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**Arts Therapies Interventions in Eating Disorder
Treatment: A Comprehensive Updated Scoping Review**

Master's Thesis

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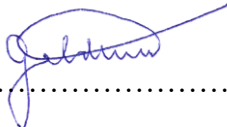
Declaration

We hereby declare that we have completed this thesis independently and have used only the sources and literature listed. We also grant permission for this thesis to be used for study purposes.

Olomouc, December 3, 2025


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ABSTRACT

Background: Eating disorders are complex psychiatric conditions characterized by multifactorial aetiology and profound consequences for physical and psychological health. In recent decades, arts therapies – including art therapy, dance/movement therapy, drama therapy, and music therapy – have been increasingly investigated as adjunctive interventions within multidisciplinary treatment frameworks.

Objective: This thesis provides an updated scoping review of arts therapies interventions in the treatment of eating disorders, with a focus on therapeutic modalities, methodological approaches, and reported clinical outcomes. The review builds upon and extends the existing scoping review protocol developed by Bucharová et al. (2020), thereby ensuring methodological continuity while incorporating newly published evidence.

Methods: Guided by established scoping review protocols, 133 studies published between 1980 and 2025 were systematically identified and analysed. Interventions were classified according to modality, participant characteristics, and outcome domains. Particular attention was given to methodological rigor, assessment instruments, and ethical transparency.

Results: Arts therapies interventions demonstrated beneficial effects across several domains. Art therapy emerged as the most frequently examined modality in the treatment of eating disorders, with consistent reports of benefits in emotional regulation, body image, and treatment engagement. Music therapy was also well represented, with numerous studies highlighting its role in fostering emotional expression and therapeutic alliance. Dance/movement therapy appeared in a moderate number of studies, while drama therapy remained comparatively underexplored. Across modalities, heterogeneity in study design, small sample sizes, and limited longitudinal data constrain the generalizability of findings.

Conclusions: Arts therapies represent promising complementary approaches in the treatment of eating disorders, supporting recovery through embodied and creative processes. This updated scoping review underscores both the therapeutic potential of these modalities and the need for more rigorous, large-scale, and longitudinal research. By extending Bucharová's protocol, the thesis contributes to methodological refinement, clinical practice, and the advancement of integrative mental health care.

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LIST OF ABBREVIATIONS

ACT – Acceptance and Commitment Therapy

AN – Anorexia Nervosa

ARFID – Avoidant-Restrictive Food Intake Disorder

AsTs – Arts Therapies

AT – Art Therapy

BAI – Beck Anxiety Inventory

BDI – Beck Depression Inventory

BN – Bulimia Nervosa

BED – Binge Eating Disorder

CBT – Cognitive-behavioural therapy

CBT-E – Enhanced Cognitive Behavioural Therapy

D/MT – Dance/Movement Therapy

DSM – Diagnostic and Statistical Manual of Mental Disorders

ED – Eating Disorder

EDs – Eating Disorders

EDNOS – Eating Disorder not Otherwise Specified

FBT – Family-Based Treatment

ICD – International Statistical Classification of Diseases and Related Health Problems

KBT – Concentrative Movement Therapy

MT – Music Therapy

OSFED – Other Specified Feeding or Eating Disorder

PD – Purging Disorder

RMT – Rhythmic Movement Therapy

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INTRODUCTION

Eating disorders (EDs) represent a complex and multifaceted group of psychiatric conditions characterized by persistent disturbances in eating behaviour, body image, and emotional regulation. Anorexia nervosa, bulimia nervosa, binge eating disorder, and other specified feeding or eating disorders are associated with significant psychological distress, medical complications, and impaired social functioning. Despite the availability of evidence-based treatments such as cognitive-behavioural therapy, family-based therapy, and pharmacological interventions, many individuals with EDs experience chronic symptoms, high relapse rates, and limited engagement with conventional therapeutic modalities (Treasure et al., 2020a). This underscores the need for complementary approaches that address the embodied, relational, and symbolic dimensions of eating disorders.

In recent years, arts therapies – including art therapy, dance/movement therapy, drama therapy, and music therapy – have gained attention as promising adjunctive interventions in ED treatment. These modalities offer non-verbal, experiential pathways for emotional expression, body–mind integration, and narrative reconstruction, which are often inaccessible through verbal psychotherapy alone. Arts therapies may be particularly beneficial for individuals with alexithymia, trauma histories, or rigid cognitive styles, who struggle to access and process affective experiences through traditional talk-based methods (Griffin et al., 2023).

This thesis presents an updated scoping review of arts therapies in the treatment of eating disorders, building upon the foundational work of Monika Bucharová (2022), who systematically mapped the evidence base up to 2020. Her scoping review was based on a protocol originally defined in an earlier methodological study by Bucharová et al. (2020). The current review expands her work by incorporating studies published between 2020 and 2024, with the aim of identifying new trends, therapeutic outcomes, and methodological developments in the field. The review follows the PRISMA-ScR guidelines and includes peer-reviewed studies that examine the clinical, psychological, and behavioural effects of arts therapies in ED populations.

The thesis is structured into two main parts. The theoretical section offers a comprehensive overview of current knowledge on the treatment of eating disorders, with a particular focus on how this clinical domain is conceptualized and addressed within the field

of arts therapies. It synthesizes recent findings from interdisciplinary literature, highlighting the evolving understanding of embodied approaches, affect regulation, and creative modalities in ED care. Special attention is given to the mechanisms by which art therapy, dance/movement therapy, drama therapy, and related practices contribute to therapeutic change, and how these modalities complement conventional psychotherapeutic and medical interventions. The practical section presents the updated scoping review, including study selection, data extraction, thematic synthesis, and critical appraisal of therapeutic outcomes. Special attention is given to methodological rigor, population characteristics, intervention modalities, and outcome measures.

By updating and extending Bucharová's (2022) work, this thesis aims to contribute to the evolving evidence base on arts therapies in ED treatment, inform clinical practice, and identify gaps for future research. It advocates for a more integrative, person-centred approach that honours the complexity of eating disorders and the transformative potential of creative expression.

1. DEFINING EATING DISORDERS

Eating disorders are serious medical conditions that significantly impact both the physical and psychological health of affected individuals. These disorders are characterized by a maladaptive relationship with food, body weight, and body image. The most prevalent eating disorders include anorexia nervosa, bulimia nervosa, and binge eating disorder (APA, 2013).

Anorexia nervosa is marked by extreme restriction of food intake and an intense fear of gaining weight, often resulting in dangerously low body weight. Bulimia nervosa involves recurrent episodes of binge eating followed by inappropriate compensatory behaviours such as self-induced vomiting or excessive exercise. Binge eating disorder is defined by the consumption of large quantities of food within a short period, typically accompanied by feelings of loss of control and shame (APA, 2013).

The aetiology of eating disorders is multifactorial, encompassing genetic, biological, psychological, and sociocultural influences (Agras, 2017). Effective treatment requires a multidisciplinary approach, which may include psychotherapy, nutritional counselling, and medical care. Early intervention and sustained support are critical for successful management and for improving the quality of life of individuals affected by these disorders (Russell et al., 2023).

1.1. Diagnosis of Eating Disorders

1.1.1. Eating disorders in ICD-11

According to the 11th revision of the International Classification of Diseases (ICD-11), eating disorders are categorized into several distinct groups:

Anorexia nervosa – characterized by extreme restriction of food intake and an intense fear of gaining weight, leading to significantly low body weight.

Bulimia nervosa – involves recurrent episodes of binge eating followed by inappropriate compensatory behaviours such as self-induced vomiting or excessive physical exercise.

Binge-eating disorder – defined by the consumption of large quantities of food within a short period, often accompanied by feelings of loss of control and shame.

Other specified eating disorders – includes disorders that do not fully meet the criteria for the above diagnoses but still represent clinically significant disturbances in eating behaviour.

Unspecified eating disorders – encompasses conditions that cannot be clearly classified into any of the categories.

1.1.2. Eating disorders in DSM-V

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), eating disorders are classified into several distinct categories.

Anorexia nervosa is defined by a persistent restriction of food intake, an intense fear of gaining weight, and a distorted perception of one's body image.

Bulimia nervosa involves recurrent episodes of binge eating followed by inappropriate compensatory behaviours such as vomiting, misuse of laxatives, or excessive physical exercise.

Binge-eating disorder is characterized by the consumption of large quantities of food within a short period, often accompanied by feelings of loss of control and shame.

Pica refers to the persistent ingestion of non-nutritive, non-food substances such as soil, paper, or hair, occurring for at least one month and not developmentally appropriate.

Rumination disorder is marked by repeated regurgitation and re-chewing of food, which is not attributable to any medical condition.

Avoidant/restrictive food intake disorder (ARFID) involves the avoidance of food or restriction of intake that leads to significant nutritional deficiency, weight loss, or psychosocial impairment, without the presence of body image disturbance typical of anorexia or bulimia.

Clinical assessment typically includes patient interviews, physical examination, and evaluation of eating habits and related behaviours. The psychologist plays a central role in the diagnostic process, which involves several key components (National Institute for Health and Care Excellence, 2017):

- 1) Assessment and diagnosis – the psychologist conduct detailed clinical interviews to gather information about the patient’s eating behaviours, emotional functioning, and cognitive patterns.
- 2) Standardized diagnostic tools such as the Eating Disorder Examination-Questionnaire (EDE-Q) and the Eating Disorder Inventory (EDI) are used to assess the presence and severity of the disorder (Fairburn et al., 2008; Garner, 1991).
- 3) Identification of comorbidities – the psychologist evaluates the presence of co-occurring mental health conditions commonly associated with eating disorders, including depression, anxiety disorders, and obsessive-compulsive disorder.
- 4) Development of a treatment plan – based on diagnostic findings, the psychologist collaborates with the patient to formulate an individualized treatment plan. This may include psychotherapy, nutritional counselling, and medical care tailored to the patient’s clinical needs.
- 5) Support and psychoeducation – the psychologist provides emotional support and psychoeducation regarding the nature, causes, and consequences of eating disorders. They assist the patient in developing healthier eating patterns and improving their relationship with food and body image.
- 6) Monitoring progress – the psychologist regularly tracks the patient’s progress and adjusts the treatment plan as needed to ensure optimal therapeutic outcomes.

1.2. Aetiology

The aetiology of eating disorders is widely recognized as complex and multifactorial, involving an interplay of biological, psychological, and sociocultural influences. From a biological standpoint, genetic predisposition appears to contribute to individual vulnerability, with research indicating that hereditary factors may increase the likelihood of developing disordered eating patterns. Neurobiological mechanisms also play a significant role, particularly changes in brain structures and functions that regulate appetite, emotional responses, and impulse control. These alterations may affect how individuals perceive hunger, satiety, and their emotional relationship with food and body image (Watson et al. 2019).

Psychological factors are equally important in understanding the onset and maintenance of eating disorders. Certain personality traits—such as perfectionism, low self-esteem, heightened anxiety, and depressive tendencies—are frequently observed among affected individuals. Moreover, exposure to traumatic experiences or prolonged stress can disrupt emotional regulation and coping strategies, thereby increasing the risk of maladaptive eating behaviours (Burdo et al., 2023; Zhou et al., 2025).

Sociocultural factors further shape the development of these disorders. Cultural ideals that glorify thinness and promote unrealistic beauty standards, often perpetuated by media and social platforms, can exert significant pressure on individuals, particularly adolescents and young adults. This societal emphasis on appearance may foster body dissatisfaction and unhealthy attempts to control weight. Additionally, the family environment plays a critical role; parental attitudes toward food, dieting, and body image—as well as broader relational dynamics—can influence a child’s self-perception and eating behaviour, either reinforcing or mitigating risk (Treasure et al., 2020a).

Taken together, these interconnected factors underscore the need for a nuanced and individualized approach to prevention, assessment, and treatment, one that considers the biological sensitivities, psychological vulnerabilities, and social contexts in which eating disorders emerge.

1.3. Treatment

The treatment of eating disorders is complex and requires a multidisciplinary approach. Contemporary research emphasizes that while established evidence-based interventions remain the foundation of clinical care, outcomes vary across diagnoses and patient groups, and treatment must increasingly be tailored to individual needs and developmental stage (Trably et al., 2024b). This chapter reviews current approaches to the complex treatment of eating disorders.

1.3.1. Pharmacological Treatment

Pharmacotherapy may be indicated in the treatment of eating disorders, particularly for addressing co-occurring psychiatric conditions such as depression or anxiety, which

frequently accompany disordered eating. In severe cases, inpatient care may be necessary to stabilize the patient's physical condition and provide intensive therapeutic support. Hospitalization allows for close medical monitoring, nutritional rehabilitation, and structured psychotherapeutic interventions. Outpatient care typically involves regular appointments with therapists and physicians who assess the patient's progress and adjust the treatment plan as needed. This ongoing multidisciplinary collaboration is essential for ensuring continuity of care and supporting long-term recovery (National Institute for Health and Care Excellence, 2017).

Psychopharmacological interventions are used as adjuncts to nutritional rehabilitation and evidence-based psychotherapies rather than as standalone cures for eating disorders. For anorexia nervosa, pharmacotherapy has shown limited efficacy for primary weight restoration or core restrictive symptoms; atypical antipsychotics, most notably olanzapine, have the strongest recent signal for modest improvements in weight gain and reductions in obsessive-compulsive eating-related cognitions in some trials, but benefits are variable and must be balanced against metabolic and sedation risks. Antidepressants do not reliably increase weight in underweight patients with AN but remain important for treatment of comorbid mood and anxiety disorders once nutritional status is stabilized (Muratore & Attia, 2022).

For bulimia nervosa (BN), selective serotonin reuptake inhibitors retain a primary role: fluoxetine has the most robust randomized controlled trial evidence for reducing binge-purge frequency and improving mood, and SSRIs more broadly are commonly prescribed as adjuncts to cognitive-behavioural treatments for BN (Byrne & Fursland, 2024; Muratore & Attia, 2022). Pharmacotherapy for BN is usually combined with psychotherapy to optimize symptomatic and functional outcomes.

Binge eating disorder (BED) has benefited from recent medication approvals and strong trial evidence for specific agents: lisdexamfetamine consistently reduces binge frequency and improves functional outcomes and is approved in several jurisdictions for BED, while other agents (including some anticonvulsants and antidepressants) show variable benefit and require careful consideration of adverse effects (Tabuenca et al., 2025).

Clinical practice emphasizes symptom-targeted prescribing, integration of pharmacotherapy with psychotherapy and medical monitoring, and consideration of patient-specific factors when selecting agents (Tabuenca et al., 2025).

1.3.2. Nonpharmacological Approaches in Treatment

Psychotherapy plays a central role in the treatment of eating disorders and encompasses several complementary approaches. Cognitive-behavioural therapy (CBT) is considered one of the most effective methods, helping patients identify and modify maladaptive thought patterns and behaviours related to food, body image, and self-worth. Through structured interventions, CBT supports the development of healthier coping strategies and promotes long-term behavioural change (Russell et al., 2023).

Core evidence-based psychotherapies include enhanced cognitive behavioural therapy (CBT-E), which is the leading transdiagnostic individual therapy for adults with bulimia nervosa, binge eating disorder, and many presentations of OSFED, and Family-Based Treatment (FBT), which remains the first-line approach for adolescents with anorexia nervosa. CBT-E targets self-monitoring, regular eating, behavioural experiments, and cognitive restructuring focused on maintaining mechanisms; FBT places parents centrally in refeeding and graduated return of autonomy as weight and eating normalize (Byrne & Fursland, 2024; Nicula et al., 2025). Family therapy is frequently used with younger patients, particularly adolescents, and emphasizes the involvement of family members in the therapeutic process. It fosters communication, emotional support, and shared responsibility for recovery, often addressing relational dynamics that may contribute to the maintenance of the disorder (Treasure et al., 2020b).

For adults with restrictive type of anorexia nervosa, specialist manualised approaches (for example cognitive–interpersonal models and Specialist Supportive Clinical Management) are commonly used when family involvement is limited or the patient is older. These approaches prioritize formulation of maintaining mechanisms such as cognitive rigidity and interpersonal factors and combine targeted psychological work with nutritional rehabilitation (Byrne & Fursland, 2024).

Emotion-focused and transdiagnostic approaches such as Dialectical Behaviour Therapy (DBT), Acceptance and Commitment Therapy (ACT), and compassion-focused interventions are widely applied for bulimic and binge-spectrum presentations characterized by affective lability, impulsivity, or self-harm. These therapies teach distress tolerance, emotion regulation, interpersonal effectiveness, and mindfulness skills, and are often adapted to address eating-related triggers and urges (Nicula et al., 2025).

Low-intensity guided self-help and stepped-care models provide evidence-based, accessible options for milder presentations of bulimia nervosa and BED. In stepped-care frameworks, guided self-help based on CBT principles is offered first, with rapid escalation to specialist psychotherapy for non-responders, thereby improving resource allocation and reducing waiting times. Also, digital and remote delivery models—internet CBT, telepsychotherapy, and blended care – have expanded access to specialist interventions. When treatment fidelity and clinician support are preserved, well-designed online programs can achieve symptom reductions comparable to in-person care, although monitoring adherence and therapeutic alliance remains essential (Byrne & Fursland, 2024; Nicula et al., 2025).

Body-focused and embodiment interventions are integral to comprehensive care. Body-image exposure, mirror exposure, and graded approaches to reduce body-related avoidance are commonly integrated into CBT formulations to decrease body-related anxiety and support extinction learning. Expressive arts therapies (art therapy, music therapy, dance-movement therapy) are used as adjuncts to promote emotional expression, interoceptive awareness, and reconnection with the body; these modalities can enhance treatment engagement and reduce post-meal anxiety, but existing studies are often small and heterogeneous (Byrne & Fursland, 2024; Nicula et al., 2025).

Emerging technologies such as virtual reality (VR) are being piloted as augmentation tools for body-image exposure and graded exposure to feared eating situations. Early trials show potential for reducing body concerns and food-related anxiety, but larger, well-controlled studies with standardized protocols are required (Byrne & Fursland, 2024).

Implementation and personalization are central clinical concerns. Therapies should be tailored to the patient’s developmental stage, comorbidities, cultural context, and preferences, including choice of format (individual, group, family), intensity, and adjunctive modules (emotion regulation, trauma focus, cognitive remediation). Stepped-care pathways and digital delivery can mitigate access inequalities, provided fidelity and specialist referral pathways are maintained (Nicula et al., 2025).

Nutritional counselling is another essential component of treatment. Registered dietitians or nutritional therapists work with patients to establish balanced eating habits and individualized meal plans that support physical health and the restoration of normal

nutritional intake. This guidance is particularly important in correcting misconceptions about food and rebuilding trust in the body's signals (Academy of Nutrition and Dietetics, 2016).

Education and psychoeducation are vital for both patients and their families. Providing accurate information about the nature, causes, and consequences of eating disorders enhances understanding and empowers individuals to engage actively in the recovery process. Support groups can also offer valuable emotional reinforcement, allowing participants to share experiences, reduce isolation, and build a sense of community with others facing similar challenges (Kurnik et al., 2023).

In addition to traditional psychotherapeutic approaches such as CBT, psychodynamic therapy, and family-based interventions, expressive therapies have gained recognition as valuable adjuncts in the treatment of eating disorders. These modalities—including art therapy, dance/movement therapy, drama therapy, and music therapy—offer alternative pathways for emotional expression, body awareness, and self-exploration, particularly for individuals who struggle to articulate internal experiences verbally (Bucharová et al., 2020).

Expressive therapies can help patients reconnect with their bodies in a non-judgmental and creative way, fostering a sense of agency and emotional regulation. For example, movement-based interventions may support the development of a more integrated and compassionate body image (Koch et al., 2019), while visual arts can provide a symbolic space for processing trauma, identity conflicts, and relational dynamics (Trably et al., 2022). These approaches are often used within multidisciplinary treatment settings and can be especially beneficial for adolescents and individuals with trauma histories, alexithymia, or resistance to verbal therapy. When integrated thoughtfully into a comprehensive treatment plan, expressive therapies can enhance therapeutic engagement, deepen insight, and support long-term recovery by addressing the emotional and somatic dimensions of eating disorders.

1.4. Expressive Therapies in the Treatment of Eating Disorders

Expressive therapies, as mentioned earlier, are increasingly incorporated into multidisciplinary treatment pathways for eating disorders to target affect regulation, body awareness, and embodied self-experience alongside core psychotherapeutic work. These modalities offer nonverbal, experiential routes to process distress, reduce post-meal anxiety, and foster interoceptive and sensorimotor reconnection, making them valuable adjuncts to

evidence-based treatments like CBT-E and family-based approaches (Byrne & Fursland, 2024; Nicula et al., 2025). Although preliminary studies and systematic reviews report improvements in engagement, emotional expression, and some symptom domains, the evidence base remains heterogeneous and constrained by small samples and variable methodology, highlighting the need for larger, well-controlled trials with standardized outcome measures to clarify efficacy, mechanisms, and optimal integration within stepped-care models (Byrne & Fursland, 2024).

In next chapters we will briefly describe the main expressive art therapies used in eating disorder treatment summarizing their theoretical rationale, typical clinical techniques, available evidence for acceptability and symptom-related outcomes, proposed mechanisms of change, practical considerations, and key methodological limitations and research priorities.

1.4.1. Music Therapy

Music therapy and music-based interventions are increasingly incorporated as complementary components within multidisciplinary treatment for eating disorders. Recent empirical studies and systematic reviews indicate that music interventions can reduce meal-related anxiety, support emotion regulation, enhance mood, and increase therapeutic engagement across inpatient and outpatient settings (Chang et al., 2023; Meneguzzo et al., 2024).

Music therapy studies demonstrated the profession's value for supporting the emotional well-being and psychosocial development of people with EDs. Highlighted methods included group music therapy with song focused approaches (singing, discussion, and song writing), individual song writing, and GIM. Various formats of music interventions — therapist-led music therapy, music medicine protocols, background music during mealtimes, and group music activities — target both cognitive-emotional and somatic dimensions of disordered eating, including alexithymia and disrupted interoception (Chang et al., 2023; Seppendorf et al., 2024). Naturalistic and clinical evaluations suggest that background or guided music during meals may help maintain a more positive affective state and reduce ritualized behaviours around eating in real-world inpatient contexts (Meneguzzo et al., 2024).

Qualitative and mixed-methods research further highlight music's role in strengthening therapeutic alliance and providing a nonverbal channel for emotional expression, particularly for patients who struggle to verbalize internal experiences (Chang et al., 2023). The contemporary literature emphasizes consistent but heterogeneous findings, noting small samples and diverse intervention protocols; rigorous, adequately powered trials with standardized intervention descriptions and outcome measures are needed to better define efficacy and mechanisms (Chang et al., 2023; Seppendorf et al., 2024).

When integrated thoughtfully into a comprehensive treatment plan, music-based interventions appear most beneficial if they are theoretically grounded, delivered by credentialed music therapists or clearly specified music medicine protocols, and coordinated with nutritional, medical, and psychotherapeutic care to support emotional regulation, embodied experience, and long-term recovery (Meneguzzo et al., 2024).

Despite promising indications, the evidence base has important limitations that constrain definitive clinical recommendations. Many studies are small, use heterogeneous or poorly described interventions, rely on uncontrolled or pre-post designs, and apply varied outcome metrics with limited follow-up, which collectively impede meta-analytic synthesis and causal inference (Chang et al., 2023; Coutinho et al., 2022; Seppendorf et al., 2024). The heterogeneity of therapist qualifications and the distinction between credentialed music therapy versus "music medicine" protocols are often unclear, reducing reproducibility and complicating attribution of effects to therapeutic mechanisms (Chang et al., 2023). Safety and ethical considerations require attention: music can evoke strong emotional memories or bodily distress, so interventions must be trauma-informed, include clinical risk monitoring, and provide immediate debriefing and containment strategies when needed (Seppendorf et al., 2024). Finally, there is a shortage of adequately powered randomized controlled trials and mediation studies that test mechanisms such as emotion regulation, interoceptive change, or social connectedness (Chang et al., 2023; Coutinho et al., 2022).

Clinically, music interventions are best integrated as adjuncts within a multidisciplinary treatment plan led by medical, nutritional, and psychotherapeutic teams. Wherever possible, music work should be delivered or supervised by credentialed music therapists using clearly described protocols that align with nutritional and safety objectives (Seppendorf et al., 2024). Research priorities include conducting adequately powered RCTs with standardized intervention manuals, using harmonized outcome sets that include meal-related anxiety, intake metrics, emotion-regulation scales, and longer-term recovery

indices, and performing mediator and moderator analyses to identify who benefits most and why (Chang et al., 2023; Coutinho et al., 2022). Implementation studies evaluating feasibility, staff training requirements, and cost-effectiveness in real-world inpatient and outpatient settings would also facilitate evidence-based adoption.

Music therapy and music-based interventions represent a promising adjunctive avenue for addressing affective, social, and embodied aspects of eating disorders. Current literature supports feasibility and short-term benefits for anxiety reduction, mood improvement, and therapeutic engagement.

1.4.2. Art Therapy

Art therapy and arts-based interventions have increasingly been investigated as adjunctive components of multidisciplinary care for eating disorders. Recent literature frames art-based work as a nonverbal, embodied pathway for affect regulation, symbolic processing of trauma and identity conflicts, and gradual reconnection with the body—targets that are often resistant to purely verbal therapies. Mechanistically, art therapy appears to facilitate access to affect in patients with alexithymia, support interoceptive and sensorimotor reconnection through tactile art-making, and promote mastery and self-efficacy via creative achievement, while group formats foster social connectedness and corrective relational experiences that enhance adherence to broader treatment plans (Griffin et al., 2023; Trably et al., 2024a)

Art interventions in eating-disorder services commonly include drawing, painting, collage, sculpting, photo-based tasks, and structured art-making with reflective discussion. Formats range from single-session expressive tasks used within meal-support protocols to time-limited group programs and ongoing individual art-therapy sessions embedded in inpatient, day-program, or outpatient care (Trably et al., 2024a). Clinical aims are to: provide a nonverbal route for emotional expression; externalize and symbolise conflicted feelings about food and body; foster mastery and agency through creative tasks; reduce avoidance of affective material; and strengthen therapeutic alliance and treatment engagement.

Contemporary work proposes several mechanisms through which art therapy may support recovery. Visual arts create symbolic referents that allow access to emotions and memories in patients with alexithymia or limited verbal affective vocabulary, facilitating incremental emotional awareness and verbalization. The tactile and sensorimotor elements

of art-making engage kinaesthetic and interoceptive systems, offering a somatic route to body reconnection that does not centre weight or shape and can be less triggering than direct body-focused interventions (Trably et al., 2022). Completing creative tasks and reflecting on outcomes can bolster self-efficacy and provide corrective experiences that counter pervasive self-criticism and shame. In group settings, co-creative activity enhances social connectedness and provides corrective relational learning that supports sustained engagement in broader treatment (Trably et al., 2024a).

Systematic reviews and controlled trials consistently report feasibility, high acceptability, and improvements on intermediate outcomes such as mood, anxiety, body dissatisfaction, and treatment engagement, particularly in adolescent and inpatient samples (Trably et al., 2022; Trably et al., 2024b; Herbert, 2024). Controlled trials remain relatively few and frequently underpowered; where controlled data are available, effect sizes are variable and often pertain to proximal outcomes (e.g., reduced post-meal anxiety, improved affect) rather than robust change in core diagnostic status or long-term remission. Qualitative studies complement quantitative findings by describing how art processes enable symbolic meaning-making, support trauma processing, and increase readiness for verbal psychotherapy.

Despite promising signals, important limitations constrain definitive conclusions and clinical generalization. The recent literature is characterized by small samples, heterogeneity of interventions (media, dose, individual vs group), variable therapist qualifications, short follow-up intervals, and inconsistent outcome measurement, all of which impede meta-analytic synthesis and causal inference (Trably et al., 2024b). Reporting standards for intervention content and fidelity are often inadequate, making replication difficult. Safety considerations are crucial: art can elicit intense emotion or trauma-related material, so protocols must be trauma-informed, include pre-session risk assessment, and ensure immediate clinical containment and debriefing when needed. Finally, mechanism-focused research (mediation/moderation analyses testing emotion regulation, interoception, or identity change) and adequately powered randomized controlled trials are still rare and represent high priorities for future research.

Art therapy is best used as an adjunct within coordinated multidisciplinary care. Clinical integration should ensure that art therapists are credentialed and work in close collaboration with medical and nutritional teams so that creative work supports, rather than interferes with, refeeding and medical stabilization. Interventions should be tailored for

developmental stage, trauma history, cultural context, and sensory tolerances. Clear manuals or session outlines, fidelity checks, and routine outcome monitoring (including measures of mood, anxiety, body dissatisfaction, and eating-behaviour indices) will improve safety and build an evidence base that is translatable to routine services.

1.4.3. Dance/Movement Therapy

Dance/movement therapy (D/MT) is an embodied psychotherapeutic approach that uses movement, nonverbal expression, and somatic awareness as primary therapeutic tools. In eating-disorder treatment D/MT is used as an adjunct to medical, nutritional, and psychotherapeutic care with the specific aim of addressing body-mind disconnection, disturbed body image, alexithymia, and emotion-regulation difficulties—domains that often remain resistant to verbal therapy alone (Syper et al., 2023; Bastoni et al., 2024).

Dance/Movement Therapy interventions for people with eating disorders are delivered in individual and group formats and typically include grounding exercises, breath work, mirroring and atonement tasks, movement improvisation to externalize affect, rhythmic or sequencing practices to rehearse new embodied responses, and integrative reflection linking movement experience to personal meaning. Clinically, D/MT targets reconnection with interoceptive signals (hunger, satiety, visceral affect), reduction of alexithymia by enabling nonverbal affect recognition, experiential updating of negative body schemas through nonjudgmental movement exposure and strengthening social relatedness via synchrony and co-movement (Syper et al., 2023; Bastoni et al., 2024).

Contemporary studies propose several overlapping mechanisms by which D/MT may support recovery in eating disorders. First, embodied emotion regulation occurs when breath-posture-rhythm coupling during movement helps down-regulate arousal and trains bodily strategies for tolerating distress. Second, interoceptive retraining is promoted by structured attention to internal sensations during movement, improving the mapping between bodily signals and adaptive responses. Third, corrective somatic experience through exploratory, nonjudgmental movement can weaken rigid body-focused self-monitoring and foster greater body trust and agency. Fourth, group synchrony and mirroring support social-affective repair, reduce isolation, and increase treatment engagement—processes that

plausibly mediate reductions in meal-related anxiety and improvements in body satisfaction (Syper et al., 2023; Bastoni et al., 2024).

Over the past decade D/MT has shifted from primarily descriptive case reports and theoretical discussions toward a progressively more empirical, mechanism-focused, and clinically integrated literature. Early work in the 2010s established clinical rationale and presented case series demonstrating D/MT's potential to address body-mind disconnection, body image disturbance, and emotion-regulation problems in people with eating disorders. More recent research has built on that foundation by testing D/MT in structured inpatient and day-program contexts, using standardized process measures (interoception, alexithymia, emotion regulation), and exploring patient-reported experiences in greater depth (Koch et al., 2019; Billock Tropea & Kleinman, 2022).

Contemporary studies extend earlier findings in three important ways. First, empirical designs have become more systematic: several open trials and pre–post evaluations now quantify changes on validated instruments rather than relying solely on qualitative description (Bastoni et al., 2024). These quantitative outcomes align with and operationalize mechanisms that early authors proposed qualitatively, showing measurable change on process variables thought to mediate recovery. Second, phenomenological and mixed-methods studies published since 2021 have deepened understanding of patient experience, documenting that participants commonly report increases in body trust, enhanced capacity to tolerate somatic sensation, and improved social connection resulting from group movement work (Syper et al., 2023). These richer qualitative data validate earlier clinical observations and help clarify which intervention components (mirroring, synchrony, improvisation, grounding) are experienced as most therapeutic. Third, newer workplaces greater emphasis on trauma-sensitive adaptations and safety procedures: contemporary protocols and clinical chapters explicitly describe screening, containment, and stepped support when movement mobilizes strong affect—an area previously underreported in the literature (Billock Tropea & Kleinman, 2022; ADTA resources). The field of D/MT for eating disorders has made measurable progress. However, to move from promising adjunct to an evidence-based component of standard care, the field must standardize intervention reporting and fidelity monitoring and embed trauma-sensitive safety provisions in both research and practice.

The literature on D/MT in eating disorders has grown mainly through qualitative studies, feasibility/open trials, and small pre–post quantitative evaluations.

Phenomenological work reports participants' experiences of increased body-awareness, reduced isolation, and improved mood following D/MT modules (Syper et al., 2023). Preliminary open-trial data indicate improvements on standardized process measures such as emotion regulation, alexithymia, and certain interoceptive domains after brief D/MT programs in inpatient settings (Bastoni et al., 2024). These findings suggest that D/MT can affect clinically relevant proximal changes that support engagement with nutritional rehabilitation and verbal therapies.

For clinical integration, D/MT is best delivered as a clearly defined adjunct within a multidisciplinary team. Interventions should be implemented by credentialed dance/movement therapists trained in trauma-sensitive practice, with pre-session risk assessment and explicit protocols for managing strong affect. Manualized session outlines, fidelity checks, and routine outcome monitoring that capture both process (interoception, emotion regulation) and distal outcomes (eating-disorder symptoms, BMI, relapse) will increase clinical utility and research value. Research priorities include adequately powered RCTs, mediation analyses to test proposed mechanisms, longer follow-up for durability, and implementation studies assessing feasibility, training needs, and cost-effectiveness in real-world services (Syper et al., 2023; Bastoni et al., 2024).

1.4.4. Dramatherapy and Psychodrama

Dramatherapy is a psychotherapeutic modality that uses role, enactment, storytelling, metaphor, and symbolic play to externalize internal conflicts, rehearse alternative behaviours, and rework relational patterns within a contained therapeutic frame. Psychodrama is a closely related, action-oriented approach that emphasizes role reversal, doubling, mirroring, and enactment within a group setting to access spontaneity, creativity, and corrective interpersonal experiences. Both modalities provide aesthetic distance that allows clients to approach shame, body-related distress, identity conflicts, and affective avoidance indirectly, which is particularly valuable for patients who find direct verbal disclosure difficult.

Contemporary empirical and synthesis work positions dramatherapy and psychodrama as promising adjuncts in multidisciplinary eating-disorder services, with utility for improving emotional expression, reducing experiential avoidance, and supporting identity work. Recent reviews of drama-based therapies report medium overall effects on

psychological and behavioural mental-health outcomes across clinical populations, supporting the transdiagnostic potential of psychodrama/drama therapy techniques that are also used with eating-disorder clients. Scientometric and review studies of psychodrama literature highlight renewed methodological attention, increased transparency in reporting, and calls for clearer manuals and outcome measurement that are directly relevant to advancing dramatherapy research in eating disorders (Lim et al., 2021).

Applied studies and practice-focused reports emphasize several clinical functions relevant to eating-disorder care. Dramatic enactment and psychodramatic techniques facilitate affect labelling via projection and metaphor, widen the window of tolerance for somatic and affective activation, and enable behavioural rehearsal of alternative responses to eating-related conflicts and interpersonal triggers. Group psychodrama formats provide corrective relational experiences through mirroring and synchrony, which can reduce isolation and support motivation for change. These process targets map onto theoretically important maintenance factors in eating disorders (alexithymia, shame, identity-based illness roles, and body-mind disconnection), suggesting plausible pathways by which dramatic methods could augment nutritional and psychotherapeutic work when integrated into multidisciplinary treatment plans (Lim et al., 2021).

Progress in the field of drama therapy and treatment of eating disorders is visible in two linked trends. First, the field has shifted from largely descriptive case reports and small service evaluations toward more systematic mapping, with increased emphasis on manualization, process measurement, and safety guidelines. Scientometric analyses and recent systematic syntheses call for greater transparency about techniques, materials, and outcomes and recommend the adoption of validated measures and clearer reporting standards—advances that make cross-study comparison and cumulative evidence building more feasible¹. Second, clinician-research collaborations since 2021 have translated tacit practice knowledge into practical guidance for trauma-sensitive dramatherapy with eating-disorder populations, including staged interventions that progress from low-arousal symbolic techniques to higher-activation role enactments and explicit protocols for integrating dramatic work with refeeding and medical monitoring (Orkibi et al., 2023).

Despite these advances, important limitations constrain robust clinical claims. The evidence base specific to dramatherapy and psychodrama in eating-disorder populations remains limited: randomized controlled trials testing dramatic interventions against active comparators are rare; much of the literature consists of qualitative studies, small

quasi-experimental designs, or service evaluations that focus on proximal process outcomes rather than distal clinical endpoints such as diagnostic remission, sustained weight restoration, or relapse prevention. Intervention heterogeneity is high—approaches vary in theoretical orientation, session dose, group versus individual format, and integration with other treatments—and reporting of therapist qualifications and fidelity procedures is often incomplete, hindering replication and meta-analysis (Orkibi et al., 2023). Safety reporting is inconsistent; while practice papers emphasize trauma-informed adaptations, systematic documentation of adverse events, criteria for exclusion, and standardized containment procedures is not yet routine in published studies (Lim et al., 2021). The empirical evidence base for dramatherapy in eating-disorder treatment is still sparse and dominated by qualitative reports, small case series, service evaluations, and clinician-led practice papers; randomized controlled trials and adequately powered comparative studies are rare, which limits conclusions about efficacy on distal clinical endpoints such as diagnostic remission, sustained weight restoration, binge/purge frequency, or relapse prevention (Bucharová, 2022).

For research, priorities are the development and publication of manualized protocols with fidelity criteria, adequately powered randomized or pragmatic trials embedded in routine services, harmonized outcome sets that capture both process mediators (affect labelling, experiential avoidance, identity change) and distal clinical outcomes, and routine reporting of adverse events and safety procedures so that efficacy and risk can be evaluated systematically (Orkibi et al., 2023).

In summary, dramatherapy and psychodrama offer theoretically coherent, action-oriented approaches that address experiential, relational, and identity-based maintenance factors in eating disorders. The field has progressed toward better reporting, clearer process targets, and practice guidance for trauma-sensitive delivery, but larger, methodologically rigorous trials and standardized reporting are required before dramatherapy or psychodrama can be recommended as evidence-based components for core clinical outcomes in eating-disorder treatment.

1.4.5. Multimodal Approaches

Over the past decade, there has been growing interest in integrating expressive and creative arts therapies into comprehensive treatment plans. Multimodal approaches, which combine two or more creative disciplines (e.g., visual art, music, dance/movement, drama, and writing), offer a flexible, client-centred framework designed to address the cognitive, emotional, and somatic dimensions of eating disorders. This chapter traces the evolution of multimodal art therapies over the past ten years and highlights key empirical advances.

Multimodal art therapy refers to the intentional sequencing, integration, or parallel delivery of multiple creative modalities within a single therapeutic protocol. Rather than privileging one expressive medium, therapists draw upon visual art, music, movement, drama, or writing to meet clients' shifting needs. The core principles include:

- **Intermodality:** Transitioning between art forms to deepen insight and maintain engagement.
- **Integration:** Blending psychotherapeutic theories (e.g., attachment, emotion regulation) with each modality's unique affordances.
- **Client agency:** Allowing participants to choose or co-construct modalities according to preference and therapeutic goals.

This approach contrasts with unimodal interventions, which typically focus on a single art form and may limit the scope of emotional expression or embodied exploration (Trably et al., 2024b).

Between 2010 and 2015, research on art therapies in eating disorders was largely confined to single-modality studies. Visual art therapy for adolescents with anorexia nervosa demonstrated improvements in emotional awareness and body image (Smith & Lee, 2021), while isolated music therapy sessions reduced anxiety in bulimia nervosa populations (Trably et al., 2022). However, these studies often lacked control groups, standardized measures, and long-term follow-up. From 2016 onwards, small-scale feasibility studies began exploring combinations such as art plus music or movement plus writing. A scoping review in 2020 identified only six multimodal protocols among 62 arts therapy trials, underscoring methodological infancy (Nguyen, Zhao, & Russell, 2025). Common limitations were heterogeneous outcome measures and difficulties isolating the active therapeutic ingredients of each modality.

Multiple modalities offer varied entrée points for processing difficult emotions. Music’s rhythmic structure can regulate arousal levels; visual art externalizes internal experiences; movement reconnects clients with embodied sensations; drama fosters role-play and perspective-shifting; and writing structures narrative coherence (Patel, Kim, & Lewis, 2023). Dance/movement therapy explicitly cultivates somatic resonance and body acceptance, counteracting disordered eating’s dissociative tendencies. When paired with visual art or writing, clients often report enhanced integration of mind and body experiences (Johnson & Moffitt, 2022). Drama and writing modalities enable clients to externalize eating-disorder voices, rehearse alternative self-narratives, and experiment with identity roles outside the pathology. Such reframing supports long-term recovery by consolidating a coherent sense of self beyond food and weight concerns (Zheng et al., 2024).

Smith and Lee’s (2021) randomized pilot compared group CBT alone versus CBT augmented with weekly visual art sessions. In the multimodal arm, adolescents with anorexia nervosa exhibited greater improvement on the *Eating Disorder Examination Questionnaire* (EDE-Q) and higher dropout retention at three-month follow-up. Though sample size was limited to 30 participants, effect sizes favoured the multimodal group (Smith & Lee, 2021).

Patel et al. (2023) conducted a controlled trial with 60 adults diagnosed with binge eating disorder. The intervention combined music improvisation with guided painting over eight weeks. Compared to a relaxation control, the multimodal group showed significant reductions in binge frequency ($p < .01$) and self-reported shame ($p < .05$), measured by the Internalized Shame Scale.

Johnson and Moffitt (2022) randomized 48 individuals with bulimia nervosa to either a six-week dance/movement plus journaling program or journaling alone. The combined approach yielded greater decreases in body dissatisfaction (Cohen’s $d = 0.8$) and bulimic symptom severity ($d = 0.6$) at post-treatment and three-month follow-up.

Zheng et al. (2024) piloted a drama therapy protocol in 20 women with bulimia nervosa. Participants enacted scenes representing internal critical voices and supportive figures. Compared with a psychoeducation control, the drama group reported enhanced self-compassion (*Self-Compassion Scale*) and reduced binge episodes (both $p < .05$).

The most rigorous recent effort is the systematic controlled trials review by Trably et al. (2024b), which synthesized six studies integrating two or more modalities. Across 180 total participants, multimodal interventions consistently outperformed unimodal or minimal

control conditions in reducing anxiety, body dissatisfaction, and frequency of disordered eating behaviours.

Over the past decade, studies directly contrasting single-modality and multimodal art therapy interventions in eating disorder populations have consistently shown that integrating multiple expressive forms enhances both engagement and clinical outcomes. Clients participating in multimodal programs frequently report a stronger therapeutic alliance, attributing this improvement to the collaborative atmosphere that emerges when they can choose among visual art, music, movement, drama, or writing tasks (Griffin et al., 2023). Quantitative comparisons further reveal that effect sizes for anxiety reduction, body image dissatisfaction, and binge-purge behaviours tend to be larger in multimodal studies than in those confined to a single medium, suggesting a synergistic effect of combining creative modalities on emotional regulation and embodiment processes (Nguyen et al., 2025). The enriched sense of agency and enjoyment inherent in multimodal sessions also appears to drive lower dropout rates, highlighting the importance of flexibility and client choice in sustaining adherence throughout treatment (Griffin et al., 2023; Nguyen et al., 2025).

Despite these promising outcomes, the field of multimodal art therapy faces several methodological challenges that hinder the accumulation of definitive evidence. A primary tension lies between the need for manualized, replicable protocols and the client-centred adaptability that multimodal approaches demand; overly rigid designs can stifle the very agency that makes these therapies effective, while excessive flexibility undermines cross-site consistency. In addition, the lack of a consensus on core outcome measures—particularly regarding anxiety, body image disturbance, relapse rates, and quality of life—forces researchers to rely on a patchwork of psychometric tools, complicating meta-analyses and evidence synthesis. Participant heterogeneity further muddies interpretation, as most trials aggregate diverse diagnoses without examining modality-specific responses. Finally, isolating the active therapeutic ingredients within multimodal protocols remains an unresolved issue; without dismantling trials or component analyses, it is unclear whether observed benefits stem from one particular art form or from the integrative process itself (Nguyen et al., 2025).

Looking ahead, several strategic priorities can propel multimodal art therapies toward evidence-based status. Large-scale, multisite randomized controlled trials are essential to confirm initial findings and bolster generalizability across clinical settings. Implementing dismantling designs that compare single-modality, dual-modality, and

comprehensive multimodal protocols will illuminate which combinations yield the greatest therapeutic gain. Expanding digital and telehealth adaptations of multimodal art therapies will address the service-delivery disruptions revealed by the COVID-19 pandemic, improving access for remote and underserved populations. Finally, investigating moderator variables – such as age, specific diagnosis subtype, and baseline emotion-regulation capacity – will enable the tailoring of modality combinations to individual client profiles and distinct phases of recovery.

Multimodal art therapies represent a promising innovation in the treatment of eating disorders, leveraging the affordances of diverse creative practices to address the complex biopsychosocial dimensions of these illnesses. As the field coalesces around integrative frameworks, multimodal approaches have the potential to become a foundational element of comprehensive, personalized eating-disorder treatment.

2. METHODOLOGY

2.1. Scoping Review

Scoping reviews have become an essential methodology in evidence synthesis, particularly for mapping the extent, range, and nature of research activity in each domain. Unlike systematic reviews, which aim to answer narrowly defined questions, scoping reviews are designed to explore broader topics, identify research gaps, and inform future research agendas (Munn et al., 2018).

Since the foundational framework proposed by Arksey and O'Malley (2005), the methodology has undergone significant refinement. The Joanna Briggs Institute (JBI) has played a central role in this evolution, offering detailed guidance for conducting scoping reviews. According to the JBI Manual for Evidence Synthesis, the process typically includes identifying the research question, developing a protocol, conducting a comprehensive search, selecting relevant studies, charting the data, and synthesizing and reporting the results (Peters et al., 2020). This structure is supported by the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews), which enhances transparency and reproducibility (Tricco et al., 2018).

Klugar et al. (2021) emphasize the role of scoping reviews in guideline development and health policy decision-making. Their work highlights the utility of scoping reviews in synthesizing heterogeneous evidence, especially in areas where randomized controlled trials are scarce or inappropriate. They also stress the importance of stakeholder engagement throughout the review process to ensure relevance and applicability of findings.

Moreover, Peters et al. (2021) advocate for rigorous methodological standards to prevent misuse of the term "scoping review." Despite the availability of detailed guidance, many published reviews lack clarity in objectives, use inconsistent terminology, and demonstrate insufficient methodological transparency. To address this, they call for enhanced training, peer-review scrutiny, and strict adherence to established protocols.

Scoping reviews are increasingly integrated into broader evidence synthesis tools, such as mapping reviews and evidence gap maps. These approaches, while distinct, share methodological roots and are often used together to inform policy and practice.

Scoping reviews have become a cornerstone for synthesizing heterogeneous evidence in the field of art therapies applied to eating disorder treatment. Art therapies encompass a wide range of modalities—art therapy, music therapy, drama therapy, dance/movement therapy, and multimodal approaches—each with distinct techniques, outcome measures, and theoretical underpinnings. The diversity of interventions and the predominance of small-scale or qualitative studies make traditional systematic reviews and meta-analyses challenging. Scoping reviews, by contrast, enable researchers to map the extent, range, and nature of existing research, identify knowledge gaps, and chart directions for future inquiry (Bucharová et al., 2020).

A foundational example is the scoping review protocol by Bucharová and colleagues (2020), which registered a priori objectives to explore arts therapies in eating disorder populations of all ages. Employing JBI methods, their team searched eight major databases. The protocol underscored the importance of dual independent screening and data extraction to maximize reliability when charting intervention characteristics and reported outcomes (Bucharová et al., 2020). The subsequent full scoping review by Bucharová (2022) applied this protocol and identified 1,722 records, of which 62 met inclusion criteria. The review mapped diverse therapeutic goals—ranging from reduction of eating-disorder psychopathology to the cultivation of coping skills—and highlighted methodological gaps: 69 % of included studies lacked standardized assessment tools, and few employed quantitative measures or rigorous designs (Bucharová, 2022).

In contrast, a recent systematic review of controlled trials by Trably et al. (2024b) screened 1,286 records but included only six controlled studies across art, music, writing, and dance/movement therapies. Their work demonstrated the limitations of systematic approaches in this field: high heterogeneity of samples, interventions, and outcomes precluded quantitative synthesis, though music therapy showed promise in reducing post-meal anxiety and dance/movement therapy in alleviating body dissatisfaction (Trably et al., 2024b).

Collectively, these scoping reviews underscore their unique value in art therapies research on eating disorders. By comprehensively charting the landscape of interventions and outcomes, scoping reviews inform the design of future controlled trials, promote the adoption of standardized outcome measures, and guide the integration of stakeholder perspectives. As art-based modalities continue to diversify and intersect with digital and

somatic therapies, ongoing scoping exercises will be crucial for capturing emerging trends and ensuring that evidence-based recommendations remain current and inclusive.

2.2. Research Purpose and its Objectives

The purpose of this thesis is to update and expand the existing scoping review conducted by Monika Bucharová (2022), which focused on the use of art therapies in the treatment of eating disorders. Given the growing body of literature and the evolving nature of therapeutic practices, this research aims to build upon her foundational work by incorporating more recent studies and critically comparing them with the original findings.

This updated scoping review not only synthesizes newly published evidence but also seeks to provide a more structured and detailed categorization of specific interventions used within each expressive therapy modality. These include music therapy, art therapy, dramatherapy, dance/movement therapy and multimodal therapeutic approaches. By mapping and analysing the therapeutic techniques employed across these modalities, the study offers a clearer understanding of their application, scope, and potential benefits in the context of eating disorder treatment.

The objectives of this research are:

- To identify and include relevant studies published after 2022 that address the use of art therapies in eating disorder treatment.
- To compare the findings of these newer studies with those presented in Bucharová's original review, highlighting areas of continuity, innovation, and divergence.
- To categorize specific interventions within each modality, providing a structured overview of therapeutic practices and their reported outcomes.
- To contribute to the evidence base supporting expressive therapies, offering insights for clinicians, researchers, and educators working in the field of mental health and eating disorders.

Through this approach, the thesis aims to deliver a more comprehensive and current synthesis of knowledge, while also enhancing the practical relevance of art therapy modalities in clinical settings.

According to PCC format (P—participants/population, C—context, C—concept) the research questions were formulated:

1. What types of arts therapy interventions are currently used in the treatment of eating disorders across different therapeutic settings?
2. What specific techniques or approaches are employed within each expressive therapy modality for treating eating disorders?
3. What therapeutic outcomes have been reported, and how do recent studies compare with the findings of Bucharová's (2022) scoping review regarding the effectiveness and application of art therapies in eating disorder treatment?
4. What trends, gaps, or innovations can be identified in the use of expressive therapies for eating disorders based on literature published after 2022?

2.3. Specification of the Search

Following the methodology outlined in Bucharová's study (2022) the search in the databases was done in cooperation with the professional librarian PhDr. Zuzana Svobodová. The search was conducted in the following databases: CINAHL Plus, EMBASE, MEDLINE (OvidSP), ProQuest Central, PsycINFO, PubMed, Scopus, and Web of Science. Sources of unpublished studies and grey literature included Google Scholar, MedNar. For the selection of available evidence discovered through databases search, the following inclusion criteria were implied:

Participants: The review included studies involving individuals of any age diagnosed with eating disorders, including those with various comorbid conditions.

Concept: The review focused on studies examining the use of arts therapies (AsTs), specifically art therapy, music therapy, drama therapy, and dance/movement therapy and their combination. Studies addressing combinations of these modalities or broader expressive arts therapies were also considered. Studies employing artistic activities for non-therapeutic purposes—such as educational, recreational, personal, or purely artistic objectives—were excluded.

Context: The review included studies conducted across diverse geographical regions and therapeutic settings, without contextual limitations.

Types of Sources: Eligible sources comprised quantitative and qualitative research studies, systematic reviews, diploma theses, and conference papers. Excluded were text and opinion papers, all forms of non-systematic reviews, and bachelor theses.

Language limitation: the review considered all research studies with no language restrictions.

2.4. Search Formula

Following search formula (with modifications based on the specifics of search engines) was applied within the search in databases:

eating disorder * OR anorexia OR bulimia OR anorexia nervosa OR bulimia nervosa OR binge eating disorder * (binge-eating disorder * or binge-eating syndrome * could be used as preferred term in the database) OR pica OR hyperorexia OR night eating syndrome * (night eating disorder * could be used as preferred term in the database) OR overeating OR orthorexia nervosa OR food intake disorder *

AND

art therapy * OR art psychotherapy * OR music therapy * OR music medicine OR dramatherapy * OR drama therapy * OR psychodrama OR dance therapy * OR dance/movement therapy * OR dance/movement psychotherapy * OR arts therapy * OR expressive therapy *.

2.5. Process of Study Selection

As the database search was completed, the full set of results was exported into Zotero V7.0.24. The process of study selection is documented in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) flow diagram (see Figure 1. PRISMA Flow Diagram for Updated Systematic Reviews). A total of 716 records were identified through database searching. After removing 308 duplicates, 408 records remained for title and abstract screening to assess potential relevance.

Two reviewers (SL and VG) independently screened the records in Zotero and selected articles for full-text review. A total of 100 articles were assessed against predefined inclusion and exclusion criteria. A total of 29 reports were excluded following full-text

review. Specifically, 26 studies were removed due to the absence of relevant data on arts therapies in the context of eating disorder treatment. Furthermore, three studies were excluded because their content substantially overlapped with sources already included in the previous review. From the set of 100 articles, 71 newly identified studies were included for data extraction and narrative synthesis.

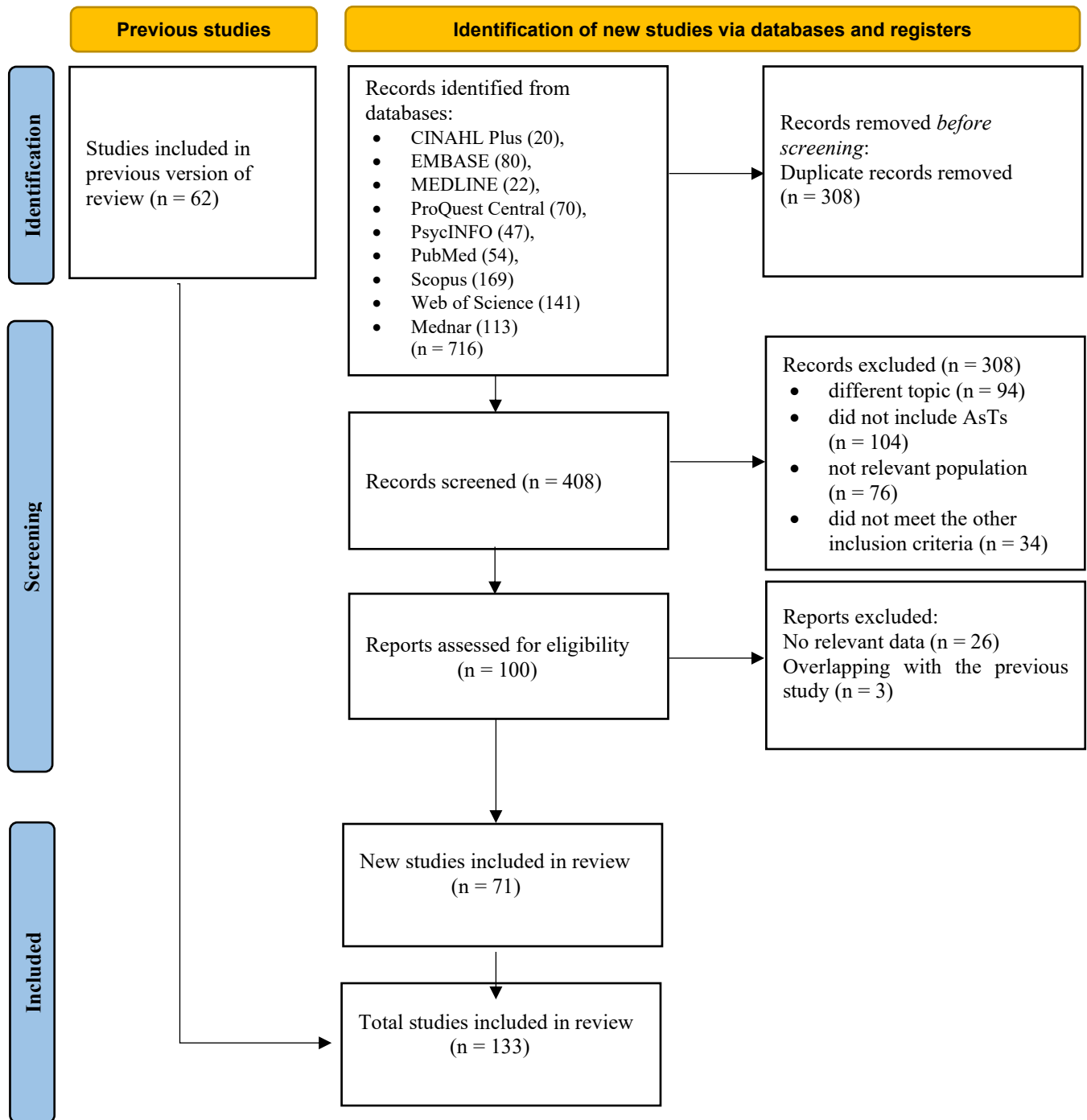
In addition to these newly selected records, the original 62 studies from Bucharová's (2022) scoping review were also incorporated into the final analysis. This decision was made to ensure continuity, allow for direct comparison, and provide a comprehensive overview of the literature. Altogether, 133 studies formed the basis of the updated scoping review.

To categorize outcomes based on thematic similarity, a thematic analysis was conducted. Primary data extraction was performed using the structured data extraction tool provided in Appendix A. To support the extraction and organization of relevant data from the included studies, Copilot AI (Microsoft) was used as an auxiliary tool. It facilitated the identification of key variables and streamlined the synthesis of intervention characteristics, populations, and outcomes.

2.6. Ethics

This thesis presents an upgraded scoping review based exclusively on previously published scientific literature. As such, it does not involve human or animal participants, personal data collection, or experimental procedures. All sources were cited appropriately, and the review was conducted in accordance with ethical standards for academic integrity and responsible research. The inclusion and analysis of studies were guided by transparency, objectivity, and respect for intellectual property.

Figure 1. PRISMA Flow Diagram for Updated Systematic Reviews



3. RESULTS

In the following section, the results of each expressive therapy modality are presented. Full-sized extraction tables for each modality – art therapy (AT), music therapy (MT), dramatherapy (DT) and psychodrama, and dance/movement therapy (D/MT) – as well as multimodal approaches, can be found in Appendices B–F.

Studies included in this review were conducted across diverse geographical and clinical contexts. Where possible, treatment settings were categorized as either outpatient or inpatient. However, in several cases, the setting was not explicitly stated and thus remains unspecified.

A total of 71 newly identified studies were included in this upgraded scoping review. In addition, the original 62 studies from Bucharová’s review (2022) were incorporated into the final synthesis to ensure continuity and enable direct comparison. Altogether, 133 records were analysed.

The distribution of studies across modalities is as follows:

- Art Therapy (AT): 47 studies in total, with 23 from the original review and 24 newly added.
- Music Therapy (MT): 45 studies, including sixteen original and 29 new.
- Dramatherapy/Psychodrama (DT): fourteen studies, with ten from the original review and four new.
- Dance/Movement Therapy (D/MT): thirteen studies, including seven original and six new.
- Multimodal or Expressive Arts Therapies: fourteen studies, with six from the original review and eight newly identified.

To organize and interpret the findings, a thematic analysis was conducted. This allowed for the categorization of specific interventions within each modality based on shared therapeutic techniques, goals, and outcomes. The primary data extraction was performed using the structured tool provided in Appendix A.

This synthesis offers a more comprehensive and current overview of the use of art therapies in the treatment of eating disorders, highlighting both continuity and innovation across the literature.

3.1. Music Therapy

This data collection updates the master's thesis by Monika Bucharová called *Arts Therapies Interventions and Their Outcomes in the Treatment of Eating Disorders: A Scoping Review* (Palacký University, 2022), expands its findings with more recent studies, and complements current developments in the use of arts therapies in the treatment of eating disorders. The final extraction table is in appendix B. The table contains detailed information on 29 scientific publications selected based on predefined criteria of relevance, quality, and thematic focus.

3.1.1. Year and Country

In the previous study by Bucharová (2022) studies on music therapy and eating disorders (MT and EDs) included in the dataset were published between 1989 and 2019. The earliest is by Nolan (1989), followed by works by Heal, O'Hara, Robarts, and Sloboda (1993–1994). In the 2000s, studies by Robarts (2000), Hilliard (2001), McFerran (2006), and Trondalen with colleagues were added. Between 2010 and 2019, six studies were published (e.g., Bibb et al., Heiderscheit & Madson, Karvonen, McFerran & Heiderscheit).

These are updated data expanding on the previously mentioned thesis. The analysis of studies focused on Music Therapy interventions in the treatment of eating disorders includes research published between 2020 and 2024. This five-year period reflects a growing academic interest in integrating MT into multidisciplinary approaches for individuals with eating disorders, particularly AN and BN.

The following table provides an overview of the included studies according to the year of publication, country of origin, and author(s).

Table 1. Characteristics and summary of included MT studies.

Author(s)	Year	Country
Briana Applewhite, Aishwarya Krishna Priya, Valentina Cardi, Hubertus Himmerich	2020	UK
Francesca Testa, Sarah Arunachalam, Annie Heiderscheit, Hubertus Himmerich	2020	UK, USA
Varvara Pasiالي, Dean Quick, Jessica Hassall, Hailey A. P. Park	2020	USA
Gabriela Patiño-Lakatos, Hugues Genevois, Benoît Navarret, Irema Barbosa-Magalhaes, Cristina Lindenmeyer, Maurice Corcos, Aurélie Letranchant	2020	France
Angela Valentina Spalatro, Marco Marzolla, Sergio Vighetti, Giovanni Abbate Daga, Secondo Fassino, Benedetto Vitiello, Federico Amianto	2020	Italy
Stéphane Scotto Di Rinaldi	2020	France
Aishwarya Krishna Priya, Briana Applewhite, Katie Au, et al.	2021	UK
Xiaobo Li, Qingsong Sang	2021	China
Gabriela Patiño-Lakatos, Cristina Lindenmeyer, Irema Barbosa Magalhaes, Aurélie Letranchant, Hugues Genevois, Benoît Navarret, Maurice Corcos	2021	France
Phoebe Barnett, Laura-Louise Arundell, Rob Saunders, Hannah Matthews, Stephen Pilling	2021	UK
Annie Heiderscheit, Kathleen M. Murphy	2021	USA
Enrico Ceccato, Cristina Roveran	2022	Italy
Wolfgang Mastnak	2022	China
Eduardo Coutinho, Tamaya Van Crieckinge, Greg Hanford, Rajan Nathan, Michelle Maden, Ruairaidh Hill	2022	UK, Belgium
Yu Yu	2023	China
Stéphane Scotto Di Rinaldi, Jean-Luc Sudres, Amélie Rousseau, Jean-Pierre Bouchard	2023	France
Duconget, De Rosis, Jovic, Bourmaud, Dumas	2023	France
Abbey Dvorak	2023	USA
Stéphane Scotto Di Rinaldi, Catarina Silva, David Da Fonseca, Flora Bat-Pitault	2023	France
Annie Heiderscheit	2023	UK

Author(s)	Year	Country
Ee Xuen Chang, Joanne Brooker, Richard Hiscock, Clare O'Callaghan	2023	Australia
Johanna Louise Keeler, Hubertus Himmerich, Carol Kan, Janet Treasure	2023	UK
Kate A. Aitchison, Tania Withington	2023	Australia
Priya Shah, Elizabeth Mitchell, Shannon Remers, Sherry Van Blyderveen, Heidi Ahonen	2023	Canada
Sayali Bhandarkar, Bhagyashree V. Salvi, Pravin Shende	2024	India
María Elizabeth Gómez-Neva, Edwin Pulido-Ramirez, Leidy Johana Ibañez-Rodriguez, Oscar Caroprese, Adriana Buitrago-Lopez	2024	Colombia
Sarah Seppendorf, Julia Hoorman, Natalie Schloëßer, Artur C. Jaschke	2024	Various (multi-country)
Hubertus Himmerich, Annie Heiderscheit	2024	UK, USA
Annie Heiderscheit	2024	USA

Between 2020 and 2024, research on music therapy in the treatment of eating disorders expanded significantly. The year 2020 marked the beginning of this trend, with six studies including foundational work by Applewhite, Priya, and Cardi, who explored music's therapeutic role in anorexia nervosa through a qualitative focus group study.

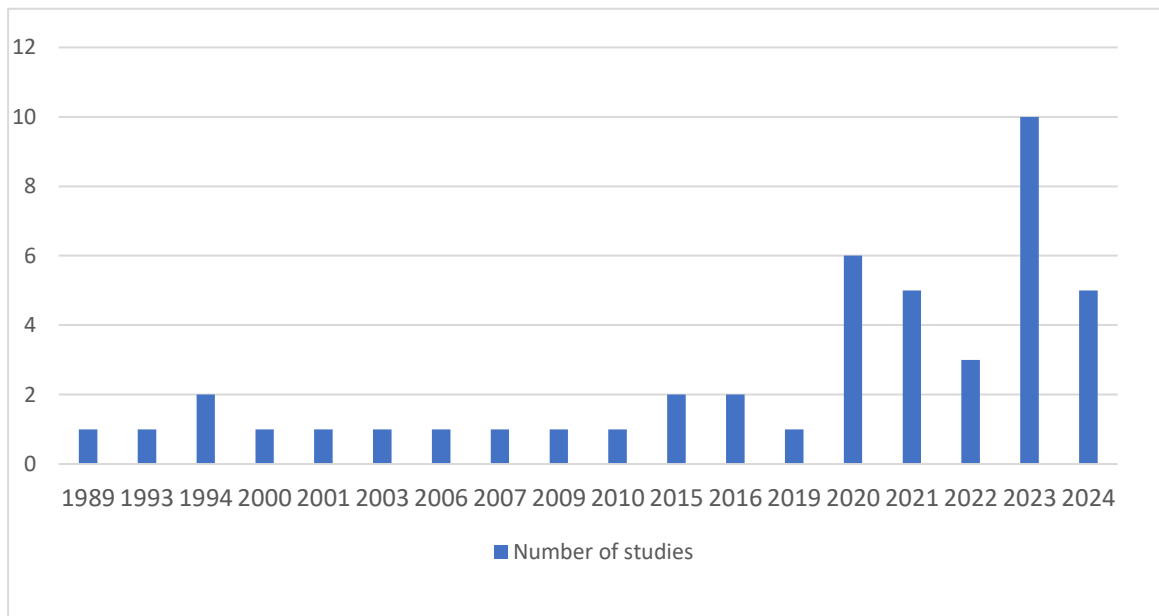
In 2021, five studies followed, including a feasibility study by Li and Sang on integrating MT into juvenile anorexia treatment. Heiderscheit and Murphy also contributed with clinically focused work, continuing their engagement in the field.

Three studies appeared in 2022, such as Ceccato and Roveran's observational study on pre-meal anxiety, Mastnak's theoretical model on systemic MT, and a systematic review by Coutinho et al. identifying research gaps and future directions.

The year 2023 saw a peak with ten studies, reflecting global interest and methodological diversity. Notable were systematic reviews, guided imagery interventions, and neurobiological perspectives by authors like Barnett, Arundell, Keeler, Himmerich, and Heiderscheit.

In 2024, five studies continued this momentum. Contributions came from India, Colombia, and the USA, including narrative reviews and systemic approaches. Heiderscheit, Himmerich, and Patiño-Lakatos remained active voices in the field.

Figure 2. Music Therapy and ED studies Published per Year (1989 - 2024)



Based on older data, the geographic distribution of studies shows that 4 originated from Australia, 4 from the United Kingdom, 3 from Norway, 2 from the United States, and 1 from Germany. The clinical case reports by McFerran & Heiderscheit (2016) do not specify a country, but they likely come from either Australia or the USA.

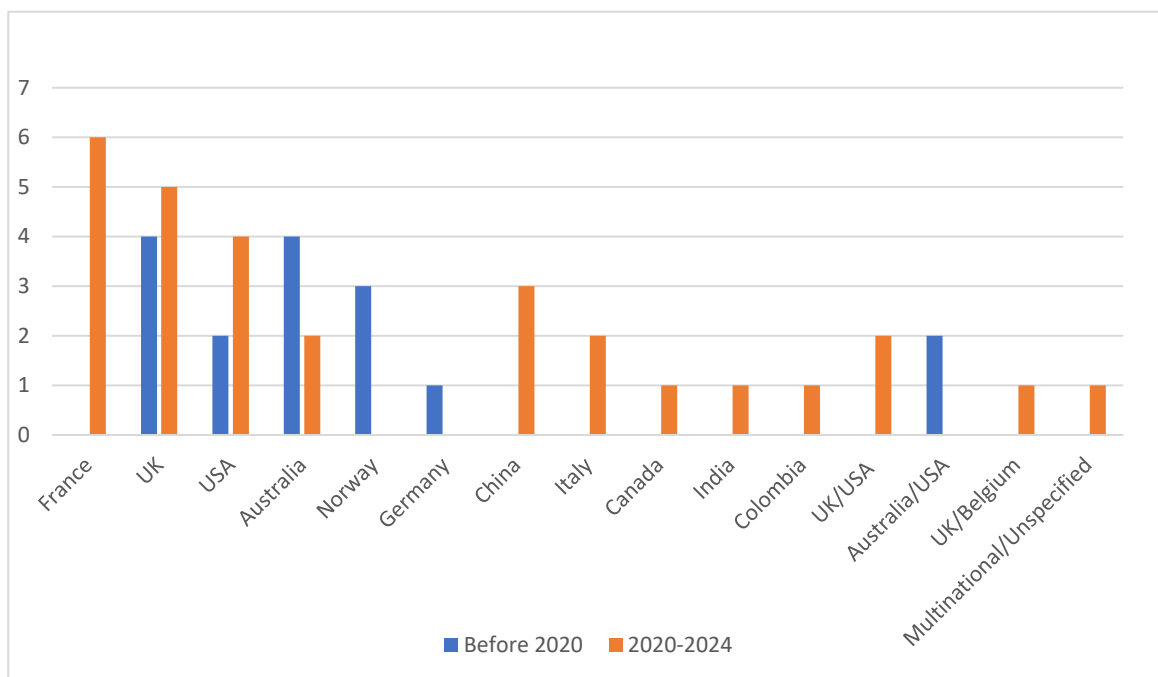
An analysis of 29 peer-reviewed studies published between 2020 and 2024 reveals a diverse yet uneven geographic distribution in research on music therapy (MT) for the treatment of eating disorders (EDs). Most contributions come from Western countries, with the United Kingdom (Barnett et al., 2021; Keeler et al., 2023), the United States (Heiderscheit & Murphy, 2021; Dvorak, 2023), and France (Scotto Di Rinaldi et al., 2020, 2023; Patiño-Lakatos et al., 2020, 2021) leading in publication volume. These studies include interdisciplinary approaches, clinical applications, and group therapy formats.

China is represented by three studies focusing on culturally adapted interventions and emotional regulation (Li & Sang, 2021; Mastnak, 2022; Yu, 2023). Italy (Spalatro et al., 2020; Ceccato & Roveran, 2022) and Australia (Chang et al., 2023; Aitchison & Withington, 2023) each contributed two studies, addressing bodily perception, anxiety, and inpatient settings.

Single studies from India (Bhandarkar et al., 2024), Canada (Shah et al., 2023), Colombia (Gómez-Neva et al., 2024), and Belgium (Coutinho et al., 2022) reflect growing global interest. Two studies were multinational or lacked a clearly defined national affiliation, such as Seppendorf et al. (2024), which involved authors from Germany, the Netherlands, and the United Kingdom.

Overall, the data indicate a concentration of research activity in Anglophone and European regions, while also pointing to a gradual expansion toward culturally sensitive and globally relevant music therapy approaches in the treatment of eating disorders. Overall, 2020–2024 marks a dynamic period in MT and ED research, evolving from conceptual foundations to more rigorous, interdisciplinary approaches, with 2023 standing out as a pivotal year.

Figure 3. Music Therapy and ED Studies by Country (1989 – 2024)



3.1.2. Study Design and Settings

Between 1989 and 2019, clinical case reports represented most of music therapy studies on eating disorders, accounting for 56 % (nine out of sixteen studies), and primarily focused on individualized therapeutic documentation and practitioner reflections. Case studies made up 19% (three studies), offering detailed clinical insights into therapeutic processes. Phenomenological analyses appeared in 13 % (two studies), using qualitative content

analysis to explore lived experiences. Quantitative designs were rare, with one quasi-experiment and one case series (6 % each), both published by the same research team. Overall, the research during this period was predominantly qualitative, emphasizing experiential depth, clinical application, and exploratory inquiry.

Between 2020 and 2024, the methodological design of studies investigating music therapy for individuals with eating disorders played a pivotal role in shaping the reliability, validity, and applicability of findings. The selected body of literature (n = 29) from this period reflects a diverse range of research frameworks, underscoring both the interdisciplinary nature of MT and its evolving integration into clinical and community-based mental health practice.

Across this five-year span, researchers employed a spectrum of methodological approaches, including qualitative inquiry, mixed-methods designs, feasibility and pilot testing, systematic reviews, experimental and quasi-experimental protocols, practice-based evaluations, and narrative or expert syntheses. This variety highlights the exploratory and applied dimensions of MT research in the context of EDs.

Of the 29 studies reviewed, qualitative designs accounted for 17 % (n = 5), focusing on lived experiences, therapeutic processes, and practitioner reflections through interviews, thematic analysis, and clinical narratives. Quantitative designs were less common, representing 7 % (n = 2), and typically involved pre-post comparisons without control groups. Mixed-methods designs comprised 17 % (n = 5), integrating qualitative and quantitative data to provide a comprehensive view of outcomes and perspectives. Feasibility and pilot studies also made up 17 % (n = 5), assessing implementation, acceptability, and preliminary effects. Systematic reviews and meta-analyses represented 17 % (n = 5), synthesizing existing evidence, often following PRISMA guidelines. Practice-based evaluations accounted for 10 % (n = 3), emphasizing real-world clinical feedback and application. Finally, narrative and expert reviews formed 14 % (n = 4), offering conceptual syntheses and professional insights. Collectively, these studies demonstrate a balanced mix of exploratory, evaluative, and evidence-based research approaches.

This methodological diversity reflects the field's developmental stage and its responsiveness to clinical complexity. While qualitative and review-based designs dominated the early years, the rise of pilot testing and experimental trials signals a growing emphasis on evidence-based validation.

During the initial phase (2020–2022), qualitative and feasibility studies were most prevalent, aiming to understand patient experiences and explore therapeutic potential (e.g., Applewhite et al., 2020; Li & Sang, 2021; Rousseau et al., 2022). These foundational studies laid the groundwork for conceptual integration and clinical relevance.

From 2023 onward, a clear methodological shift emerged, marked by increased use of systematic reviews, mixed-methods, and experimental designs. This evolution reflects a maturing field prioritizing standardized instruments—such as the Eating Disorder Examination Questionnaire (EDE-Q), Beck Depression Inventory, and physiological indicators like heart rate and blood pressure—to support evidence-based validation (e.g., Shah et al., 2023; Yu, 2023; Barnett et al., 2023).

The inclusion of trauma-informed models and practice-based evaluations in recent publications further emphasizes clinical applicability and individualized care. Notably, authors such as Annie Heiderscheit and Hubertus Himmerich have bridged academic inquiry with therapeutic practice, contributing to both empirical research and program development (e.g., Heiderscheit & Murphy, 2021; Himmerich & Heiderscheit, 2024).

In sum, the methodological heterogeneity across these 29 studies underscores the complexity of researching MT in the treatment of EDs. Early qualitative and pilot studies established foundational insights, while recent designs reflect a shift toward rigorous, integrative, and context-sensitive therapeutic interventions. Between 1989 and 2019, eight studies were conducted in inpatient settings, while six studies were reported in outpatient settings. Two studies did not specify the setting in which music therapy was delivered (Nolan, 1989; Trondalen, 2003).

The setting in which music therapy is delivered plays a vital role in shaping its therapeutic impact, accessibility, and integration into broader treatment frameworks. Across the 29 reviewed studies, MT was implemented in diverse environments—from inpatient psychiatric units to university health services and community-based programs. This chapter explores how these varied contexts influence the design and outcomes of MT interventions for individuals with EDs.

The studies span a range of clinical and institutional settings, grouped into five categories:

- Inpatient psychiatric and ED units
- Outpatient clinics and day-hospital programs

- University and educational health services
- Community-based and private practice settings
- Multimodal or mixed settings (e.g., inpatient + outpatient + community)

Inpatient psychiatric units were among the most common, especially for adolescents with severe anorexia nervosa. For instance, Rousseau et al. (2022) evaluated the DÉPi-AM psychomusical relaxation protocol at Hôpital Salvator in Marseille, while Patiño-Lakatos et al. (2020) implemented receptive MT at Institut Mutualiste Montsouris in Paris to support emotional containment and anxiety reduction. Shah et al. (2023) explored guided imagery and music (GIM) at Homewood Health Centre in Canada, highlighting emotional transformation.

Outpatient and day-hospital settings were also prominent, often integrated into structured ED treatment programs. Roveran and Ceccato (2022) combined MT with cognitive behavioral therapy at San Bortolo Hospital in Italy, including physiological and psychological assessments. In Australia, O’Callaghan et al. (2023) led post-meal MT groups in a specialist adolescent day program, aiming to reduce meal-related anxiety and enhance emotional regulation.

Barnett et al. (2023) conducted a systematic review assessing MT’s efficacy for mental health issues among university students.

Some studies adopted broader approaches, combining inpatient, outpatient, and community care. Heiderscheit and Himmerich (2023) described MT programs across private practice and partial hospitalization, emphasizing adaptability across recovery stages. Mastnak (2022) proposed the PLUS-model (Psycho-education, Learning conditions, Underlying mechanisms, Self-regulation), a flexible framework for MT in anxiety disorders across educational and clinical settings.

This diversity highlights MT’s versatility. Inpatient settings offer intensive care for acute cases, while outpatient and community contexts support long-term recovery. University-based programs emphasize prevention, especially for young adults at risk. Authors such as Rousseau, Heiderscheit, and Roveran show that setting shapes both the delivery method (e.g., receptive vs. active MT) and therapeutic goals—from emotional containment and anxiety reduction to identity development and trauma processing.

3.1.3. Population

The following data are drawn from a previous scoping review by Bucharová (2022) focused on music therapy in the context of eating disorders.

The studies included participants with eating disorders or disordered eating symptoms. In most cases, the number of participants was clearly reported. Twelve studies described individual therapeutic work with one patient, while Sloboda (1994) and McFerran & Heiderscheit (2016) presented clinical examples involving four patients. Several studies (e.g., Bibb et al., 2015, 2016, 2019) involved group formats with ten to seventeen participants. McFerran et al. (2006) analysed song lyrics written by fifteen individuals.

Gender distribution was notably imbalanced—among studies that specified gender, 57 participants were female and only three were male. Participant ages ranged from twelve to 58 years.

The most common diagnoses were anorexia nervosa (ten studies) and bulimia nervosa (four studies). EDNOS appeared in one study, while BED was not reported. Some cases included comorbidities such as Down syndrome, depression, anxiety disorders, or suicidal symptoms.

In more recent studies since 2020, the following data have emerged. Gender plays a significant role in the epidemiology of EDs, which is reflected in the participant profiles of the reviewed studies. Across all 29 publications, female participants were overwhelmingly dominant, aligning with clinical data indicating that anorexia nervosa and related disorders primarily affect women and adolescent girls.

At least 20 studies explicitly reported exclusively female or predominantly female samples. For example, Applewhite et al. (2020) conducted a qualitative study with six females. Rousseau et al. (2022) focused exclusively on eight hospitalized adolescent girls in France. Similarly, Roveran et al. (2022) included 24 female patients in a controlled trial combining music therapy with cognitive behavioural therapy.

Approximately thirteen studies included mixed-gender samples, though females remained the dominant group. Dvorak (2023) conducted surveys and interviews with 25 participants (18 in the survey, seven in interviews), with only one male participant. Shah et al. (2024) also reported a mixed sample although gender proportions were not clearly specified.

No study focused exclusively on male participants, highlighting a gap in the research and the need for future studies to explore male and non-binary experiences with EDs and music therapy.

Gender was not specified in four studies (e.g., Keeler et al., 2023; Mastnak, 2022).

Age is another key factor in the onset and treatment of EDs, and the reviewed studies primarily focused on adolescents and young adults. These age groups are particularly vulnerable to body image issues, identity development, and social pressures, making them central targets for therapeutic interventions such as music therapy.

Children (under 13 years)

This age group was only marginally represented. Studies by Mastnak (2022), Ceccato and Roveran (2022), Chang et al. (2023), and Seppendorf et al. (2024) included children aged eleven to twelve, but none focused exclusively on participants younger than thirteen. This may be due to the later onset of EDs, ethical limitations in research involving minors, and the fact that most clinical programs target adolescents.

Adolescents (13–19 years)

Adolescents formed the largest group. A total of 15 studies focused exclusively or primarily on this age category (e.g., Scotto Di Rinaldi et al., 2023; Patiño-Lakatos et al., 2020; Aitchison & Withington, 2023). Music therapy was commonly used in hospital and school settings, aiming to reduce anxiety, support emotional expression, and strengthen the therapeutic alliance (Pasiali et al., 2020; Li & Sang, 2021).

Young Adults (20–35 years)

Ten studies included participants aged 20 to 35 (e.g., Yu, 2023; Spalatro et al., 2020; Shah et al., 2023). Music therapy was often combined with cognitive-behavioural therapy (CBT) and focused on enhancing self-awareness, stress management, and identity development (Barnett et al., 2021; Heiderscheit, 2023).

Adults (36–59 years)

Six studies involved middle-aged participants (e.g., Applewhite et al., 2020; Krishna Priya et al., 2021; Coutinho et al., 2022). Interventions were mostly conducted in outpatient settings and research programs. Music therapy proved effective in reducing post-meal anxiety, processing trauma, and supporting motivation for recovery (Heiderscheit & Murphy, 2021).

Older Adults (60+ years)

Older adults were included in studies by Chang et al. (2023) and Seppendorf et al. (2024), which covered a broad age range up to 77 years. Although not the primary focus, findings suggest that music therapy may benefit this age group, particularly in improving quality of life and emotional well-being.

Unspecified

Study by Himmerich & Heiderscheit (2024) did not report any age data. It was an editorial addressing challenges and opportunities for music therapy in psychiatry.

This age distribution reflects the clinical reality that EDs most commonly emerge during adolescence and early adulthood.

Sample sizes varied significantly across the reviewed literature, reflecting differences in study design, scope, and methodological intent. The number of participants is a key factor in determining statistical power and the generalizability of findings, especially in clinical research involving vulnerable populations.

Small Samples (1–20 participants)

The most common category included studies with small participant groups. For example, Heiderscheit and Murphy (2021) conducted a case study involving a single client. Several qualitative studies included between five and fifteen participants, such as Scotto Di Rinaldi et al. (2023) with eight adolescent female patients, and Patiño-Lakatos et al. (2020) with eight adolescents (seven female, one male). These studies focused primarily on in-depth analysis of therapeutic processes and subjective experiences.

Medium Samples (21–100 participants)

This category included studies such as Krishna Priya et al. (2021), which involved 41 participants (40 female, one male), and Li and Sang (2021), who initially recruited 77 patients, with 66 completing the study. These studies often employed quantitative methods to evaluate the effectiveness of music therapy, comparing control and treatment groups (e.g., CBT vs. CBT + MT).

Large Samples (101+ participants)

Some studies worked with extensive samples. Yu (2023) analysed 150 university faculty members, 20 of whom showed symptoms of anorexia nervosa. Chang et al. (2023)

reported a total of 349 participants, while Seppendorf et al. (2024) synthesized data from 26 studies totalling 1 026 individuals. Barnett et al. (2021) included 84 randomized controlled trials (RCTs), representing approximately 7 158 participants, with ten studies specifically focused on EDs.

Systematic Reviews and Meta-Analyses

Several studies did not report a specific sample size but summarized findings from multiple sources. Testa et al. (2020), for instance, reviewed sixteen studies with a combined sample of 3 792 participants. Similarly, Gómez-Neva et al. (2024) included 62 studies without reporting a total participant count. These types of studies offer broader insights into the effectiveness of music therapy across diverse populations and methodologies.

Unspecified Sample Size

Seven studies did not specify sample size (e.g., Duconget et al., 2023; Mastnak, 2022; Pasiali et al., 2020). In some cases, these were theoretical or editorial works without empirical data collection.

In summary, sample sizes across the 29 studies ranged from single-case analyses to large-scale meta-analyses. This variation reflects the evolving nature of music therapy research, balancing exploratory depth with statistical robustness. Smaller studies offer rich qualitative insights and feasibility testing, while larger reviews contribute to evidence-based validation and broader clinical applicability.

The clinical profiles of participants in music therapy studies targeting eating disorders reveal a diverse spectrum of diagnoses, treatment contexts, and comorbid conditions. Across the reviewed literature, anorexia nervosa emerges as the most frequently studied diagnosis, followed by bulimia nervosa, binge eating disorder, and other specified feeding or eating disorders. A significant proportion of studies focused exclusively on individuals diagnosed with AN. For instance, Applewhite et al. (2020) and Yu (2023) examined adult populations with confirmed AN diagnosis, while Scotto Di Rinaldi et al. (2023) investigated hospitalized adolescents with severe AN symptoms. Krishna Priya et al. (2021) included participants at various stages of treatment – ranging from inpatient to outpatient and community mental health teams – all diagnosed with AN.

Several studies also differentiated between AN subtypes. Heiderscheit (2023) and Heiderscheit & Murphy (2021) reported on individuals with restrictive and binge-purge

presentations, often with long-standing illness durations averaging fifteen years and multiple prior treatment episodes. These samples frequently exhibited high rates of comorbidities, including post-traumatic stress disorder, anxiety, and depression. While AN was predominant, some studies incorporated broader diagnostic categories. Dvorak (2023) and Shah et al. (2023) included participants with BN, BED, and OSFED, often alongside trauma-related and mood disorders. Chang et al. (2023) and Seppendorf et al. (2024) synthesized data from multiple studies, capturing mixed samples with eating disorders and common comorbidities such as anxiety and depression.

In contrast, Testa et al. (2020) conducted a systematic review primarily focused on AN and BN, explicitly noting the absence of BED-specific studies. Barnett et al. (2021) reviewed 84 randomized controlled trials, of which ten specifically addressed eating disorders, requiring validated diagnostic measures for inclusion. Comorbidity was a recurring theme across studies. Participants often presented with overlapping psychiatric conditions, including generalized anxiety disorder, major depressive disorder, borderline personality disorder, attention-deficit/hyperactivity disorder, and histories of trauma or childhood sexual abuse (Heiderscheit & Murphy, 2021; Patiño-Lakatos et al., 2020; Aitchison & Withington, 2023).

Some studies extended beyond eating disorders to include populations with selective mutism, autism spectrum disorder, dementia, obsessive-compulsive disorder, and oppositional defiant disorder, reflecting the broader applicability of music therapy in complex clinical settings (Bhandarkar et al., 2024; Mastnak, 2022). The reviewed studies demonstrate that music therapy is applied across a wide range of clinical profiles, with a strong emphasis on AN and high prevalence of psychiatric comorbidities. This diversity underscores the need for tailored therapeutic approaches and highlights music therapy's potential to address both core eating disorder symptoms and associated emotional distress.

3.1.4. Methodology of Relevant Studies

In the scoping review by Bucharová (2022), it was found that in the field of arts-based interventions for EDs, it is essential to understand appropriate methodological tools. However, many studies describe the therapeutic process solely from the therapist's

perspective without employing formal assessment methods. Eight studies did not specify a clear research methodology and relied on therapist observations and patient-reported experiences during sessions (e.g., Heal & O'Hara, 1993; Robarts, 2000).

Some studies applied specific techniques such as video session analysis (Bauer, 2010), interviews (Bibb et al., 2016; Trondalen, 2003), or phenomenological analysis of song lyrics (McFerran et al., 2006). Quantitative studies used the *Subjective Units of Distress Scale* (SUDS) to measure post-meal anxiety (Bibb et al., 2015, 2019) and Likert-type scales to assess depression and develop iso playlists (Heiderscheit & Madson, 2015).

Our findings point to the following insights. The methodological landscape of research on MT in the context of eating disorders is notably diverse, reflecting both the complexity of the clinical populations and the evolving nature of therapeutic approaches. Across the reviewed studies, researchers employed a wide range of designs, including qualitative case analyses, randomized controlled trials (RCTs), mixed-methods evaluations, and systematic reviews. This diversity underscores the interdisciplinary character of music therapy and its adaptability to various clinical and research settings.

Qualitative methodologies were particularly prevalent in studies focusing on therapeutic process and patient experience. For example, Applewhite et al. (2020) conducted thematic and content analysis using NVivo 12 to explore emotional responses to music therapy among individuals with AN. Similarly, Heiderscheit (2023) employed intertextual and thematic analysis of Guided Imagery and Music (GIM) session transcripts to identify patterns of emotional transformation and relational dynamics. These approaches allowed for rich, nuanced insights into the subjective dimensions of recovery.

Mixed-methods designs were also common, especially in pilot evaluations and exploratory studies. Dvorak (2023) combined quantitative survey data with qualitative interviews to examine therapists' clinical practices and reflections, while Shah et al. (2023) integrated psychometric assessments with *interpretative phenomenological analysis* (IPA) of focus group transcripts. Such designs facilitated triangulation of data and enhanced the ecological validity of findings.

Quantitative approaches were employed in studies aiming to measure treatment efficacy. Yu (2023) implemented a pre-post intervention model using the Anorexia Self-Test Scale and SPSS 3.0 to assess symptom reduction following six months of MT and psychological counselling. Li and Sang (2021) conducted an RCT comparing CBT alone

versus CBT combined with MT, using standardized tools such as the *Eating Disorder Examination Questionnaire* (EDE-Q 6.0), *Beck Anxiety Inventory* (BAI), and *Beck Depression Inventory* (BDI). These studies provided empirical evidence for the clinical utility of music therapy in structured treatment programs.

Systematic reviews and meta-analyses contributed to the broader synthesis of evidence. Testa et al. (2020) conducted a PRISMA-guided review of sixteen studies, highlighting the predominance of AN and BN in the literature and the lack of BED-specific research. Barnett et al. (2021) analysed 84 RCTs, of which ten focused on EDs, and performed a meta-analysis using Hedges' *g* to evaluate symptom reduction. Seppendorf et al. (2024) reviewed 26 studies and synthesized both qualitative and quantitative findings, offering a comprehensive overview of music therapy's impact across diagnostic categories.

Several studies adopted innovative or interdisciplinary methodologies. Bhandarkar et al. (2024) presented a narrative literature review that integrated neurophysiological mechanisms of music – such as dopamine release and cortisol modulation—with historical perspectives from Egypt, India, and the United States. Mastnak (2022) developed the PLUS-model through systemic meta-synthesis, outlining psychoeducational and self-regulatory components of music therapy. Gómez-Neva et al. (2024) conducted a systematic search across six medical databases to evaluate non-pharmacological interventions for chemotherapy side effects, including anorexia, thereby indirectly contributing to the understanding of music therapy's role in nutritional and psychological distress.

In clinical settings, music therapy was often integrated into multidisciplinary care. Duconget et al. (2023) and Ceccato & Roveran (2022) reported on programs where music therapy complemented psychological counselling, nutritional support, and psychiatric care. These studies relied on clinical observations and qualitative feedback to assess therapeutic suitability and emotional responsiveness. Heiderscheit & Murphy (2021) described a trauma-informed approach with individualized session planning, emphasizing the importance of tailoring interventions to patients' histories and emotional needs.

Overall, the reviewed literature demonstrates that music therapy research in EDs is methodologically pluralistic, combining empirical rigor with clinical sensitivity. The use of both qualitative and quantitative tools, along with systematic synthesis, reflects a commitment to capturing the multifaceted nature of eating disorders and the therapeutic potential of music across diverse populations and treatment contexts.

3.1.5. Types of Music Therapy and Other Therapeutic Interventions

Insights derived from previous findings: Studies describe various approaches to MT in the treatment of eating disorders. Some do not specify the type of approach, while others work within defined frameworks. Bauer (2010) applies a need-adapted music therapy approach; Bibb et al. (2015) use a humanistic approach, later shifting to a resource-oriented model (2016). Hilliard (2001) implemented music therapy based on cognitive behavioural therapy, while Lejonclou & Trondalen (2009) adopted a psychodynamic approach incorporating Stern's theory, focusing on affect atonement (Trondalen & Skårderud, 2007).

McFerran & Heiderscheidt (2016) identified four main approaches used in music therapy with ED patients: psychodynamic, humanistic, cognitive-behavioural, and ecological. Additional therapeutic interventions varied depending on the study design—for example, meal support (Bibb et al., 2015), post-meal debriefing with staff (Bibb et al., 2019), individual and group psychotherapy, and family therapy. Some studies mention multidisciplinary teams, though without specifying the professionals involved.

Reviewed studies published since 2020 demonstrate a rich diversity in music therapy approaches used with individuals diagnosed with eating disorders. These therapeutic methods range from structured clinical protocols to creative, improvisational techniques, each tailored to the emotional and psychological needs of participants. In addition to music therapy, many studies incorporated complementary interventions such as CBT, trauma-informed care, and mindfulness-based practices.

This trend is further supported by several systematic and narrative reviews published after 2020, which emphasize the integration of MT into multimodal treatment plans and highlight its therapeutic potential across diverse clinical settings (Testa et al., 2020; Barnett et al., 2021; Seppendorf et al., 2024; Gómez-Neva et al., 2024).

In several studies, MT was combined with CBT, DBT, FBT, or psychodynamic approaches (Li & Sang, 2021; Shah et al., 2023; Dvorak, 2023). For example, Ceccato & Roveran (2022) described MT as part of a weekly program that included CBT, creative activities, and meal support. In other cases, MT was embedded in inpatient programs using receptive formats (music listening) to reduce pre-meal anxiety (Scotto Di Rinaldi et al., 2023; Patiño-Lakatos et al., 2020).

The type of music therapy varied depending on the context and target group. Receptive MT was more common in clinical settings, used to stabilize mood and reduce stress (Applewhite et al., 2020; Heiderscheid, 2023). Active forms of MT—such as improvisation, songwriting, and group music-making—were more frequently applied in community or outpatient settings (Krishna Priya et al., 2021; Heiderscheid & Murphy, 2021). Some studies combined both approaches, with the choice of technique tailored to individual client needs.

Special attention is warranted for studies that used vibrotactile or audiovibrotactile music therapy, particularly with patients experiencing high levels of comorbidity (e.g., post-traumatic stress disorder, depression, anxiety). These approaches were implemented within standard psychiatric inpatient care (Patiño-Lakatos et al., 2021; Spalatro et al., 2020) and involved specialized tools for stimulating the body through sound and vibration.

Some studies explored conceptual links between MT and other expressive interventions, such as art therapy, poetry writing, relaxation, and mindfulness (Barnett et al., 2021; Gómez-Neva et al., 2024). Mastnak (2022) developed the PLUS model, integrating psychoeducation, learning, processing mechanisms, and self-regulation as core pillars of music-based intervention. Bhandarkar et al. (2024) offered a historical and neurophysiological perspective on music's effects, including dopamine activation, cortisol reduction, and hormonal modulation.

In summary, music therapy in EDs treatment is applied in various forms—receptive, active, individual, and group-based—and most often as part of comprehensive therapeutic care. Its flexibility and responsiveness to patients' emotional needs make it a valuable tool in the multidisciplinary approach to eating disorders.

3.1.6. Characteristics of Music Therapy Interventions

Music therapy is delivered in both individual and group formats. Out of sixteen studies, nine describe individual sessions and seven focus on group settings. The longest therapeutic process lasted three years (Lejonclou & Trondalen, 2009). Sessions typically lasted 45–60 minutes and were held once or twice a week. Interventions used in music therapy for EDs: Active methods, Receptive methods, Compositional methods, Methods from other arts therapies.

Studies published since 2020 have increasingly explored the role of art-based music therapy interventions in the treatment of EDs, highlighting their therapeutic versatility and emotional depth. These interventions encompass a wide range of techniques aimed at emotional regulation, anxiety reduction, and enhancement of therapeutic engagement. They are often delivered in structured formats, combining both receptive and active modalities, and tailored to individual or group needs.

Receptive methods, such as guided music listening, classical music exposure, and psychomusical relaxation, are frequently used to induce calm and reduce anticipatory anxiety. For example, the DéPi-AM protocol developed by Scotto Di Rinaldi et al. (2023) structures sessions into three phases—relaxation, musical immersion, and verbal integration—using slow-tempo, low-volume music to promote emotional containment and openness. Similarly, interventions targeting weigh-in anxiety employed passive listening environments designed to counteract institutional stressors and support physiological regulation (Scotto Di Rinaldi et al., 2023).

Active techniques include improvisation, songwriting, drumming, and psychodrama, often delivered in weekly group sessions. Priya et al. (2021) implemented one-hour sessions combining these elements to foster emotional expression and coping. Pasiali et al. (2020) and Barnett et al. (2021) further expanded the repertoire by integrating guided imagery, lyric analysis, and music-assisted relaxation, with the goal of reducing meal-related distress and enhancing self-expression.

Some interventions incorporated vibrotactile or audiovibrotactile elements, using custom sound-emitting objects such as tables, pillows, and blankets to stimulate bodily awareness and emotional reinvestment. Patiño-Lakatos et al. (2021) allowed patients to interact with MIDI-controlled music, facilitating non-verbal communication and sensory integration. These approaches were particularly relevant for individuals with trauma histories or high levels of comorbidity.

Educational and psychoeducational formats were also present. Mastnak (2022) introduced Guqin-based practices and trance-imagination techniques within classroom settings, while Yu (2023) embedded music appreciation and relaxation into a university health program alongside psychological counselling. These interventions emphasized positive psychology, emotional resilience, and rehabilitation support.

The therapeutic mechanisms underlying these interventions are diverse. Bhandarkar et al. (2024) highlighted music's role in activating reward pathways, modulating emotional and cognitive functions, and improving sleep quality. Heiderscheidt & Murphy (2021) emphasized the importance of tailoring sessions to patients' emotional states, using music to strengthen therapeutic alliance and reduce anxiety. Electroencephalography (EEG) studies by Spalatro et al. (2020) demonstrated music's impact on brain wave reactivity and event-related potentials, suggesting neurophysiological correlates of emotional processing.

Group-based interventions often incorporated playful and collaborative elements. Aitchison & Withington (2023) used post-meal music games—such as quizzes, charades, and song identification—based on Resource-Oriented Music Therapy (ROMT) principles of empowerment and co-planning. These formats were particularly effective in adolescent populations, promoting engagement and emotional safety.

In summary, art-based music therapy interventions in EDs treatment are characterized by their multimodal nature, therapeutic flexibility, and integration of both expressive and regulatory techniques. Whether delivered through structured protocols, improvisational formats, or sensory-based methods, these interventions contribute meaningfully to emotional stabilization, identity formation, and treatment adherence across diverse clinical settings.

3.2. Art Therapy

This data collection updates the master's thesis by Monika Bucharová *Arts Therapies Interventions and Their Outcomes in the Treatment of Eating Disorders: A Scoping Review* (Palacký University, 2022), expands its findings with more recent studies, and complements current developments in the use of arts therapies in the treatment of eating disorders.

The extraction table in Appendix C presents a comprehensive synthesis of research studies focused on the use of art therapy in the context of eating disorders. It encompasses qualitative, quantitative, and mixed-method approaches, with attention to various forms of art-based therapeutic interventions, their methodological frameworks, clinical settings, target populations, and therapeutic outcomes.

The studies vary in terms of geographic origin, research design, applied techniques, and participant profiles. Art therapy is portrayed as a tool for processing trauma, supporting

identity development, regulating emotions, and improving psychological functioning. Interventions include body mapping, scientific drawing, group-based creation, narrative techniques, and expressive visual activities. These are often combined with other therapeutic modalities such as psychodynamic therapy, cognitive-behavioural therapy, psychoeducation, or multifamily therapy.

The extraction table also documents diverse research environments—from clinical and community centres to online formats—and covers a broad age range, with a particular focus on adolescents and adult women. The findings highlight the significance of art therapy as a non-verbal, symbolic, and aesthetic medium that facilitates deeper engagement with psychological difficulties associated with eating disorders.

Overall, the table offers a structured overview that enables comparison of methodological approaches, therapeutic strategies, and artistic techniques, while also providing a foundation for further analysis, typological classification, and clinical application.

3.2.1. Year and Country

This overview builds on previous research focused on art therapy and eating disorders. The oldest identified study in this area was published in 1986 (Wolf et al., 1986). A further eleven studies were published before the year 2000, and ten studies appeared after 2000. The most recent relevant publications were identified in 2020, authored by Misluk-Gervase (2020a, 2020b).

In terms of geographical distribution, there is a comparable number of studies from the USA and the United Kingdom, with ten studies originating from the USA and nine studies from the UK. Additionally, two studies were conducted in Canada, and one study each from Austria and South Korea.

Between 2020 and 2024, a total of 24 art therapy studies were published. The number of studies varied each year, reflecting the evolving interest in this field.

The following table provides an overview of the included studies according to the year of publication, country of origin, and author(s).

Table 2. Characteristics and summary of included AT studies.

Author(s)	Year Country
Janet Lynne Kuhnke	2020 Canada
Jean-Luc Sudres, Aurélie Bordet, Gilles Brandibas	2020 France
Lucy Shaw	2020 UK
Jessica H. Essayi, Amanda E. Webster, Megan A. Quail, Hana F. Zikgraf, Sarah E. Lane-Loney	2021 USA
C. Griffin, P. Fenner, K. B. Landorf, M. Cotchett	2021 Australia
Bethany J. Hunt, Whitney S. Hagan, Sarah Peffrey, Susan Mericle, Jessica A. Harper, Jayme M. Palka, Carrie J. McAdams	2021 USA
Whitney Smith Hagan, Susan Mericle, Bethany J. Hunt, Jessica A. Harper, Jayme M. Palka, Sarah Pelfrey, Carrie J. McAdams	2021 USA
Zaida M. Prijana, Monty P. Satiadarma, Linda Wati	2021 Indonesia
J. S. Malecki, P. Rhodes, J. M. Ussher, K. Boydell	2022 Australia
Kai Syng Tan	2022 UK
Elisabetta Soanferla, Bernard Pachoud, Philip Gorwood	2022 France
Berit Støre Brinchmann, Siri Lyngmo, Sine Maria Herholdt-Lomholdt, Bodil H. Blix	2022 Norway, Denmark
Loukia Chaidemenaki, Eleni Giannouli	2022 Greece
Gal Peleg, Iliara Sterbizzi, Ron Peleg, Yulia Treister-Goltzman	2022 Italy, Israel
Małgorzata Kaczmarek-Fojtar, Piotr Musiał, Monika Szewczuk-Bogusławska	2022 Poland
Jennifer S. Malecki, Paul Rhodes, Jane Usher, Katherine Boydell	2022 Australia
NA (conference proceeding)	2023 NA
Caryn Griffin, Patricia Fenner, Karl B. Landorf, Matthew Cotchett	2023 Australia
Nurhan Eren, Pervin Tune, Başak Yücel	2023 Turkey
Emily Horton, Brenda Everett	2023 USA
Keren Blumenthal Yanir	2023 Israel
Brianna Herbert	2024 USA
Laura Kiely, Janet Conti, Phillipa Hay	2024 Australia
Nicolas Nagyomskuti Mertse, Giulia Franzi, Nina Bischoff	2024 Switzerland

In 2020, three studies were published, focusing primarily on clinical practice, psychodynamic approaches, and individual reflection (Kuhnke, 2020; Sudres, Bordet & Brandibas, 2020; Shaw, 2020).

In 2021, five studies emerged. Authors explored school environments, community-based interventions, and culturally specific contexts (Essayi et al., 2021; Griffin et al., 2021; Hunt et al., 2021; Hagan et al., 2021; Prijana, Satiadarma & Wati, 2021).

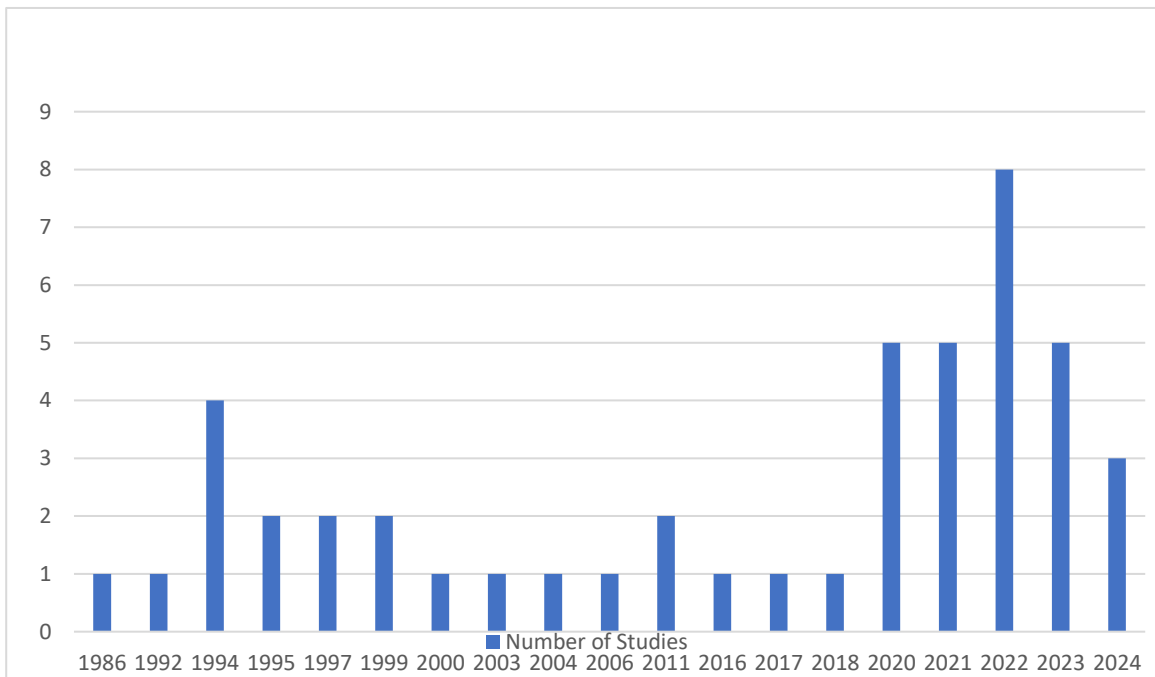
The year 2022 was the most productive, with eight studies published. Research focused on international collaborations, neurodiversity, ethical issues, and transdisciplinary approaches (Malecki et al., 2022; Tan, 2022; Soanferla, Pachoud & Gorwood, 2022; Brinchmann et al., 2022; Chaidemenaki & Giannouli, 2022; Peleg et al., 2022; Kaczmarek-Fojtar et al., 2022; Malecki, Rhodes, Usher & Boydell, 2022).

In 2023, five studies were published, emphasizing community practice, cultural sensitivity, and interdisciplinary applications (Griffin et al., 2023; Eren, Tune & Yücel, 2023; Horton & Everett, 2023; Blumenthal Yanir, 2023; NA, 2023).

Finally, in 2024, three studies were released, representing new approaches in education, digital interventions, and inclusive design (Kiely, Conti & Hay, 2024; Mertse, Franzi & Bischoff, 2024; Herbert, 2024).

This chronological overview shows a gradual shift in art therapy research from introspective and clinical themes toward inclusive, community-based, and technologically innovative approaches.

Figure 4. Number of Art Therapy Studies Published in 1986–2024

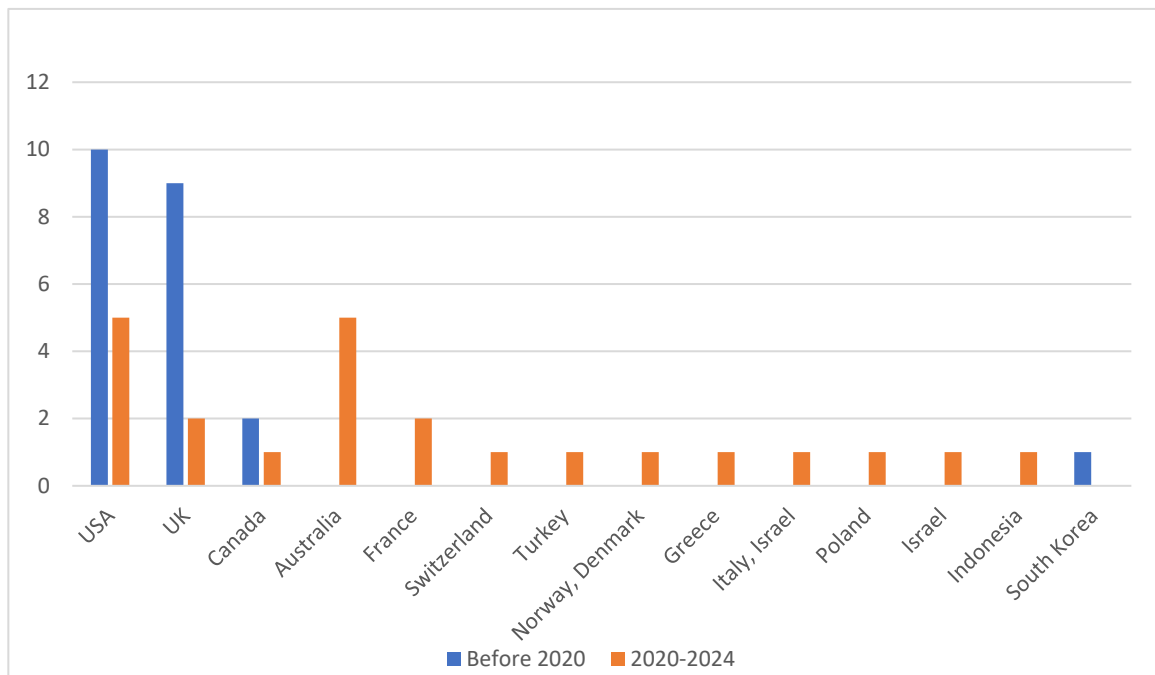


Art therapy studies were published across various countries and cultural contexts. The highest number of studies came from the USA and Australia, each contributing five publications. American research focused primarily on school settings, community interventions, and neurodiversity (e.g., Hunt et al., 2021; Horton & Everett, 2023; Herbert, 2024), while Australian studies reflected interdisciplinary approaches, academic collaboration, and methodological development (e.g., Malecki et al., 2022; Kiely et al., 2024; Griffin et al., 2023).

Two studies originated from the United Kingdom (Tan, 2022; Shaw, 2020) and France (Sudres et al., 2020; Soanferla et al., 2022), focusing on artistic inquiry, psychodynamic frameworks, and ethical issues. Individual studies were also conducted in Canada (Kuhnke, 2020), Switzerland (Mertse et al., 2024), Turkey (Eren et al., 2023), Norway and Denmark (Brinchmann et al., 2022), Greece (Chaidemenaki & Giannouli, 2022), Poland (Kaczmarek-Fojtar et al., 2022), Israel (Blumenthal Yanir, 2023), Italy and Israel (Peleg et al., 2022), Indonesia (Prijana et al., 2021), and one from an unspecified conference source (NA, 2023).

This distribution suggests that art therapy is becoming a global tool for inclusive education, mental health support, and community engagement. The international diversity of authors enriches theoretical frameworks with cultural specificity and ethical reflection.

Figure 5. Art Therapy Studies by Country: Before 2020 and between 2020–2024



3.2.2. Study Designs and Settings

Seven types of research designs were identified within the modality of art therapy. The most frequently represented design was clinical case reports, accounting for 57 % of all studies. Clinical group reports and case studies were equally present, each comprising 13 % of the studies.

One study employed a feasibility design with a randomized controlled trial, comparing the feasibility of combining art therapy or cognitive remediation therapy with family-based treatment in adolescents diagnosed with anorexia nervosa (Lock et al., 2018).

A mixed-methods design, incorporating both qualitative and quantitative approaches, was used in Chaves' (2011) study. A phenomenological approach was applied in Ki's (2011) qualitative research, which explored the lived experience of participants.

One quasi-experimental study without a control group was conducted at the Montreal Museum of Fine Arts in Canada (Thaler et al., 2017a).

In terms of treatment setting, eight studies were conducted in outpatient contexts, and eight in inpatient settings. The remaining six studies did not specify the therapeutic setting.

These studies represent earlier research efforts, which are complemented in our work by more recent and up-to-date studies, providing a broader and more current perspective on the development of art therapy in the context of EDs.

Recent research in expressive therapies and interventions for eating disorders reveals a marked diversification in the settings where these approaches are implemented. Studies published after 2020 increasingly reflect a shift away from traditional clinical facilities toward hybrid or community-oriented models of care.

Some studies were conducted exclusively in community-based outpatient environments, such as the work by Malecki, Rhodes, Ussher, and Boydell (2022), which focused on adult clients in a community setting. Others combined clinical and community components, reflecting the need to integrate formal healthcare with participatory, educational, or artistic activities. For instance, Griffin, Fenner, Landorf, and Cotchett (2021) explicitly cite both community and clinical settings, while Blumenthal Yanir (2023) connects art therapy practice with community-based workshops.

Particularly notable are studies targeting specialized programs for eating disorders. Horton and Everett (2023) examined residential treatment centres for adolescents, while Chaidemenaki and Giannouli (2022) worked within a psychiatric day hospital in Athens. Several studies were conducted in partial hospitalization contexts, such as Essayi et al. (2021), which focused on patients undergoing structured daytime treatment for eating disorders.

University-affiliated outpatient centres also feature prominently, as seen in the study by Hagan et al. (2021), which provided group therapy in an academic medical setting. Similarly, Eren, Tune, and Yücel (2023) conducted research within a psychiatry clinic at a university outpatient centre, underscoring the integration of research and clinical practice in academic institutions.

Some studies are characterized by reflective or narrative formats without a direct clinical setting. Kuhnke (2020), for example, combines personal memoir with academic commentary, expanding the methodological possibilities for research in expressive therapies.

Overall, the research environments in expressive therapy studies have significantly expanded and diversified since 2020. While earlier studies predominantly focused on traditional clinical contexts, contemporary research reflects a growing need for

comprehensive approaches that encompass clinical, community, educational, artistic, and therapeutic dimensions.

3.2.3. Population

Studies published before 2020 in the field of art therapy included interventions conducted both with individual patients and within group formats. Clinical case examples focused on one-on-one therapeutic work were described in a total of twelve studies. In contrast, Thaler et al.'s (2017) quasi-experimental study analysed data from a sample of 78 participants. Several publications referred to group-based interventions without specifying the exact number of participants (e.g., Johnson & Parkinson, 1999; Levens, 1994; Liebmann, 2004). The age range of participants varied between twelve and 60 years.

In terms of gender distribution, female participants were predominant, representing 96 % of the described cases ($n = 126$), while male participants appeared in only 4 % of studies ($n = 5$). A few studies did not report gender information at all.

The diagnostic spectrum included anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified, and avoidant/restrictive food intake disorder. Anorexia nervosa was reported in fourteen studies, while BN appeared in nine. In Thaler et al.'s (2017) study, nineteen participants were diagnosed with EDNOS and one with ARFID. The diagnosis EDNOS was also present in Chave's (2011) paper, whereas Liebmann (2004) referred more generally to long-term chronic eating disorders without further specification.

Comorbid diagnoses were described in several cases. Estep (1995) presented a 28-year-old female with BN who was also diagnosed with post-traumatic stress disorder, having experienced severe childhood sexual abuse and exhibiting self-harming behaviour. In Levens's (1994) therapeutic group, all patients with eating disorders were also survivors of sexual abuse. Generalized anxiety disorder was reported in one patient with AN (Misluk-Gervase, 2020b). Depression combined with suicidal tendencies was noted in another female patient with AN across two different studies (Rabin, 2003; Wolf et al., 1986). Self-harm and substance misuse were identified as comorbidities in a group of patients (Wood, 2000).

An analysis of 24 studies focused on art therapy and expressive interventions, published between 2020 and 2024, reveals a clear predominance of female representation. The gender category "female" (F) was explicitly stated in twelve cases, accounting for 50 %

of all entries. Studies authored exclusively by women include those by Malecki et al. (2022); Kiely, Conti, and Hay (2024); Tan (2022); Kuhnke (2020); Eren, Tune, and Yücel (2023); Herbert (2024); Blumenthal Yanir (2023); and both studies by the research team of Hagan et al. (2021).

Male representation appeared only once as a standalone category (“M”), specifically in the study by Nagyomskuti Mertse, Franzi, and Bischoff (2024). Mixed-gender teams were present in seven cases. For example, Griffin et al. (2021) and Peleg et al. (2022) reported combined representation. Other mixed teams without precise gender breakdowns include Essayi et al. (2021); Soanferla, Pachoud, and Gorwood (2022); Griffin et al. (2023); Horton and Everett (2023); and Kaczmarek-Fojtar et al. (2022).

In four studies, gender was not specified, including a conference proceeding from 2023, the work by Brinchmann et al. (2022), Chaidemenaki and Giannouli (2022), and Herbert (2024). One case (Lucy Shaw, 2020) was marked as “F (most likely),” indicating an estimated rather than confirmed gender.

Overall, the analysis shows that research in the field of art therapy is predominantly shaped by female authors, with minimal male representation. Mixed-gender teams tend to appear in interdisciplinary or international studies. The absence of gender data in some publications may be due to author anonymity, conference formats, or methodological limitations.

The age structure of participants across the analysed studies is notably diverse, reflecting a broad spectrum of target groups within art therapy and expressive interventions. Some studies provide clearly defined numerical ranges, such as 18–84 years (Malecki et al., 2022), 18–46 years (Griffin et al., 2023), 18–55 years (Eren et al., 2023), or 11–60 years (Prijana et al., 2021). In other cases, a specific age is listed (e.g., 32 years in Kiely et al., 2024) or the average age of participants is reported, such as 32.7 years (Sudres et al., 2020).

Several studies use general age categories like “young adult,” “adult,” “adolescents,” “children,” or “all ages.” These classifications appear in works by Tan (2022), Kuhnke (2020), Shaw (2020), Horton & Everett (2023), Chaidemenaki & Giannouli (2022), and Soanferla et al. (2022). In some cases, combined categories are used (e.g., conference proceeding, 2023; Blumenthal Yanir, 2023), indicating the inclusion of multiple age groups within a single intervention. In several cases, age data is not specified at all (e.g., Herbert, 2024) or is presented only in general terms without numerical detail. This variability

highlights differences in methodological reporting and points to the need for more precise demographic documentation in future research.

The sample sizes across the analysed studies vary significantly, reflecting methodological diversity and differing research objectives. The smallest samples are found in individual case studies, such as those by Kiely et al. (2024), Tan (2022), Kuhnke (2020), and Sudres et al. (2020), each involving only one participant. In contrast, the largest sample is reported by Soanferla et al. (2022), who worked with 169 adult outpatients after accounting for dropouts.

Some studies combine quantitative and qualitative approaches, which is reflected in their sample structure. For example, Griffin et al. (2021) include three mixed-methods case series, while Blix et al. (2022) present two narrative cases without a formal participant sample. Similarly, the 2023 conference proceeding does not specify the number of participants.

Medium-sized samples (e.g., 8–25 participants) appear in studies by Malecki et al. (2022), Chaidemenaki & Giannouli (2022), Hunt et al. (2021), Hagan et al. (2021), and Peleg et al. (2022). Some of these studies also report group divisions, such as Eren et al. (2023), who included fifteen women (eight in the experimental group and seven in the control group).

The study by Hunt et al. (2021) is notable for its longitudinal design, with 24 participants completing the post-intervention assessment (T2) and eighteen completing the long-term follow-up (T3). The research by Essayi et al. (2021), involving 126 participants, ranks among the more extensive studies.

Several studies do not report sample size at all (e.g., Herbert, 2024; Horton & Everett, 2023; Kaczmarek-Fojtar et al., 2022; Blumenthal Yanir, 2023; Prijana et al., 2021), which complicates comparisons of methodological rigor. This absence highlights the need for more consistent reporting of demographic parameters in future publications.

Overall, sample sizes range from individual cases to large-scale quantitative studies, with most research involving small to medium groups. This variability is characteristic of art therapy and expressive interventions, where in-depth analysis of individual cases often takes precedence.

The analysed studies encompass a wide range of clinical characteristics, reflecting the diversity of EDs, stages of illness, age groups, and therapeutic contexts. The most

frequently represented diagnosis is AN, appearing in various forms—from individual case studies to group-based research. For example, the study by Malecki et al. (2022) includes four women diagnosed with AN (two currently in treatment, two in remission) and four without any diagnosis, highlighting the contrast between clinical and non-clinical experiences.

Some studies focus on severe and enduring anorexia nervosa, such as Kiely et al. (2024), which explores the profound impact of the illness on identity and daily functioning. Others, like Sudres et al. (2020), report extreme physical manifestations, including a BMI as low as 12.6, underscoring the severity of the condition.

The diagnosis EDNOS appears in several studies, especially where specific classification is absent or where broader symptom spectrums are explored. An example is the 2023 conference proceeding, which references EDNOS without further specification.

Some research investigates childhood trauma as an etiological factor in EDs, such as Kuhnke (2020) and Malecki et al. (2022), where body mapping is used to visually process bodily and emotional memories. These studies emphasize the importance of embodiment and narrative processing in ED treatment.

Participant age ranges span from adolescents to adults aged 18–84. Some studies focus exclusively on adolescents (e.g., Shaw, 2020; Kaczmarek-Fojtar et al., 2022), while others include adult patients in outpatient or residential care (e.g., Soanferla et al., 2022; Hunt et al., 2021).

In terms of diagnostic typology, alongside AN and EDNOS, there are cases of BN and BED, particularly in studies involving group interventions or systematic reviews. Several studies include combined diagnoses (e.g., AN, BN and BED), reflecting the complexity of clinical presentations.

Several studies do not specify clinical details (e.g., Herbert, 2024; Horton & Everett, 2023), which complicates methodological comparisons. This absence highlights the need for standardized reporting of demographic and clinical parameters in future publications.

Overall, the clinical characteristics of participants across the analysed studies reveal a diverse landscape of diagnoses, illness stages, age groups, and therapeutic approaches, with many studies emphasizing the role of artistic expression as a tool for processing identity, trauma, and embodied experience.

3.2.4. Methodology of Relevant Studies

Among the 23 studies published up to 2020, sixteen did not report any specific method of data collection. These studies were based primarily on clinical observations or case-based reflections, without the use of standardized measurement tools. In contrast, seven studies applied various questionnaires and psychodiagnostics instruments.

Body Mass Index (BMI) was assessed in two studies (Acharya et al., 1995; Lock et al., 2018), with Acharya also exploring body image through photo-based discussions with a psychiatrist. Chaves employed a mixed-methods design using the *Rosenberg Self-Esteem Scale* (RSE), *Hartz Art Therapy Self-Esteem Questionnaire* (HARTZ AT-SEQ), *Visual Analogue Scales* (VAS) for depression, anxiety, anger, and shame, *Subjective Units of Distress* (SUDS), and thematic analysis of interviews. The VAS were also used in a quasi-experimental study alongside the *Profile of Mood States* (POMS) and a satisfaction scale.

Ki (2011) conducted semi-structured interviews (35–50 minutes, in-person or by phone), followed by phenomenological analysis. Lock et al. (2018) applied a comprehensive battery of psychodiagnostics tools, including BDI, BAI, *Children's Yale-Brown Obsessive Compulsive Scale* (CY-BOCS), *Eating Disorder Examination* (EDE), *Kiddie Schedule for Affective Disorders and Schizophrenia – Present and Lifetime version* (K-SADS-PL), *Wechsler Abbreviated Scale of Intelligence* (WASI), *Wisconsin Card Sorting Test* (WCST), and others. Smaller-scale studies used the *Tennessee Self-Concept Scale* (TSCS), a self-report eating questionnaire (Rabin, 2003), or the BDI with *Pudel's Eating Habits Questionnaire* (Steinbauer et al., 1999).

These differences highlight the methodological variability across studies—from narrative and reflective approaches to complex psychometric assessments.

The analysed set of 24 studies published between 2020 and 2024 demonstrates significant methodological diversity, encompassing qualitative, quantitative, mixed-methods, and systematic research designs. Several studies rely on deep narrative and visual analyses, while others apply standardized psychodiagnostics tools and experimental frameworks.

Malecki et al. (2022) employed a qualitative feminist phenomenological approach, collecting data through body mapping and narrative interviews. Similarly, Kiely et al. (2024) applied *Interpretative Phenomenological Analysis* (IPA) to autobiographical texts and visual

artworks. Tan (2022) contributed a cultural reflection through artistic and critical analysis, while Kuhnke (2020) conducted autobiographical narrative research using journaling, photography, and creative writing.

A qualitative reflective approach also appears in the conference contribution (2023), where patients created illustrated reflections as part of art psychotherapy, with analysis focused on emotional themes and therapeutic insights. Griffin et al. (2023) conducted a mixed-methods feasibility study using a parallel design, combining *World Health Organization Quality of Life* (WHO-QOL), the *Experience of Shame Scale*, the *Session Rating Scale*, and semi-structured interviews analysed with NVivo software.

Sudres et al. (2020) carried out a retrospective follow-up evaluation seven years after art therapy, using a modified version of the *Clinical Experience Scale of Mediated Therapies* (ECTM) to compare therapeutic outcomes between recovered and non-recovered participants. Nagysomkuti Mertse et al. (2024) developed a *Visual Analogue Scale* (VAS) inspired by patient artwork, comparing weekly assessments with BMI and emotional states.

Essayi et al. (2021) used a custom-designed questionnaire to assess attitudes toward five treatment types, including art therapy. Shaw (2020), Eren et al. (2023), and Herbert (2024) focused on various eating disorders, though methodological details were limited. Griffin et al. (2021) and Scanferla et al. (2022) included DSM-5 diagnostic criteria and BMI thresholds (>16).

Brinchmann et al. (2022) explored severe and enduring eating disorders, while Horton and Everett (2023) and Chaidemenaki and Giannouli (2022) included comorbid psychiatric diagnoses. Hunt et al. (2021) and Hagan et al. (2021) conducted pilot studies targeting AN, BN, and BED.

Peleg et al. (2022) introduced a 10-session workshop using the “Squares Method,” a grid-based drawing technique used to assess perceptual distortions. Kaczmarek-Fojtar et al. (2022) implemented psychodynamic group therapy for adolescents with AN or BN, with participant selection based on pre-treatment consultations.

Malecki et al. (2022) in a second study used body mapping as an arts-based method to explore lived experiences, with participants creating visual representations of their bodies and narrating their stories. Blumenthal Yanir (2023) conducted interpretive analysis of artwork created using Styrofoam torsos, applying thematic coding. Prijana et al. (2021)

concluded the set with a systematic review of literature from databases including APA PsycNet, CORE, Google Scholar, ResearchGate, ScienceDirect, and Wiley Online Library.

This methodological variety highlights the broad spectrum of research approaches in art therapy for eating disorders—from introspective and visual analyses to structured quantitative evaluations. The combination of artistic expression, psychotherapeutic dialogue, and standardized tools enables deeper understanding of therapeutic processes and patients’ lived experiences.

3.2.5. Types of Art Therapy and Other Therapeutic Interventions

These findings are based on previous research that mapped various approaches to art therapy in the treatment of eating disorders. The analytic approach in art therapy appeared in the studies by Johnson and Parkinson (1999) and Rust (1994), while the integrative approach was applied by Matto (1997) and Steinbauer et al. (1999). Bloomgarden (1997) introduced his own technique called “offerings,” which is closely related to Sandplay therapy. Ki (2011) worked with art-based support groups, whereas Misluk Gervase (2020b) drew on an original therapeutic model—the Nourishment Framework—alongside the Expressive Therapies Continuum. Schaverien (1994) viewed the image as a transactional object within the therapeutic process.

Art therapy was often integrated into broader therapeutic frameworks in clinical settings, particularly within multidisciplinary teams. It was commonly combined with verbal psychotherapy, family therapy, or CBT, reinforcing its complementary and flexible role in the treatment of eating disorders.

Based on an analysis of 24 studies published between 2020 and 2024, a wide range of art therapy modalities were identified. These approaches span from classical visual techniques to expressive forms, group interventions, and the integration of art therapy into broader therapeutic frameworks.

One of the most prominent techniques was body mapping—drawing body outlines combined with visual expression of personal experiences—which appeared in studies by Malecki et al. (2022) and Yanir (2023). Visual art, including painting and imagery, was central in the work of Kiely et al. (2024), while Tan (2022) emphasized creative expression

without strict media constraints. Self-directed artmaking involving photography and mixed media was used by Kuhnke (2020).

Some studies combined art therapy with psychotherapeutic approaches (e.g., conference proceeding, 2023), while others focused on group art therapy (Griffin et al., 2023). Expressive visual outputs created by patients were analysed by Nagyomskuti Mertse et al. (2024), and Essayi et al. (2021) applied expressive art therapy more broadly.

In several cases, art therapy was embedded within comprehensive clinical care. Shaw (2020) described its integration into an NHS day program that included medical and psychological support. Eren et al. (2023) and Herbert (2024) operated within standard psychiatric care, where art therapy was not explicitly defined. Studies by Soanferla et al. (2022) and Brinchmann et al. (2022) combined art therapy with CBT, ACT, Mindfulness-Based Cognitive Therapy, psychoeducation, family therapy, and psychodynamic approaches.

Some research focused on specific techniques, such as scientific drawing using the “Squares Method” (Peleg et al., 2022), or multifamily therapy (Brinchmann et al., 2022). Kaczmarek-Fojtar et al. (2022) incorporated art therapy into psychodynamic group work with adolescents. Prijana et al. (2021) concluded the set with a systematic literature review, where art therapy was one of the analysed modalities.

This typological analysis reveals that AT in the context of EDs is applied in diverse forms – from individual visual expression to complex therapeutic systems. Its flexibility allows integration into multidisciplinary teams and combination with verbal, behavioural, or family-based interventions, enhancing its clinical effectiveness and adaptability to patients’ needs.

Art therapy was frequently combined with various complementary therapeutic approaches. These interventions included psychotherapeutic, educational, somatic, group-based, and multidisciplinary forms of care, reinforcing the comprehensive nature of treatment for eating disorders.

Some studies did not report any additional interventions (Malecki et al., 2022; Kiely et al., 2024; Tan, 2022; conference proceeding, 2023; Malecki et al., 2022; Yanir, 2023), while others described broader therapeutic frameworks. For example, Kuhnke (2020) supplemented art therapy with journaling, reflexive embodied empathy, dialogue with trusted peers and family, and nature-based self-care practices. Griffin et al. (2023) noted

concurrent participation in a day program that included psychological support, nutritional counselling, and medical monitoring.

Sudres et al. (2020) combined analytical psychotherapy with body-oriented therapy, while Nagyomskuti Mertse et al. (2024) worked within an inpatient multidisciplinary setting involving nutrition therapy, physiotherapy, ergotherapy, psychotherapy, and visual-narrative exploration of anorexia as a personified entity. Essayi et al. (2021) compared art therapy with exposure therapy, cognitive therapy, interpersonal therapy, and psychiatric medication.

Shaw (2020) presented case vignettes from online group sessions grounded in psychoanalytic and mentalization-based frameworks, exploring themes such as containment, gaze, joint attention, and body image. Eren et al. (2023) combined standard outpatient care with a 30-week semi-structured art-based group therapy, measuring symptom severity, emotional regulation, depression, anxiety, and social functioning.

Herbert (2024) and Griffin et al. (2021) conducted systematic literature reviews analysing the therapeutic impact of art therapy on eating disorder symptoms. Soanferla et al. (2022) implemented a single-day workshop exposing participants to eight psychotherapy approaches, with assessments of motivation and illness awareness. Brinchmann et al. (2022) interpreted fieldwork narratives through four distinct research lenses, emphasizing relational, emotional, and symbolic dimensions.

Horton and Everett (2023) drew from narrative therapy, expressive arts literature, and group counselling, offering clinical examples suited to residential settings. Chaidemenaki and Giannouli (2022) conducted 15–24 art therapy sessions over nine months, evaluating psychiatric symptoms, empathy, and functional performance. Hunt et al. (2021) and Hagan et al. (2021) combined psychoeducation on social cognition with AT, homework, and guided discussions, using multiple time-point assessments.

Peleg et al. (2022) described AT as part of a multidisciplinary treatment program. Kaczmarek-Fojtar et al. (2022) integrated psychoeducation, therapeutic dialogue, clarification and confrontation techniques, and group process facilitation. Prijana et al. (2021) noted that some studies included art therapy alongside psychotherapy or CBT.

These findings suggest that art therapy in the context of eating disorders rarely occurs in isolation. Rather, its effectiveness is often enhanced through integration with other therapeutic modalities, creating a comprehensive and individually tailored treatment framework.

3.2.6. Characteristics of Art Therapy Interventions

These findings are based on previous work analysing art therapy interventions for eating disorders. Art therapy was conducted in both individual and group formats. The longest individual intervention lasted two years (Misluk-Gervas, 2020), while the shortest spanned two months (Chaves, 2011). Nine studies did not specify the duration of treatment. Sessions typically occurred once or twice per week and lasted between 30 and 90 minutes. In group settings, session time was extended to allow for sufficient creation and reflection (Wood, 2000).

Applied interventions included free expression, drawing, painting, self-portraiture, guided fantasy, body contour drawing, collaborative artwork, clay modelling, symbolic work, therapeutic bookmaking, collage, mandala and origami creation, sand worlds, chromatic family line drawing, and material experimentation. Additional expressive modalities involved poem reflection and mirror work. Common materials included watercolour, coloured pencils, oil pastels, and cray-pas, with techniques such as wet-on-wet painting and paint squirting onto thick paper.

Art-based interventions in the treatment of eating disorders encompass a wide range of expressive, symbolic, and therapeutic practices. These approaches often involve participatory and aesthetic processes that encourage reflection, storytelling, and the visual expression of traumatic experiences. They enhance verbal interviews and explore embodied experiences (Malecki et al., 2022). Some interventions combine textual and visual narratives, representing complex inner states through metaphors such as the “SE-AN Kaleidoscope” and themes like “disappearing self” or “dialectical dilemma” (Kiely et al., 2024).

Art therapy offers emotional insight beyond language (Tan, 2022), using unschooled, intuitive engagement with multiple art mediums to explore trauma symbolically and sensorially, emphasizing healing across emotional, spiritual, and physical domains (Kuhnke, 2020). In some cases, patients created illustrated reflections to externalize emotions, explore identity, and process trauma, particularly in response to pandemic-related stress and isolation (conference proceeding, 2023).

Structured interventions included twice-weekly sessions lasting one and half hour over eight weeks, focusing on non-verbal expression, symbolic exploration, and body engagement through drawing, painting, collage, and mixed media (Griffin et al., 2023). Art

therapy helped patients bypass rationalization and emotional anaesthesia, providing a symbolic space for emotional expression and identity reconstruction. It facilitated access to deeper therapeutic spaces and emphasized the need for standardized evaluation tools and specialized training (Sudres et al., 2020).

Symbolic representations were central in some studies, such as depicting anorexia as a giant spider or using metaphorical imagery to express psychological pain (Nagyomskuti Mertse et al., 2024). Other interventions were presented in vignette format, focusing on participants' attitudes toward credibility and effectiveness (Essayi et al., 2021), or delivered online via video conferencing platforms (Shaw, 2020).

Group-based formats such as Art-Based Group Therapy (ABGT) and general art therapy practices were also employed (Eren et al., 2023; Griffin et al., 2021). In some cases, art was used metaphorically rather than as a formal therapeutic tool (Brinchmann et al., 2022), or integrated within narrative therapy frameworks (Horton & Everett, 2023).

Creative techniques included life-sized body outlines enriched with symbols, colours, and text to represent emotions, memories, and bodily experiences, with themes such as "Femininity and family" or "Voices and dissociation" (Malecki et al., 2022). Styrofoam torsos were used as symbolic representations, often marked in sensitive areas while neglecting others (Yanir, 2023). Non-verbal expression through drawing, painting, and sculpture focused on catharsis, projection, and symbolic representation of body image, control, isolation, and self-esteem (Prijana et al., 2021).

These diverse characteristics highlight the depth and adaptability of art-based interventions in addressing the complex emotional and psychological dimensions of eating disorders.

3.3. Dance/Movement Therapy

This extraction table in Appendix D provides an overview of recent research focused on the use of Dance/Movement Therapy (D/MT) in the treatment of eating disorders. It includes information on authors, publication year, country of origin, study design, clinical settings, sample size, methodology, additional therapeutic interventions, characteristics of D/MT, and key findings. The studies highlight a variety of approaches, ranging from individual to group

formats, and emphasize the importance of body awareness, emotional regulation, and the integration of D/MT into multidisciplinary care.

3.3.1. Year and Country

Seven studies published between 1986 and 2020 form the final dataset in the scoping review by Bucharová (2020). The earliest, by Krueger & Schofield (1986), presented a theoretical D/MT model for treating eating disorders. Rice et al. (1989) followed with a chapter focused on D/MT for anorexia nervosa. After a 22-year gap, Padrão & Coimbra (2011) introduced a body-oriented intervention project for women with AN. Four additional studies were published between 2012 and 2020 across the UK, USA, Spain, and Switzerland (Oppikofer, 2012; Kleinman, 2015; Feldman, 2017; Savidaki et al., 2020), reflecting renewed international interest in D/MT applications.

Research on Dance/Movement Therapy (D/MT) in the context of eating disorders evolved between 2020 and 2024, progressing from theoretical models to applied clinical studies and systematic reviews. The following table provides an overview of the included studies according to the year of publication, country of origin, and author(s).

Table 3. Characteristics and summary of included D/MT studies.

Authors	Year	Country
Irina G. Malkina-Pykh	2020	Russia
Anke Dalhoff	2022	Germany
Amy Syper, Merle Keitel, Dori M. Polovsky, Whitney Sha	2023	USA
Lea Anna Graute, Ida Wessing, Anke Dalhoff	2023	Germany
Ilaria Bastoni, Anna Guerrini Usubini, Maria Gobetti, et al.	2023	Italy
Bravo C, Hernández-García D, Trinidad-Fernández M, Badia G, et al.	2024	Spain

In 2020, Malkina-Pykh introduced a quantitative model based on nonlinear regression to predict psychotherapy outcomes in patients with eating disorders and obesity (Malkina-Pykh, 2020).

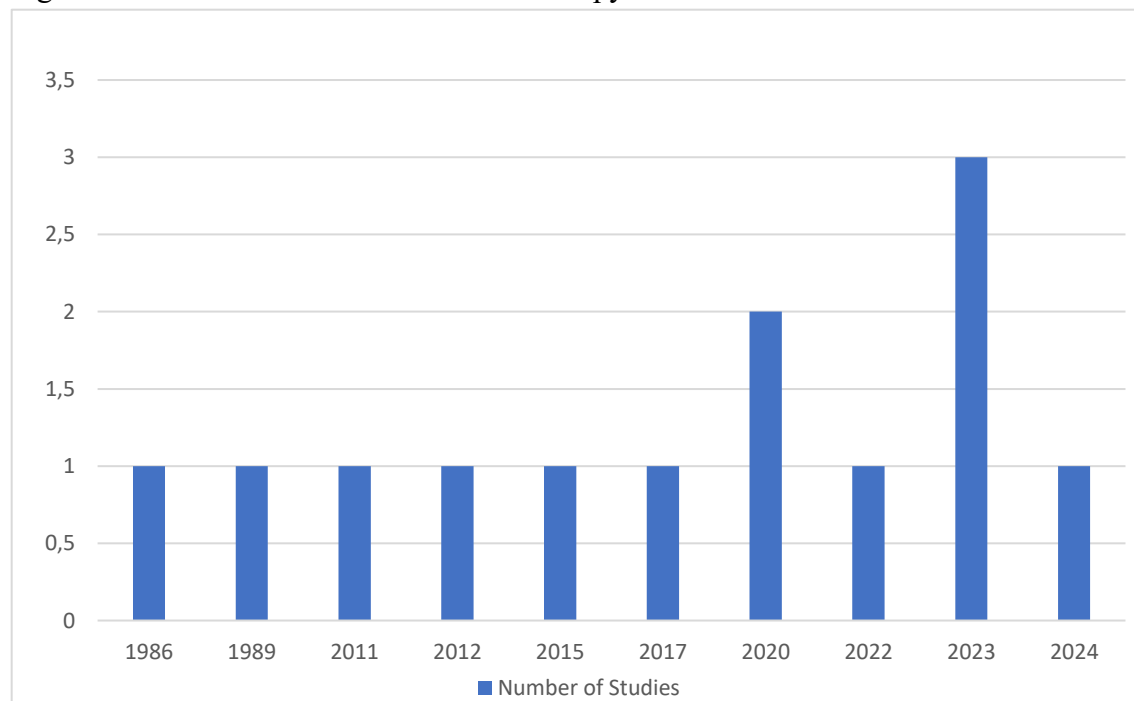
No relevant study was recorded in 2021. The next contribution came in 2022, when Dalhoff published a clinical reflection analysing the concept of “KörperErleben–Ich–Du–Wir” in adolescent anorexia nervosa, emphasizing bodily experience as a key element of psychodynamic therapeutic change (Dalhoff, 2022).

The most productive year was 2023, with three studies published. Syper et al. (2023) conducted a phenomenological qualitative analysis of participants’ experiences with D/MT. Graute et al. (2023) introduced group-based Concentrative Movement Therapy (KBT) for adolescent girls with anorexia nervosa. Bastoni et al. (2023) published an open pilot study that quantitatively tracked changes in emotional regulation and body image following D/MT intervention.

The most recent study in the dataset was published in 2024. Bravo et al. (2024) conducted a systematic meta-analysis of movement-based therapies, synthesizing findings from eleven studies and providing an overview of the effectiveness of D/MT, yoga, psychomotor therapy, and body-awareness-based approaches.

This chronological progression reflects growing interest in D/MT as a relevant therapeutic modality for eating disorders, with research gradually moving toward methodological standardization and clinical efficacy assessment.

Figure 6. Number of Dance/Movement Therapy Studies Published in 1986–2024



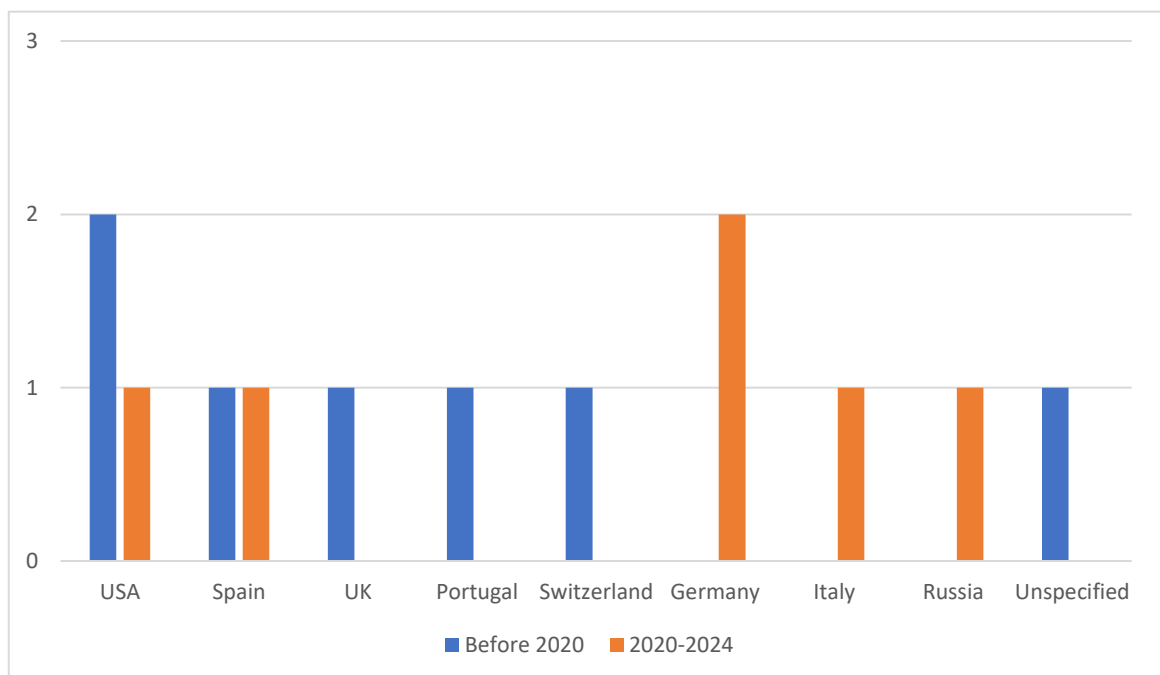
The analysed set of studies on D/MT published between 2020 and 2024 highlights the international scope of research in the field of eating disorders. Research teams come from six different countries, indicating a growing global interest in movement-based therapeutic approaches.

One of the earliest studies was published in Russia (Malkina-Pykh, 2020), where a quantitative model was developed to predict psychotherapy outcomes. Germany is represented by two studies (Dalhoff, 2022; Graute et al., 2023) focusing on adolescent populations and applying KBT. The United States contributed a qualitative study exploring participants lived experiences with D/MT (Syper et al., 2023).

Italy is represented by a pilot study conducted in a clinical rehabilitation setting (Bastoni et al., 2023), while Spain provided the most recent contribution—a systematic meta-analysis of movement-based therapies (Bravo et al., 2024), synthesizing findings from 11 studies and offering an overview of the effectiveness of D/MT, yoga, psychomotor therapy, and body-awareness-based interventions.

The geographical spread of research suggests that D/MT is being applied across diverse cultural and clinical contexts. It also underscores the need for international collaboration and comparative evaluation of D/MT’s effectiveness across healthcare systems and therapeutic traditions.

Figure 7. Dance/Movement Therapy Studies by Country: Before 2020 and between 2020–2024.



3.3.2. Study Designs and Settings

These insights are based on a previous study that analysed Dance/Movement Therapy research published before 2020. More than half of the studies (57 %) were classified as clinical case reports, indicating a predominance of individually focused therapeutic documentation. Two studies were categorized as clinical group reports (Feldman, 2017; Padrão & Coimbra, 2011), focusing on collective therapeutic processes. Savidaki et al. (2020) applied a mixed-methods design, combining both qualitative and quantitative approaches to data collection. The distribution of study designs is illustrated in Figure 5.

Regarding clinical settings, four studies were conducted in private clinics or hospitals (Feldman, 2017; Kleinman, 2015; Krueger & Schofield, 1986; Savidaki et al., 2020), suggesting a preference for specialized therapeutic environments. An inpatient setting was explicitly mentioned in the study by Padrão & Coimbra (2011), while the remaining two studies did not provide any details about the therapeutic context in which the intervention was carried out.

Following the analysis of earlier studies published before 2020—which have been updated and contextualized in this thesis—the next section presents a structured overview of more recent research published after 2020. These newer studies reflect current trends in the field, with an emphasis on standardized measurement tools, clinical applicability, and the integration of D/MT into conventional treatment approaches for eating disorders. They are characterized by greater methodological precision and a stronger empirical foundation.

Syper et al. (2023) conducted a qualitative phenomenological study exploring participants' lived experiences with D/MT interventions. Their work focused on deep understanding of subjective therapeutic processes. In contrast, Malkina-Pykh (2020) applied a quantitative modelling approach using nonlinear regression to predict therapeutic outcomes in eating disorders, including changes in BMI and psychological variables.

Dalhoff (2022) contributed a clinical reflection with case vignettes involving adolescent patients with anorexia nervosa, while Graute, Wessing, and Dalhoff (2023) carried out an observational cohort study with pre-post comparisons, using standardized tools to assess body image and therapeutic experience.

Bastoni et al. (2023) published a pilot feasibility study with a pre-post intervention design, evaluating the effectiveness of D/MT in a rehabilitation setting through

psychological scales such as *Difficulties in Emotion Regulation Scale* (DERS), *Toronto Alexithymia Scale* (TAS), and *Multidimensional Assessment of Interoceptive Awareness* (MAIA). Finally, Bravo et al. (2024) presented a systematic review and meta-analysis of movement-based therapies – including D/MT, yoga, and psychomotor therapy – adhering to PRISMA guidelines and assessing risk of bias using the *Cochrane Collaboration Tool*.

Together, these studies represent a significant shift from anecdotal case reports toward systematic data collection and analysis. They contribute to a growing evidence base supporting the clinical relevance and therapeutic potential of D/MT in the treatment of eating disorders.

An overview of recent studies published after 2020 reveals methodological diversity and a variety of clinical settings in which D/MT has been applied. The authors of these studies worked in outpatient, inpatient, and university-based environments, and the research included qualitative, quantitative, and synthesis-based approaches.

Syper et al. (2023) conducted a qualitative study, most likely in an outpatient or community-based therapeutic setting. Malkina-Pykh (2020) published a quantitative model based on nonlinear regression, applied within outpatient psychotherapy programs. Dalhoff (2022) contributed a clinical reflection from an adolescent psychiatric setting, while Graute, Wessing, and Dalhoff (2023) carried out an observational study at a university department of child and adolescent psychiatry, psychosomatics, and psychotherapy.

The pilot study by Bastoni et al. (2023) was conducted within a hospital-based rehabilitation program, where D/MT was part of a multidisciplinary approach. Finally, Bravo et al. (2024) published a systematic meta-analysis that included studies from various clinical and research settings, offering a broader perspective on the effectiveness of movement-based therapies in the treatment of eating disorders.

3.3.3. Population

Studies published before 2020 show that only two papers applied D/MT in individual sessions with a single patient (Oppikofer, 2012; Rice et al., 1989), while five studies reported group-based interventions for patients diagnosed with eating disorders. None of the studies included male participants.

Participant age varied across studies, ranging from twelve to 56 years (Feldman, 2017; Padrão & Coimbra, 2011). Diagnoses included anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified. Two studies did not specify the exact diagnosis but were conducted in specialized eating disorder treatment facilities (Feldman, 2017; Krueger & Schofield, 1986). No comorbidities were reported among patients receiving D/MT interventions.

In studies published after 2020, D/MT was applied predominantly with female participants. All studies reported either exclusively female or female-majority samples, with no male participants included. Syper et al. (2023) worked with a mixed-gender group, while the remaining authors (Malkina-Pykh, 2020; Dalhoff, 2022; Graute et al., 2023; Bastoni et al., 2023; Bravo et al., 2024) reported exclusively female or predominantly female samples.

This trend reflects the overrepresentation of women in clinical D/MT research on eating disorders, which aligns with epidemiological data indicating a higher prevalence of these diagnoses among the female population.

The age range of participants varied depending on the target group and type of study. Syper et al. (2023) and Malkina-Pykh (2020) worked with adults aged 18 and older, although specific ages were not reported. Bastoni et al. (2023) indicated an age range between 18 and 34 years.

Adolescent groups were the focus of studies by Dalhoff (2022) and Graute, Wessing & Dalhoff (2023), with one study reporting a mean age of 15.35 years. Bravo et al. (2024), in their systematic meta-analysis, included studies involving both adolescents and adults, with age ranges varying across individual research samples.

Sample sizes varied significantly across studies, reflecting the diversity of methodological approaches and target populations. Syper et al. (2023) conducted a qualitative phenomenological study with eleven participants, focusing on in-depth exploration of individual experiences with D/MT. Dalhoff (2022) worked with a larger sample of 52 adolescent patients, allowing for broader insights into group dynamics and therapeutic processes within this age group.

Graute, Wessing, and Dalhoff (2023) reported 49 participants in a group therapy setting, conducted in a clinical environment with emphasis on body perception and psychodynamic processes. Bastoni et al. (2023) carried out a pilot intervention study with twelve participants, divided into a D/MT group ($n = 7$) and a control group ($n = 5$), enabling

comparison of therapeutic effects within a randomized design. Bravo et al. (2024), in their systematic meta-analysis, included eleven studies with a total of 437 individuals diagnosed with eating disorders, offering a robust overview of the effectiveness of movement-based therapies across various contexts. Malkina-Pykh (2020) did not report a specific sample size, although her study was based on quantitative modelling of therapeutic data.

The clinical focus of individual studies encompassed a wide spectrum of eating disorders, with research samples differing in age, diagnosis type, and therapeutic context. Syper et al. (2023) worked with patients diagnosed with AN, BN, and BED, reflecting the diversity of clinical presentations in adult populations. Similarly, Bastoni et al. (2023) included participants with AN, BN, and BED, aiming to evaluate the effects of D/MT within a pilot intervention design.

Dalhoff (2022) and Graute, Wessing & Dalhoff (2023) focused exclusively on adolescent patients diagnosed with anorexia nervosa. Their research was conducted in a hospital setting and emphasized body perception, group dynamics, and psychodynamic aspects of treatment. Bravo et al. (2024), in their systematic meta-analysis, included eleven studies involving patients with AN, BN, and BED, with clinical characteristics varying across individual research samples. Their analysis provided a comprehensive overview of the effectiveness of movement-based therapies across different age groups and therapeutic contexts.

Malkina-Pykh (2020) addressed disordered eating behaviours and obesity in her quantitative study. Using nonlinear regression modelling, she tracked individual changes in BMI and psychological variables such as perfectionism, body dissatisfaction, and locus of control. Although specific clinical diagnoses were not reported, the study's focus on dysfunctional eating patterns places it within the broader field of eating disorder research.

3.3.4. Methodology of Relevant Studies

In the study by Savidaki et al. (2020), the *Multidimensional Body Self Relations Questionnaire* (MBSRQ) and the *Toronto Alexithymia Scale* (TAS-20) were administered at the beginning and end of the intervention. Reflective diaries were analysed as part of the qualitative data. In another study by Padrão and Coimbra (2011), the therapist's non-structured movement observation and patients' verbalizations at the end of each session were

included in the assessment of the therapeutic process. Additionally, semi-structured interviews were conducted, and outcomes were determined through consensual judgment by three professionals (two psychiatrists and one clinical psychologist). Feldman (2017) employed thematic analysis of the therapist's journal. No specific research methodology was reported in the remaining studies.

Methodological approaches in studies focused on D/MT for eating disorders published after 2020 demonstrate considerable diversity, reflecting varied research aims, contexts, and data types. Syper et al. (2023) conducted a qualitative phenomenological study, analysing semi-structured interviews through thematic analysis to capture participants' subjective experiences with D/MT in the context of eating disorder treatment. This approach enabled deeper insight into clients' embodied experiences, emotional processes, and therapeutic engagement.

In contrast, Malkina-Pykh (2020) applied a quantitative modelling approach using the *Generalized Multiplicative Model* (GMultM), which employs nonlinear regression to predict changes in BMI and psychological variables such as perfectionism, body dissatisfaction, and locus of control. This method allowed for individualized tracking of therapeutic response and intervention effectiveness.

Dalhoff (2022) combined clinical reflection with case studies and psychodiagnostics tools, including the TBF-KBT-G (a questionnaire assessing concentrative movement therapy) and the BID test (*Body Image Distortion*), providing both qualitative and quantitative data on the effects of KBT in adolescent patients with anorexia nervosa. Graute, Wessing, and Dalhoff (2023) conducted an observational cohort study with pre-post comparisons, using correlational analysis to explore relationships between therapeutic experience and changes in body size perception.

Bastoni et al. (2023) implemented a pilot intervention study with a pre-post design, employing standardized psychological scales such as the *Difficulties in Emotion Regulation Scale* (DERS), the *Toronto Alexithymia Scale* (TAS), and the *Multidimensional Assessment of Interoceptive Awareness* (MAIA). Their methodology enabled quantification of changes in emotional regulation, alexithymia, and bodily awareness following group D/MT sessions. Bravo et al. (2024), in their systematic meta-analysis, followed PRISMA guidelines and assessed risk of bias using the *Cochrane Collaboration Tool*. Their analysis included various movement-based therapies such as D/MT, yoga, psychomotor therapy, and body-awareness

interventions. Effectiveness was evaluated through forest plot analyses and standardized clinical scales, offering a comprehensive synthesis of outcomes across diverse therapeutic settings and populations.

A comparison of methodologies in older and more recent studies on dance/movement therapy for eating disorders reveals a clear shift toward greater research standardization. Earlier works (e.g., Feldman, 2017; Padrão & Coimbra, 2011) relied on non-structured observations, therapist journals, and clinical judgments, often lacking unified methodological frameworks. In contrast, studies published after 2020 (e.g., Syper et al., 2023; Bastoni et al., 2023; Bravo et al., 2024) employ validated instruments, structured qualitative analyses, and transparent research designs. This development reflects a growing effort to align creative therapeutic approaches with evidence-based practice.

3.3.5. Types of Dance/Movement Therapy and Other Therapeutic Interventions

The following information is drawn from the foundational studies to which this thesis refers and builds upon. A variety of approaches and models of Dance/Movement Therapy were employed across the studies. The American study by Krueger and Schofield (1986) adopted a psychodynamically oriented framework, while Savidaki et al. (2020) integrated Chace's method with guided imagery techniques. The concept of Authentic Movement was explored in Oppikofer (2012), emphasizing spontaneous bodily expression and inner awareness. In several cases, additional therapeutic interventions were either unspecified or embedded within multidisciplinary treatment settings. These included daily psychiatric consultations (Krueger & Schofield, 1986), verbal psychotherapy (Rice et al., 1989), and comprehensive treatment programs combining nutritional, medical, psychological, and experiential modalities (Feldman, 2017).

In the overview of studies published after 2020, several types of dance/movement and body-oriented therapies appear, reflecting different theoretical foundations and clinical objectives. Syper et al. (2023) applied a classical form of Dance/Movement Therapy within a phenomenological qualitative design, focusing on bodily experience and participants' subjective perspectives. Malkina-Pykh (2020) used Rhythmic Movement Therapy (RMT), a structured movement-based approach aimed at emotional regulation, body awareness, and behavioural change, integrated into a quantitative model of psychotherapy outcomes.

In the German context, KBT was used by Dalhoff (2022) and Graute, Wessing & Dalhoff (2023). This approach emphasizes body perception, boundaries, and relational patterns, and is primarily applied in adolescent psychiatry. Bastoni et al. (2023) conducted a group-based intervention using D/MT, which included expressive movement activities, guided improvisation, and reflection, with a focus on bodily awareness, emotional regulation, and group dynamics.

Bravo et al. (2024), in their meta-analysis, included various movement-based interventions such as D/MT, yoga, psychomotor therapy, and body awareness therapies. Their work highlights the growing diversity of body-oriented approaches in the treatment of eating disorders, as well as the need for their systematic evaluation.

Dance/movement therapy frequently appears in research as part of a broader therapeutic framework, complementing verbal, behavioural, or nutritional interventions. Syper et al. (2023) report that participants had received conventional treatment prior to engaging in D/MT, including psychotherapy and medical support. Malkina-Pykh (2020) combined RMT with CBT, integrating structured movement sequences into a psychotherapeutic model focused on emotional regulation, body awareness, and behavioural change.

In German studies, Dalhoff (2022) and Graute, Wessing, and Dalhoff (2023) applied KBT within adolescent psychiatric care, often in combination with group therapy, psychodiagnostics, and standard clinical treatment. Bastoni et al. (2023) describe D/MT as part of a multidisciplinary rehabilitation program that included ongoing psychological and nutritional support. The intervention was conducted in a hospital setting, where D/MT complemented standard care for individuals with eating disorders.

Bravo et al. (2024), in their systematic meta-analysis, included studies that combined D/MT with other movement-based therapies such as yoga, psychomotor therapy, and body awareness approaches. Their analysis highlights the diversity of clinical applications and the need for systematic evaluation of these interventions.

3.3.6. Characteristics of Dance/Movement Therapy Interventions

The following information is based on studies analysed in the previous thesis by M. Bucharová. Dance/Movement Therapy interventions were implemented in both short-term and long-term formats, ranging from three to 30 sessions, with specified durations between two and nine months. Most sessions were held weekly, with one study reporting twice-weekly group meetings (Krueger & Schofield, 1986). Therapies were conducted in both individual and group settings—group formats were described by Feldman (2017), Krueger & Schofield (1986), Padrão & Coimbra (2011), and Savidaki et al. (2020); individual formats were used by Kleinman (2015), Oppikofer (2012), and Rice et al. (1989).

Session structure was detailed in a few studies. Savidaki et al. (2020) outlined six phases including warm-up, guided movement, reflection, and diary writing. Similar elements appeared in Padrão & Coimbra (2011) and Feldman (2017). Rice et al. (1989) introduced a three-stage structure based on questions about bodily identity and capacity.

Applied techniques included breathing and relaxation exercises, guided imagery, thematic and free movement, movement with objects, mirroring, self-touch, reflective diaries, partner work, Chacian circle, body mapping, proximity exercises, and creating a safe space. Some sessions also incorporated drawing to express the therapeutic experience.

Recent studies published since 2020 present diverse approaches to D/MT and related body-oriented interventions, reflecting a shift toward research-based and clinically grounded practice. These studies emphasize mind-body integration, emotional regulation, somatic awareness, and group dynamics, each framed within distinct theoretical and methodological perspectives.

Syper et al. (2023), in a phenomenological study, explored participants' lived experiences with D/MT as part of eating disorder treatment. The intervention focused on non-verbal expression, strengthening body awareness, and supporting emotional processing. Emphasis was placed on integrating bodily experience into the therapeutic process to foster acceptance of the body and reduce psychological tension.

Malkina-Pykh (2020) introduced RMT, which combines elements of CBT with structured movement sequences. This approach targets emotional regulation, body awareness, and behavioural change. The study employed quantitative modelling to track

changes in BMI and psychological variables, contributing to individualized assessment of therapeutic effectiveness.

In the German context, KBT was applied by Dalhoff (2022) and Graute, Wessing & Dalhoff (2023). The KBT focuses on body perception, boundaries, relational patterns, and identity formation. In group interventions with adolescent patients diagnosed with anorexia nervosa, the therapy emphasized positive bodily experiences, therapeutic alliance, and improvement in body image. Despite persistent distortions in body perception, studies reported a correlation between positive bodily experiences and improved body size estimation.

Bastoni et al. (2023) conducted an open trial of group-based D/MT in a hospital setting. Sessions included expressive movement, guided improvisation, interoception, and reflection. Participants reported improvements in emotional regulation, body awareness, and group cohesion. Dance/Movement Therapy was perceived as a valuable complement to verbal therapies, supporting reconnection with the body.

Bravo et al. (2024), in a systematic meta-analysis, examined various movement-based interventions including D/MT, yoga, psychomotor therapy, and body awareness techniques. Their findings suggest the potential of these approaches to improve psychological well-being, body image, and quality of life in individuals with eating disorders. The authors also highlight the need for further high-quality randomized controlled trials to confirm the efficacy of these methods.

3.4. Dramatherapy and Psychodrama

For systematically analysing and synthesizing scholarly studies on dramatherapy and psychodrama in the treatment of eating disorders, an extraction table was created as a foundational analytical tool. This table in Appendix E contains detailed information on four scientific publications selected based on predefined criteria of relevance, quality, and thematic focus. The table includes one study on dramatherapy and three studies using psychodrama techniques. This dataset upgrades the previously mentioned scoping review by Bucharová (2022), whose final dataset included ten studies with dramatherapeutic or psychodramatic interventions.

3.4.1. Year and country

From the previous study by Bucharová (2022), we know that the year of publication of studies focused on dramatherapy or psychodrama ranges between the years 1989 to 2012. More specifically, studies with specific interventions from psychodrama were published between 1989 and 2012. Studies applying dramatherapy were published between 1994 and 2013. The later studies by Bailey (2012) and Pellicciari et al. (2013) were published thirteen and twelve years ago. Most of studies were conducted in Europe, specifically in UK, Italy and Netherlands. There were two studies from the USA and two more records with no specified country of origin (Jay, 1994; Young, 1994). Both dramatherapy and psychodrama were applied in research from the United Kingdom, while the United States of America conducted 49 studies using only the psychodrama framework.

In our upgraded dataset we found four studies, which span 2021–2024, with two very recent papers from 2024 (Dumont & Estellon; Szilárd et al.), one from 2022 (Wood et al.), and one from 2021 (Guimaraes & Nery). Geographically, the set covers Europe and South America: Dumont & Estellon originates from France, Szilárd et al. represents Hungary and the Central/Eastern European context, Guimaraes & Nery comes from Brazil, and Wood et al. reflects an international/Anglophone research collaboration published in an English-language journal. This distribution shows renewed contemporary interest in dramatherapy and psychodrama, combining regional scholarship in Europe and South America with broader international collaboration, and suggests both localized clinical perspectives and cross-national engagement with these therapeutic approaches.

The following table provides an overview of the latest studies according to the authors, year of publication and country of origin.

Table 4. Characteristics and summary of included Dramatherapy and Psychodrama studies.

Authors	Year	Country
Wood, L. L., Hartung, S., Al-Qadfan, F., Wichmann, S., Cho, A. B., & Bryant, D.	2022	International/Anglophone collaboration
Dumont, P., & Estellon, V.	2024	France
Guimaraes, J. S., & Nery, M. D. P.	2021	Brazil

The added studies reflect contemporary methodological and clinical developments not well represented in the previous sample summarized by Bucharová (2022). They show renewed empirical interest, more recent case series and clinical guideline-oriented work, and a tendency toward multinational collaboration and publication in specialty journals. This contemporary material allows updated discussion of intervention framing, cross-cultural application, and potential advances in clinical guidance that were not available in earlier publications.

Implications for our work integrating these four new studies into the original scoping framework strengthens the temporal currency and geographic diversity of the evidence base. The update supports revised conclusions about recent momentum in drama- and psychodrama-informed treatments for eating disorders and motivates targeted recommendations for future research focused on rigorous study designs, reporting standards, and cross-national comparisons.

3.4.2. Study Design and Settings

In the previous scoping review clinical case reports were identified in 60% of studies. Pellicciari et al.'s (2013) and Wur & Pope-Carter's (1998) studies were classified as case series. There was one paper presenting a clinical group report (Young, 1994). Bailey (2012) conducted a qualitative study based on grounded theory and lived experience methodology. The inpatient setting was present in several papers. Meillo (1991) presents data from the psychotherapeutic community for disturbed adolescents, similarly to Wurr & Pope-Carter (1998) who describe dramatherapy in a group in Child and Adolescent Service in Bradford. Italian study was carried out in Bologna Eating Disorder Center (Pellicciari et al., 2013). The outpatient setting was identified in three studies (Callahan, 1989; Jay, 1994; Jennings, 1994). The four newly added studies vary markedly in design and clinical setting, together illustrating the contemporary methodological mix in dramatherapy and psychodrama research.

Wood et al. (2022) is a synthesis-oriented, guideline-focused paper that uses literature synthesis and thematic analysis rather than primary experimental methods and therefore draws on interventions delivered across diverse settings including inpatient, outpatient, day services, and community programmes.

Dumont and Estellon (2024) presents a clinically oriented, qualitative case account of triadic psychodrama addressing denial in anorexia nervosa from psychoanalytic perspective, delivered in a clinical treatment context that interfaces with secondary child and adolescent psychiatric care and is consistent with an outpatient or community-based setting.

Guimaraes and Nery (2021) reports a single-case psychodrama study with an adolescent with bulimia nervosa, documenting therapeutic processes and outcomes consistent with outpatient psychotherapeutic delivery (individual or group psychodrama).

Szilárd et al. (2024) provides a brief service-based observational contribution derived from combined clinical care, implying integration across inpatient and outpatient pathways or multidisciplinary clinical services rather than a controlled trial design.

Collectively, these studies range from evidence synthesis to detailed clinical case descriptions and service-level observation; they contribute ecological and practice-relevant detail but are limited in generalizability by the predominance of case and observational designs, highlighting the need for more controlled and mixed-method research with clear reporting of setting, modality, and treatment fidelity.

The new material demonstrates clearer emphasis on synthesis and guideline translation (Wood et al., 2022) and greater attention to service-integration perspectives (Szilárd et al., 2024), but primary empirical designs remain predominantly case-based or observational. There is still a paucity of randomized trials, larger controlled cohort studies, or standardized outcome reporting compared with what would be needed to claim substantive methodological advancement.

Recent studies also more frequently situate interventions within explicit clinical pathways and discuss applicability across settings (inpatient, outpatient, day services), which aids clinical translation. Wood et al.'s synthesis helps aggregate diverse practices into guidance-informed recommendations, addressing a gap identified in earlier literature.

In summary, compared with the ten studies in Bucharová's scoping review, the four new studies add temporal currency, broader geographic representation, and a stronger

orientation toward synthesis and service-integration. However, methodological progress is incremental rather than transformative: contemporary contributions continue to favour case-based and observational designs, and the field still needs larger, controlled, and standardized studies to move from descriptive clinical knowledge toward robust, generalizable evidence.

3.4.3. Population

In the previous scoping review studies with psychodrama and dramatherapy interventions were applied with one patient or in a group. However, in the modality of dramatherapy/psychodrama, only one study describes the use of dramatherapy in the setting of individual sessions with one patient (Jennings, 1994). There were two male participants and 48 female participants. Diagnoses of AN, BN, and EDNOS were found within studies. In Bailey's (2012) study, two patients were diagnosed with a combination of BN and EDNOS. The youngest participant in sessions with dramatherapy and psychodrama principles was fourteen years old (Pellicciari et al., 2013). Drug abuse was comorbidity in one patient (Callahan, 1989) and a previous suicide attempt was recorded in anamnesis of one patient (Meillo, 1991). Further, substance misuse, self-harming behaviour and two cases with a history of abuse were comorbidities present in a group of patients in another study (Wurr & Pope-Carter, 1998). Three cases of childhood sexual abuse were described in a clinical group report by Young (1994).

The four newly added studies differ in population characteristics and clinical detail, and together they expand contemporary clinical descriptions. Across the studies the primary eating-disorder presentations described are anorexia nervosa (Dumont & Estellon, 2024; Szilárd et al., 2024) and bulimia nervosa (Guimarães & Nery, 2021), while Wood et al. (2022) synthesizes across multiple ED presentations. Comorbidity reporting is limited – the case reports emphasise affective and relational difficulties but do not systematically list additional psychiatric diagnoses.

Wood et al. (2022) is a synthesis/guideline paper drawing on mixed clinical samples across the literature; it reports both female and male cases with a broad age range (adolescents and adults) but contains no primary sample size because it is not an empirical study.

Dumont and Estellon (2024) is a single-case clinical report of a female adolescent with anorexia nervosa, offering detailed qualitative description of a triadic psychodrama intervention delivered within a clinical pathway interfacing with secondary child and adolescent psychiatric services.

Guimaraes and Nery (2021) is likewise a single-case psychodrama study of the one female adolescent with bulimia nervosa, focused on affective processes and therapeutic technique in an outpatient psychotherapeutic context (Multidisciplinary clinical practice in Brazil).

Szilárd et al. (2024) reports service-level observational data from combined clinical care with an implied mixed-gender and mixed-age sample; the brief report/abstract format indicates a larger but unspecified sample and emphasizes multidisciplinary, cross-setting care rather than a controlled intervention trial. The study compares two clinical groups within that service framework (interpreted here as inpatient versus outpatient pathways). One group consists of milder cases with Body Mass Index sixteen and higher, the second group consists of severe cases requiring inpatient admission. The sample is described as mixed-gender but is likely female-dominant given typical eating-disorder casemix; age ranges span adolescents through adults rather than a single age cohort. The report is presented as a brief abstract and does not provide a precise sample size or full demographic breakdown.

Across the four studies, female participants are predominant, adolescents are the explicit focus in the two case reports while the synthesis and service report encompass wider age ranges, and evidence levels cluster at low inferential strength (single-case and observational designs) with only the synthesis providing aggregated interpretation.

In terms of sample size and evidence level, there is little change: Bucharová's dataset and the new studies are both characterized by small, heterogeneous samples and a paucity of controlled trials. The clinical detail available in both bodies of work remains a strength, as many studies deliver rich process descriptions and therapeutic technique accounts; however, standardized outcome measures, explicit treatment dose, fidelity checks, and long-term follow-up are still rarely reported across both the historical and contemporary literature.

Notable progress is modest but meaningful in specific areas. Wood et al. (2022) advances the field by synthesizing evidence toward practice guidance and clinical

recommendations, which aids interpretability and translation of case-based findings into guidance for clinicians. Szilárd et al. (2024) points toward service-level evaluation and integrated care perspectives that were less visible in earlier reports.

Overall, the combined evidence base now offers richer clinical narratives, slightly broader geographic coverage, and initial moves toward synthesis and service-oriented reporting, but substantive progress toward higher-level evidence is still required.

3.4.4. Methodology of Relevant Studies

In the previous scoping review by Bucharová (2022) the specific methods for data collection were scarce in dramatherapy/psychodrama studies. *Toronto Alexithymia Scale* (TAS-20) and *Self Administrated Psychiatric Scales for Children and Adolescents* (SAFA) were administrated in Pellicciari et al.'s study (2013). Bailey (2012) conducted interviews on the procedure of open coding. One study applied a modified content analysis approach with one year later follow-up administrating questionnaires, analysis of their scale of task and level of socialization. However, analysed data were based on the author's reflection of the therapeutic meetings and were not collected through a structured methodological method.

The four newly added studies use predominantly qualitative, case-based, or service-level observational methods rather than controlled experimental designs, and methodological reporting reflects that orientation. Wood et al. (2022) is a synthesis and guideline-oriented paper that applies literature synthesis and thematic analysis to aggregate findings from diverse dramatherapy and psychodrama reports; it does not present a primary empirical sample but summarises measures and clinical indicators used across the literature it reviews.

Dumont and Estellon (2024) is a detailed clinical case study of triadic psychodrama for an adolescent with anorexia nervosa that uses qualitative case description, clinical observation, and process analysis to illustrate therapeutic mechanisms and change; the article emphasises therapeutic technique, transference dynamics, and clinical reasoning rather than standardized outcome batteries.

Guimarães and Nery (2021) reports a single-case psychodrama intervention for an adolescent with bulimia nervosa using qualitative case methods focused on affective

processes and psychodramatic techniques; the paper prioritises sessional process description and clinical interpretation over large-scale quantitative measurement.

Szilárd et al. (2024) is a service-level observational study that compares two patient subgroups within combined clinical care pathways and includes a control group for comparative analysis. The study uses a naturalistic, nonrandomized design focused on routine clinical populations treated within multidisciplinary services. Diagnostic and clinical assessment relied on structured diagnostic interviews using the *Mini International Neuropsychiatric Interview* (MINI) and the *Structured Clinical Interview for DSM-5 Alternative Model for Personality Disorders* (SCID-5-AMPD). Self-report measurement was collected via online questionnaires: the *Eating Disorder Inventory* (EDI-I), *Mentalization Questionnaire* (MZQ), *Dissociation Questionnaire* (DIS-Q), *Symptom Checklist-90* (SCL-90), *Patient Health Questionnaire-9* (PHQ-9), *State-Trait Anxiety Inventory* (STAI), *Childhood Trauma Questionnaire* (CTQ), and *Young Parenting Inventory* (YPI). Assessments captured diagnostic status, symptom severity, personality features, trauma history, general psychopathology, depression and anxiety symptoms, and developmental/parenting-related variables. Analytic approach compared patient subgroups and controls on diagnostic interviews and questionnaire outcomes to evaluate differences in clinical profile and treatment-relevant characteristics.

Across these four contributions, standardized questionnaire use and formalized outcome measurement are inconsistently reported. The synthesis (Wood et al.) references a range of outcome indicators and assessment tools reported in the broader literature but does not itself administer or report new psychometric data. The two single-case reports (Dumont & Estellon; Guimarães & Nery) foreground qualitative clinical process and therapeutic technique with limited standardized outcome panels presented. The service-level abstract (Szilárd et al.) implies routine clinical assessment within multidisciplinary pathways but does not detail any statistical analyses. The study's statistical approach increases analytic rigor relative to single-case reports by quantifying group differences and candidate predictors, but its observational design, likely non-random group allocation, and limited abstract reporting constrain causal claims and full methodological appraisal.

Methodological implications for the field and for this thesis: these studies provide rich clinical description and practice-relevant detail, especially about psychodramatic and dramatherapeutic techniques, clinical reasoning, and service integration. However, they offer limited standardized outcome data, small or unspecified samples, and few fidelity or

dose metrics, which constrains generalizability and comparative synthesis. Future primary research should combine the descriptive strengths of case and service reports with clearer methodological rigour by (1) specifying standardized assessment batteries and time points, (2) reporting sample characteristics and sample sizes clearly, (3) documenting treatment dose and fidelity, and (4) where possible, using mixed-method or controlled designs to strengthen inference while retaining clinically rich process data.

3.4.5. Types of Dramatherapy/Psychodrama and Other Therapeutic Interventions

In the previous study by Bucharová (2022) there was a little specification about dramatherapy types used, however, Young (1994) specified her dramatherapeutic approach as embodied projection. In the paper of Pellicciari et al. (2013) dramatherapy with a combination of psychodrama principles was applied. A complex treatment program was a part of treatment in one text (Levens, 1994). Further, interventions of dramatherapy and psychodrama were applied simultaneously with individual/group psychotherapy, family therapy, support groups, socio therapy, medical and nutritional support or occupational therapy sessions in various combinations.

The first from the recent studies by Wood et al. (2022) synthesise a range of dramatherapy and expressive approaches reported in the literature rather than delivering a single standardized intervention. The synthesis emphasises drama therapy in clinical formats such as therapeutic theatre and Co-Active Therapeutic Theatre, uses role work, enactment, symbolic embodiment, role reversal, and projective role techniques, and situates these methods within multidisciplinary care pathways. The paper highlights flexibility of delivery across individual, group, and family formats and frames dramatherapy as a modality that supports neural integration, self-atonement, identity work, and experiential re-authoring of the eating-disorder narrative.

Dumont and Estellon (2024) describe a triadic psychodrama intervention focused on an adolescent with anorexia nervosa who refused inpatient care. The psychodrama is explicit in method: protagonist role enactment, auxiliary egos, director interventions, enactment of symbolic scenes that externalise denial, and relational re-enactment to challenge defensive structures. The triadic format includes the patient, a close other (family member or carer),

and the therapist/director, with emphasis on relational dynamics, containment of denial, and facilitating shifts in illness identity through enacted relational experience.

Guimarães and Nery (2021) present a single-case psychodrama therapy for an adolescent with bulimia nervosa that foregrounds affective processes and the concept of the “wounded inner child.” The intervention uses classic psychodramatic techniques: role reversal, doubling, soliloquy, and concretisation of internal scenes, combined with psychotherapeutic exploration of early attachment and affect regulation patterns. The work prioritises affect restructuring, embodied expression, and reintegration of split self-states through repeated enactment and reflective processing.

Szilárd et al. (2024) report psychodrama delivered alongside a range of other psychotherapeutic modalities in an integrated clinical service. Psychodrama is one of several treatments offered; other named modalities include Cognitive Behavioural Therapy (CBT), Schema Therapy, and Katathym Imaginative Psychotherapy (KIP). Psychodrama in this study is described as part of multimodal care pathways, used in conjunction with manualized and structured treatments, and evaluated within a comparative, questionnaire-based research design.

The four studies collectively show progress in integrating psychodramatic and dramatherapeutic methods within broader clinical pathways and multidisciplinary services. Szilárd’s inclusion of psychodrama alongside CBT, Schema Therapy, and KIP illustrates practical pluralism and service integration not as visible in earlier isolated case literature. Single-case reports (Dumont & Estellon; Guimarães & Nery) continue to deliver rich procedural detail that advances clinical understanding of technique application, but they do not substitute for standardized protocols or fidelity reporting. Szilárd represents methodological advancement by evaluating psychodrama within a comparative, questionnaire-driven framework that allows group comparisons and statistical inference.

Across the four studies psychodrama and dramatherapy are applied with varying degrees of specificity. This pattern shows growing clinical integration and measurement orientation while underscoring the need for standardized protocols and controlled evaluations to consolidate evidence for specific techniques and delivery formats.

The group of ten studies summarized by Bucharová (2022) emphasizes descriptive reporting of classical techniques without consistent protocolization or fidelity monitoring. The newer single-case studies supply more granular procedural detail about how classical

psychodramatic techniques are enacted and tailored to clinical targets, improving clinical transferability. Szilárd represents a clear change in orientation: psychodrama is not presented in isolation but as a pragmatic element of integrated treatment packages delivered within inpatient and outpatient pathways and assessed with structured diagnostic interviews and broad self-report batteries. Wood's synthesis advances interpretive translation by linking varied dramatherapy practices to clinical guidance rather than isolated case description.

Progress is observable but incremental. Improvements include:

- Greater clinical integration: psychodrama/dramatherapy appear more often within multidisciplinary treatment pathways and combined with evidence-based psychotherapies.
- Richer procedural reporting: recent case reports offer detailed descriptions of techniques and therapeutic targets that better support replication and clinical teaching.
- Enhanced measurement orientation: at least one new service study pairs psychodrama with structured interviews and standardized questionnaires, enabling comparative quantitative analysis.

Persistent limitations mirror those in the Bucharová's review: a continued lack of manualized protocols for dramatherapy/psychodrama, sparse fidelity assessment, few randomized or controlled trials, inconsistent outcome sets and limited long-term follow-up. Thus, methodological maturation is partial—technique description and service integration have improved, but rigorous evaluation of efficacy and mechanisms remains inadequate. To consolidate progress the field should prioritize development and testing of manualized psychodrama/dramatherapy protocols with built-in fidelity measures, design controlled and pragmatic trials comparing standalone and integrated delivery across inpatient and outpatient settings, and adopt standardized outcome batteries that include symptom, functional and process measures.

3.4.6. Characteristics of Drama Therapy/Psychodrama Interventions

Dramatherapy and psychodrama interventions are applied mostly in group settings. There was only one study utilizing interventions of dramatherapy in an individual setting (Jennings, 1994). This is also one of the main aspects distinguishing DT and psychodrama from other AsTs. The itinerary of group sessions of dramatherapy was described by Pellicciari et al.

(2013). Their sessions began with a warm-up which took around 30 minutes. Choice of a character was the next step in the session, this contained reflection upon similarities to the patient and chosen character. Further, the chosen character was developed through various exercises and the last part contained a performance, possibly with an audience.

Following interventions are being applied in dramatherapy/psychodrama sessions with clients with EDs: techniques working with roles (role play, improvisation role play, role-reversal, group roles), creation of theatre of the past/present/future (use of pictures, models, stories, patient in the role of director or performer), use of guided fantasy to develop the journey metaphor, voice projection exercises, breathing exercises, mirroring, doubling, building obstacles (using materials in the room) and getting over it, bubble exercise, sculpture exercise (the group as a human body or small and large-scale sculpture), clock exercise, the magic shop – imagery buying and selling personal qualities, Theatre of the Oppressed exercises, empty chairs technique. There were also other engaging methods of other AsTs modalities like writing-based exercises, drawing of patient's native village and her home or building native village with variety of toys.

Wood et al. (2022) characterises dramatherapy interventions across the literature with emphasis on: role-based enactment (role reversal, projective role work), symbolic embodiment, therapeutic theatre formats, and experiential re-authoring techniques. Delivery formats described include individual and group DT, family-facing theatre work, and community or day-programme implementations. Clinical targets highlighted are identity work, neural integration and self-atonement, trauma processing, and the reconstruction of the eating-disorder narrative. The study emphasises flexibility of techniques to match setting and client needs and links methods to practice guidelines rather than prescribing a single manualized protocol.

Dumont & Estellon (2024) present key characteristics: protagonist-centred enactment with auxiliary egos; director interventions guiding enactment sequences; classical psychodramatic techniques including role reversal, doubling, soliloquy, and concretization; triadic structure that intentionally involves the patient, a close other (family member or carer), and the therapist/director to work directly on relational dynamics. Therapeutic targets are denial of illness, transference and relational defences, and reorganisation of defensive structures through enacted relational experience. Intervention emphasis is clinical process and transference change rather than standardized outcome measurement.

Guimarães & Nery (2021) report a single-case psychodramatic psychotherapy for an adolescent with bulimia nervosa. Intervention characteristics include classical psychodrama technique use (role reversal, doubling, soliloquy, scene concretization), iterative enactment focused on affective repair, and explicit work with the “wounded inner child” construct. The therapeutic orientation foregrounds affect regulation, attachment-related dynamics, and embodied expression; sessions prioritise experiential access to core affect and reparation via enactment. The report focuses on sessional process, clinical interpretation and observed clinical change rather than on extensive standardized psychometrics.

Szilárd et al. (2024) describe psychodrama embedded within a multimodal, service-level treatment package and provide the most structured, measurement-oriented context among the four studies. Psychodrama is delivered as one component within individualized treatment plans; describes pragmatic selection of modalities according to formulation and service allocation and the use of classical psychodramatic techniques in a clinical service context rather than as an isolated research protocol. The study pairs therapeutic delivery with systematic assessment (structured diagnostic interviews and a broad online questionnaire battery), allowing comparative quantitative analyses between patient subgroups and controls.

Compared with the Bucharová’s corpus, the newer studies show clearer procedural transparency in single-case descriptions, allowing improved clinical transferability. They also demonstrate stronger service integration: psychodrama is increasingly presented not as an isolated arts intervention but as a component within multidisciplinary treatment pathways and individualized care plans. This integration is most explicit in Szilárd, where psychodrama coexists with manualized psychotherapies and is evaluated within a measurement-driven framework.

Measurement orientation has improved but remains uneven. Bucharová’s set generally prioritised process description with inconsistent psychometrics. Among the four newer studies, Szilárd markedly increases the use of structured assessment and comparative quantitative analysis, while Wood synthesizes measures used in the wider literature and the two case reports continue to emphasise qualitative process and clinical outcome narrative. Across both older and newer bodies of work, however, the absence of widely adopted, manualized psychodrama protocols and routine fidelity monitoring persists.

Theoretical and clinical targets have become more specific in recent work. Earlier studies tended to claim broad therapeutic benefits such as enhanced expression or social skills. The newer studies articulate more focused hypotheses: targeting denial and relational defenses in anorexia, reworking developmental affective wounds in bulimia, supporting identity reconstruction and trauma-sensitive integration across diagnoses, and using psychodrama pragmatically to address symptom and personality-linked treatment needs within multimodal care.

Overall progress is incremental. Advances include richer, more actionable technique descriptions in contemporary case reports, clearer embedding of psychodrama within multidisciplinary service pathways, and increased use of structured assessment in service evaluations. Remaining limitations mirror those identified by Bucharová: lack of standardized manuals and fidelity measures, few controlled or randomized evaluations isolating psychodrama's specific effects, limited long-term follow-up and small or unrepresentative samples. Future research priorities indicated by this comparison are development of manualized psychodrama protocols with fidelity checks, pragmatic controlled trials comparing standalone versus integrated delivery, adoption of standardized outcome batteries, and routine inclusion of longer-term follow-up and larger, more representative samples.

3.5. Multimodal approaches

The extraction table in Appendix F provides an overview of recent studies (2020–2024) focused on the use of arts-based therapies (AsTs) in combination with other therapeutic approaches. It includes information on authors, study type, country of origin, applied artistic modalities, as well as study settings, sample size, gender distribution, and participant age range. Most studies target adolescents in clinical and academic contexts, combining visual, movement-based, musical, and dramatic forms of therapy with psychotherapeutic and body-oriented methods. This data collection updates the master's thesis by Bucharová (2022).

3.5.1. Years and Country

Based on previous analysis, six studies were identified within the category of multimodal approaches, published between 1986 and 2015. The earliest study by Naitove (1986) focused on treating AN and BN through movement, poetry, and dramatherapy. Hinz and Ragsdell (1990) worked with BN patients using masks and video. Franks and Fraenkel (1991) applied D/MT and fairy tales, while Porter and Waisberg (1992) introduced an intensive day treatment model. Diamond-Raab and Orrell Valente (2002) explored the integration of art therapy, psychodrama, and verbal psychotherapy. After a thirteen-year gap, Karvonen (2015) published a study combining music therapy and movement.

Geographically, four of the six studies originated in the USA, one in Canada, and one in Finland, indicating a predominance of North American research while also reflecting international interest in multimodal therapeutic approaches.

This subchapter provides an overview of the publication years and countries of origin of the included studies. Its aim is to map the research contributions both chronologically and geographically, highlighting their international scope.

The following table provides an overview of the included studies according to the year of publication, country of origin, and author(s).

Table 5. Characteristics and summary of included studies describing multimodal approaches.

Author(s)	Year	Country
Monika Bucharová, Andrea Malá, Jiří Kantor, Zuzana Svobodová	2020	Czech Republic
Gabriela Patilño-Lalotse, Cristina Lindenmeyer, Irema Barbosa Magalhaes, Maurice Corcos, Aurélie Lentzmann, Hugue Szwiec, Benoît Navarre	2020	France
Chenyu Wang, Renshun Xiao	2021	China
Ward, W.	2022	Australia
Aleema Zakers & Valentina Cimolai	2023	USA
François Traby, Philip Garwood, Laura Di Ledolcico	2024	France
Samantha Steiner, Mara Dürk, Marco Warth	2024	Germany
Pedro Cruz Betin, Urquiza Nogueira, Bertasso de Araujo, and Antunes	2024	Brazil

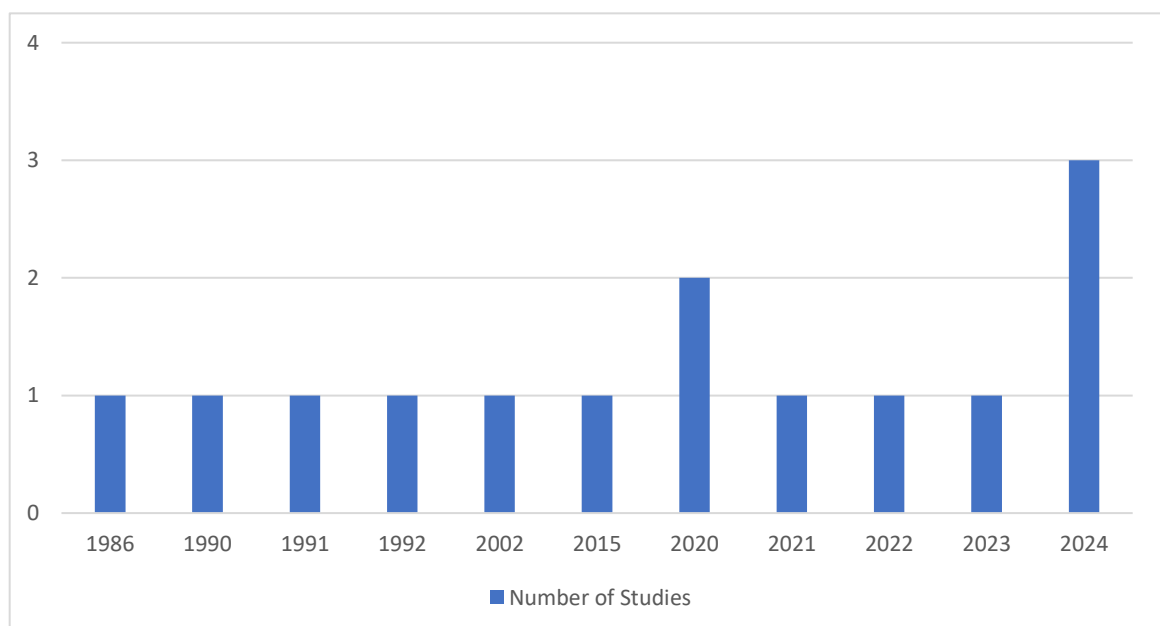
A chronological analysis of the included publications reveals a gradual increase in interest in expressive and multimodal therapeutic approaches in the context of eating disorders. The earliest studies date back to 2020, with Bucharová, Malá, Kantor, and Svobodová (2020) presenting research focused on the application of expressive therapies in educational and clinical settings. In the same year, Patilño-Lalotse et al. (2020) published work addressing culturally sensitive approaches in psychotherapy, thereby expanding the geographical and methodological scope of the field.

In 2021, Wang and Xiao (2021) contributed a pilot study focused on interoception and body awareness as key components of the therapeutic process. Their work signalled a shift toward neuropsychological grounding of expressive techniques. A year later, Ward (2022) published a reflective analysis of therapeutic processes, enriching the discourse with qualitative perspectives on change in psychotherapy.

The year 2023 brought the study by Zakers and Cimolai (2023), who explored the integration of somatic techniques into psychotherapy with an emphasis on client experience. Their research built on previous work while opening space for further clinical applications.

The largest number of publications comes from 2024, indicating a significant rise in research interest. Traby, Garwood, and Di Ledolcico (2024) analysed the therapeutic environment from the client’s perspective, while Steiner, Dürk, and Warth (2024) examined group dynamics in expressive therapy. The study by Cruz Betin et al. (2024) focused on community-based applications of expressive methods in culturally diverse contexts.

Figure 8. Number of Studies Describing Mutimodal Approaches Published in 1986–2024.



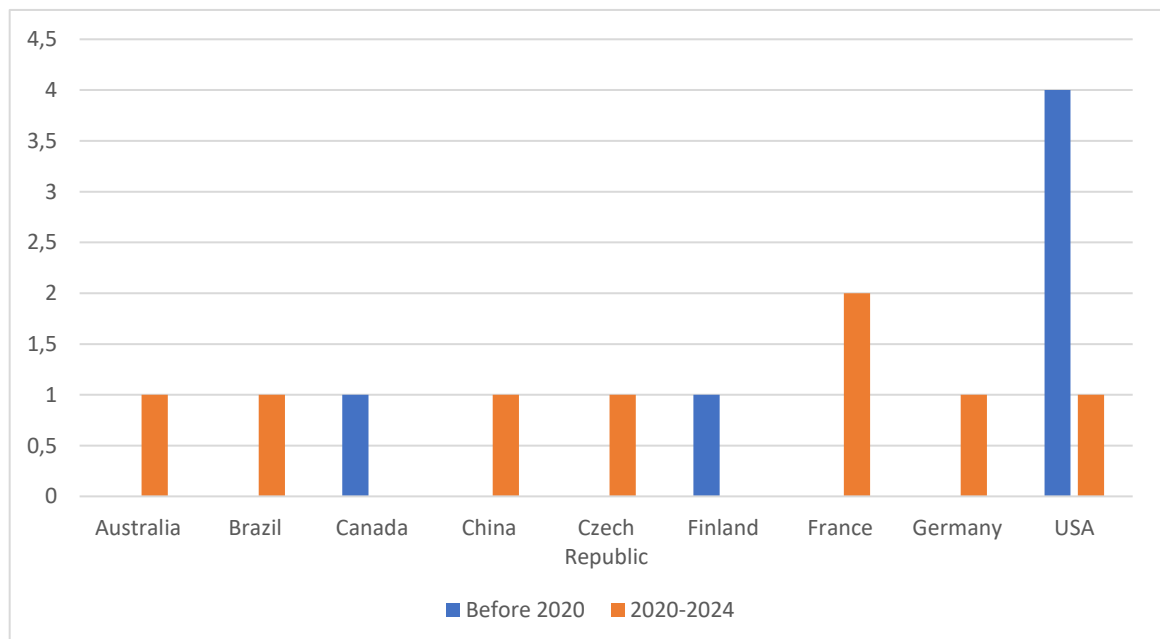
The reviewed studies span a diverse geographical landscape, reflecting the international scope of research on expressive and multimodal therapeutic approaches. Two studies published in 2020 originated from the Czech Republic and France, respectively. The Czech contribution by Bucharová, Malá, Kantor, and Svobodová (2020) explored therapeutic applications within educational and clinical contexts, while the French study by Patilño-Lalotse et al. (2020) emphasized culturally sensitive psychotherapeutic practices.

In 2021, Wang and Xiao conducted research in China, contributing insights into interoceptive awareness and its relevance in therapeutic settings. The following year, Ward (2022) from Australia presented a reflective analysis of therapeutic processes, adding a qualitative dimension to the discourse.

The United States entered the field in 2023 through the work of Zakers and Cimolai, who examined somatic integration in psychotherapy. In 2024, France contributed a second study by Traby, Garwood, and Di Ledolcico, focusing on client perspectives in therapeutic environments. Germany's Steiner, Dürk, and Warth (2024) investigated group dynamics in expressive therapy, while Brazil's Cruz Betin et al. (2024) explored community-based interventions within culturally diverse populations.

This international distribution of studies underscores the global relevance of expressive therapies and highlights the methodological and cultural diversity shaping contemporary therapeutic research.

Figure 9. Studies describing Multimodal Approaches by Country: Before 2020 and Between 2020 – 2024.



3.5.2. Study Designs and Settings

Most studies using combinations of arts-based interventions published up to 2020 were classified as clinical case reports (67 %). The paper describing an intensive day treatment model by Porter and Waisberg (1992) presents a quasi-experiment without a control group.

Recent research in the field of arts-based interventions demonstrates a growing methodological diversity, with study designs tailored to specific goals and contexts. Organizing the studies chronologically reveals a shift from conceptual and mapping approaches toward systematic reviews and quantitative comparisons.

In 2020, two studies focused on mapping and conceptual development. Bucharová, Malá, Kantor, and Svobodová (2020) presented a scoping review protocol based on the Joanna Briggs Institute methodology, aiming to identify the scope and nature of existing literature in inclusive arts education. In parallel, Patilño-Lalotse et al. (2020) published a clinical conceptual study grounded in interdisciplinary therapeutic practice, offering a theoretical framework for future applications of arts-based methods in clinical settings.

In the following year, Wang and Xiao (2021) conducted a quantitative comparative study using a two-group design to evaluate the effects of an arts-based intervention. Their study included both pre- and post-test measurements in experimental and control groups, providing stronger internal validity and enabling causal conclusions about intervention effectiveness.

Ward (2022) published a descriptive clinical report documenting the use of arts-based methods in a specific clinical setting. This design is well-suited for illustrating practical aspects of therapeutic work, though it does not include statistical comparisons or control mechanisms.

In 2023, Zakers and Cimolai presented a narrative review synthesizing theoretical and practical insights from the field of expressive therapies. Narrative reviews allow for flexible interpretation and integration of diverse sources, supporting the development of conceptual frameworks.

The year 2024 marked a clear shift toward more systematic and analytical approaches. Traby, Garwood, and Di Ledolcico (2024) published a systematic review of controlled clinical trials, offering an evidence-based framework for evaluating the effectiveness of arts-based interventions. Steiner, Dürk, and Warth (2024) conducted an integrative literature

review with thematic network analysis, combining qualitative and quantitative methods to explore relationships between key concepts. Finally, Cruz Betin et al. (2024) applied JBI methodology in a systematic review, which also proposed a theoretical model for future research in arts-based interventions.

The evolution of arts-based intervention research over recent years reflects not only methodological diversification but also a broadening of contextual settings—from specialized clinical environments to multinational academic collaborations. This chronological overview highlights how study settings shape the scope, applicability, and interpretive depth of each research design.

In 2020, two studies laid foundational groundwork for mapping and conceptual development. Bucharová, Malá, Kantor, and Svobodová conducted a scoping review protocol within multinational clinical, academic, and therapeutic settings, aiming to identify gaps in inclusive arts education. In parallel, Patilño-Lalotse et al. presented a clinical conceptual study rooted in interdisciplinary therapeutic practice, though the study did not specify a particular institutional setting.

In 2021, Wang and Xiao implemented a quantitative comparative study at the Affiliated Hospital of Jinggangshan University in Jiangxi Province, comparing treatment and control groups using pre/post measures. This hospital-based setting enabled structured data collection and clinical relevance.

Ward's 2022 descriptive clinical report focused on Wandí Nerida, Australia's first residential eating disorder recovery centre, offering a unique lens into long-term therapeutic engagement in a specialized residential context.

In 2023, Zakers and Cimolai published a narrative review that was literature-based, without anchoring in a specific clinical setting. This allowed for broader theoretical synthesis across diverse therapeutic models.

The year 2024 marked a surge in multinational and integrative research. Traby, Garwood, and Di Ledolcico conducted a systematic review of controlled clinical trials across clinical and academic settings, drawing from studies in multiple countries. Steiner, Dürk, and Warth followed with an integrative literature review with thematic network analysis, emphasizing adolescent clinical settings within a multinational scope. Finally, Cruz Betin et al. (2024) contributed a systematic review and theoretical model proposal, grounded in

clinical and therapeutic settings including outpatient programs, hospital-based interventions, and community workshops.

This progression illustrates how arts-based research increasingly bridges disciplines and geographies, adapting to varied institutional contexts while refining methodological rigor.

3.5.3. Population

Based on previous research, the following characteristics emerged regarding the sample in studies focused on multimodal arts-based interventions. The dataset included a total of 24 participants, of whom 23 were female and one male. The age range spanned from sixteen to 30 years, indicating a focus on adolescents and young adults. A diagnosis of AN was present in five studies, while BN appeared in three. No study focused on the treatment of patients with BED or EDNOS, highlighting certain limitations in diagnostic coverage.

Comorbidities were reported in three studies, most commonly depressive symptoms ranging from low mood to severe depression. These symptoms were documented in studies by Diamond-Raab & Orrell-Valente (2002), Karvonen (2015), and Naitove (1986). The same three studies also reported self-injurious behaviour, suicidal ideation, and anxiety disorder, indicating a high level of psychological distress among the participants included in the research.

Gender composition plays a key role in interpreting the results of studies focused on arts-based interventions, particularly in the context of mental health, expressive therapies, and inclusive education. Among the studies published between 2020 and 2024, the most common population type is mixed gender, with two studies reporting predominantly female samples and one focusing on youth without specifying gender.

Mixed-gender populations are reported in studies by Traby, Garwood, and Di Ledolcico (2024), Bucharová et al. (2020), Ward (2022), Steiner, Dürk, and Warth (2024), and Wang and Xiao (2021). This composition allows for broader generalization of findings and reflects the diversity of experiences across gender identities. For instance, the study by Wang and Xiao (2021), conducted in a hospital setting, compared the effects of an intervention between experimental and control groups, with mixed gender enhancing the validity of the results.

Predominantly female populations are noted in studies by Patilño-Lalotse et al. (2020) and Cruz Betin et al. (2024). Their focus on female groups may be linked to the higher engagement of women in expressive therapies, particularly in areas such as eating disorders, body image, and emotional processing. These studies also highlight the need for gender-sensitive approaches in therapeutic practice.

Zakers and Cimolai (2023) focus on youth in their narrative review, though gender is not specified. While the absence of gender data may limit interpretation, the emphasis on adolescent populations suggests a need for further research into gender dynamics during early developmental stages.

Overall, the studies from 2020 to 2024 reflect growing awareness of gender diversity, although not all research explicitly reports gender composition.

Age composition is a key factor in the planning, implementation, and interpretation of studies focused on arts-based interventions. A chronological analysis of studies published between 2020 and 2024 reveals that research teams worked with diverse age groups—from children to adults. While some studies included broad age ranges, others targeted specific developmental stages.

In 2020, two studies presented contrasting approaches. Bucharová, Malá, Kantor, and Svobodová (2020) worked with participants of all ages, reflecting an inclusive approach in educational and community-based interventions. In contrast, Patilño-Lalotse et al. (2020) focused on adolescents and young adults, highlighting the need for targeted therapeutic support during psychosocial development.

Wang and Xiao (2021) conducted a quantitative study in a hospital setting, working with adolescents, likely aged 12 to 18. This age group is frequently studied in mental health research, especially in the context of preventive and intervention programs.

Ward (2022) published a clinical report focused on adults aged 18 and older, consistent with the residential therapeutic setting, where adult clients often present with complex needs.

In 2023, Zakers and Cimolai expanded the age range by focusing on children and adolescents, emphasizing the importance of expressive therapies for school-aged and pre-school populations.

The year 2024 brought three studies with varied age focuses. Traby, Garwood, and Di Ledolcico (2024) worked with adolescents (12+) and adults, covering a broad spectrum of developmental needs. Steiner, Dürk, and Warth (2024) targeted adolescents aged approximately 12–18, a critical period for identity formation and emotional regulation. Finally, Cruz Betin et al. (2024) reported an age range of 15–40 years, bridging adolescent, young adult, and mid-adult populations within a single research cohort.

This chronological analysis shows that arts-based intervention research is increasingly responsive to age-specific needs, with adolescents emerging as the most frequently studied group. At the same time, there is a growing tendency to expand age ranges, supporting inclusivity and intergenerational approaches in therapeutic practice.

Sample size is a key indicator of methodological quality and the generalizability of findings in arts-based intervention research. A chronological analysis of studies published between 2020 and 2024 reveals a wide range of approaches—from extensive systematic reviews to precisely defined clinical cohorts.

In 2020, Bucharová, Malá, Kantor, and Svobodová included 62 studies in their final dataset, offering a broad overview of international approaches to inclusive arts education. In 2024, Traby, Garwood, and Di Ledolcico incorporated eight controlled clinical trials, focusing on the quality and comparability of research designs. Steiner, Dürk, and Warth (2024) reviewed 46 studies, indicating a comprehensive thematic analysis of adolescent-focused interventions. Cruz Betin et al. (2024) included 8 studies, most of which involved fewer than 50 participants, a common feature in therapeutic community research or pilot projects.

Wang and Xiao (2021) conducted a quantitative clinical study with a clearly defined sample: initially 72 adolescents, with a final sample of 66 participants after excluding 11 dropouts, evenly divided into control and treatment groups. This design allows for precise comparison of intervention effects.

In contrast, some studies did not report a specific sample size. Patilño-Lalotse et al. (2020) and Ward (2022) marked this information as not applicable (NA), likely due to the conceptual or clinical nature of their work. Zakers and Cimolai (2023) published a review article, where sample size was also not applicable, as the study involved a narrative synthesis of literature without primary data collection.

These exceptions highlight the diversity of research approaches in arts-based interventions—from empirical studies with well-defined samples to theoretical and review-based works where sample size is not a relevant parameter. Nonetheless, transparent reporting of sample size remains essential for assessing methodological rigor and practical relevance.

Eating disorders (EDs) are complex mental health conditions that require a multidisciplinary approach, including expressive and arts-based therapies. A chronological analysis of studies published between 2020 and 2024 reveals that research teams addressed a wide spectrum of diagnoses—from common forms such as anorexia nervosa, bulimia nervosa, and binge eating disorder, to less recognized categories like ARFID, OSFED, and EDNOS.

In 2020, Bucharová et al. included AN, BN, BED, ARFID, and OSFED in their study, reflecting current DSM-5 classifications. Patilño-Lalotse et al. (2020) worked with a similar range, explicitly noting specified and unspecified forms of EDs, highlighting diagnostic variability in clinical practice.

Wang and Xiao (2021) focused on AN, BN, BED, and OSFED, conducting their study in a hospital setting that allowed for comparative analysis across different types of disorders. Ward (2022) covered AN, BN, BED, and ARFID, expanding the scope to include avoidant and restrictive intake patterns that are often overlooked.

Zakers and Cimolai (2023) concentrated on AN, BN, and BED, aligning with the most frequently diagnosed EDs in adolescent populations. Traby, Garwood, and Di Ledolcico (2024) focused exclusively on anorexia nervosa, suggesting a deeper analysis of a single disorder within a specific context.

Steiner, Dürk, and Warth (2024) broadened their clinical scope to include AN, BN, BED, and EDNOS, reflecting historical classifications prior to the introduction of OSFED. Finally, Cruz Betin et al. (2024) addressed AN, BN, and BED, indicating a focus on the most prevalent forms of EDs within therapeutic communities.

This analysis shows that arts-based intervention research in the field of EDs is evolving toward greater diagnostic precision and inclusivity. While some studies concentrate on a single disorder, others encompass the full spectrum, supporting flexible therapeutic approaches that respond to individual client needs.

3.5.4. Methodology of Relevant Studies

These studies originate from previous research focused on methodological approaches in arts-based interventions for eating disorders. Porter and Waisberg (1992) measured symptoms of eating disorders using eight scales of the *Eating Disorder Inventory*. Personality traits were assessed through two clinical scales of the *Eysenck Personality Inventory* and Rotter's dimensions of internal versus external locus of control, using the *Self-Control Scale* by Reid-Ware and the *Multidimensional Internal-External Scale*.

In another study, video recordings were analysed by the therapist (Karvonen, 2015), representing a qualitative approach based on observation and reflection. The remaining studies did not apply any standardized measurement methods, indicating a predominantly narrative or theoretical character.

Based on previous research, a variety of methodological approaches have been identified in studies examining the effects of multimodal arts-based interventions. Studies published between 2020 and 2024 include systematic reviews, clinical observations, narrative reflections, as well as quantitative and qualitative research designs.

Bucharová, Malá, Kantor, and Svobodová (2020) conducted a systematic database search followed by a narrative synthesis, focusing on qualitative aspects of arts-based interventions in inclusive education. In the same year, Patilño-Lalotse et al. applied a systematic literature review centred on complementary and integrative medicine approaches, analysed through narrative synthesis.

Wang and Xiao (2021) employed a quantitative clinical design, comparing an intervention group (MT, AT, CBT) with standard care. To measure outcomes, they used standardized tools such as the BDI, *State-Trait Anxiety Inventory* (STAI), and the *Eating Disorder Examination Questionnaire* (EDE-Q 6.0).

Ward (2022) focused on clinical reflection within a multidisciplinary residential setting, using a narrative approach and case study analysis. Zakers and Cimolai (2023) approached the topic through literature synthesis and theoretical analysis, creating a framework for understanding arts-based interventions in mental health contexts.

In 2024, Traby, Garwood, and Di Ledolcico conducted a PRISMA-guided systematic review, including randomized controlled trials and comparing the effects of various therapeutic modalities (MT, AT, CBT) against standard care. Steiner, Dürk, and Warth

(2024) carried out a thematic analysis of psychiatrist interviews and proposed a theoretical model reflecting current and future roles of psychiatry in residential care. Finally, Cruz Betin et al. (2024) performed a systematic search across 14 databases, incorporating qualitative, quantitative, mixed-methods studies, and theoretical papers, resulting in a comprehensive framework for analysing arts-based interventions in residential treatment settings.

These methodological approaches demonstrate that research in arts-based interventions is multidimensional, integrating empirical data with theoretical frameworks and reflecting the need for a holistic perspective on mental health in both clinical and community contexts.

3.5.5. Types of Arts Therapies in Multimodal Approaches and Other Therapeutic Interventions

The studies identified in previous research were classified as multimodal, as they incorporated all major modalities of arts therapies. Each paper featured a variety of interventions, including visual, musical, movement-based, dramatic, and narrative approaches. Franks and Fraenkel (1991) applied techniques based on fairy tales combined with a dance/movement therapy approach. Naitove (1986) used movement, poetry, drama, and plastic arts as part of the therapeutic process with the client.

In addition to arts therapies, the studies included other therapeutic interventions such as family therapy, journaling (Diamond-Raab & Orrell-Valente, 2002), and interventions delivered within a multidisciplinary team (Naitove, 1986). These complementary approaches expanded the therapeutic possibilities and reflected the need for a comprehensive, individualized approach to patient care.

Based on previous research, a wide range of arts therapies have been identified across multimodal interventions targeting mental health and eating disorders. Studies published between 2020 and 2024 include combinations of visual, musical, movement-based, dramatic, and written therapies, with some incorporating multimodal approaches and psychoanalytic techniques.

Bucharová et al. (2020) applied art therapy, music therapy, dance/movement therapy, dramatherapy, and psychodrama, using a multimodal expressive therapy framework.

Similarly, Patilño-Lalotse et al. (2020) worked with a combination of AT and MT, reflecting the foundational pillars of creative therapies.

Ward (2022) utilized plastic arts (drawing, painting), music therapy, writing therapy, and D/MT, creating a diverse framework for individual expression. Zakers and Cimolai (2023) focused on creative therapies, specifically art therapy and music therapy, integrated into a broader narrative context.

Steiner, Dürk, and Warth (2024) applied visual art therapy, music therapy, D/MT, and dramatherapy, forming a comprehensive intervention model. Traby, Garwood, and Di Ledolcico (2024) expanded the concept of multimodality by incorporating vibroacoustic stimulation and psychoanalytic mediation through sound and bodily resonance, pushing the boundaries of traditional AsTs toward somatic experience.

Wang and Xiao (2021) and Cruz Betin et al. (2024) employed combinations of art therapy, music therapy, D/MT, and dramatherapy, with approaches tailored to both community and clinical settings.

This analysis demonstrates that research in arts therapies is methodologically diverse and reflects the need for individualized therapeutic approaches. Multimodal combinations allow for flexibility in the therapeutic process and support expression across multiple dimensions—visual, auditory, kinaesthetic, and narrative.

Previous research revealed a variety of complementary therapeutic approaches used in studies focused on mental health and eating disorders. Some studies compared the effectiveness of interventions with usual treatment, waiting lists, or other forms of psychotherapy, with art therapy occasionally combined with standard care (Ward, 2022).

Frequently applied methods included cognitive behavioural therapy, attachment-based approaches, psychodrama, and group psychotherapy, as reported by Bucharová et al. (2020). Some studies also employed cognitive remediation therapy (CRT), aimed at improving cognitive functioning. Steiner, Dürk, and Warth (2024) expanded the therapeutic framework to include psychodynamic therapy, nutritional counselling, and group psychotherapy, reflecting a comprehensive treatment approach.

Zakers and Cimolai (2023) incorporated psychotherapy, creative therapies, as well as gardening and cooking therapy and exercise-based interventions, which supported daily functioning and sensory regulation. Patilño-Lalotse et al. (2020) noted that arts-based

interventions were often integrated with CBT, FBT or acceptance-based therapy (ABT) as complementary methods.

Traby, Garwood, and Di Ledolcico (2024) extended the therapeutic scope by including psychoanalytic psychotherapy and interdisciplinary collaboration between psychiatry, psychotherapy, and somatics, emphasizing the role of body-oriented approaches. In the study by Cruz Betin et al. (2024), the therapeutic protocol also included pharmacological treatment, specifically lisdexamfetamine for binge eating disorder, highlighting a combined approach between biological and psychosocial interventions. Wang and Xiao (2021) applied CBT exclusively, positioning their study within a clearly defined methodological framework.

These complementary approaches suggest that mental eating disorders research increasingly moves toward integrated models of care, combining diverse therapeutic modalities to enhance treatment effectiveness and respond to the complex needs of patients.

3.5.6. Characteristics of Interventions of Arts Therapies in Multimodal Approaches

Studies published up to the year 2020 show that multimodal arts-based interventions were delivered in both individual and group formats, with session durations ranging from 45 to 105 minutes. Hinz and Ragsdell (1990) described a three-phase mask-making process involving creation, video-recorded self-reflection with the mask, and group feedback—less than half of the participants completed all phases.

In treating eating disorders, a wide range of techniques were applied within the multimodal framework: movement and body-based activities (breathwork, body boundaries, kinesthetic awareness), guided visualizations, art tasks (self-portraits, family paintings, mandalas, mood-based drawings, future-oriented themes), psychodrama, drama improvisation, collage-making, mirroring, journaling, supportive physical exercises, and symbolic “hunger journeys.”

The most recent studies published between 2020 and 2024 offer up-to-date insights into the characteristics of arts-based interventions applied within multimodal therapeutic frameworks. These interventions are marked by a strong emphasis on non-verbal expression, which helps bypass rationalization and verbal barriers. They have proven effective in addressing unresolved trauma, body image, identity, and emotional regulation. The creative

process serves as a vehicle for expression, communication, and meaning-making, while also strengthening the therapeutic alliance and client motivation (Bucharová et al., 2020; Ward, 2022; Patilño-Lalotse et al., 2020).

Some interventions were structured, while others were client-directed. Visual, movement-based, and sound modalities were frequently used as adjunctive therapies alongside conventional care (Steiner et al., 2024; Wang & Xiao, 2021). Particularly notable were approaches focused on sensory experience and bodily resonance, which proved effective in working with dissociation and body disconnection (Traby et al., 2024).

Several studies adopted a holistic, trauma-informed, and recovery-oriented framework, aiming to rebuild relationships with food, body, and self through creative engagement (Zakers & Cimolai, 2023). Depending on the context and target group, interventions were led either by trained art therapists or professionals with backgrounds in verbal therapies.

Overall, the arts-based interventions examined in these studies represent a comprehensive, flexible, and client-sensitive approach, enabling deeper introspection, emotional processing, and identity reinforcement through creative engagement.

3.6. Therapeutic Outcomes of Arts Therapies in Treatment of Eating Disorders

This data collection updates the master's thesis by Bucharová (2022), expands its findings with more recent studies, and complements current developments in the use of arts therapies in the treatment of eating disorders.

In the process of categorization, therapeutic outcomes related to AsTs have been sorted into the following thematic categories: improvement or reduction of eating disorders symptomatology, outcomes related to emotions, gaining insights, understanding and new perspective, outcomes related to self, learning new skills, reconnection between body and mind.

3.6.1. Improvement or Reduction of Eating Disorders Symptomatology

The following overview is based on earlier research studies to which our work is directly connected. These studies document positive changes in eating disorder symptoms following the application of various forms of expressive therapies. Improvement, reduction, or complete remission of symptoms was observed either through psychodiagnostics tools or as outcomes emerging directly from the therapeutic process.

In art therapy (AT), studies reported weight stabilization and a decrease in food-related obsession (Jeong & Kim, 2006), improved attitudes toward food (Rabin, 2003), symptom reduction based on self-report questionnaires (Steinbauer et al., 1999), and long-term positive outcomes confirmed by a general practitioner (Luzzatto, 1994).

In music therapy (MT), findings included weight stabilization (Heal & O'Hara, 1993), the ability to maintain a safe weight (Robarts, 1994), return of menstruation (Sloboda, 1994), reduced episodes of binge eating (Bauer, 2010), and symptom reduction in group settings (Trondalen & Skårderud, 2007). Songwriting was found to support body acceptance (McFerran & Heiderscheidt, 2016).

Dance/movement therapy (D/MT) demonstrated significant improvements in body satisfaction (effect size: 0.95), appearance evaluation (1.10), and reductions in appearance orientation (1.30) and overweight preoccupation (0.75) (Savidaki et al., 2020).

Drama therapy led to increased comfort in body perception (Wurr & Pope-Carter, 1998) and a reduction in disorder severity among all group members, with some achieving complete symptom remission (Young, 1994).

Multimodal approaches yielded substantial improvements: patients reached 95–100% of their ideal body weight (Diamond-Raab & Orrell-Valente, 2002), experienced reduced urges to binge and purge, and showed significant changes across EDI subscales in group therapy (Porter & Waisberg, 1992). Therapy also supported the development of a positive body image and emotional processing (Karvonen, 2015).

The most recent research findings in the field of arts-based therapeutic strategies highlight their growing relevance in reducing symptoms of EDs, depression, anxiety, and related psychological difficulties. These approaches foster emotional regulation, introspective processes, and therapeutic engagement, contributing to overall improvements in psychological functioning.

Music Therapy

In the study by Duconget et al. (2023), the course of treatment was monitored in adolescents with anorexia nervosa during a six-month music therapy program. Results showed that eight participants fully recovered, ten showed significant improvement, and two showed minor improvement, with statistical significance confirmed at $p < 0.05$. This study is among the few that provide quantitative evidence of music therapy's effectiveness in ED treatment.

Similarly, Krishna Priya et al. (2021) demonstrated that combining music therapy with psychological counselling led to measurable improvements in anorexia symptoms. Patients showed enhanced emotional well-being, motivation, and stress management, indicating the synergistic potential of music therapy as an adjunct to standard care.

Bhandarkar et al. (2024), in their narrative synthesis, highlighted positive effects of music on neuropsychiatric symptoms, especially in Alzheimer's disease, while also noting improved mood, quality of life, and reduced distress in ED populations. The authors emphasize the need for broader implementation in low-income settings and standardized protocols.

Ceccato and Roveran (2022) investigated the impact of group MT on pre-meal anxiety. Their findings revealed a significant reduction in anxiety compared to previous days without intervention, with a score of $t(23) = 3.847$, confirming statistical significance.

In a systematic review, Seppendorf et al. (2024) identified that MT improves quality of life, reduces depression and anxiety, and strengthens the therapeutic alliance. These effects were observed across various age groups and ED subtypes.

Coutinho et al. (2022) noted a lack of robust evidence, but identified increased treatment adherence, reduced need for medication, and improved therapeutic engagement among patients who participated in music therapy. The authors call for further research focused on methodological rigor and long-term outcomes.

Gómez-Neva et al. (2024) demonstrated that MT prior to weigh-ins in patients with AN led to reduced physiological arousal (e.g., blood pressure, heart rate) and lower anxiety, confirming the value of non-verbal, sensory-oriented interventions in acute care.

Finally, Spalatro et al. (2020) identified neurophysiological markers of reduced responsiveness to musical stimuli in patients with AN, suggesting specific patterns of

emotional dysregulation and potential endophenotypes of the disorder. These findings support the need for personalized music-based interventions.

In conclusion, MT has the potential to significantly reduce ED symptoms, particularly in the domains of anxiety, depression, body dissatisfaction, and physiological regulation. Its effects are clinically relevant and often synergistic with conventional therapeutic approaches.

Art Therapy

Within research focused on eating disorders, art therapy has emerged as an effective tool for improving psychological functioning and reducing symptoms. Several studies confirm that creative interventions can significantly contribute to enhancing motivation, interpersonal sensitivity, and emotional expression—key areas often affected in individuals with EDs.

Eren et al. (2023) highlighted the positive impact of AT on interpersonal dynamics and emotional catharsis, with participants reporting a marked improvement in overall functioning. Similarly, Soanferla et al. (2022) found that small group formats (up to 10 participants) fostered a significant increase in motivation for change – an especially important factor in ED treatment, where ambivalence toward recovery is common.

Group-based AT approaches also proved effective in the study by Chaidemenaki and Giannouli (2022), which demonstrated improved interpersonal responsiveness, supporting clients' ability to form and maintain relationships. Finally, although the study by Prijana et al. (2021) was primarily qualitative, it still showed a reduction in psychological distress and enhanced emotional expression among participants.

These findings suggest that AT can serve as a valuable complement to traditional therapeutic approaches in ED treatment, particularly in areas requiring strengthened motivation, emotional regulation, and social functioning.

Dance/Movement Therapy

Irina G. Malkina-Pykh (2020) introduced the GMultM model, which effectively predicts psychotherapy outcomes based on psychological variables such as perfectionism, locus of control, and body dissatisfaction. Using nonlinear regression modelling and sensitivity analysis, the study demonstrated that GMultM enables personalized assessment

of therapeutic effectiveness and supports targeted symptom reduction, especially in relation to BMI change.

In a more recent study, Bravo et al. (2024) examined the effects of multimodal art therapies on ED symptoms. Improvements were observed in emotional regulation, self-criticism, self-esteem, body image, and overall quality of life. Although the results were not statistically significant or consistent across studies, they suggest the potential of multimodal art therapies as a supportive tool in alleviating psychological manifestations of EDs. The authors emphasize the need for more rigorous randomized controlled trials to better evaluate therapeutic efficacy.

Drama Therapy and Psychodrama

Drama- and psychodrama-based interventions are reported to reduce binge–purge behaviours and improve eating attitudes in clinical and case-study contexts; programs that integrate expressive therapies with medical/nutritional care commonly report clinically observable decreases in symptom frequency and improvements in nutritional/medical status (Wood et al., 2022).

The psychodrama single-case report on an adolescent with bulimia nervosa documents clinical improvement in bulimic symptoms following psychodramatic psychotherapy focused on the wounded inner child and affective reprocessing; improvement is described as a reduction in bulimic episodes and greater spontaneous/regulatory eating behaviours (Guimarães & Nery, 2021).

The combined clinical-care study of anorexia describes improvements in psychological understanding and treatment engagement when psychotherapeutic work is integrated with somatic/medical care; the abstract emphasizes gains in psychological formulation linked to clinical improvement, though numeric effect sizes are not provided in the summary abstract (Szilárd et al., 2024).

Multimodal Approaches

The study by Trably et al. (2024b) examined the effects of music therapy, dance/movement therapy, and art therapy on psychological symptoms in individuals with ED. Findings indicate that MT significantly reduced post-meal anxiety, D/MT improved body dissatisfaction, and AT showed promise in fostering emotional resilience and self-awareness. The authors also noted high heterogeneity in study designs and measurement

tools, which limits the generalizability of results. Nevertheless, the study confirms the positive impact of AsTs on psychological well-being, treatment adherence, and emotional expression, suggesting their potential as complementary modalities to conventional therapeutic approaches.

Complementarily, the study by Wang and Xiao (2021) provides quantitative data on the efficacy of combined therapy (AsTs integrated with standard treatment). In the intervention group, significant reductions were observed in scores on the EDE-Q 6.0, BAI, and BDI scales, indicating improvements in ED symptoms, anxiety, and depression. Additionally, increases in body weight, BMI, and fat thickness were recorded, with statistically greater changes compared to the control group. Lower dropout rates and higher treatment satisfaction suggest a strengthened therapeutic alliance and increased patient motivation to remain in treatment.

Together, these studies affirm that expressive and multimodal therapeutic approaches can meaningfully contribute to the reduction of psychological symptoms in individuals with ED. Their effects are evident not only in decreased anxiety, depression, and body dissatisfaction, but also in enhanced adherence, emotional regulation, and overall satisfaction with treatment. These findings support further research aimed at standardizing methodologies and integrating AsTs into comprehensive care for individuals with eating disorders.

3.6.2. Outcomes Related to Emotions

Although most of the studies are older, research across therapeutic modalities confirms that arts-based therapeutic strategies effectively support the expression of suppressed emotions, particularly in individuals with eating disorders. Improvements in emotional states were measured using standardized tools such as the *Profile of Mood States* and *Subjective Units of Distress Scale* (Thaler et al., 2017b; Bibb et al., 2019).

In art therapy, inwardly directed anger was externalized through image-making (Jeong & Kim, 2006). Group sessions and museum-based interventions promoted self-expression and anxiety reduction (Johnson & Parkinson, 1999; Thaler et al., 2017b). Visual outputs served as safe containers for intense emotions (Rust, 1992), contributing to

emotional well-being (Ki, 2011). Rabin (2003) described a case in which the patient gained insight into her feelings and allowed herself to express them.

Music therapy helped patients remain with negative affect without reverting to ED symptoms (Heal & O'Hara, 1993), with musical expression often proving more effective than verbal communication (Sloboda, 1994). Music therapy also supported emotional memory and self-reflection (Trondalen, 2003). Bibb et al. (2015, 2019) reported significant reductions in post-meal anxiety ($p < 0.0001$), and MT was perceived as a distress tolerance technique and a tool for learning coping strategies (Bibb et al., 2016).

In dance/movement therapy, emotions were externalized through movement, symbols, and metaphors (Oppikofer, 2012; Feldman, 2017). Psychodrama enabled the processing of past experiences and fostered corrective emotional experiences (Jefferies, 2000; Young, 1994; Meillo, 1991). Notably, 71% of participants reported that positive feelings from sessions were accessible in everyday life (Pellicciari et al., 2013). Callahan (1989) documented personal improvements following psychodrama, including increased confidence and relational changes.

Multimodal approaches helped restore trust in the therapeutic process, reduced self-harm ideation, and facilitated the identification of underlying ED-related patterns (Diamond-Raab & Orrell-Valente, 2002).

The latest research in AsTs highlights their unique potential in processing, expressing, and regulating emotions among individuals with EDs and related psychological difficulties. Art, as a non-verbal language, enables access to emotional content that is often difficult to verbalize, creating space for deeper introspection and therapeutic connection.

Music Therapy

Applewhite et al. (2020) found that music evoked strong emotional reactions in patients with anorexia nervosa, often linked to positive memories but also to negative associations. Nevertheless, participants expressed a strong interest in music therapy as a potential therapeutic tool. Testa et al. (2020) build on these findings, highlighting that music supports emotional expression, regulation, and motivation, and is perceived by patients as a welcome complement to standard treatment.

Yu (2023) demonstrated that active forms of MT, such as group singing, led to reduced anxiety and distress, while passive listening positively influenced food intake.

However, some music videos had a negative impact on body image, underscoring the need for sensitive selection of musical material. Scotto Di Rinaldi et al. (2023) emphasized that MT can aid in emotional regulation, improve body image, and reduce anxiety, while also calling for more randomized controlled trials to confirm these effects.

Dvorak (2023), in his analysis of music therapists' clinical practice, identified key therapeutic goals such as emotional expression, body awareness, stress management, and identity development. Therapists also stressed the importance of safety, individualized intervention planning, and ongoing professional development. Heiderscheit (2023) adds that music therapy was well received by patients, supported emotional regulation, and improved treatment engagement, although no quantitative data were reported.

Li and Sang (2021) showed that music intervention led to reduced anxiety and improved patient cooperation, thereby strengthening the therapeutic alliance. Mastnak (2022) emphasized the strong emotional impact of music, its ability to evoke memories, and its function as a means of social connection. Chang et al. (2023), in their systematic review, confirmed that music-based interventions are helpful for emotional regulation, stress management, and social connection, although their impact on core ED symptoms such as body image or eating behaviour was limited.

Finally, Shah et al. (2023) warned that while music therapy can promote emotional regulation, body awareness, and group cohesion, it may also trigger negative memories or emotions. The authors therefore recommend clinical caution and careful assessment of individual patient responses.

These studies suggest that MT is an effective tool for working with emotions in individuals with ED. It supports expression, regulation, and emotional processing, thereby contributing to the overall therapeutic process. However, its effectiveness depends on a sensitive approach, individualized planning, and professional guidance.

Art Therapy

Art therapy research focused on emotional processes highlights the significant potential of visual art in supporting emotional expression, processing, and regulation. In these studies, art emerges as a tool that enables individuals to gain emotional freedom, autonomy, and deeper insight into their inner experiences.

Tan (2022) emphasizes that artistic creation offers space for emotional freedom and agency, enhancing individuals' capacity to make sense of and take ownership of their emotional lives. Similarly, Kuhnke (2020) found that art-making can support long-term trauma processing through creative engagement that activates deep emotional layers.

Griffin et al. (2023) demonstrated that AT is a practical and flexible intervention that enables emotional expression even without verbal language. Their earlier study (Griffin et al., 2021) also showed that art therapy fosters self-expression and self-awareness, helping participants explore their emotions in a safe environment.

Nagyomskuti Mertse et al. (2024) introduced an illustrated *Visual Analogue Scale* as a tool for tracking psychological progress, noting increased emotional expression and therapeutic engagement. Complementing this perspective, Yanir (2023) analysed symbolic patterns in artworks, which correlated with enhanced emotional expression and self-awareness.

These findings confirm that art therapy can serve as an effective means of emotional processing, particularly in the context of eating disorders, where emotional regulation is often disrupted. It allows clients to express complex inner experiences that might otherwise remain unspoken, thereby supporting the therapeutic process and emotional integration.

Dance/Movement Therapy

The research by Anke Dalhoff (2022) focuses on adolescents with anorexia and highlights the importance of emotional engagement within art therapy. The therapeutic process supported identity formation, strengthened relational dynamics (Ich–Du–Wir), and allowed clients to safely explore emotionally challenging themes. Working with imagery, colour, and symbolism created space for nonverbal expression of internal conflicts, thereby enhancing emotional regulation and relational connection.

In the study by Bastoni et al. (2023), the effects of D/MT on emotional regulation, alexithymia, and interoceptive awareness were examined. Significant improvements were observed in Difficulties in *Emotion Regulation Scale* and *Toronto Alexithymia Scale*, indicating that D/MT can effectively support the ability to identify, process, and express emotions. Increased scores in interoceptive awareness (*Multidimensional Assessment of Interoceptive Awareness*) further suggest a strong link between emotional and somatic experience.

Both studies confirm that expressive therapies can create a safe space for working with emotions that are often suppressed, unconscious, or fragmented in the context of EDs. Their ability to activate affective processes through bodily and creative expression represents a valuable contribution to holistic treatment approaches for eating disorders.

Drama Therapy and Psychodrama

Drama therapy and psychodrama interventions described in the articles converge on the view that action-based, embodied methods produce meaningful shifts in emotional awareness, affect regulation, and the symbolic processing of painful experiences. Wood et al. (2022) synthesize dramatherapy literature to argue that enactment, role-play, and metaphorical dramatization enhance clients' capacity to access, name, tolerate, and reframe emotions that are typically avoided or somatically dissociated in eating disorders; these affective shifts are presented as proximal mechanisms that permit downstream changes in eating behaviours and interpersonal responsiveness (Wood et al., 2022). In the single-case psychodrama report of an adolescent with bulimia, Guimarães and Nery (2021) document clinically meaningful improvements in affective processing—specifically increased ability to recognize and express previously suppressed feelings, reduced affect-driven impulsivity around food, and enhanced capacity to mentalize relational triggers of binge–purge episodes. Szilárd et al. (2024) report that when psychotherapeutic work is embedded within combined medical and multidisciplinary care for anorexia nervosa, patients show gains in the articulation of internal emotional states and in translating emotional insight into tolerable, embodied experiences that support nutritional and behavioural rehabilitation (Szilárd et al., 2024).

Across the three sources, authors emphasize common affective processes: (a) increased emotional granularity and labelling, which reduces diffuse distress and the need for maladaptive regulation strategies; (b) improved interoceptive attunement and bodily literacy, which re-links affective signals to adaptive self-care rather than punishment or avoidance; and (c) affect rescripting achieved via role reversal, doubling, and enactment, which permits corrective emotional experiences and changes in self-narrative (Wood et al., 2022; Guimarães & Nery, 2021; Szilárd et al., 2024).

Multimodal Approaches

Bucharová et al. (2020) emphasize that multimodal arts therapies provide a safe space for emotional expression and introspection. They help reduce ED symptoms, improve coping

strategies, and strengthen the therapeutic alliance. A key benefit is the opportunity for communication through non-verbal channels, which is especially important for patients who struggle to verbalize their internal states. The findings suggest that emotional regulation and increased self-awareness are crucial factors that support recovery motivation, improve interpersonal relationships, and foster greater acceptance of the body.

Similarly, the study by Zakers and Cimolai (2023) confirms that art therapies play a significant role in emotional processing and reducing resistance to treatment. The authors point out that these approaches enhance the therapeutic alliance, increase client engagement, and support emotional regulation. They allow patients to safely confront and express complex emotional content, which helps reduce internal tension and deepen psychological insight. These therapies also serve as a complement to standard treatment protocols, expanding the possibilities for individualized care.

Both studies affirm that emotion-focused expressive therapies represent a meaningful contribution to ED treatment. Their effects are evident in improved emotional regulation, strengthened therapeutic relationships, and increased motivation for recovery. These approaches enable patients to reconnect with their emotions, which is essential for deeper psychological work and long-term stabilization.

3.6.3. Gaining Insights, Understanding and New Perspective

Studies published up to 2020 suggest that arts-based therapeutic strategies support the development of insight into symptoms, behaviours, eating disorders, and interpersonal relationships. Understanding eating patterns can also help prevent maladaptive habits.

In art therapy, artmaking was linked to cognitive insight, decision-making, and problem-solving (Matto, 1997). Patients gained awareness of their eating issues (Rust, 1992; Luzzatto, 1994), family dynamics (Bloomgarden, 1997), and emotional experiences (Rabin, 2003). In Chaves' study (2011), 66% of participants reported improved understanding of others through group AT sessions, and 63% stated that art conveyed deeper feelings than words.

Music therapy helped patients recognize family roles (Sloboda, 1994), the function of their ED (Hilliard, 2001), cognitive distortions, and the role of support in recovery

(McFerran & Heiderscheidt, 2016). Insight was also gained by the patient's parents, who better understood her distress about weight gain.

In dance/movement therapy, audiovisual tools such as video recordings enabled patients to see themselves from a new perspective (Krueger & Schofield, 1986). Psychodrama facilitated re-experiencing past situations, understanding family dynamics, and recognizing cognitive patterns during binge episodes (Meillo, 1991; Jay, 1994; Levens, 1994a; Jefferies, 2000; Callahan, 1989).

Multimodal approaches also provided insight not only to patients but to members of the therapeutic team, expanding their understanding of the patient's experience (Naitove, 1986).

Recent research in AsTs highlights their value in facilitating introspective processes, fostering self-reflection, and enabling participants to gain new perspectives on their experiences, symptoms, and relationships. Their non-verbal nature, symbolic depth, and capacity to activate emotional layers of experience allow individuals in therapy to articulate complex internal content that might otherwise remain unexpressed.

Music Therapy

Patiño-Lakatos et al. (2023) demonstrated that vibrotactile music intervention enabled adolescents with anorexia to reinvest "disaffected" body zones, activate associative processes, and improve the verbalization of affective states. This process was interpreted as a form of psychic reorganization that fosters integration of bodily and emotional experience and opens space for deeper therapeutic insight.

Aitchison and Withington (2023) reflected on the challenges and opportunities of music therapy in adolescent care, highlighting its potential to stimulate neuroplasticity, support emotional exploration, and strengthen clients' ability to access inner resources. Music-based activities were designed to promote self-reflection, group dynamics, and transformative processes.

In their systematic review, Patiño-Lakatos et al. (2021) pointed out the underrepresentation of MT in research focused on student populations at risk for ED. However, they identified the potential of expressive approaches to support self-awareness, emotional processing, and identity reconstruction, emphasizing the need for more targeted research and methodological precision.

Heiderscheit (2023) analysed thematic and intertextual patterns within the Guided Imagery and Music method, identifying a narrative structure resembling the “hero’s journey”—from emotional landscape through relationships with self, others, and the disorder, to transformation, empowerment, and healing. Music therapy here appears as a space for deep introspection, symbolic processing, and the development of new perspectives on personal experience.

Finally, Heiderscheit and Murphy (2021) documented a case study in which a client, through co-created musical experiences, developed emotional regulation skills, stress management strategies, and self-discovery. Music enabled her to replace maladaptive behaviours (e.g., ED, self-injury) with more functional coping mechanisms, opening space for deeper trauma work.

Together, these studies show that MT can be an effective tool for fostering therapeutic insight, understanding of one’s experience, and the development of new perspectives on the self. Through sensory, symbolic, and narrative mediation, it allows clients to reflect on deep layers of identity, emotional patterns, and bodily experience, contributing to transformation and healing.

Art Therapy

Kiely et al. (2024) point out that in severe and enduring anorexia nervosa, self-perception is significantly disrupted, and art therapy can facilitate deeper insight into these complex internal states. Similarly, thematic analyses presented in a conference paper (NA, 2023) suggest that AT creates a safe, non-verbal space in which new meanings and understandings can emerge without the need for explicit verbalization.

Shaw (2020) focuses on the concept of mentalization and the distinction between the internal and external world, noting that the online format of art therapy may amplify existing difficulties related to “being seen” and authentic self-expression. In this context, art appears as a bridge between inner experience and the outer world.

Brinchmann et al. (2022) describe art as a form of non-verbal communication, where each “unpacking” of the artwork brought new insights into participants’ subjective experiences. Likewise, Peleg et al. (2022) identified drawing as an effective non-verbal channel that allows for the expression of psychological states that are difficult to articulate verbally.

Finally, Kaczmarek-Fojtar et al. (2022) emphasize that AT can activate introspective processes and enhance motivation for treatment, making it not only a diagnostic but also a transformative tool. These findings confirm that art therapy has the potential to foster deep self-understanding and support the healing process through visual and symbolic expression.

Dance/Movement Therapy

The research by Graute, Wessing, and Dalhoff (2023) focuses on the relationship between bodily experience and body perception in individuals with EDs. The authors found that even after completing therapy, many patients continued to overestimate their body size. However, those who reported positive bodily experiences during the therapeutic process showed significantly greater improvement in estimating their body size. This finding suggests that embodied experience can serve as a catalyst for correcting perceptual distortions and deepening self-awareness. An important aspect of the research was the role of group dynamics and the quality of the therapeutic alliance, which emerged as stable and positive factors influencing the overall therapeutic process. The group-based expressive therapy setting provided a space for sharing, mutual reflection, and confronting one's body image in a safe and supportive environment.

Drama Therapy and Psychodrama

Drama therapy and psychodrama interventions produce notable changes in interpersonal functioning, relational patterns, and sense of self that appear integral to recovery processes in eating disorders. Wood et al. (2022) synthesize clinical and programmatic evidence showing that enactment-based techniques (role-play, ensemble work, symbolic dramatization) create structured, low-threat opportunities for patients to experiment with new relational roles, practice assertive communication, and receive corrective social feedback; these experiences reduce social withdrawal and reshape maladaptive interpersonal scripts linked to disordered eating. Guimarães and Nery (2021) illustrate these processes ideographically in an adolescent with bulimia: psychodramatic enactments enabled the patient to externalize and re-evaluate relational narratives (family expectations, peer shame), which facilitated increased help-seeking, improved capacity to accept support, and diminished reliance on binge-purge cycles as a maladaptive interpersonal regulator. Szilárd et al. (2024) report parallel observations in anorexia treatment when psychotherapy is embedded in multidisciplinary care: collaborative team formulations and integrative interventions supported patients in reconstructing identity

narratives that had been narrowly centred on weight and control, increasing openness to relational repair and adherence to shared treatment goals.

Across the three sources, changes in relational functioning are described through three interrelated pathways. First, enactment and role exploration expand role flexibility and agency, allowing patients to try alternative relational responses in vivo rather than only cognitively rehearsing them (Wood & Hartung, 2022; Guimarães & Nery, 2021). Second, the group and relational context of drama/psychodrama provides corrective emotional experiences – safe witnessing, empathic mirroring, and renegotiation of shame-laden narratives – that weaken interpersonal avoidance and isolation (Wood et al., 2022; Szilárd et al., 2024). Third, integration with medical and family-involved care translates emergent intrapersonal insights into concrete relational changes (improved family communication, negotiated boundaries, coordinated support), which sustain behavioural and nutritional rehabilitation (Szilárd et al., 2024).

Multimodal Approaches

Ward (2022) emphasizes that expressive therapies support emotional regulation, identity reconstruction, and therapeutic involvement. Although the study does not include quantitative data, its qualitative findings suggest that patients gain deeper insight into their inner world through artistic expression. The psychiatrist's role is also pivotal, enabling the integration of medical and psychological care. This interdisciplinary approach fosters a more comprehensive understanding of symptoms and their connection to personal development, thereby increasing patients' readiness for long-term recovery.

Complementarily, Bettin et al. (2024) reflect on the methodological limitations of existing research while proposing a theoretical model that may guide future clinical applications. The authors note that despite the limited number of studies with statistically significant outcomes, some research indicates reductions in anxiety, depression, and body dissatisfaction. These findings are accompanied by enhanced emotional expression and therapeutic engagement, suggesting that ASTs may help patients symbolically process their experiences and gain new perspectives on their bodies, emotions, and relationships.

Together, these studies affirm that expressive and arts-based therapies can meaningfully contribute to the development of insight and understanding in individuals with ED. This process goes beyond symptom relief and involves a deeper transformation in the relationship to the self, which is a fundamental prerequisite for sustainable recovery. The

research also points to the need for further theoretical grounding and methodological precision to systematically integrate these qualitative benefits into clinical practice.

3.6.4. Outcomes Related to Self

Studies published up to 2020 show that arts-based therapeutic approaches significantly influence self-image, identity, and self-awareness in individuals with eating disorders. Themes such as true self, false self, distorted self, and the “anorectic self” appeared across modalities.

Art therapy supported deeper self-awareness, identification of personal needs, and confrontation with negative thought patterns (Misluk-Gervase, 2020a). Patients gained a sense of control over their environment (Bloomgarden, 1997) and recognized their ability to choose behaviours within family dynamics. Increased self-awareness was reported by 50% of participants (Chaves, 2011). Image-making helped separate identity from the mother (Jeong & Kim, 2006) and fostered personal development (Ki, 2011). TSCS results showed improvements in physical, personal, family, and social self (Rabin, 2003). AT also enhanced self-confidence and identity formation (Steinbauer et al., 1999), while themes of emptiness, loneliness, and anxiety over boundaries emerged (Wolf et al., 1986). The creation of a “recovered self” symbol marked therapeutic progress (Misluk-Gervase, 2020b).

Music therapy strengthened self-confidence (Lejonclou & Trondalen, 2009), supported a coherent sense of self (Trondalen & Skårderud, 2007), and had a regenerative effect on identity (Robarts, 2000). One patient expressed her “anorectic self” through violin improvisation (Sloboda, 1994).

Dance/movement therapy facilitated recognition of the whole self (Kleinman, 2015), and one study identified the theme of “true self” (Feldman, 2017). In multimodal approaches, the tension between real and false self was frequently discussed (Hinz & Ragsdell, 1990). A shift toward internal locus of control was observed (Porter & Waisberg, 1992), and combining music, movement, and dance helped improve self-esteem (Karvonen, 2015).

Arts-based therapeutic approaches play a crucial role in fostering self-awareness, rebuilding identity, and deepening the relationship to the self. Their non-verbal, symbolic, and sensory-anchored nature allows participants in therapy to access their inner experiences in ways that transcend verbal language. Research shows that AsTs not only support

emotional expression but also activate introspective processes that strengthen self-esteem, self-reflection, and new perceptions of the self.

Music Therapy

Pasiali et al. (2020) emphasize that MT can support self-discovery, emotional regulation, trauma processing, and identity development. Their clinical examples show that music serves as a tool for expressing internal conflicts, strengthening self-confidence, and activating transformative processes often inaccessible through standard verbal therapies.

Scotto Di Rinaldi (2020) presents the DéPi-AM protocol, focused on psychomusical relaxation for adolescents with AN. Results indicate high levels of satisfaction, therapeutic engagement, and a sense of safety. Patients appreciated the personalized approach, the opportunity for emotional expression, and the reinforcement of autonomy through musical preferences and individual choice.

Barnett et al. (2021) observed that during MT sessions, patients experienced increased positive emotional states, while periods without music were marked by a resurgence of negative emotions. These observations suggest that music can act as a stabilizing element that supports emotional balance and enhances receptivity to therapeutic processes.

Himmerich and Heiderscheit (2024) reflect on the use of MT as a nonverbal entry point into treatment, particularly for adolescents in acute phases of ED. The DéPi-AM protocol proved effective in reducing anticipatory anxiety, supporting emotional regulation, and restoring contact with the body. The authors also emphasize the importance of profiling patients for whom this approach is most suitable.

Together, these studies confirm that MT has the potential to foster a deep relationship with the self, restore a sense of identity, strengthen autonomy, and create space for safe emotional experience. In the context of ED, it appears to be a valuable tool that complements standard therapeutic approaches with a dimension of personal growth and self-reflection.

Art Therapy

Essayi et al. (2021) compared various therapeutic approaches and found that cognitive therapy was rated most positively, while AT was perceived as moderately credible. Nevertheless, non-verbal forms of expression appear to be more accessible and effective for some clients, particularly when working with complex emotional themes.

Herbert (2024) presents visual art as a means of exploring emotions, offering promising evidence for the effectiveness of expressive art-based therapy. These approaches allow clients to reflect on their experiences through creative processes, activating self-awareness and emotional processing.

Horton and Everett (2023) focused on adolescents, implementing an intervention that included visual art, storytelling, and metaphor. Their findings suggest that such multimodal approaches can be especially effective in supporting young people in self-expression and emotional development.

Finally, Hagan et al. (2021) conducted a four-week AT intervention that identified three main themes reflecting participants' individual experiences. These qualitative outcomes demonstrate the ability of art therapy to facilitate deep personal insights that can enhance the therapeutic process and strengthen clients' internal resources.

Overall, these studies confirm that AT can be an effective means of fostering self-awareness, particularly when intuitive, symbolic, and non-verbal forms of expression are needed.

Drama Therapy and Psychodrama

Identity-related outcomes reported by the authors emphasize narrative expansion and de-identification from the eating disorder. Drama-based methods facilitate externalization and rescripting of self-stories that had been rigidly defined by body-focused ideals or perfectionistic roles; patients increasingly describe more multifaceted self-concepts, greater self-compassion, and a loosening of identity fusion with disordered behaviours (Wood et al., 2022; Guimarães & Nery, 2021). In combined-care contexts, multidisciplinary teams can help consolidate these nascent identity shifts into everyday functioning by aligning therapeutic, medical, and familial messages that validate a broader self-definition beyond symptomatology (Szilárd et al., 2024).

Multimodal Approaches

In this area, the study by Steiner, Durk, and Warth (2024) offers valuable insights into the use of AsTs among adolescents with ED. The authors identified three overarching thematic domains: emotional processing, identity reconstruction, and the therapeutic relationship. These domains reflect how AsTs help young people externalize the eating disorder and construct a new, healthier narrative about themselves. The therapies supported

the development of self-esteem, autonomy, and interpersonal skills, contributing to the reinforcement of personal identity and the ability to reflect on one's own experiences. At the same time, they enabled adolescents to safely explore and reassess their relationship with their bodies, laying the foundation for deeper psychological transformation. In terms of therapeutic outcomes, the study reported improved emotional regulation, reduced ED symptoms, increased motivation for recovery, and strengthened therapeutic alliance. Arts therapies were perceived by adolescents as meaningful and empowering, indicating their potential not only as a complement to standard treatment but also as a means of fostering personal growth and self-awareness.

3.6.5. Learning New Skills

Earlier research shows that arts-based therapeutic approaches help patients develop skills applicable in everyday life, which can support recovery beyond the therapeutic setting.

In art therapy, art was recognized as an empowering tool that fosters decision-making and problem-solving (Matto, 1997). Techniques such as watercolour painting helped one patient develop self-soothing skills, which proved essential in her recovery process (Estep, 1995).

Music therapy was described as a means of expressing identity, tolerating distress, and learning new coping strategies (Bibb et al., 2016). A cognitive-behavioural approach within MT also supported the development of coping skills in a group of patients with EDs (Hilliard, 2001).

Psychodrama interventions likewise proved effective in teaching coping strategies (Jay, 1994).

Arts-based therapeutic strategies serve not only as tools for processing emotions or trauma but also as spaces for developing new skills that support psychological stability, self-expression, and social functioning. The creative processes activated within art therapy enable participants to acquire practical, emotional, and interpersonal competencies that are applicable both within and beyond the therapeutic setting.

Art Therapy

Art therapy has proven to be an effective tool for developing new skills that support emotional integration and therapeutic engagement. Sudres et al. (2020) demonstrated its cost-effectiveness and long-term benefits in emotional processing. A group-based experiential intervention by Hunt et al. (2021) achieved a high completion rate (87.5%), indicating growth in persistence, personal involvement, and group collaboration. These findings suggest that art therapy contributes not only to treatment but also to the acquisition of practical skills essential for mental health.

Drama Therapy and Psychodrama

The three articles converge in describing therapeutic outcomes that can be conceptualized as acquisition and consolidation of practical skills delivered through enactment-based, experiential methods and multidisciplinary scaffolding. Across sources, patients gained improved emotional awareness and labelling, learning to notice, name, and differentiate feelings that previously remained diffuse or somatically dissociated – skills practiced through role enactment, doubling, and reflective group processing (Wood et al., 2022; Guimarães & Nery, 2021; Szilárd et al., 2024). They also learned adaptive affect-regulation strategies to replace eating-disordered coping, and to test these responses in a safe therapeutic setting. Interoceptive and bodily atonement was another skill domain emphasized: drama-therapy techniques that link movement, imagery, and somatic noticing helped clients reconnect internal cues to needs rather than punitive self-control, improving awareness of hunger, satiety, and embodied affect (Wood et al., 2022; Szilárd et al., 2024).

Relational and communication skills were explicitly cultivated through psychodrama and group enactments: role reversal, ensemble feedback, and structured improvisation afforded opportunities to rehearse assertive communication, help-seeking, boundary setting, and empathic responding, with observable increases in patients' capacity to ask for and accept support (Guimarães & Nery, 2021; Wood et al., 2022). Role flexibility and spontaneity were trained experientially and described as pivotal in reducing reliance on disordered behaviours. The studies also highlight skilful narrative work: patients learned to construct and apply broader, less symptom-defined self-narratives through externalization and rescripting practices (Wood et al., 2022; Szilárd et al., 2024).

Finally, integration with medical, nutritional, and family-team inputs translated experiential gains into concrete self-management skills—self-monitoring, relapse-

prevention planning, and collaborative problem solving—so that emotional and interpersonal skills practiced in therapy were reinforced in real-world eating, health, and relational contexts (Szilárd et al., 2024; Wood et al., 2022).

3.6.6. Reconnection between Body and Mind

Studies published up to 2020 show that arts-based therapeutic approaches support the integration of body and psyche, which is especially relevant in the treatment of EDs.

Music therapy enhanced emotional and procedural memory and deepened the connection between somatic and psychological experience (Trondalen, 2003b; Trondalen & Skårderud, 2007). Dance/movement therapy helped patients reconnect with themselves (Kleinman, 2015), but increased body awareness can also be emotionally challenging. In one long-term D/MT study, a patient with anorexia experienced relapse and hospitalization due to intensified body connection; however, returning to therapy helped her feel stronger and integrate the experience of weight gain (Rice et al., 1989).

Psychodrama-based interviews revealed strong associations between connection and fear, with themes such as fear of bodily contact, emotional connection, and relational closeness (Bailey, 2012). The body–mind connection thus appears as a sensitive yet therapeutically significant aspect in ED treatment.

One of the key therapeutic benefits of arts-based strategies is their ability to support the restoration of the connection between body and mind, particularly among individuals with eating disorders, trauma, or a disrupted body image. Creative processes that integrate sensory perception, bodily experience, and symbolic expression allow participants to reconnect with the body as a subject of experience rather than merely an object of evaluation.

Music Therapy

The study by Scotto Di Rinaldi et al. (2023) analysed the effects of vibrotactile music intervention in adolescents with AN. The authors reported that this form of MT helped participants reinvest so-called “disaffected” body zones—areas previously perceived as inauthentic or disconnected from subjective experience. The intervention also led to improved verbalization of affective states and activation of associative processes, suggesting a reconnection between bodily perception and emotional processing. In this study, music

and sound were used as means to activate symbolic processing through touch and vibration, creating conditions for the development of a therapeutic alliance. The nonverbal nature of the intervention allowed access to deeper layers of experience that are often inaccessible through standard verbal therapies. The authors emphasize that the bodily dimension of MT may be decisive in restoring contact with the body, especially in cases where bodily awareness is fragmented or suppressed.

Art Therapy

Malecki et al. (2022) demonstrated that body mapping helps deepen understanding of trauma and AN and can complement traditional therapeutic methods. The technique supports the identification of bodily sensations, emotional blocks, and the relationship to one's body, thereby activating integration between physical and psychological experience.

In a follow-up study (Malecki et al., 2022) showed that body mapping visualizes the relationship between eating practices and bodily experience, offering valuable insight into the dynamics of trauma and healing. Through creative engagement, clients learn to perceive the body as a source of information rather than an object of control—an essential shift in restoring a disrupted body image.

These findings suggest that AT, especially body mapping, can significantly contribute to reintegrating body and mind, supporting a holistic approach to treating EDs.

Dance/Movement Therapy

The research by Syper et al. (2023) highlights the transformative potential of D/MT in reestablishing the connection between body and mind. Participants reported deepened bodily awareness, increased self-confidence, and emotional insight, describing the therapeutic process as both challenging and meaningful. Dance/Movement therapy helped clients confront alexithymia and distorted body image, fostering acceptance of bodily experience as part of their identity. The authors emphasize that D/MT can serve as a valuable complement to traditional forms of psychotherapy, particularly in cases where verbal interventions fail to reach deeper layers of embodied experience. Through movement, rhythm, and physical expression, D/MT activates processes that enable clients to reconnect with their bodies, promoting holistic integration and psychological healing.

Drama Therapy and Psychodrama

Authors describe how drama-based interventions and integrated clinical care reduce the experienced split between “body as object” and “self as subject” by creating controlled opportunities to re-experience bodily signals with new meanings, paced sensory engagement, and symbolic reattribution. Practitioners observed that guided sensorimotor exercises, movement improvisation, and use of theatre props allowed patients to re-own bodily sensations previously experienced as threatening or alien, gradually increasing tolerance for somatic cues without collapsing into avoidance or punitive control strategies (Wood et al., 2022; Guimarães & Nery, 2021; Szilárd et al., 2024).

Clinically, this reconnection shows up in several novel ways across the studies. First, patients report a shift in how they interpret bodily feedback: sensations that once triggered self-criticism or compensatory behaviour become informational signals that can be queried, named, and integrated into decision-making about eating and self-care. Second, therapists note reductions in defensive bodily dissociation during sessions—patients increasingly remain present in their bodies during emotionally charged enactments rather than disconnecting or numbing, enabling in-session processing that carries into everyday contexts. Third, the dramaturgical frame (metaphor, role, and safe aesthetic distance) permits patients to explore taboo or shame-laden body meanings indirectly, which often leads to spontaneous, corrective reconstructions of bodily worth and agency (Guimarães & Nery, 2021; Wood et al., 2022).

Multimodal Approaches

In this area, the study by Patiño-Lakatos, Lindenmeyer, Magalhaes, Corcos, Letranchant, Genevois, and Navarret (2020) offers a significant contribution, highlighting the potential of sound therapy and symbolically oriented expressive approaches in facilitating bodily awareness and psychic reorganization. The authors draw on clinical observations suggesting that sound can serve as a medium for accessing unconscious processes and supporting the symbolization of previously inaccessible emotions. Patients gradually began to reconnect with bodily sensations, leading to deeper emotional experience and the ability to express internal states through sensory and symbolic mediation. This process was interpreted as a form of psychic reorganization, enabling the integration of bodily and emotional experience. The study also emphasizes the importance of an interdisciplinary approach in treating AN, pointing to the need for integrating

psychodynamic, sensory, and expressive components of therapy. In this context, restoring the connection between body and mind appears to be a key prerequisite for transforming the pathological relationship with the body and for developing a healthier bodily identity.

4. DISCUSSION

This thesis builds directly upon the work of Bucharová (2022), whose master's thesis presented a comprehensive scoping review of arts-based therapies in the treatment of eating disorders. Her research laid a solid conceptual and methodological foundation by mapping the diversity of interventions across four core modalities – music therapy, art therapy, dance/movement therapy, and dramatherapy/psychodrama. The present study continues this trajectory by narrowing the scope to studies published between 2020 and 2024, thereby capturing the most recent developments in clinical practice, therapeutic innovation, and methodological refinement within the field.

The decision to focus on this five-year period reflects the growing recognition of AsTs as integrative and person-centred approaches to mental health care. It also responds to the increasing demand for evidence-based interventions that address the complex emotional, cognitive, and somatic dimensions of EDs. By building on Bucharová's earlier work, this thesis contributes to a longitudinal research effort coordinated by the Centre of Evidence-based Education and Arts Therapies: A JBI Affiliated Group and aligns with ongoing efforts to standardize and validate arts-based interventions in clinical settings.

The scoping review enabled a comprehensive mapping of available research evidence on the application of expressive arts therapies in the treatment of eating disorders. Research in this field has been conducted continuously for over four decades, with the earliest identified studies dating back to 1986 and the most recent publications appearing in 2023 and 2024. This temporal continuity reflects a sustained interest in the clinical use of arts-based therapies, as well as a gradual expansion of methodological approaches and therapeutic frameworks.

From a geographical perspective, studies were identified across four continents—Europe, North America, Asia, and Australia. European countries also play a significant role in the development and application of AsTs. In Asia, studies originated from China, South Korea, and Indonesia, while North American research was predominantly conducted in the United States and Canada. Australian studies focused primarily on adolescent populations and specialized clinical programs.

Research was carried out in diverse settings. Some studies were embedded within multidisciplinary rehabilitation programs, while others focused on individual or group

therapy in specialized centres. This diversity of contexts highlights the broad applicability of AsTs in ED treatment and simultaneously underscores the need for standardized therapeutic protocols across clinical frameworks.

In terms of age distribution, most studies targeted adolescents and young adults, although some included adult populations over the age of 30. Most studies involved female participants, which aligns with epidemiological data indicating a higher prevalence of EDs among women. Nevertheless, several studies included mixed-gender samples, suggesting an effort toward more inclusive research practices.

Overall, the research on AsTs in ED treatment is internationally distributed, methodologically varied, and conducted across a wide spectrum of clinical and community settings. This diversity presents challenges for synthesis but also offers a rich foundation for further development of research and clinical practice in the field of expressive therapies.

In this study, four research questions were formulated to guide the analysis and interpretation of the findings. The following discussion is therefore structured around these questions, with the aim of demonstrating how the results provide answers to each of them. First, we consider the types of arts therapy interventions currently employed in the treatment of eating disorders across diverse therapeutic settings, highlighting both established practices and emerging approaches. Second, we discuss the specific techniques and strategies utilized within each modality, illustrating the ways in which they address the complex symptomatology of eating disorders. We examine how expressive therapy modalities – including music therapy, art therapy, dramatherapy/psychodrama, dance/movement therapy, and multimodal interventions – have been applied, with particular attention to their clinical contexts and methodological variations. Third, we discuss therapeutic outcomes and our findings are compared with Bucharová's (2022) scoping review, allowing us to identify continuities as well as novel developments in the effectiveness and application of arts therapies. Finally, we explore broader trends, gaps, and innovations evident in literature, situating our results within the evolving landscape of expressive therapies for eating disorders.

Types of Arts Therapy Interventions in Eating Disorder Treatment

The scoping review revealed a diverse diagnostic spectrum across studies applying expressive arts therapies in the treatment of eating disorders. Most interventions were directed toward individuals diagnosed with AN, which remains the most frequently

represented diagnosis in the reviewed literature. Several studies also addressed BN, BED, OSFED and EDNOS. Notably, while earlier reviews did not identify any studies focused on BED, the expanded dataset now includes multiple studies involving BED, particularly within MT, D/MT, and multimodal interventions. This shift suggests a growing recognition of the applicability of AsTs across a broader range of ED presentations.

Each therapeutic modality demonstrated distinct patterns of application. Art therapy was the most represented modality overall, with interventions ranging from body mapping and symbolic drawing to structured visual art sessions focused on identity and emotional expression. Music therapy encompassed both active and receptive techniques, including improvisation, songwriting, guided imagery, and vibrotactile mediation. Dance/movement therapy was applied primarily in adolescent populations, often through structured group sessions emphasizing interoception, body awareness, and emotional regulation. Drama therapy and psychodrama were employed to explore relational dynamics, symbolic enactment, and embodied trauma, particularly in group settings.

Multimodal approaches integrated two or more expressive modalities – most commonly AT and MT – within broader therapeutic frameworks. These interventions were often embedded in multidisciplinary programs that included CBT, FBT, nutritional counselling, and psychiatric care. Such integrative models reflect a trend toward holistic treatment strategies that address both psychological and somatic dimensions of EDs.

The reviewed studies also varied in terms of participant demographics. While most focused on adolescent and young adult populations, several included adult participants, with age ranges extending into midlife. Gender distribution was predominantly female, consistent with epidemiological data on ED prevalence. However, some studies included mixed-gender samples, indicating an effort to broaden the scope of research and clinical applicability.

In summary, the diagnostic and modality-specific distribution of studies underscore the versatility of AsTs in addressing the complex and heterogeneous nature of EDs. The inclusion of diverse diagnoses and therapeutic techniques highlights the potential of expressive therapies to complement conventional treatment approaches and respond to the individualized needs of patients across developmental stages and clinical profiles.

An analysis of the methodological approaches used in the included studies revealed considerable variability in research quality and design. In the original scoping review by Bucharová (2022), clinical case reports and group descriptions without standardized data

collection tools accounted for 69 % of the total sample. Research outcomes were often based on therapists' observations, excerpts from patient dialogues, or subjective reflections, rather than on validated instruments or structured protocols. This trend was confirmed in the expanded extraction tables, where qualitative approaches dominated across all expressive therapy modalities.

In art therapy, studies frequently employed thematic analyses of artworks, narrative interviews, and reflexive journaling. Music therapy included several mixed-method designs combining quantitative measures with qualitative interviews and clinical observations. Dance/movement therapy featured several pre-post experimental designs, including meta-analyses and systematic reviews that applied standardized instruments to assess interoceptive awareness, alexithymia, and emotional regulation. Drama therapy and psychodrama were primarily represented by case studies and clinical reflections, with only occasional inclusion of quantitative components.

Multimodal approaches incorporated systematic reviews, integrative analyses, and a few controlled studies comparing the effectiveness of combined therapies against standard care. These studies provided initial indications of quantitatively supported outcomes, such as statistically significant improvements in BMI, reductions in anxiety and depression, and increased treatment satisfaction.

Expressive arts therapy modalities are applied in a wide range of clinical and community-based contexts in the treatment of eating disorders, demonstrating their flexibility and broad potential for integration into therapeutic frameworks. Interventions have been implemented in hospital settings, day-treatment programs, outpatient services, community workshops, and even in school and university environments. This diversity reflects not only the different phases of treatment but also the varying needs of patients depending on age, symptom severity, and access to care.

In hospital-based and specialized clinical programs, AsTs were often integrated into multidisciplinary teams that included psychotherapists, psychiatrists, nutritionists, physiotherapists, and other healthcare professionals. In these contexts, expressive therapies served as complementary interventions that deepened the therapeutic process, enhanced treatment motivation, and improved adherence. For example, in MT, structured programs were developed to reduce post-meal anxiety, often delivered regularly before evening meals

as part of a day hospital schedule. In D/MT, group sessions were conducted in rehabilitation settings with a focus on body awareness and emotional regulation.

In outpatient and community-based settings, AsTs were delivered both individually and in groups, often used to support emotional processing, identity development, and self-expression. In DT, group formats proved particularly effective in addressing shame, rigidity, and relational trauma, with an emphasis on creating a safe space, maintaining aesthetic distance, and expanding the client's role repertoire. Psychodrama was traditionally conducted in group settings, utilizing techniques such as symbolic enactment, role-play, and reconstruction of relational scenes.

Some studies also reported the application of AsTs in educational settings, particularly in preventive programs or mental health support for young adults. These interventions focused on self-awareness, stress management, and emotional resilience.

Across all modalities, AsTs were shown to be effective in both individual and group formats. Group settings provided opportunities for shared experience, development of social skills, and a sense of community, while individual sessions allowed for deeper introspective work, personalized approaches, and safe exploration of sensitive topics.

These findings suggest that the context in which AsTs are applied plays a significant role in the therapeutic process. The diversity of settings and formats allows for tailoring interventions to the individual needs of patients, fostering active engagement in treatment, and creating conditions for comprehensive processing of ED symptoms.

Techniques and Approaches Within Each Modality

The analysis of included studies revealed that expressive arts therapy modalities employ a wide range of techniques, each specific to its therapeutic tradition. Every modality of AsTs offers a distinct set of tools and methods grounded in its theoretical foundations and therapeutic aims. This diversity highlights both the flexibility of AsTs in working with individuals with eating disorders and the need for more consistent and detailed reporting of interventions in research contexts.

In art therapy, the most frequently used techniques included body mapping, drawing body outlines, working with torso representations, collage, symbolic imagery, and the creation of artifacts representing the "recovered self." These approaches enabled patients to visualize internal experiences, process trauma, and reflect on body image. While some

studies provided detailed descriptions of session structures and therapeutic intentions, others lacked clarity regarding the specific techniques used, which limits comparability and replicability across studies.

Music therapy encompassed a broad spectrum of both active and receptive methods – ranging from improvisation, songwriting, and group singing to music listening, guided imagery, and vibrotactile mediation. Several studies described structured protocols, such as post-meal group sessions aimed at reducing anxiety, or the use of music as a tool for emotional regulation and identity reinforcement. Innovative approaches also emerged, including the use of sound-vibration objects and personalized playlists based on the iso principle.

Dance/movement therapy focused primarily on body awareness, interoception, and emotional regulation. Techniques included KBT, RMT, and structured group movement sessions that supported mind-body integration, improved body image, and emotional processing through physical expression. Emphasis was placed on safe bodily experience, boundary awareness, and rebuilding trust in one's physical self.

Drama therapy and psychodrama were characterized by symbolic enactment, role-play, work with the “wounded inner child,” and the reconstruction of relational scenes. These approaches allowed patients to externalize internal conflicts, process trauma, and create new meanings through dramatic expression. In some cases, therapy was conducted within a “supplementary reality,” a psychodramatic space where painful experiences could be safely re-experienced and transformed.

Multimodal approaches combined multiple expressive techniques – most commonly AT and MT – within comprehensive therapeutic programs. These interventions were often embedded in multidisciplinary care and included CBT, FBT, psychoeducation, or psychodynamic therapy. They utilized various forms of nonverbal expression, symbolic work, group dynamics, and creative activities aimed at enhancing self-awareness, emotional regulation, and motivation for recovery.

Taken together, AsTs offer a rich repertoire of techniques that can be tailored to the individual needs of patients with EDs.

Therapeutic Outcomes and Comparison with Previous Findings

Based on the analysis of the included studies, the therapeutic outcomes of AsTs in the treatment of EDs were categorized into several thematic domains. These categories reflect the multifaceted nature of AsTs' effects, which manifest not only in symptom reduction but also in emotional processing, self-awareness, skill development, and reintegration of body and mind. The findings suggest that AsTs offer significant therapeutic value, particularly in areas where verbal approaches may encounter limitations.

The first identified category involved outcomes related to the reduction of ED symptoms. Several studies reported decreases in anxiety, depression, shame, and improvements in body image. In some cases, increases in BMI, reductions in bulimic behaviours, or improved perception of body proportions were observed. These changes were most evident in studies that combined AsTs with CBT or were embedded within comprehensive rehabilitation programs.

The second category encompassed outcomes related to emotional regulation. Arts therapies enabled patients to access, express, and process suppressed emotions through nonverbal media. In D/MT, improvements were noted in interoceptive awareness, reductions in alexithymia, and enhanced emotional awareness. In AT and MT, patients often reported that creating art or music allowed them to express feelings they could not verbalize. These findings highlight the capacity of AsTs to engage with the emotional core of EDs.

The third category included outcomes related to self-awareness, gaining new perspectives, and identity reconstruction. Through the creation of symbols, images, or musical compositions, patients reflected on their inner experiences, their relationship with the body, and the recovery process. In DT, themes such as the "wounded inner child," shame, rejection, and longing for acceptance were explored through role-play and symbolic enactment. In AT, patients created images representing the "recovered self" or bodily symbols such as the ovary, reflecting feminine identity and embodiment.

The fourth category addressed the development of new skills. Patients acquired coping strategies, stress management techniques, and tools for emotional regulation that could be applied in daily life. In MT, for example, personalized playlists were created based on the iso principle to support patients outside the therapeutic setting. In AT, patients produced visual symbols to remind themselves of key moments in their recovery journey.

The fifth category focused on the reintegration of body and mind. Arts therapies helped patients reconnect with their bodies, correct perceptual distortions, and cultivate

positive bodily experiences. In D/MT, work centred on bodily boundaries, movement, and somatic awareness, while in AT, techniques such as tracing the body on paper enabled patients to confront the reality of their physical proportions.

Finally, several studies emphasized the communal aspect of AsTs, particularly in group formats. Group sessions provided space for shared experiences, social learning, and relationship-building. This was especially evident in psychodrama, where group dynamics supported affective reorganization and mutual understanding.

Across the analysed studies, AsTs modalities demonstrated a sensitive capacity to engage with cultural, gendered, and identity-related themes that are often closely intertwined with the lived experience of eating disorders. These topics emerged most prominently in AT, MT and DT, where the creative process opened space for exploring femininity, sexuality, fertility, body shame, and culturally shaped expectations regarding the body.

In AT, symbolic representations related to feminine identity appeared repeatedly—for example, the image of the ovary as a metaphor for embodiment, fertility, and female self-perception. These motives were especially present among patients with anorexia nervosa, who used visual art to reflect on their disconnection from the body, femininity, and reproductive function. In some cases, artworks became carriers of deeply personal meaning, enabling patients to initiate dialogue around topics that had previously been suppressed or considered taboo.

Music therapy offered similar opportunities for processing identity and embodiment, particularly through vibrotactile techniques that supported bodily awareness and emotional reintegration. Several studies included patient testimonies describing how music helped them reconnect with their bodies—perceiving rhythm, heartbeat, or vibration—as moments of reconnection and healing. Music thus served as a medium for expressing what was “unheard” or “unspeakable.”

In DT and psychodrama, cultural and gendered themes were addressed through role-play, symbolic enactment, and reconstruction of relational scenes. Patients often worked with the image of the “wounded inner child,” shame, rejection, and the longing for acceptance. These themes were explored within a “supplementary reality,” a psychodramatic space where painful experiences could be safely revisited and transformed. Therapy enabled the reconstruction of one’s relationship to the body, to femininity, and to social roles disrupted by the eating disorder.

From a cultural perspective, studies also reflected on societal norms, gender stereotypes, religious discourses, and ideals of health and beauty that shaped patients' bodily experiences. These aspects were often implicitly present in the creative process but gained explicit meaning through therapeutic dialogue. AsTs thus proved to be a sensitive tool for processing culturally embedded themes that are frequently overlooked in conventional therapeutic approaches.

The current synthesis corroborates several stable patterns identified by Bucharová (2022). Across expressive arts therapies, studies consistently report reductions in anxiety, depression, shame, and improvements in body image, with occasional gains in BMI and decreases in bulimic behaviours when arts therapies are embedded within CBT or multidisciplinary rehabilitation pathways. Their adjunctive role remains clear: arts therapies reliably complement verbal modalities by opening access to nonverbal, symbolic, and embodied processes that conventional approaches often struggle to reach. Feasibility and acceptability persist across inpatient, outpatient, day-program, and community settings in both individual and group formats, while core change processes – emotional expression, symbolic meaning-making, and embodied reconnection—continue to anchor therapeutic impact.

Divergences reflect a substantive evolution from modality presence to mechanism-level precision and practice innovation. Recent work details protocolized techniques with clear links to eating disorder mechanisms (e.g., vibrotactile music therapy to support interoception; iso-principle playlist design for daily coping; art-based body-tracing to confront perceptual distortions; psychodramatic “supplementary reality” to facilitate affective reorganization), thereby moving beyond generic benefit statements. Populations and contexts have broadened, with stronger representation of adolescents in structured day programs, cross-diagnostic cohorts with comorbid anxiety/depression, culturally diverse samples, and tighter integration within stepped-care and rehabilitation pathways. Mechanistic targets – interoceptive awareness, alexithymia, shame processing, and identity reconstruction – are articulated with greater specificity, and identity-cultural work (femininity, sexuality, fertility, body shame, sociocultural norms) shifts from peripheral observation to intentional therapeutic focus and outcome domain. Group-based relational change is also more explicitly described, emphasizing social learning, mutual recognition, and affective reorganization in psychodrama and multimodal groups.

Taken together, the field shows continuity in effectiveness alongside maturation in explanatory depth and clinical utility. Our synthesis extends Bucharová's review by specifying how arts therapies effect change, offering technique-level guidance transferable to practice, and foregrounding identity and cultural processes integral to eating disorder recovery.

Trends, Gaps, and Innovations

When interpreting the results of the scoping review, it is essential to consider several limitations that affect the scope and generalizability of the findings. A major limitation is the absence of controlled clinical studies – specifically randomized controlled trials – within the thesis. Although some studies in the expanded dataset employed quantitative designs or mixed-method approaches, their number remains low, and the methodological quality is often inconsistent.

Another limitation concerns the author's disciplinary background, which is primarily rooted in music therapy. Despite efforts to objectively address all AsTs modalities, deeper understanding of the specific techniques and theoretical frameworks of AT, D/MT and DT requires collaboration with experts in these respective fields.

Finally, the methodological heterogeneity of the included studies – regarding research designs, target populations, therapeutic settings, and measurement tools – poses a challenge for synthesizing results and precludes the possibility of conducting a meta-analysis. However, this diversity also highlights the broad applicability of AsTs and opens space for future research that should be more methodologically consistent, transparent, and focused on comparable outcomes.

Based on these observations, several recommendations emerge for future research and clinical practice. First, it is necessary to conduct studies with robust quantitative designs that allow for objective evaluation of the effectiveness of individual AsTs modalities. Second, interdisciplinary collaboration among therapists from different modalities, researchers, and clinical practitioners should be actively encouraged to ensure the complexity and practical relevance of research outputs. Lastly, it is important to reflect cultural, gender, and developmental aspects in the design of therapeutic protocols to ensure that AsTs are accessible and meaningful for diverse groups of individuals affected by eating disorders.

CONCLUSION

This scoping review aimed to update and expand the existing evidence base on the application of arts therapies in the treatment of eating disorders, building directly on the work of Monika Bucharová (2022), which followed a protocol established by Bucharová et al. (2020). The review addressed four research questions, focusing on the types of arts-based interventions used, their therapeutic aims and outcomes, the populations and settings in which they are applied, the methodological characteristics of the studies, and the evolution of the field since 2020.

The updated dataset included studies published between 2020 and 2024, reflecting a renewed and geographically diversified interest in the use of music therapy, art therapy, dance/movement therapy, drama therapy and psychodrama, and multimodal approaches in ED treatment. Notably, recent studies also demonstrated increased methodological transparency and interdisciplinary collaboration, particularly in the context of integrated care models.

Findings confirm that arts-based interventions provide valuable tools for accessing and processing emotions, restoring body–mind connection, and supporting therapeutic engagement in individuals with EDs. Their non-verbal, experiential nature allows for the expression of complex affective states and internal conflicts that may be difficult to articulate verbally, especially in populations with alexithymia, trauma histories, or rigid cognitive styles. The creative and symbolic dimensions of AsTs offer patients opportunities for play, narrative exploration, and the development of transferable coping strategies.

While each modality has distinct characteristics, the review identified several shared therapeutic mechanisms across interventions, including emotional regulation, interoceptive awareness, identity expansion, and relational reparation. These outcomes were observed across diverse clinical contexts and age groups.

Despite the promising developments, the review highlights persistent gaps in the literature. There is a continued need for high-quality, quantitative research using standardized assessment tools and longitudinal designs. Future research should also examine the differential effects of specific modalities and explore how cultural, developmental, and diagnostic factors shape therapeutic outcomes.

In conclusion, this updated scoping review reinforces the clinical relevance of AsTs in ED treatment and underscores their potential to complement conventional approaches. By mapping recent advances and identifying areas for further inquiry, the thesis contributes to a more nuanced understanding of how creative, embodied, and relational practices can support recovery in individuals with eating disorders.

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APPENDICES

Appendix A

Scoping Review Details

Title:

Author:

Year:

Study design:

Country:

Setting (s):

Sample size:

Population: Sample size, Gender, Age/Age range, Eating disorder / Clinical details:

Methodology:

Other therapeutic interventions:

Type of AsTs:

Characteristics of arts-based interventions:

Therapeutic outcomes related to AsTs:

Appendix D - D/ MT extraction table

	Title	Author(s)	Year	Study design	Country	Setting(s)	Sample size	Gender	Age / Age range	Eating disorder / Clinical details	Methodology	Other therapeutic interventions	Type of AsTs	Characteristics of art based interventions	Findings	Therapeutic outcomes related to AsTs
1	Demobilization Therapy for Individuals with Eating Disorders: A Phenomenological Approach	Amy Super, Maria Katal, Dor M. Polesvay, Whitney Dhe	2023	Qualitative phenomenological study	USA	Body independent or community-based therapeutic environments	11 participants	F	18+; specific ages not reported	AN, BN, BED	Semi-structured interviews. Thematic and content analysis using phenomenological framework. Analyzed participants' lived experiences with Demobilization Therapy in ED treatment contexts.	Participants had received conventional treatment prior to DMT, such as psychotherapy or medical support.	DMT	Emphasis on mind-body connection and non-verbal expression. Addressed body image, disordered eating, emotional regulation, and somatic awareness. Included group movement exercises and personal reflection. Facilitated emotional and physical vulnerability in a supportive setting.	DMT allowed participants to process experiences, describe emotional difficulty. Participants reported improved self-esteem, emotional weight, and embodiment. Therapist backs challenges the dysfunctions and distorted body image.	Improved emotional regulation, strengthened mind-body integration. Supported greater acceptance of body experiences. Served as a meaningful complement to traditional ED treatment approaches.
2	Generalized Multivariate Model for Assessing Outcomes in Psychotherapy-Disordered Eating Behaviors and Obesity	Uma G. Mahesh-Pyati	2020	Quantitative modeling study using nonlinear regression	Russia	Outpatient psychotherapy programs	NA	Mixed	18+	Disordered eating behaviors and obesity	Development and application of the Connected Multivariate Model (CMM) to assess outcomes of CBT and Rhythmic Movement Therapy (RMT). Nonlinear regression used to model individual BMI changes and psychological variables.	Cognitive Behavioral Therapy (CBT)	Rhythmic Movement Therapy (RMT) as a body-oriented expressive modality	RMT involves structured movement exercises aimed at emotional regulation, body awareness, and behavioral change.	CMM effectively predicts psychotherapy outcomes and identifies psychosocial variables in 2 participants. Use of cyclic body disorientation that enhances BMI change, model shows individual assessment of treatment response. Nonlinear regression modeling, sensitivity analysis, partial regression functions for psychological predictors.	Improved prediction of weight loss and psychological change supports personalized treatment planning and evaluation of therapy effectiveness.
3	KörperEbenen...ich...Du...Wir und Avocado reinste in Augenlider	Anke Dahlf	2022	Clinical reflection with case vignettes	Germany	Inpatient and outpatient adolescent psychotherapy	NA	F	adolescents	AN	Application of Connected Movement Therapy (CMT) in psychosomatics and treatment, emphasis on body experience and relational processes.	Family therapy, psychodynamic approaches, group therapy	Connected Movement Therapy (CMT)	CMT involves embodied body perception, boundaries, and relational patterns through guided movement and reflection, emphasis on "experience" (body experience) as a therapeutic gateway.	CMT fosters embodied awareness, strengthens identity formation, and supports therapeutic alliance in adolescents with anorexia nervosa (AN). CMT was an integral part of therapy.	Improved body awareness, emotional regulation, and relational engagement. Therapy supports integration of fragmented self-image and promotes healing through embodied experience.
4	Körpererfahrung als Schlüssel zur Körpertherapie bei Essstörungen: Ein integratives Modell	Lea Anne Gräbe, He Weising, Anke Dahlf	2023	Observational cohort study with pre-post comparison	Germany	University Hospital Münster - Department of Child and Adolescent Psychiatry, Psychosomatics, and Psychotherapy	52	F	Mean age: 18.39 years	AN	Quantitative and qualitative evaluation using Therapy Evaluation Questionnaire for Connected Movement Therapy (TEF-CMT-Q). 2019 Inpatient Cohort Study (ICS) for Outpatient and Inpatient.	NA	Connected Movement Therapy (CMT)	Therapy targeted perceptual and affective components of body image distortion. Emphasis on embodied body awareness and positive body-related experiences. Group sessions featured embodied somatic methodology and cognitive approaches. Patients engaged in guided movement exercises to explore and release body sensations. The approach fostered self-compassion, body positivity, and self-acceptance. Despite persistent body image distortion, body awareness improved with increased body size awareness.	Patients continued to normalize their body size at the end of therapy. Those who reported positive body experiences showed greater improvement in body size satisfaction. Positive group chemistry and therapeutic alliance were consistently reported. Conditional data suggested a link between therapy satisfaction and body image improvement.	Encouraging results despite the persistence of body image distortion. Therapy helped foster positive body awareness, emotional growth, and group cohesion. CMT was primarily effective in modifying perceptual distortions and enhancing self-acceptance.
5	Let the Body Talk: Preliminary Data of an Open Trial of Connected Movement Therapy for Eating Disorders	Nata Bekker, Anna Gouws, Lisbeth, Maria Gräbe, Sila Jansen, Gerda Jaspers, Laura Dijk, Marjolien de, Gerda Casteleijn, Alexander Sattelm, Lennards Mandelstam	2023	Open trial feasibility study. Pre-post intervention design using standardized psychological measures.	Netherlands	In-hospital rehabilitation program for eating disorders at Radboud University Nijmegen	49 participants	F	18-34	AN, BN, BED	Participants completed: Difficulties in Emotion Regulation Scale (DERS), Toronto Alexithymia Scale (TAS), Multidimensional Assessment of Interoception Awareness (MAIA), Interoception Questionnaire (IQ), and after four DMT group sessions. Pre-post design used to assess changes.	DMT was part of a broader multidisciplinary stabilization program. No specific protocol of CMT or DMT for psychological and nutritional support was ongoing.	DMT	Group-based expressive movement exercises focused on embodiment, emotional awareness, and integration. Emphasis on embodied awareness through movement, body awareness, and self-compassion. Emphasis on connecting with the body and processing emotions physically.	Significant improvements in: Emotion regulation (DERS subscales), Alexithymia (TAS total and subscales), Interoception awareness (MAIA subscales), body awareness, body image, and body satisfaction. One exception: increased difficulty in emotion awareness (DERS subscale).	Reduced emotional dysregulation. Decreased alexithymia. Enhanced interoceptive awareness. Indicated potential for DMT to support psychological healing and body reconstruction in ED treatment.
6	Movement Awareness Therapies in Eating Disorders: A Systematic Review and Meta-Analysis	Erwin C. Hendriks, Gerda C. Trossel, Fendricka M. Bada C. S. S. S. S. S.	2024	Systematic review and meta-analysis. Followed PRISMA guidelines. Risk of bias assessment using Cochrane Collaboration Tool.	Spain	Included studies from various clinical and research settings internationally.	11 studies included. Total of 437 participants with eating disorders.	Majority F	Adolescents and adults (mean age range varied across studies)	AN, BN, BED	Included randomized controlled trials (RCTs). Interventions analyzed: yoga, body awareness therapy, dance therapy, psychosomatic therapy, and other body-oriented approaches. No meta-analysis of RCTs for psychological outcomes. Focus on clinical implications (e.g., Eating Disorder Examination scale).	yoga, body awareness therapy, psychosomatic therapy	DMT	Focused on: Emotion regulation, body image and body attitude, self-compassion and self-compassion, embodied awareness, embodied self-compassion, embodied self-compassion.	MAAs showed additional benefits for ED symptoms. Improvements noted in: emotional regulation, self-compassion, body image and body attitude, embodied awareness, embodied self-compassion, embodied self-compassion.	Indicated potential for enhancing psychological well-being. Supported embodied and somatic regulation. Highlighted need for more high-quality RCTs to define efficacy.

Appendix E - DT Extraction table

	Title	Author(s)	Year	Study design	Country	Setting(s)	Sample size	Gender	Age / Age range	Eating disorder / Clinical details	Methodology	Other therapeutic interventions	Type of AsTs	Characteristics of art based interventions	Findings	Therapeutic outcomes related to AsTs
1	Drama Therapy and the treatment of eating disorders: Advancing towards clinical guidelines	Laura L. Wood, Sarah-Herling, Fatmah Al-Qadiri, Stephanie Wolmann, Albert S. Cho, David Bryant	2022	Participatory action research with applied thematic analysis	USA	Clinical drama therapy practice settings: Benefits drawn from their own lived experiences	Not clearly defined from practitioner reflections and clinical experience	NA	NA	AN, BN, BED, other ED	Drama therapists collaborated to analyze their clinical work with ED clients. Data themes emerged to identify key principles and challenges in drama therapy for EDs. Grounded in narrative, trauma-informed, and culturally responsive frameworks.	DT was considered within multidisciplinary treatment teams. Emphasized collaboration with medical, psychological, and nutritional professionals.	DT	Focused on embodiment, aesthetic distance, and role enactment. Encouraged playfulness, spontaneity, and emotional expression. Provided avenues to avoid triggering self-criticism or shame through narrative construction or creative playmaking. Emphasis on playful playmaking. DT can help clients explore agency, explore identity, and challenge oppressive norms.	DT offers unique tools for addressing ED-related shame, identity, and relational issues. Trauma-informed and culturally sensitive. Cultural humility, and power dynamics. DT can help clients explore agency and healing standards for DT in ED treatment.	Promotes emotional regulation, self-expression, and social engagement. Supports trauma-informed and healing empowerment. Encourages creative choices, and creative risk-taking. Highlights need for clinical guidelines and training standards for DT in ED treatment.
2	Le lieu de l'expérience narrative & l'histoire du psychodrame tradique	Patrice Dumont & Vincent Edelin	2024	Clinical case study with psychodynamic interpretation	France	Child and adolescent psychiatry group therapy context	Single adolescent case	F	Adolescent	AN	Use of plastic psychodrama to explore transference, denial mechanisms, and emotional defenses.	Psychanalytic group therapy. Individual psychodynamic support	Psychodrama	Psychodrama sessions involve role play, symbolic enactment, and group interaction, emphasis on relational dynamics and unconscious processes.	Transference psychodrama enables reorganization of defensive structures with transference facilitates emergence of emotional insight and symbolic expression in the face of denial. Qualitative and interpretive analysis.	Reduction in denial, increased emotional engagement, and inhibition of psychic charge through symbolic and relational work in the group setting.
3	Psicodrama, Budismo Nervosa na Adolescência e Adultidade	Jafara Soares Guimarães, Maria do Perito Neto	2021	Single case clinical study	Brazil	Multidisciplinary clinical practice in Brazil	1	F	adolescent	BN	Qualitative case study using psychodramatic techniques. The therapeutic process was analyzed through self-observation and interpretive reflection, focusing on affective dynamics and symbolic enactment.	NA	Psychodrama	The therapy centered on using psychodramatic scenes that shaped the patient's emotional experience and body image. The "rehearsed" scene (RE) was a primary focus, exploring the social construction and symbolic play aspects of the scene in "experiential therapy". Psychodrama, then, was the primary mode in "stage play". The body was treated as a carrier of emotional and cultural experience, and the therapy aimed to release spontaneity and creativity. The patient enacted scenes of rejection, shame, and longing, which allowed her to reconstruct affective bonds and identify healthier relational patterns.	The patient showed improvement in emotional regulation and reduction in bulimic behaviors.	Psychodrama facilitated greater self-awareness, affective reorganization, and symbolic healing. The therapy helped the adolescent reorganize her relationship with her body and develop less painful relational patterns.
4	Psychological understanding of Anorexia nervosa generalised: combined clinical case	H. Székely, D. Csizsik, A. Mészáros, J. Szegedi, D. Pápai, J. Biliczki, Z. Barcs, Z. Nemcsik, J. Táborczy	2024	Clinical observational study with comparative analysis	Hungary	Psychiatry and Psychosomatic Department, Semmelweis University includes inpatient and outpatient care	Included two subgroups of anorexia nervosa patients: 200 cases (10 inpatient cases) - Severe cases requiring hospital admission. Compared with age-matched healthy controls	F	16-45	AN	Psychodramatic modalities: Cognitive Behavioral Therapy (CBT), Schema Therapy (ST), Narrative Integrative Psychotherapy (NIP), Psychodrama, Psychological support, ICBT, and CBT-based interventions. Online questionnaires: EDI-3, EDI-G, SCI-95, PHQ-9, BSN, CTQ, VFI. Comparative analysis between patient subgroups and controls.	CBT, Schema Therapy, NIP, Antidepressant medication	Psychodrama	Psychodrama: role-play and symbolic enactment of emotional conflicts. Used to explore identity, trauma, and relational patterns.	SCID-5-MPD identified affected personality domains. Identify self-directedness, Regulation efficacy, Externalization. No significant differences in trauma (CTQ) or dissociation (DSO-G) between patients and controls. Highlighted psychological findings: maladaptive coping, absence or over-identity with body, harsh inner critic, etc.	Psychodrama helped uncover deep psychological patterns. Supported personal insight, emotional regulation, and identity development. Findings may guide individualized psychotherapy planning. Emphasized the need for targeted focus areas in treatment based on personality traits.

Appendix F - Extraction table of Multimodal Approaches

	Title	Author(s)	Year	Study design	Country	Setting(s)	Sample size	Gender	Age / Age range	Eating disorder / Clinical details	Methodology	Other therapeutic interventions	Type of A&Ts	Characteristics of art based interventions	Findings	Therapeutic outcomes related to A&Ts
1	Art therapy in eating disorders: A systematic review of controlled trials	Francis Tully, Philip Corwood, Laura D Loderer	2024	Systematic review of controlled clinical trials	France	Clinical and academic settings, review of studies from multiple countries	8 controlled trials included	Mixed	Adolescents (12+) and adults	AN, BN, BED, ARFID, OSFED	PRISMA protocol systematic review Search across PubMed, Embase, and CINAHL/PsycInfo Inclusion of studies with art therapy interventions and control groups Evaluation of clinical, psychological, and behavioral outcomes	Comparison with usual treatment, waiting list, or other psychotherapies Some studies combined art therapy with standard care	Plastic arts (drawing, painting), Music therapy, Writing therapy Creative writing/therapy (CWT)	Non-verbal expression to bypass verbalization and verbalization difficulties Targeting emotional awareness, body image, and self-esteem. Use of creative media to enhance therapeutic alliance and motivation. Sessions led by trained art therapists	ART reduced post-meal anxiety, DMFT (reduced body dissatisfaction), ART showed promise in enhancing emotional resilience and self-awareness. High transparency in study design and measures tested generalizability	Improved psychological well-being, treatment adherence, enhanced emotional awareness and communication. Potential to complement traditional therapies for ED. Need for more rigorous, standardized research to confirm efficacy
2	Arts Therapies Interventions and Their Outcomes in the Treatment of Eating Disorders: Scoping Review Protocol	Monika Buchanek, Andrea Mark, Jill Karkov, Suzanne Sordaniak	2020	Scoping review protocol (Joanna Briggs Institute methodology)	CI	Multinational studies across clinical, academic, and therapeutic settings	42 studies included in final dataset	Mixed	All ages included	AN, BN, BED, other specified and unspecified ED	Systematic database search (CINAHL, EMBASE, MEDLINE, PsycINFO, PubMed, Scopus, Web of Science). Inclusion of peer-reviewed and grey literature Thematic analysis of interventions and outcomes Data extracted by multiple reviewers	CBT, CWT, Attachment based approaches, Psychoeducation and group therapy	Art, MT, CWT, DT/Psychodrama, Multinational expressive therapies	Creative expression as emotional regulation Symbolic and embodied communication. Group and individual formats, integration with verbal therapies. Focus on body image, identity, and trauma	Art therapies support emotional expression and insight. Help reduce ED symptoms and improve coping skills. Enhance therapeutic alliance and engagement. Promote non-verbal pathways for healing. Multinational approaches show promising results.	Improved emotional regulation and self-awareness. Reduction in ED symptom severity. Increased motivation for recovery. Strengthened interpersonal relationships. Greater acceptance of body and self
3	Australia's First Residential Programme for Eating Disorders: The Psychosocial Role	Ward, W	2022	Descriptive clinical report	Australia	Ward Nerida, Soriano Coast, Queensland - Australia's first residential eating disorder recovery centre	NA	Mixed	18+	AN, BN, BED, OSFED	Narrative and clinical reflection on the psychiatrist's role in a multidisciplinary residential setting	Art, psychotherapy, creative therapies, gardening and cooking therapy, exercise physiology	Creative therapies including art therapy, music therapy	Music, trauma informed, and recovery oriented designed to rebuild relationships with food, body, and self through creative engagement	Expressive therapies supported emotional regulation, identity reconstruction, and therapeutic engagement. Psychiatrists' role was pivotal in integrating medical and psychological care. No quantitative data reported; outcomes are qualitative and experiential	Improved emotional resilience, reduced symptom severity, enhanced therapeutic alliance, and increased readiness for long-term recovery
4	Complementary and Integrative Medicine and Eating Disorders in Youth	Alicia Zahera & Valeria Cirio	2023	Narrative review	USA	Literature-based review; not conducted in a single clinical setting	Not applicable (review article)	Focus on youth; gender not specified	Children and adolescents	Chronic anxiety, bulimia nervosa, binge eating disorder, and antidepressant-induced low mood disorder (AMFD)	Review and synthesis of existing literature on complementary and integrative medicine (CIM) approaches	Conventional psychiatric and psychotherapeutic care, pharmacological options (e.g., SSRIs/antidepressants for BED)	Art, MT	Non-verbal expressive modalities Promote emotional awareness and self-regulation. Used as adjunctive therapy alongside conventional care	Art therapies show promise in improving emotional processing. High patient receptivity to treatment. Strengthen therapeutic alliance	Improved engagement and emotional regulation. Complementary support to standard treatments. Potential for greater treatment adherence and psychological insight
5	Creative Art Therapies in the Treatment of Adolescents with Eating Disorders: An Integrative Review and Thematic Network Analysis	Samantha Blom, Maria Dika, Marco Werh	2024	Integrative literature review with thematic network analysis	Germany	Multinational studies included, focus on adolescent clinical settings	48 studies reviewed	Mixed	Adolescents (Typically 12-18 years)	AN, BN, BED, OSFED	Systematic search across multiple databases. Inclusion of qualitative, quantitative, and mixed-method studies. Thematic network analysis to identify core therapeutic themes. Focus on creative arts therapies (CATs), art therapy, music therapy, drama/music therapy, dance/movement therapy, expressive therapy	Other integrated with cognitive behavioral therapy (CBT), family-based therapy (FBT), or inpatient programs. CATs used as adjunctive or complementary interventions	Art (visual art), MT, CWT, DT	Emphasis on non-verbal expression and emotional regulation. Use of metaphor, symbolism, and embodied experiences. Safe space for identity exploration and self-reflection. Creative processes as a vehicle for therapeutic alliance and insight	CATs foster emotional expression, reduce anxiety, and improve body image. Support development of self-esteem, resilience, and interpersonal skills. High adolescents' receptivity and enhance their motivation with the eating disorder. Thematic analysis revealed three global themes: emotional processing, identity reconstruction, and therapeutic relationship	Improved emotional regulation and reduced eating disorder symptoms. Enhanced motivation for recovery and treatment adherence. Strengthened therapeutic alliance and engagement. CATs performed as theoretically informed and experientially
6	Dispositif de médiation thérapeutique par le son, le mouvement et le visuel: essai de médiation thérapeutique par le son, le mouvement et le visuel. essai de médiation thérapeutique par le son, le mouvement et le visuel.	Genevieve Pothier-Labrousse, Christine Lindermeier, Inma Berioles, Marie-Cécile, Aurélie Lemoine, Tiphaine Caron, David Neumeier	2020	Clinical conceptual study based on interdisciplinary therapeutic practice	France	NA	NA	F (predominantly)	Adolescents and young adults	AN	Qualitative and theoretical synthesis. Clinical synthesis and empirical interpretation. Integration of psychoanalytic and somatic theories. Exploration of sound as a mediator of unconscious bodily experience	Psychoanalytic psychotherapy, interdisciplinary collaboration between psychiatry, psychology, and somatics. Body-oriented approaches	Multinational expressive therapy combining Music therapy, Music/dance/drama, Psychodrama, meditation through sound and body resonance	Sound and vibration used to reconnect patients with dissociated bodily sensations Music acts as a symbolic container for complex emotional experiences. Therapy seeks to make the invisible audible, allowing expression of what cannot be verbalized. Emphasis on resonance, rhythm, and bodily experience as pathways to psychic integration. Sessions foster sensory reconnection, emotional re-synchronization, and affective embodiment	Clinical observations suggest positive therapeutic impact on emotional access and body awareness. Theoretical reflections support the use of sound as a mediator of unconscious processes.	Patients began to reclaim bodily sensations and symbolic processes, increasingly emotional. Therapy facilitated psychic integration through sensory and symbolic mediation. Highlighted the importance of interdisciplinary approaches in treating complex cases
7	Music and Art Therapy Combined with Cognitive Behavioral Therapy in the Treatment of Anorexia Nervosa Patients	Chenye Wang, Huanhui Xian	2021	Quasi-experimental comparative study. Therapeutic design: treatment vs. control, Pre- and post-intervention measures.	China	Affiliated Hospital of Jiangnan University, Jiangsu Province	Initially 77 adolescents recruited Final sample 69 participants (after excluding 11 dropouts) - Control group: 32 - Treatment group: 37	Mixed	adolescents	AN	Intervention group received MT, Art, CBT. Control group received standard care Outcomes measured: Body weight, BMI, Adjustment subscale of MB-EAT, Emotional state (BN, BED), Eating disorder symptoms (EDE-Q 6.3), Treatment satisfaction	CBT	Art, MT	Non-verbal emotional expression. Creative engagement to reduce anxiety and depression. Symbolic expression of body image and self-perception	Dropout Rate: Lower in treatment group Treatment Satisfaction: Higher in treatment group Body Weight, BMI, Fat Free Mass: Increased in both groups. Significantly greater increase in treatment group (P < .05). Psychological Distress: EDE-Q 6.3, BN, ED scores decreased post-intervention. Greater reduction in treatment group (P < .05). Global Rating: Combined therapy improved clinical and psychological outcomes. Enhanced emotional regulation and treatment engagement. Mixed outcomes reported across mood and body image	Reduced anxiety and depression. Improved body image and self-esteem. Increased motivation and satisfaction with treatment. Lower dropout rates suggested better therapeutic alliance
8	Visual art and music based interventions as adjuncts in the treatment of eating disorders: a systematic review and a theoretical model	Fabrizio Costi, Bettina, Ursula Negretto, Barbara de Araujo, and Antonia	2024	Systematic review (PR guidelines) and theoretical model proposal	Brazil	Clinical and therapeutic settings, including adolescent eating disorder programs, hospital-based interventions, and community workshops	Studies included; Most studies involved fewer than 10 participants	F (predominantly)	15-40	AN, BN, BED, EDNOS	Systematic search across databases (CINAHL, EMBASE, LILACS, PsycINFO, PubMed, and Cochrane Library). No restrictions on publication date Quality appraisal conducted by two independent reviewers Theoretical model proposed based on synthesis of findings	CBT, psychodrama therapy, rational counseling, group psychotherapy	Art, MT	Mixed art interventions focused on body image, identity, and emotional expression. Music-based interventions included both passive (listening) and active (singing) formats. Review emphasized non-verbal communication, emotional regulation, and symbolic expression. Some interventions were structured, others open-ended and client-directed	Five studies reported statistically significant outcomes. Some studies showed reductions in anxiety, depression, and body dissatisfaction. Clinical evidence was mixed and preliminary. Authors noted methodological weaknesses and small sample sizes across studies.	Promoted to reduce negative emotional states. Enhanced emotional expression and therapeutic engagement. Improved body image awareness in some participants. Theoretical model proposed to guide future research and clinical application.