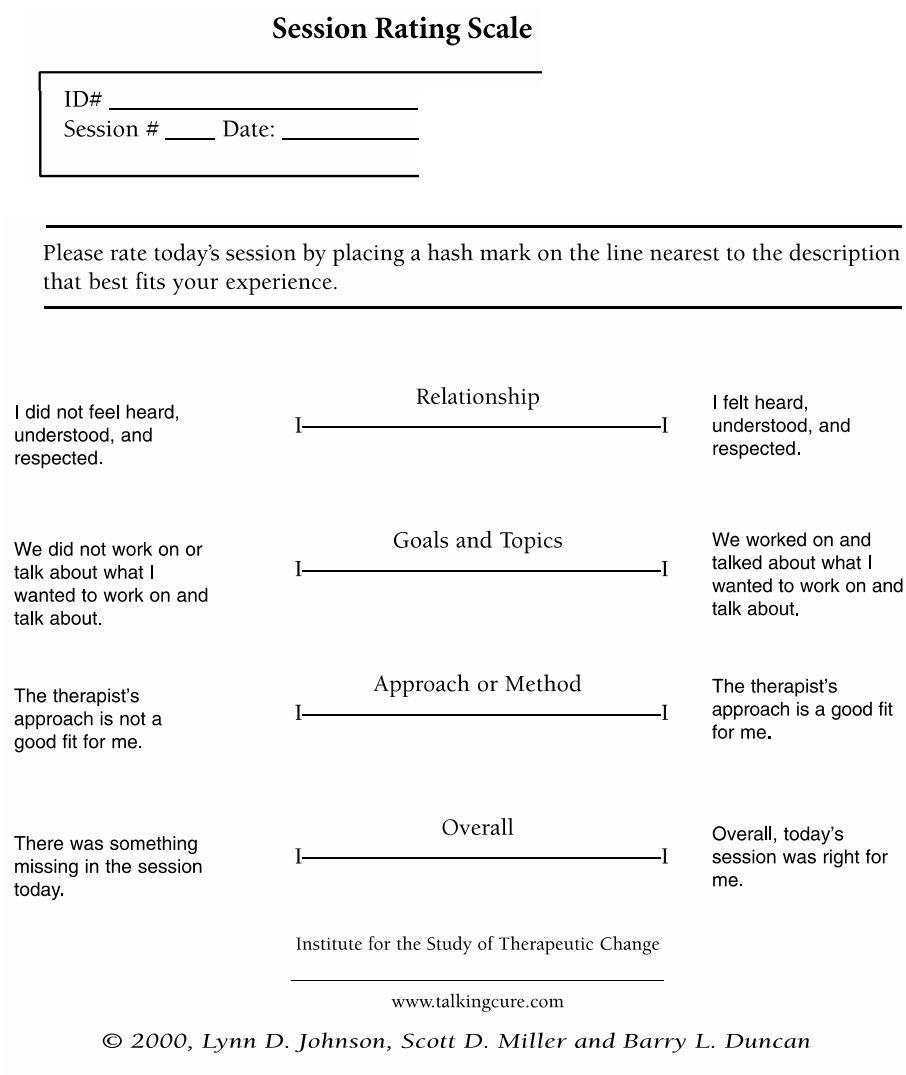
*Experience of Shame Scale* (Andrews et al., 2002)

Everybody at times can feel embarrassed, self-conscious or ashamed. These questions are about such feelings if they have occurred **at any time in the past year**. There are no 'right' or 'wrong' answers. Please indicate the response which applies to you with a tick.

| | not at all | a little | moderately | very much |
|---|---|---|---|---|
| 1. Have you felt ashamed of any of your personal habits? | (1 ) | ( 2 ) | ( 3 ) | ( 4 ) |
| 2. Have you worried about what other people think of any of your personal habits? | ( ) | ( ) | ( ) | ( ) |
| 3. Have you tried to cover up or conceal any of your personal habits? | ( ) | ( ) | ( ) | ( ) |
| 4. Have you felt ashamed of your manner with others? | ( ) | ( ) | ( ) | ( ) |
| 5. Have you worried about what other people think of your manner with others? | ( ) | ( ) | ( ) | ( ) |
| 6. Have you avoided people because of your manner? | ( ) | ( ) | ( ) | ( ) |
| 7. Have you felt ashamed of the sort of person you are? | ( ) | ( ) | ( ) | ( ) |
| 8. Have you worried about what other people think of the sort of person you are? | ( ) | ( ) | ( ) | ( ) |
| 9. Have you tried to conceal from others the sort of person you are? | ( ) | ( ) | ( ) | ( ) |
| 10. Have you felt ashamed of your ability to do things? | ( ) | ( ) | ( ) | ( ) |
| 11. Have you worried about what other people think of your ability to do things? | ( ) | ( ) | ( ) | ( ) |
| 12. Have you avoided people because of your inability to do things? | ( ) | ( ) | ( ) | ( ) |
| 13. Do you feel ashamed when you do something wrong? | ( ) | ( ) | ( ) | ( ) |
| 14. Have you worried about what other people think of you when you do something wrong? | ( ) | ( ) | ( ) | ( ) |
| 15. Have you tried to cover up or conceal things you felt ashamed of having done? | ( ) | ( ) | ( ) | ( ) |
| 16. Have you felt ashamed when you said something stupid? | ( ) | ( ) | ( ) | ( ) |
| 17. Have you worried about what other people think of you when you said something stupid? | ( ) | ( ) | ( ) | ( ) |
| 18. Have you avoided contact with anyone who knew you said something stupid? | ( ) | ( ) | ( ) | ( ) |
| *19. Have you felt ashamed when you failed in a competitive situation? | ( ) | ( ) | ( ) | ( ) |

## Appendix J

*Session Rating Scale* (Duncan et al., 2003)



**Session Rating Scale**

ID# _____

Session # ____ Date: _____

Please rate today's session by placing a hash mark on the line nearest to the description that best fits your experience.

| | | |
|---|---|---|
| I did not feel heard, understood, and respected. | Relationship | I felt heard, understood, and respected. |
| We did not work on or talk about what I wanted to work on and talk about. | Goals and Topics | We worked on and talked about what I wanted to work on and talk about. |
| The therapist's approach is not a good fit for me. | Approach or Method | The therapist's approach is a good fit for me. |
| There was something missing in the session today. | Overall | Overall, today's session was right for me. |

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## Appendix K

*Interview Guide*

**First Interview**

1. Can you tell me about your experience of taking part in the art therapy groups?
2. Can you describe the artworks that you created over the past 4 weeks?
3. Is there one artwork that you have created that stands out among the rest?
4. How did you feel when you did art therapy? *(prompt: physically, emotionally, mentally)*
5. How did you find the length of the sessions?
6. How did you feel to be part of the group?
7. Did you find a difference between the structured sessions and the unstructured sessions? If so, how did you experience these differences?
8. How did you find experimenting with new materials?
9. How did you feel about art therapy being incorporated into your treatment plan?
10. Was there anything that you found surprising during the art therapy sessions so far?
11. Would you like to comment on any other aspect of the art therapy groups?

**Second Interview**

***Experiencing art therapy***

1. Can you tell me about your experience of taking part in the art therapy groups?
2. Could you describe the artworks that you created over past 4 weeks?
3. Is there one artwork that you have created that stands out among the rest?
4. How did you feel when you did art therapy? *(prompt: physically, emotionally, mentally)*
5. Did you find a difference between the structured sessions and the unstructured sessions? If so, how did you experience these differences?
6. How did you find experimenting with new materials?
7. Were you concerned with your ability to use new materials? Did this view change over the 8 weeks of art therapy?

8. How did you feel about art therapy being incorporated into your treatment plan?

***Being part of a group***

1. How did you feel to be part of an art therapy group?
2. How did you find creating art with the group?
3. Did you find yourself concerned with how others viewed your process or ability to make art during the art therapy groups? If so, did this concern change over the 8 weeks?
4. Did you find yourself concerned with how others would view your finished artworks during the art therapy groups? If so, did this concern change over the 8 weeks?

***Impact outside of the program***

1. Has the art therapy program had an impact on you outside of the art therapy groups? If so, what was this like? *(prompt: emotionally, physically mentally)*
2. Has taking part in the art therapy program made a difference to how you see yourself? If so, how did you experience this difference?

***Ending***

1. How do you feel about the art therapy program coming to an end?
2. Was there anything that you found surprising during the art therapy sessions so far?
3. Would you like to comment on any other aspect of the art therapy groups?

# Appendix L

## Table L1

*Initial Thematic Analysis Process – Example 1*

| | Transcript Extract | Statements of Meaning/Keywords | Individual Theme |
|---|---|---|---|
| **Interviewer** | How do you feel when you do art therapy - physically, mentally or emotionally? | 1. Art therapy offers feelings of being grounded<br>2. Art-making facilitates the externalisation of emotions<br>3. Colour can evoke intense feelings | 1. Art therapy facilitates and can provide containment for the externalisation of emotions, which can feel relieving<br>2. The use of colour in art therapy can evoke intense feelings |
| **Participant 9** | Um… I feel physically grounded. And I feel… and I said this to someone on Monday night… when I am doing art… in this room or in the lunch room, even if it's just using their, they've got like a set of oil pastels in the corner… or if it's using stuff from here… as the Day Program's gone on, I… like and I nearly started crying on Monday when I was doing something. I think I took it home… while we were waiting for ward round. I just feel like all of these emotions bubbling up, especially with colour. I don't know what it is. | | |
| **Interviewer** | With colour? | 4. Art-making can release blocked or suppressed emotion<br>5. Art-making can offer containment for emotions<br>6. Externalising emotions during art therapy can be relieving | |
| **Participant 9** | Yeah. Especially red. Um… I know… yeah, it was Monday afternoon, I was like, I feel like I'm gonna cry. And I was just doing something similar, but it was pastel, oil pastel. So, I think it's… it's not a trigger, yeah… it's some kind of release of blocked or suppressed… Because at a low weight… you basically, well in my experience, are pretty numb for a long time. And then as the weight restoration happens, then like, you get your emotions back and then it sort of bubbles up. So, I find art helpful to kind of just manage that bubbling up of emotion. So, for example, when I woke up this morning in a pretty bad mood. And I was like, oh it's art therapy, it's gonna be ok. Like, just you'll get something out, like out of your system when you're doing it, and feel better. | | |

**Table L2**

*Initial Thematic Analysis Process – Example 2*

| | Transcript Extract | Statements of Meaning/Keywords | Individual Theme |
|---|---|---|---|
| **Interviewer** | Can you describe the artworks you created over the past four weeks? | 1. Collaborating when art-making lead to feeling a lack of control<br>2. Making poetry in group art therapy can be pleasurable | 1. Art-making in group art therapy can be pleasurable and develops an understanding of the process of other group members<br>2. Making art with others in group art therapy encourages a letting go of outcomes<br>3. Group art therapy offers new interpersonal experiences, and new experiences with art materials<br>4. Having something tangible at the end of art therapy is rewarding |
| **Participant 7** | Yeah! I really really liked, um… that one, how we, um, we all collaborated to make the little poems and stuff. Some of them were funny. I think it was really fun, the lack of control as well, because usually I liked doing art by myself and I don't like group projects and stuff, it's stressful, but that really just… that was really fun and, um… what else did we do? We did, um… I kind of liked the mini activity that was, um… describing an object from the words instead. | | |
| **Interviewer** | What was it about that? | 3. Making poetry in group art therapy offers new perspectives into other group members' processes<br>4. Making poetry in a group means an uncertainty of the outcome | |
| **Participant 7** | Sort of, um… yeah, I guess… not knowing what the picture is, but sort of trying to do it from your own perspective. And they all ended up looking pretty similar, which was good, but it's sort of the power of words instead of, um… the visual aspect of it, which was really interesting. It's like art from a different direction. | | |
| **Interviewer** | What do you think was it about doing that one in the group and also the word one as a group? How did you find that? | 5. Group art therapy is enjoyable<br>6. Seeing others making art offers insights into their process of making and their perspectives | |
| **Participant 7** | Well, um… I really liked the group sessions and I thought I wouldn't enjoy, like, being solo as much, but I actually do and I think um… it's really enjoyable having to see other people's sort of talents and stuff, and their frustrations with the art and things. It's…mmm… you know, I just feel that you come across different skills and things so… people really good with words could choose really interesting things for that, and… yeah, it's fun. | | |
| **Interviewer** | Is there one artwork that you created that stands out among the rest? | 7. Art therapy offers new skills and introduces new materials that may not have been tried before<br>8. Keeping artworks is rewarding | |
| **Participant 7** | Umm… probably the marbling, I really enjoyed that. I've got um… I've got a few pages still saved in my diary. But, um… that was really interesting because… there's something, like, I had no idea how to do, and learning that new skill and also being able to just keep it, and um… like I have a little piece that I wrote on as an entry, um… which was… I just, I just found that really fun and um… being able to have something I can use for cards and stuff, it's nice. | | |

## Appendix M

*Example of Reduction of Individual Themes to Common Themes*

| Individual Theme | Common Theme |
|---|---|
| Externalising challenging thoughts and emotions on paper through art-making can offer distance (Participant 1)<br>It can feel cathartic to express feelings through drawing (Participant 5)<br>Expression through art-making offers relief from talking about thoughts and feelings (Participant 6)<br>Engaging in art therapy can turn feelings of grumpiness into moments of relaxation (Participant 7)<br>Getting out emotions through art-making feels useful and offers clarity (Participant 8)<br>Art therapy facilitates and can provide containment for the externalisation of emotions, which can feel relieving (Participant 9) | Emotional expression and externalisation are facilitated through art-making, as the artwork can act as a container for overwhelming emotions |
| Art therapy offers opportunities to play with and explore different art materials (Participant 1)<br>The range of different art materials in art therapy allows for experimentation and fun (Participant 5)<br>Using a range of art materials encourages a stepping away from familiarity and a stepping into new experiences (Participant 6)<br>Exploring new materials allowed for experimentation and an embrace of imperfections (Participant 7)<br>Trying a range of art materials in art therapy supports quicker art-making and the generation of new ideas (Participant 8)<br>Art therapy allows for a following of the art-making process as it unfolds, and engaging in new experiences pushes boundaries (Participant 9) | The art-making process promotes opportunities for play and experimentation |

**Figure 24**

*Photographic Detail of Process 6*

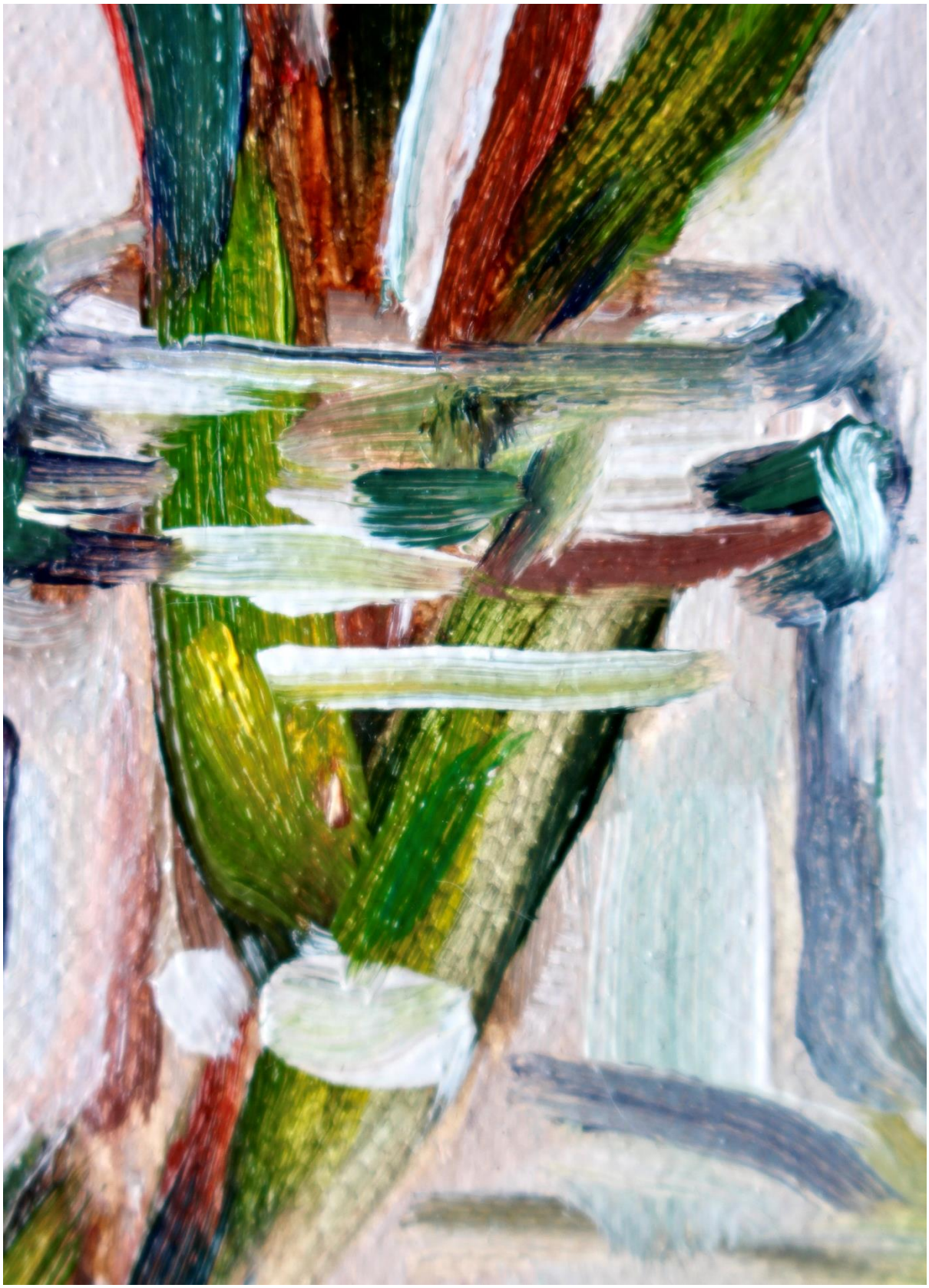

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**Figure 25**

*Photographic Detail of Process 7*