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Review Article

Art-Making for Emotional Well-Being: A Review of Non-Clinical Painting and Drawing Practices

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Abstract

Painting and drawing are often evaluated through immediate changes in mood or stress. This critical narrative review examines whether that emphasis adequately represents their contribution to emotional well-being in non-clinical settings. Twenty-four publications were assembled through targeted searches and bibliographic verification. Experimental findings were compared with accounts of artistic experience, with attention to task instructions, participant choice, comparators and assessment timing. Several studies report short-term affective benefits, but comparisons are inconsistent, follow-up is limited, and activities and outcomes vary substantially. Two hypotheses are proposed: immediate relief and sustained creative agency may favour different practices; and meaningful personal choice within supportive structure may matter more than a named artistic format. Both remain untested. Prospective comparisons and findings that would challenge each prediction are specified. Evaluation should address participants' decisions, interpretations and continued engagement alongside emotional change. The review distinguishes artistic meaning, physiological responses and causal evidence, and identifies priorities for research on the longer-term value of everyday painting and drawing practices.

Keywords: art-making, painting, drawing, emotional well-being, emotion regulation, creative agency, art-based research, narrative review

Introduction

Painting and drawing involve decisions about subject, colour and form. The decisions available to someone colouring a supplied pattern differ from those involved in developing an image of their own. A fixed palette constrains one part of the task; an empty sheet requires the participant to decide where to begin. Such differences can be lost when activities are grouped under the general label of art-making. Evaluating their contribution to emotional well-being requires a description of the task and the participant's role, as well as a measure of emotional change.

Studies of art-making address several different questions. Brief experiments ask whether drawing repairs an induced negative mood. Educational programmes explore repeated participation, and art-based accounts examine how images help participants articulate experience. Broader reviews bring together multiple art forms and populations, increasing coverage while reducing the specificity of conclusions about painting and drawing (Martin et al. 2018; Liu 2026). Problems arise when conclusions extend beyond the question a study addressed: an immediate change in affect may become a general claim about well-being, or a rich account of meaning may be interpreted as proof that a particular activity causes improvement.

Here, non-clinical practice refers primarily to artistic activity offered outside treatment for a diagnosed

condition. It does not mean that every participant has been screened and found free of psychological difficulties. Recruitment from a university or workplace establishes a setting, rather than a complete clinical profile. Therapist facilitation is also distinguished from treatment indication: some studies involve an art therapist but recruit generally healthy adults. Studies of mental-health services are retained only as contextual material where their accounts illuminate participation or artistic process. They do not establish effectiveness for the population addressed by this review.

Emotional well-being is treated as broader than low distress immediately after an activity. For this analysis, immediate positive and negative affect, anxiety, perceived stress, creative agency, personal meaning and continuing participation are related but distinguishable outcomes. Creative agency denotes perceived capacity to make and act on artistic decisions. Meaning and participation are not automatically equivalent to well-being; their relationship to it requires investigation. This distinction allows the review to ask whether an activity that excels at immediate soothing necessarily offers the strongest basis for a sustainable artistic practice.

The contribution is a critical comparison of outcome-focused studies with accounts that preserve the content and context of making. The review asks how task instructions, structure and participant choice shape reported experiences, what different research designs can establish, and which testable propositions follow from their tensions. It proposes two hypotheses concerning the time course of benefit and the interaction between structure and agency. These are prospective interpretations of the literature, not findings demonstrated by this review or claims to have discovered previously unrecognized mechanisms. Each is developed into a prospective comparison with a specified result that would count against the prediction.

Review methods

Approach and discovery

A critical narrative approach was chosen to connect heterogeneous evidence and develop testable propositions. The distinction between critical synthesis and exhaustive evidence retrieval follows an established typology of review methods (Grant and Booth 2009). SANRA informed attention to a clear question, transparent searching, appropriate references and the evidential basis of claims; it was not used as a risk-of-bias instrument or a requirement to impose a particular section structure (Baethge et al. 2019). The search was purposive and did not aim to retrieve every eligible study.

Targeted discovery was conducted on 23 September 2026 in three strands: drawing and colouring experiments; artistic process and participant experience; and reviews and recent programme studies. Scholarly web searches led to publisher pages, PubMed/PMC records, author-hosted copies and institutional repositories. Queries combined specific practices and outcomes and included author/title searches, such as ‘Drake Winner drawing distraction expression negative affect 2012 DOI’ and ‘Curry Kasser mandalas anxiety 2005 DOI’. The full query log, access records and extraction matrix are retained in Supplementary File S1. Subscription databases were not searched comprehensively, and there was no independent dual human screening.

Scope, access and interpretation

Twenty-four topical publications were assembled, spanning 2005 - 2026. Relevance to drawing, painting, related mark-making or the interpretation of their outcomes guided purposive selection. Clinical, mixed-modality and methodological publications were retained as labelled contextual sources. The corpus contains 13 controlled or comparative reports, three other exploratory quantitative reports, three qualitative or process reports, three reviews, one population association study and one conceptual paper. Figure 1 groups publications by design. A report can contain more than one experiment, and its category does not indicate methodological

quality.

Each topical DOI was checked against Crossref metadata and source identity was compared with publisher or repository records. The decision to require Crossref-registered sources improves traceability but can exclude relevant books, practice accounts and other scholarship. Fourteen PDFs were archived. For the remaining ten reports, interpretation was restricted to accessible abstracts or publisher excerpts; their abbreviated access is marked in the extraction matrix. A bibliographic match was not treated as verification of every result, and unavailable methodological details were left unresolved.

Extraction recorded population, activity, comparator, outcome, assessment timing and access limitations. The synthesis compared instructions and processes across studies, then examined disagreements and alternative explanations. It distinguished between-group comparisons from within-group change, non-significance from equivalence, and physiological measures from experienced well-being. Formal risk-of-bias scores were not assigned; limitations are discussed at the level permitted by access. No effects or participant totals were pooled, and contextual reviews were not counted as independent replications of their component studies. The hypotheses were formulated after synthesis and have not been prospectively tested.

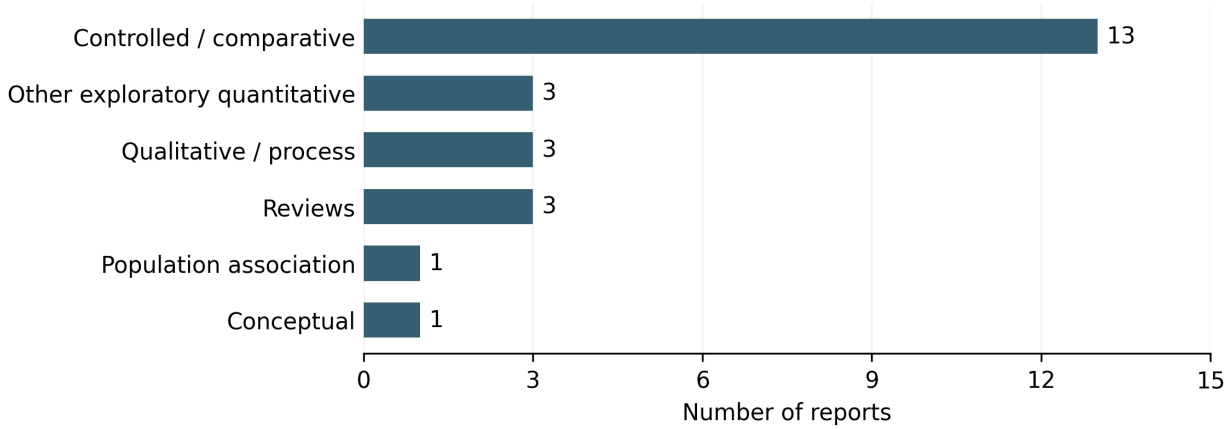

Figure 1. Report designs in the purposively assembled corpus (24 publications). Counts describe reports, including contextual sources; they are not independent-study totals, quality ratings or effect estimates. Source: archived extraction records; classification for this review.

Thematic synthesis

Immediate relief depends on the comparison

Many drawing experiments assess mood or anxiety immediately after a brief activity. Bell and Robbins compared free art production with viewing and sorting art prints and reported greater reductions in negative mood and anxiety in the production condition (Bell and Robbins 2007). This comparison is informative because both groups encountered visual art. However, Boothby and Robbins subsequently used a factorial design involving drawing or art sorting, with or without music, and reported a music effect without a significant art-production effect (Boothby and Robbins 2011). The studies therefore give conflicting evidence of an advantage over art sorting. The nonsignificant contrast in the later study does not establish equivalence.

Instructions also matter. Drake and Winner found that drawing unrelated content could support acute mood repair more effectively than drawing sad content. The comparison with quiet sitting varied by outcome: a positive-affect advantage did not justify an equally strong claim about negative affect (Drake and Winner

2012). James and colleagues extended the expression - distraction comparison across drawing, writing, talking and thinking, suggesting that some observed differences concern regulatory strategy across activities (James et al. 2018). The available abstract does not resolve that study's recruitment and screening details, so population-specific conclusions remain restricted.

Expression itself is heterogeneous. Smolarski and colleagues reported greater immediate mood improvement when participants drew positive feelings than when they depicted current stress or traced an image (Smolarski et al. 2015). The emotional content of an expressive task therefore matters. Drawing positive imagery and depicting current distress should not be combined into a single category when interpreting these comparisons. These brief experiments do not establish which practices participants will value, choose independently or sustain over subsequent weeks. Table 1 sets out the main comparisons and their limits.

Table 1. Comparisons that constrain interpretation of the literature.

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Evidence comparison	Reported pattern	Inference limit
Art production versus art sorting (Bell and Robbins 2007; Boothby and Robbins 2011)	Advantage in one report; no significant production effect in another.	An art-specific effect is not consistently established.
Mandala, plaid and blank paper (Curry and Kasser 2005; van der Vennet and Serice 2012)	Structured tasks outperformed blank paper; the mandala - plaid contrast differed across reports.	No universal advantage of circular geometry.
Distraction, expression and drawing demand (Drake and Winner 2012; Smolarski et al. 2015; Forkosh and Drake 2017)	Patterns depend on emotional content and the outcome assessed.	No demonstrated delayed superiority of expression.
Cortisol and subjective anxiety (Kaimal et al. 2016; Halbrecht-Shaked et al. 2026)	Cortisol declined in one report, not significantly in another; procedures differed.	Uncontrolled change cannot isolate making from time or context.
Repeated Zentangle and related practices (Cheung et al. 2023; Chung et al. 2022)	Selected affect outcomes improved; other comparisons were null or favoured controls.	No consistent benefit across outcomes and follow-up.

Source: cited reports; synthesis for this review. Abbreviated access applies to Boothby and Robbins, van der Vennet and Serice, Smolarski et al. and Chung et al.

Structure, choice and the demands of beginning

Printed designs offer a starting point while limiting some artistic decisions. Curry and Kasser found that both mandala and plaid colouring reduced induced anxiety more than colouring on blank paper, with no significant difference between the two structured patterns (Curry and Kasser 2005). A later replication reported a stronger result for mandalas than for the other conditions (van der Vennet and Serice 2012). Because the replication was available only in abstract form, procedural explanations for the disagreement cannot be settled here. The specific contribution of circular geometry remains unresolved.

Forkosh and Drake compared mandala colouring, drawing an abstract design and drawing in response to sadness. Increasing presumed cognitive demand did not produce a straightforward advantage in mood repair (Forkosh and Drake 2017). Results differed between positive and negative affect, and the reported flow comparison between colouring and design drawing did not establish significant superiority for colouring. The comparison varied complete activities, so the effects of demand could not be separated from ease of entry, expectations, enjoyment or content. Engagement alone does not identify which of these features contributed to mood change.

Choice is equally difficult to isolate. Eaton and Tieber compared freely selected colours with copying

prescribed colours and reported differences favouring free choice on aspects of their outcomes (Eaton and Tieber 2017). The accessible abstract is insufficient to establish the statistical robustness of every contrast, so this report is suggestive rather than decisive support for an autonomy mechanism. A facilitated open-studio comparison reported gains in agency and self-efficacy alongside affective outcomes, but facilitation and activity format changed together (Kaimal et al. 2017b). Structure and choice need to be described separately. A template supplies a starting point while leaving some decisions to the participant. An open task allows more formal freedom, although the participant may still experience pressure to produce something judged artistically competent.

The artistic process extends beyond a task label

Art-based accounts examine how making and interpreting an image contribute to the participant's or researcher's understanding of an experience. Fish presents painting and response art as reflexive methods for examining the researcher's attitudes towards inquiry (Fish 2013). Becker and colleagues describe prompt-led making during pandemic restrictions as a setting for expressing and processing experience (Becker et al. 2022). Both are considered here at abstract level. They establish the kinds of inquiry being proposed, but their limited accessibility prevents detailed appraisal of media, analytic procedures or discrepant experiences. Neither is used as controlled evidence that painting improves emotional well-being.

Potash and colleagues offer a more concrete distinction between creating a mandala and colouring a ready-made one. Medical students produced personally meaningful images within a workshop that also included reflective writing and discussion (Potash et al. 2016). The resulting analysis concerned the meanings articulated through artworks and accounts. It did not isolate the causal contribution of the image-making activity from the accompanying components. Creating a personal mandala in this setting involved different decisions and relationships from colouring a supplied design, despite the shared task label.

Contextual mental-health literature adds caution to idealized accounts of communal making. Lewis and Spandler describe shared artistic activity alongside tensions involving hierarchy and boundaries (Lewis and Spandler 2019). Tomlinson and colleagues' qualitative synthesis includes belonging and achievement as well as pressure to complete activities and concern about programmes ending (Tomlinson et al. 2020). These clinical and service-based contexts cannot be transferred directly to non-clinical populations. Their relevance is methodological: participants' accounts can reveal both valued experiences and costs that a brief mood measure may miss. A process-sensitive review should preserve such disagreements rather than select only narratives that confirm an assumed benefit. These accounts describe experience in particular settings; broader causal or population claims require additional evidence.

Physiological measures and follow-up findings

Several reports supplement self-reported outcomes with physiological measurements. Kaimal and colleagues observed an average cortisol decrease after a mixed-media session involving participant choice and available therapist support (Kaimal et al. 2016). There was no no-art control, and the activity cannot be equated with painting alone. In a later comparison of oil-pastel and digital drawing, anxiety decreased in both conditions, but cortisol did not decrease significantly and there was no no-art comparator (Halbrecht-Shaked et al. 2026). Differences in procedures and samples limit comparison between the cortisol studies. An exploratory study also measured prefrontal activation during colouring, doodling and drawing (Kaimal et al. 2017a). These measurements describe physiological responses; they do not by themselves establish either improved well-being or an art-specific mechanism.

Programme studies extend observation beyond a single session, although their follow-up findings differ

by outcome. Chung and colleagues' pilot trial reported a reduction in negative affect relative to a waitlist immediately and after two weeks, without significant between-group differences on the other measures (Chung et al. 2022). Cheung and colleagues' feasibility trial found positive-affect advantages for particular activities at particular assessments, but no positive-affect advantage at week 12; negative-affect change at week 4 favoured the control over Zentangle (Cheung et al. 2023). The workplace pilot by Hsu and colleagues reported favourable pre/post changes, but the abstract described no comparison group (Hsu et al. 2021).

Population surveys address participation in everyday settings but cannot resolve the causal questions left open by these trials. Keyes and colleagues associated arts-and-crafts participation with several well-being outcomes in a large population survey, while the exposure combined activities and the design remained correlational (Keyes et al. 2024). Together with the mixed-modality reviews, this study supports examining participation in everyday life. It does not demonstrate that a particular drawing instruction produces sustained well-being, or that the practice with the largest immediate change will produce the best longer-term outcome.

Two hypotheses for prospective testing

Hypothesis 1: Immediate relief and sustained creative agency can diverge

The first hypothesis predicts that practices ranked by immediate emotional relief will not necessarily have the same ranking for later creative agency and voluntary participation. More specifically, a supported, personally directed practice may produce less immediate soothing than a readily absorbing prescribed activity while producing stronger later agency and continuation. This predicts an outcome divergence, not an inherent benefit of frustration or autobiographical expression. Baseline preferences and experience would be prespecified moderators. Meaningfulness after assignment would be measured as an outcome, not used to exclude participants whose experience contradicted the prediction.

The rationale combines the outcome-specific results of brief experiments with evidence that making can involve interpretation, decisions and evolving engagement. An activity designed to redirect attention answers a different practical question from one that invites a participant to develop an image they want to revisit. Acute distraction findings (Drake and Winner 2012; Forkosh and Drake 2017) and accounts of meaningful making (Potash et al. 2016; Tomlinson et al. 2020) make the distinction worth testing, but they do not demonstrate the predicted divergence. Open-studio findings also leave open the competing possibility that agency and immediate relief usually improve together (Kaimal et al. 2017b).

A prospective test would compare prescribed colouring with supported, personally directed drawing or painting across repeated sessions, matching contact, materials access, time and expectations. Affect, agency and meaning would each be assessed immediately and later, alongside a follow-up well-being measure and recorded voluntary practice. The principal comparison would retain participants in their assigned groups. Separate condition contrasts would prespecify the expected direction and meaningful margin for each outcome; raw scores on unlike scales would not be compared directly. Condition-by-time tests would distinguish temporal change from changing the outcome measured. Participation would remain a distinct behavioural endpoint, even if associated with well-being.

The directional prediction would lose support if adequately precise condition contrasts excluded the specified combination of greater immediate relief with prescription and greater later agency with personally directed making. Individual-level associations between relief and agency would be examined separately. Differential enjoyment, facilitator relationships or prior artistic interest could offer simpler explanations. Distress trajectories, unwanted exposure and reasons for withdrawal would be monitored; persistent deterioration or participant-reported harm would not be reinterpreted as beneficial development. A favourable interpretation of a difficult session would therefore require evidence beyond the difficulty itself.

Hypothesis 2: The benefit of structure depends on retained decision authority

The second hypothesis predicts that the usefulness of structure depends on whether participants retain meaningful artistic decisions. For novices experiencing uncertainty, a scaffold that reduces the difficulty of beginning while permitting personally consequential choices should support engagement and later agency better than either a rigidly prescribed product or unsupported openness. A label such as 'mandala' gives little information about which decisions are left to the maker or what support is available. This is a proposed interaction, not an established hierarchy of artistic activities.

Structured patterns performing differently from blank paper, inconsistent contrasts between patterns, and suggestive findings about colour choice provide reasons to investigate that arrangement (Curry and Kasser 2005; van der Vennet and Serice 2012; Eaton and Tieber 2017). They do not isolate agency. The alternative account is that familiar patterns simply reduce effort or increase expectancy, regardless of ownership. The hypothesis must therefore predict something beyond a general preference for easier tasks. It also permits experienced participants to respond differently: removing constraints may help someone who already has the skills and intentions needed to begin.

A factorial study could vary starting support and decision authority separately. Support would provide a starting scaffold, with any discretion to use it held constant across decision-authority conditions. Decision authority would vary whether participants choose important features or receive matched instructions. Yoked comparisons could match materials and formal options while differing in who selects them. Time, feedback and facilitator contact would be standardized. Measures would include perceived choice, task demand, expectancy, affect, creative self-efficacy and subsequent voluntary engagement, with prior experience specified as a moderator. Participant accounts would examine what the choices meant, without replacing the comparison.

Support would require the proposed interaction after checking that decision authority changed experienced choice. Precise estimates excluding the specified interaction would count against the hypothesis. Perceived agency would be a process measure; establishing causal mediation would require additional design assumptions or a separate study. Adjustment for post-assignment demand or expectancy would not alone prove a rival mechanism. Figure 2 sets both hypotheses within a conceptual model; Table 2 identifies their tests. Neither presents estimated effects, and neither hypothesis has been tested by this review.

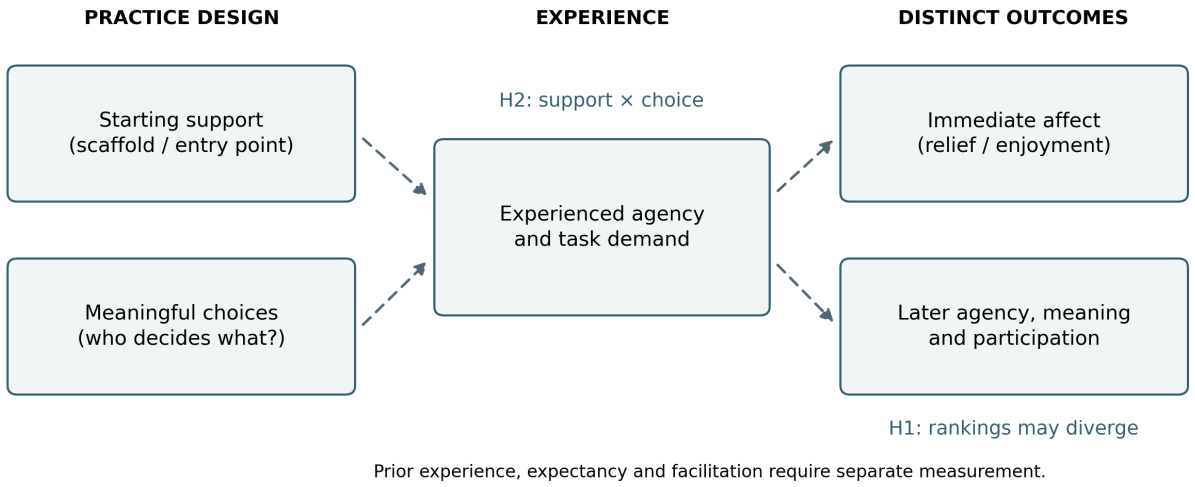

Figure 2. Proposed relationships linking practice design, experience and distinct outcomes. Dashed arrows identify untested relationships. First hypothesis predicts that immediate relief and later agency can favour different practices; Second hypothesis predicts an interaction between starting support and retained choices. Source: conceptual synthesis developed in this review; no empirical effect is plotted.

Table 2. Prospective tests and results that would count against the hypotheses.

Proposed hypothesis	Discriminating comparison	Evidence against the prediction
First hypothesis: Immediate relief and later agency can favour different practices.	Matched prescribed and personally directed activities; assess affect and agency at both horizons, plus voluntary practice.	A stable ranking across specified outcomes and times, with precise estimates excluding the proposed divergence.
Second hypothesis: Starting support is most useful when meaningful decisions are retained.	Vary starting support and decision authority separately; measure experienced choice, task demand, expectancy and prior experience.	Precise estimates exclude the specified interaction despite a successful manipulation of experienced choice.

Source: hypotheses developed in this review. These are design proposals, not observed effects. Non-significance alone would not demonstrate equivalence.

Discussion

What should count as benefit?

An activity can be evaluated only against a stated purpose. For someone seeking relief from an unpleasant mood, immediate affective change is a relevant outcome. It gives less information about whether repeated participation develops confidence in making artistic decisions or sustains a personally valued practice. The reviewed studies contain different objects of evaluation: affective states, physiological responses, artistic decisions, experiences of meaning and continued activity. Their coexistence does not establish a single underlying benefit. A more informative evaluation specifies which outcome matters to the participant, at what time, and at what cost in effort, discomfort or dependence on facilitation.

The proposed hypotheses direct attention to the fit between participants' aims and the conditions of making. Personally directed work could support later agency, but it could also prove frustrating or difficult to sustain.

Prescribed colouring could provide relief and encourage further participation. The comparisons proposed here leave both possibilities open. A brief prescribed task may be an appropriate choice on one occasion, while a longer personal project may serve another purpose. Comparative research should test those conditions rather than assume that a single format deserves a universal well-being claim.

Connecting comparison with artistic inquiry

An account of artistic experience can explain why a practice matters to participants even when it cannot estimate an intervention effect. Conversely, a controlled comparison can estimate a specific difference while leaving the experience of making poorly described. These contributions can inform one another if their evidential roles remain explicit. The present article is a literature review with conceptual propositions; it reports no new art-based inquiry and treats no newly created artwork as empirical data. Published art-based inquiries informed the questions about artistic decisions, materials and participant interpretation developed here.

A useful next study could therefore combine a controlled comparison with participant-led selection and discussion of work across sessions. Analysis would retain accounts of indifference, dissatisfaction and discontinuation alongside favourable accounts. Images would be interpreted with attention to the maker's explanation and the study's declared analytic approach, without treating the reviewer's aesthetic preference as a well-being measure. Such material could reveal whether an assigned option was experienced as support, a restriction or simply irrelevant. It could also challenge the operational definitions of agency used in a quantitative component. Disagreement between questionnaire scores and participants' accounts would itself need analysis, including cases in which a favourable score accompanies an unsatisfactory experience.

Limits and implications for research

Several limitations restrict the review's conclusions. The corpus was assembled purposively, uses a DOI-based constraint and is not representative of all relevant scholarship. Ten reports were interpreted from abstracts or excerpts rather than an available full paper. This is particularly consequential where task differences, statistical qualification or population screening are not visible. The textual evidence is more extensive for short drawing and colouring activities than for sustained painting practice. Conclusions about sustained painting are therefore less well supported than those about brief drawing and colouring tasks. Clinical and mixed-media material remains contextual throughout.

The absence of formal risk-of-bias scoring, comprehensive database retrieval and independent human screening means that the review cannot provide a certainty rating or prevalence estimate for beneficial effects. Publication and access biases may favour positive or easily retrievable reports. Some papers also contain ambiguities between abstracts and results, or between reported analytic denominators. These reporting differences further limited quantitative comparison. The hypotheses require prospective testing; the review does not establish the novelty of their component ideas.

Research would advance by making comparisons more explicit: the intended purpose of a session, the decisions available to participants, facilitator behaviour, the outcome horizon and the actual alternative activity. Repeated assessments should distinguish transient recovery from continuing engagement, and attrition should be examined rather than equated with a lack of data. These principles do not prescribe a therapeutic technique. They define a research agenda in which participants can value calm, challenge, expression or exploration without any of those experiences being declared beneficial in advance. If a programme defines success entirely as soothing, it may discourage forms of exploration that participants value even when they do not produce immediate relief. This possibility calls for investigation rather than an assumption that difficult work

is beneficial.

Conclusion

Painting, drawing and related practices cannot be assigned a single effect on emotional well-being from the studies reviewed here. Some studies support short-term affect regulation, but findings depend on instructions, comparators and the outcome assessed. Evidence from physiological measures, repeated programmes and participant accounts adds perspective while retaining its own limitations. There is insufficient basis here for a universal ranking of formats or a claim that immediate emotional improvement reliably identifies the best sustained practice.

Two hypotheses provide a more specific agenda. Immediate relief and later creative agency may favour different activities, and structure may be most useful when it preserves decisions that participants experience as their own. These propositions remain untested. The proposed studies would compare the predictions with simpler explanations based on task demand, expectations and prior artistic experience. Their practical consequence is a demand for clearer aims and more precise comparisons, rather than a recommendation that everyone should seek either calm or discomfort through art. An adequate evaluation should ask what changed, how the participant understood the activity, and whether the chosen outcomes capture the value being claimed.

Declarations

Ethical statement. This article analyses published literature and reports no newly collected participant data or identifiable participant artworks. No original participant study is claimed.

Disclosure of generative AI assistance. OpenAI Codex was used for literature discovery, source summarization, bibliographic checks, development of the hypotheses and argumentation, manuscript drafting, figure generation and document preparation. The figures contain no generated empirical observations. Independent scholarly review by the named author or authors is required before submission; this draft does not claim that such review has already occurred.

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