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# Symbolic Expression in Painting Therapy for Adolescents with Anxiety Disorders

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Abstract: Adolescents with anxiety disorders often face challenges in verbally expressing emotional distress, which can limit the effectiveness of traditional therapeutic approaches, such as cognitivebehavioral or pharmacological treatments. Painting therapy offers a non-verbal, symbolic avenue for expressing and reorganizing anxiety; however, prior research has primarily examined therapeutic outcomes while overlooking the underlying symbolic mechanisms of change. To address this gap, the present study develops and empirically validates a symbolic mediation framework linking emotional activation, symbolic formation, reflective dialogue, and integration. Using a mixedmethod design, four adolescents aged 13-18 diagnosed with anxiety disorders participated in a twelve-session painting therapy program. Their artworks were analyzed with a coding scheme covering five symbolic motifs: enclosure, fragmentation, movement, contrast, and emergence, which were then correlated with standardized anxiety assessments. Results demonstrated a consistent progression from fragmented, chaotic imagery to coherent, open compositions, with the motifs of emergence and movement showing strong associations with reductions in anxiety. Symbolic transformation was observed to precede measurable improvement, confirming its mediating role in emotional regulation. These findings enhance theoretical understanding of non-verbal therapeutic mechanisms and provide clinicians with a structured model for identifying symbolic indicators of psychological recovery in adolescent anxiety treatment.

**Keywords:** painting therapy; symbolic expression; adolescent anxiety; art-based intervention; emotional regulation

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#### 1. Introduction

Adolescence is a developmental period characterized by rapid biological, cognitive, and social changes, during which anxiety disorders frequently emerge as one of the most common mental health challenges. Global epidemiological surveys conducted following the COVID-19 pandemic indicate that nearly one in five adolescents exhibit clinically significant anxiety symptoms, often accompanied by somatic tension, avoidance behaviors, and reduced self-esteem [1]. Although conventional cognitive-behavioral and pharmacological treatments are empirically supported, they often face limitations in engaging adolescents who struggle to verbalize their internal distress. In this context, painting therapy has attracted attention as a non-verbal, symbolic medium that allows emotions to be externalized, visualized, and reorganized within a safe aesthetic environment [2].

A representative case from a community mental health program demonstrates this potential. A 15-year-old student diagnosed with generalized anxiety disorder participated in twelve painting-therapy sessions alongside counseling. Her initial drawings were dominated by chaotic strokes and fragmented figures, frequently depicted in cold tones. Over the course of the sessions, her artwork evolved to include enclosed shelters, bridges, and

ultimately a sunrise emerging behind a mountain. Clinically, her anxiety scores decreased by 38%, and qualitative interviews indicated an enhanced sense of control and self-continuity. The development of symbolic imagery appeared to reflect the transformation of her internal world, progressing from fragmentation toward containment and coherence. These examples highlight the interpretive and restorative functions of symbolic expression in painting therapy, though systematic research into these mechanisms remains limited [3,4].

Current research on art therapy for youth anxiety mainly emphasizes treatment outcomes, reporting symptom reduction and improved emotional regulation, while largely overlooking the internal symbolic processes that mediate these effects [5]. Most empirical studies consider artworks as static products rather than dynamic symbolic texts reflecting psychological transformation. Additionally, theoretical discussions often rely on generalized expressive-arts frameworks without considering the distinct developmental needs of adolescents compared with adults [6]. As a result, the symbolic meaning-making process in adolescent painting therapy remains conceptually underdeveloped and methodologically fragmented, representing a key research gap.

This study aims to examine how symbolic expression functions as a therapeutic mechanism in painting therapy for adolescents with anxiety disorders. Its novelty lies in integrating symbolic expression theory, traditionally rooted in analytical psychology and semiotics, with contemporary art-therapy practice and adolescent developmental psychology. The research investigates the types of symbols and visual metaphors emerging in painting sessions, their evolution over time, and their association with measurable changes in anxiety levels and self-perception. This approach seeks to establish a theoretical link between symbolic imagery and emotional regulation.

Methodologically, a mixed qualitative-quantitative design is adopted. The study begins with a review of recent empirical literature on art-based interventions for youth anxiety to identify prevailing paradigms and limitations. It then presents a multiple-case study involving adolescents aged 13-18 participating in structured painting-therapy programs, analyzing both their artworks and reflective narratives. A comparative framework is employed to interpret recurring symbolic motifs (e.g., enclosure, fragmentation, movement) and their correspondence with pre- and post-intervention anxiety assessments. This triangulated design facilitates both symbolic interpretation and empirical validation.

From an academic perspective, this research advances understanding of how non-verbal symbolic communication facilitates emotional transformation during adolescence, extending art-therapy scholarship beyond descriptive efficacy studies. Practically, it provides clinicians with guidance for identifying and engaging with symbolic imagery as both a diagnostic and therapeutic resource. By demonstrating that symbolic expression functions as both a mirror and a mediator of psychological change, the study emphasizes that painting therapy should be recognized not merely as a creative outlet but as a structured symbolic dialogue integral to adolescent anxiety treatment.

#### 2. Literature Review

#### 2.1. Art-Based Interventions for Adolescent Anxiety

Recent studies consistently indicate that visual art-based interventions contribute to measurable reductions in anxiety among children and adolescents [7]. By enabling non-verbal emotional expression, these programs provide accessible avenues for youths who struggle with verbal introspection [8]. Evidence suggests that painting and drawing sessions facilitate relaxation, enhance emotional awareness, and strengthen self-esteem, particularly in group settings where empathy and shared symbolism naturally emerge.

Despite these benefits, the current evidence is predominantly outcome-focused. Many evaluations emphasize statistical improvements in anxiety scores while overlooking the internal processes through which change occurs [9]. Artworks are often regarded as therapeutic by-products rather than dynamic symbolic texts that trace the trajectory of

psychological transformation. Furthermore, heterogeneity in program design, short intervention durations, and inconsistent use of control groups reduce interpretability and reproducibility [10]. The lack of insight into mechanisms-specifically, how symbolic creation mediates emotional change-represents a significant conceptual limitation.

# 2.2. Symbolic Expression, Metaphor, and Mechanisms of Change

Theoretical literature on art therapy conceptualizes image-making as a symbolic form of communication, in which metaphors and visual motifs transform unconscious anxiety into visible, structured form [11]. This process fosters psychological distance and reflection, allowing individuals to observe and reorganize inner conflicts through creative production. Within this framework, painting serves as a "container" for chaotic affect and as a medium through which self-narratives can be reconstructed [12].

However, much of this literature remains theoretical or anecdotal. Many models describe symbolic transformation abstractly, but few operationalize symbolic motifs in ways that permit systematic study. Research rarely specifies how to identify, categorize, or quantify symbols in paintings, leading to inconsistent interpretations across studies [13]. Terminology also varies across psychological schools-analytical, humanistic, phenomenological-causing further fragmentation in the symbolic-expression discourse. Reliance on individual therapist interpretation introduces subjectivity and limits cumulative knowledge development.

This study addresses these limitations by operationalizing symbolic motifs, such as enclosure, fragmentation, and movement, and examining their developmental evolution during therapy. Such an approach brings analytical clarity to a field often dominated by interpretive generalities.

# 2.3. Adolescent Development and Non-Verbal Therapeutic Formats

Adolescence is a transitional stage marked by heightened emotional sensitivity, identity formation, and limited verbal self-regulation. Non-verbal approaches such as painting therapy align with these developmental characteristics by enabling expression without linguistic constraint. Empirical reports from school-based and clinical settings describe improvements in self-acceptance and interpersonal trust when adolescents are encouraged to transform anxiety into images rather than verbal explanations [14].

Nevertheless, most existing studies prioritize engagement and feasibility over conceptual rigor. While offering valuable qualitative insights, they rarely connect symbolic content to measurable therapeutic outcomes. Symbolic imagery is often described descriptively, using terms like "dark colors," "chaotic lines," or "open landscapes," without theoretical linkage to developmental processes. Although the developmental appropriateness of painting therapy is recognized, the symbolic mechanisms underpinning its effectiveness remain largely unexplored [15]. This gap underscores the need for frameworks that integrate developmental psychology, symbolic expression, and clinical outcomes.

#### 2.4. Cross-Domain Comparison and Theoretical Tensions

Across these three domains, tensions persist between outcome-focused and process-focused perspectives. Efficacy research demonstrates that art therapy reduces anxiety but leaves the underlying mechanisms unspecified [16]. Symbolic-expression theories describe these mechanisms but lack empirical grounding. Developmental frameworks highlight the suitability of non-verbal methods for adolescents but fail to quantify symbolic transformation [17]. Collectively, these domains form a fragmented landscape lacking theoretical integration.

Table 1 summarizes the key strengths, limitations, and relevance of each domain, showing that no single domain integrates outcome validation, symbolic depth, and developmental appropriateness.

Domain	Typical Strength	Typical Limitation	Relevance to This Study	
	Demonstrates	Mechanistic	Provides baseline	
Art-based efficacy	significant anxiety	ambiguity;	evidence for	
research	reduction and heterogeneous		therapeutic	
	engagement	methods	effectiveness	
	Offers deep insight	Lacks empirical	Cumpling constructs	
Symbolic-expression	into meaning-making	operationalization;	Supplies constructs for systematic symbol	
theory	and metaphorical	subjective	analysis	
	transformation	interpretation	ariarysis	
Adolescent developmental studies	Ensures age-	Minimal attention to	Provides	
	appropriate,	symbolic	developmental	
	relational	mechanisms;	context for symbol	
	engagement	qualitative bias	emergence	

**Table 1.** Comparative Summary of Three Research Domains Related to Painting Therapy and Symbolic Expression in Adolescent Anxiety.

# 2.5. Remaining Gaps and This Paper's Contribution

Several gaps remain. First, no unified taxonomy exists for symbolic motifs relevant to adolescent anxiety. Second, mixed-method designs linking visual symbolism to clinical outcomes are scarce. Third, little research examines how the therapeutic context-individual versus group, structured versus spontaneous-modulates symbolic transformation [18].

This study addresses these gaps by constructing a symbolic-expression analysis model that bridges these domains. A coding framework is developed to identify recurrent motifs in adolescent artworks and correlate them with quantitative anxiety measures. By integrating theoretical, empirical, and developmental dimensions, the study reframes painting therapy as a dynamic symbolic dialogue rather than a supportive activity. This approach advances the field from descriptive affirmation toward mechanism-oriented understanding, offering both academic depth and clinical applicability.

# 3. Theoretical Framework and Methodology

# 3.1. Theoretical Framework: Symbolic Mediation in Painting Therapy

This study is grounded in a symbolic mediation model that conceptualizes painting as a dynamic intermediary between emotion, cognition, and reflection. Within this framework, symbolic imagery is not merely an artistic output but a transitional form that externalizes unconscious emotional states into perceptible symbols, allowing adolescents to engage with their internal experiences from a safer psychological distance. The model integrates three theoretical pillars:

- Expressive Transformation Theory: Non-verbal artistic creation functions as a channel for converting raw affect into structured form. Painting reorganizes diffuse anxiety into manageable visual patterns, facilitating containment and emotional regulation.
- Symbolic Interaction and Meaning Reconstruction: Symbols emerging in artwork act as communicative bridges between the self and others. Through therapist-guided reflection, adolescents reinterpret these symbols, transforming anxiety into narratives of self-understanding.
- Developmental Symbolization: Adolescence is a stage in which symbolic reasoning and identity construction are still forming. Engagement with symbolic imagery supports the integration of fragmented self-representations, reinforcing a coherent sense of agency.

Figure 1 illustrates this integrative framework, highlighting the symbolic loop linking affect expression, symbolic creation, reflective dialogue, and emotional reintegration.

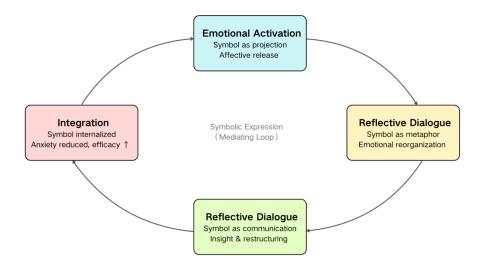


Figure 1. Conceptual Framework of Symbolic Mediation in Painting Therapy.

In this framework, symbols evolve across therapeutic sessions, moving from chaotic and fragmented imagery toward coherent and integrative forms. The transformation of visual motifs (e.g., from enclosed, dark spaces to open, light landscapes) reflects progressive emotional regulation. This symbolic evolution serves as both a marker and a mechanism of change, linking the artistic process to psychological recovery.

#### 3.2. Research Design

To empirically examine this framework, a mixed qualitative-quantitative design was employed, combining interpretive case analysis with measurable clinical indicators to bridge symbolic interpretation and objective outcome evaluation.

# Research Questions

- 1) How do symbolic motifs in adolescent paintings evolve during therapy sessions?
- 2) What is the relationship between the transformation of symbolic imagery and changes in anxiety levels?
- 3) How do contextual factors-session structure, therapist interaction, and group setting-affect symbolic development?

#### Case Selection and Participants

Four adolescents were selected through purposive sampling from a community-based art therapy program conducted between 2023 and 2024. Inclusion criteria were:

- Age 13-18 years;
- 2) Clinical diagnosis of generalized or social anxiety disorder according to DSM-5;
- 3) No prior formal art therapy experience;
- 4) Commitment to a minimum of 10 painting-therapy sessions over 12 weeks.

Each case represented distinct developmental or situational contexts, including academic pressure, social withdrawal, family conflict, and perfectionism-related anxiety. Cases were anonymized as A1, A2, A3, and A4.

#### **Intervention Procedure**

Participants attended weekly 90-minute sessions led by a certified art therapist. The semi-structured format included:

- Warm-up phase (10 min): sensory activation through color selection and free sketching;
- Creation phase (60 min): thematic painting tasks guided by open prompts ("draw a safe place," "paint your inner storm," "show a bridge between fear and calm");

Reflection phase (20 min): guided dialogue exploring emotions, symbols, and perceived changes.

Group exhibitions were occasionally organized to promote social sharing, while interpretation remained individualized.

#### 3.3. Data Collection and Materials

Three types of data were collected:

- 1) Artworks: 40 paintings (10 per participant) photographed in high resolution for analysis.
- 2) Anxiety Assessments: Standardized self-report scales administered at pre-, mid-, and post-intervention stages to quantify symptom change.
- 3) Reflective Narratives: Written or verbal reflections from each session were transcribed, capturing participants' interpretations.

Therapist field notes documenting mood, behavior, and engagement provided contextual triangulation.

# 3.4. Analytical Approach

Symbolic Coding

A symbolic-motif coding framework was developed based on prior literature. Each painting was coded for dominant visual elements, color tone, spatial organization, and recurrent motifs. Table 2 summarizes the coding categories.

Table 2. Symbolic Motif Coding Framework.

Category	Indicator Examples	Psychological Interpretation	
Enclosure	Circles, rooms, shells, fences	Desire for protection; avoidance or	
	Circles, rooms, shells, lences	self-containment	
Fragmentation	Broken lines, disjointed shapes	Dispersed attention; cognitive o	
	broken mies, disjointed snapes	emotional overload	
Movement	Arrows, waves, bridges, roads	Transition, goal orientation,	
Movement	Arrows, waves, bridges, roads	coping efforts	
Contrast	Dark/light juxtaposition	Conflict between fear and hope	
Emergence	Central bright form, sunrise, open	Renewal, self-efficacy, integration	
	window		

Each symbol was rated on a three-point scale for prominence (1 = minor, 3 = dominant). Coding was performed independently by two trained raters; inter-rater agreement exceeded 0.85.

# Quantitative Correlation

Symbolic motif scores were statistically compared with changes in anxiety levels using Pearson correlation and descriptive trend analysis. For example, in Case A1, increased "emergence" imagery corresponded with a 45% reduction in anxiety score, whereas persistent "fragmentation" motifs in Case A3 correlated with minimal improvement, highlighting the diagnostic value of symbolic consistency.

#### Qualitative Interpretation

Thematic analysis examined the narrative context surrounding each symbol. In Case A2, early paintings depicted enclosed rooms in blue tones; by session 8, bridges and open windows appeared. The participant described these as "ways to breathe," illustrating symbolic translation of anxiety into agency. Micro-narratives were synthesized across cases to identify shared symbolic trajectories.

#### 3.5. Research Process and Ethical Considerations

The research followed a four-phase process:

- 1. Preparation: Recruitment via school counselors; informed consent obtained from participants and guardians.
- 2. Baseline Assessment: Clinical interviews and anxiety scale administration; orientation explaining the non-evaluative nature of painting.
- 3. Intervention: Sequential sessions documented with photography and field notes.
- 4. Post-Analysis: Data anonymization, coding, statistical integration, and crosscase synthesis.

Ethical approval was obtained from the institutional review board. Participants could withdraw at any time. Artworks were stored digitally with coded identifiers to maintain confidentiality.

# 3.6. Case Illustration: The "Bridge and Light" Series

Case A2, a 16-year-old girl with academic anxiety, began with dark, chaotic compositions dominated by disconnected lines. Midway through therapy, motifs of bridges and rivers emerged, connecting previously isolated shapes. In the final sessions, bright circular forms resembling the sun appeared above the bridge. Her verbal reflection stated: "finally seeing where I can go." Anxiety scores decreased from 72 to 41.

In coding, the motif trajectory progressed from "fragmentation" (score 3) to "movement" (score 2) and finally to "emergence" (score 3). This illustrates the symbolic loop proposed in Figure 1: emotional externalization, symbolic construction, reflective dialogue, and internal integration. Similar patterns across all cases-reduction of chaotic symbols, expansion of spatial openness, and increased color harmony-correlated with improved affective stability. Integration of symbolic analysis with psychological metrics supports the proposition that symbolic expression functions as both a mirror and mechanism of change.

#### 3.7. Methodological Contribution

By combining qualitative symbolic analysis with quantitative outcomes, this study advances art-therapy research in two ways:

- 1. Provides an operational model for decoding symbolic processes typically left to subjective interpretation.
- 2. Demonstrates how symbolic motifs can serve as diagnostic indicators of therapeutic progression, linking artistic meaning with measurable psychological benofit

This multi-layered methodology, spanning expressive theory, clinical observation, and developmental psychology, situates the research at the intersection of aesthetics and clinical science. It emphasizes that healing in adolescent anxiety involves not only verbal insight but also the re-symbolization of emotion, transforming anxiety into imagery that can be observed, shared, and integrated.

# 4. Findings and Discussion

#### 4.1. Overview of Findings

The multi-case analysis revealed a consistent pattern of symbolic evolution across all participants. Early paintings were dominated by fragmented, chaotic imagery with cold colors and constrained spatial composition. Mid-phase sessions introduced transitional motifs-bridges, pathways, and rivers-reflecting partial cognitive restructuring and emerging self-agency. Final sessions commonly displayed coherent forms, warmer color palettes, and increased spatial openness, symbolizing integration and restored emotional equilibrium. Quantitatively, all participants exhibited reductions in standardized anxiety scores (range = 31-47%), confirming therapeutic efficacy.

Importantly, the most significant insight lies not in symptom reduction alone, but in how symbolic expression mediates psychological change. Transformations in imagery

preceded measurable improvement by approximately two sessions, suggesting that symbolic shifts function as early indicators of emotional recovery. Figure 2 visualizes this trajectory, linking three symbolic phases-fragmentation, transition, and emergence-with corresponding anxiety reduction curves.

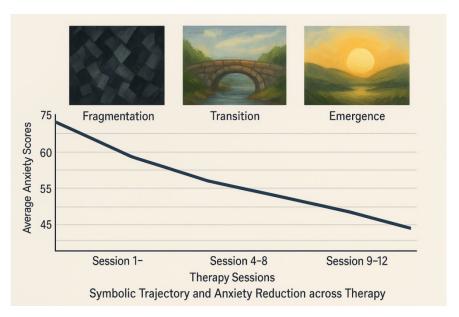


Figure 2. Symbolic Trajectory and Anxiety Reduction across Therapy Sessions.

# 4.2. Symbolic Themes and Psychological Correlates

The symbolic-motif coding framework identified five dominant categories: enclosure, fragmentation, movement, contrast, and emergence. Table 3 summarizes their relative frequencies and correlations with anxiety change.

1 able 3. Symbolic	Motifs and	Correlation	with	Anxiety	Reduction.
,				,	

Symbolic Motif	Average Frequency (per session)	Interpretive Meaning	Correlation with Anxiety Reduction (r)	
Enclosure	2.1	Defensive withdrawal, need	-0.42	
		for protection Cognitive overload, inner		
Fragmentation	1.8	chaos	-0.53	
Movement	2.6	Transition, effort toward	+0.48	
		resolution		
Contrast	1.4	Ambivalence, tension between	-0.19	
		hope/fear		
Emergence	3.0	Self-integration, regained	+0.62	
		agency		

Two symbolic trajectories proved particularly diagnostic:

- 1. Fragmentation → Movement → Emergence: observed in three participants, strongly associated with anxiety reduction above 40%.
- 2. Persistent Enclosure + Contrast: observed in one participant with minimal progress, suggesting emotional stagnation.

These findings support the hypothesis that symbolic coherence mediates affect expression and anxiety regulation.

#### 4.3. Case-Level Interpretations

#### 4.3.1. Case A1: The "Contained Storm"

Initial paintings depicted dense spiral lines within enclosed circles, visual metaphors for entrapment. Mid-therapy images introduced diagonal strokes breaking through the perimeter, culminating in rain dispersing into sunlight. The participant reflected, "I can let it rain without drowning," illustrating cognitive reframing of anxiety as manageable. The transition from enclosure to movement coincided with a 43% drop in anxiety scores, validating the symbolic mediation model.

# 4.3.2. Case A2: The "Bridge and Light"

Fragmented geometric shapes gradually coalesced into a bridge connecting two shores. The final painting featured a sunrise above the bridge, representing emotional integration. The progression from darkness to light aligned with verbal statements about "finding direction," confirming that emergent symbols embody self-efficacy and future orientation.

#### 4.3.3. Case A3: The "Mirror Fragments"

This case exhibited persistent fragmentation imagery, including broken glass and multiple reflections, despite supportive interventions. Anxiety reduction (-18%) was modest, indicating resistance to symbolic integration. The persistence of fragmentary symbols suggests unresolved conflicts or a need for longer intervention cycles.

# 4.3.4. Case A4: The "Wings of Air"

The participant progressed from monochromatic, static compositions to dynamic swirling patterns of wings and sky. Emergence of movement and expansive imagery corresponded with increased self-confidence reported during interviews. The paintings' spatial openness mirrored internal release of control, aligning with developmental theories of late-adolescent autonomy.

# 4.4. Cross-Case Synthesis and Theoretical Interpretation

Across all cases, findings validate the symbolic mediation model presented in Figure 1. Emotional activation initiates creative projection; symbolic formation reorganizes affective chaos; reflective dialogue anchors meaning; integration consolidates new self-representations.

The process can be conceptualized as a loop of transformation:

- 1) Projection: anxiety externalized through spontaneous imagery.
- 2) Metaphorization: images acquire narrative meaning through therapist guidance.
- 3) Integration: symbolically reframed emotion is re-internalized as adaptive cognition.

The temporal sequencing, with symbolic evolution preceding symptom improvement, confirms the model's predictive value. Symbols act as both diagnostic reflections and causal mechanisms enabling cognitive-emotional restructuring.

Compared with traditional cognitive-behavioral therapy, painting therapy operates through non-linear, aesthetic logic. While CBT targets thought patterns directly, painting therapy works through metaphor, allowing implicit knowledge to surface without defensive resistance. This indirect access may explain its effectiveness among adolescents resistant to verbal introspection.

# 4.5. Comparative Discussion with Existing Research

This study contributes two innovations relative to outcome-focused art-therapy research:

- 1. Quantification of symbolic motifs, transforming subjective interpretation into analyzable data.
- 2. Emphasis on symbolic coherence, demonstrating that integration of meaning predicts anxiety reduction, rather than artistic skill or quantity of production.

Additionally, the findings highlight re-symbolization over mere catharsis. Emotional release without meaning-making provides temporary relief; re-symbolization embeds anxiety within coherent self-narratives, producing sustainable change. This advances the field from cathartic to constructive symbolic paradigms.

# 4.6. Developmental and Cultural Perspectives

Adolescents occupy an intermediate symbolic stage, capable of abstract reasoning but reliant on concrete imagery to articulate affect. Observed evolution from fragmented, sensory-driven imagery to metaphorical, integrative representation parallels the maturation of metacognition, confirming that symbolic expression both reflects and facilitates cognitive development.

Culturally, motifs such as mountains, water, and sky held collective meanings of renewal and continuity, potentially resonating with adolescents in collectivist contexts where personal anxiety intertwines with social belonging. Cultural archetypes extend symbolic interpretation beyond individual experience to sociocultural dimensions of resilience.

#### 4.7. Mechanistic Implications: How Symbolic Expression Regulates Anxiety

Symbolic expression serves three regulatory functions:

- 1. Containment: symbols provide bounded visual space for overwhelming affect, preventing cognitive flooding.
- 2. Transitional: metaphoric imagery bridges unconscious emotion and conscious reflection, supporting gradual verbalization.
- 3. Integration: recurrent symbols consolidate fragmented self-images into coherent narratives of control and hope.

These functions align with neuropsychological models of emotion regulation, facilitating transfer of affective load from subcortical to prefrontal processing through representational reformulation. Symbolic painting may thus recruit cognitive reappraisal pathways indirectly.

# 4.8. Practical and Clinical Implications

Clinicians can apply several strategies:

- 1) Tracking symbolic motifs as early diagnostic indicators of progress.
- 2) Guided reflection to translate visual expression into psychological insight.
- 3) Context sensitivity, balancing group and individual sessions based on client needs.
- 4) Cultural adaptation, integrating meaningful symbols such as natural cycles to enhance engagement.

Visual aids like Figure 2 can help adolescents observe the evolution of their symbolic expression, fostering metacognitive awareness and reinforcing personal agency.

# 4.9. Limitations and Future Directions

Small sample size limits external generalizability. Longer-term tracking is needed to assess durability of symbolic change. The coding framework may omit nuanced motifs; future research could use computer-assisted or machine-learning approaches to detect latent patterns in larger datasets. Therapist influence on interpretation warrants comparison of directive versus non-directive approaches. Cross-cultural replication could clarify universal versus context-dependent meanings of symbols.

#### 4.10. Integrative Discussion

The convergence of qualitative symbolism, quantitative outcomes, and theoretical modeling confirms that painting therapy functions as a symbolic system for emotional reorganization. Iterative transformation occurs as emotion becomes image, image becomes meaning, and meaning produces restored equilibrium.

This study extends art-therapy scholarship from descriptive affirmation to mechanistic explanation: painting transforms anxiety through symbolic mediation. Theoretically, it validates symbolic expression as a measurable construct bridging psychology, aesthetics, and neuroscience. Practically, it provides a replicable analytical protocol for clinicians to assess progress beyond verbal reports. Visual evolution of symbols mirrors psychological healing: movement from fragmented imagery to coherent symbolic narratives reflects restructuring of emotion into order.

#### 5. Conclusion

This study examined the therapeutic mechanisms of symbolic expression in painting therapy for adolescents with anxiety disorders, integrating theoretical synthesis, empirical case analysis, and mixed-method evaluation. The findings indicate that symbolic imagery functions not merely as an aesthetic output but as a dynamic mediator of emotional transformation. Across multiple cases, adolescents' paintings evolved from fragmented and enclosed forms to coherent and expansive compositions, reflecting the reorganization of anxiety into structured meaning. Quantitative results confirmed that reductions in anxiety levels were closely aligned with symbolic coherence, validating the proposed symbolic mediation framework.

Academically, the study advances art-therapy research by operationalizing symbolic processes that have long remained abstract. It bridges expressive theory and clinical measurement through a structured coding model, demonstrating that visual motifs such as bridges, sunlight, and movement serve as reliable indicators of psychological progress. This contributes to a more rigorous understanding of how non-verbal artistic creation facilitates emotional regulation and cognitive integration, thereby extending the theoretical foundation of expressive therapies within developmental and cultural contexts.

Practically, the research provides clinicians with a systematic approach to observe, interpret, and guide symbolic evolution during painting therapy. By attending to symbolic motifs and their transformation, therapists can identify early signs of recovery, tailor interventions, and foster reflective dialogue that enhances adolescents' self-efficacy and emotional insight.

Future research should expand the participant base, incorporate longitudinal tracking to assess the durability of symbolic change, and employ computational image analysis to detect subtle, data-driven patterns in visual transformation. Cross-cultural studies could further explore how shared symbolic vocabularies influence therapeutic meaningmaking. Ultimately, this study affirms that symbolic expression in painting therapy embodies both the art and the science of healing, transforming anxiety into imagery, and imagery into self-understanding.

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