



Calmavisio: Visualizing Abstract Anxiety Through 360° Symbolic Animation-Based Exposure Therapy

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ABSTRACT

Generalized Anxiety Disorder (GAD) is characterized by diffuse, abstract, and non-object-specific anxiety, presenting significant challenges for conventional exposure-based therapies that depend on identifiable fear stimuli. This study proposes Calmavisio, a symbolic exposure therapy model utilizing 360° cinematic animation to visualize abstract anxiety experiences in a psychologically safe and immersive environment. Adopting a descriptive qualitative and practice-based research methodology, the study integrates principles from cognitive behavioral therapy, symbolic psychology, visual semiotics, and aesthetic theory. The creative process is structured through the INSPIRA model and realized using the AURA production method, resulting in a 360° animated experience composed of three therapeutic stages: symbolic exposure, response awareness, and recovery. The findings indicate that symbolic and surreal visual metaphors, combined with immersive presence, can effectively externalize internal anxiety states while facilitating emotional reflection and regulation. Calmavisio demonstrates conceptual coherence as a complementary exposure medium, particularly for individuals with GAD who experience difficulty with verbalization or imaginal exposure. Although further empirical validation is required, this study establishes a robust interdisciplinary framework for the development of symbolic immersive media in anxiety intervention.

INTRODUCTION

Mental disorders are clinical conditions that significantly impair cognitive, emotional, and behavioral functioning, affecting individuals' ability to cope with daily life demands. Among these conditions, anxiety disorders represent one of the most prevalent categories worldwide (American Psychiatric Association [APA], 2022). Anxiety disorders encompass several subtypes, including panic disorder, specific phobias, social anxiety disorder, and Generalized Anxiety Disorder (GAD), which is characterized by excessive, persistent, and uncontrollable worry across multiple life domains without a clearly identifiable threat (APA, 2022).

GAD differs fundamentally from other anxiety disorders due to its diffuse, abstract, and non-object-based nature. Individuals with GAD experience chronic worry related to everyday concerns such as health, work, finances, and future uncertainty, accompanied by physical symptoms including muscle tension, sleep disturbances, fatigue, and impaired concentration (Stein & Sareen, 2018). These characteristics make GAD particularly challenging to treat, as the absence of concrete fear stimuli complicates both assessment and therapeutic exposure processes.

Over the past five years, the prevalence of anxiety disorders, including GAD, has increased markedly. The World Health Organization (WHO) reported a global rise of more than 25% in anxiety and depressive disorders following the COVID-19 pandemic, with persistent effects extending into the post-pandemic period (World Health Organization, 2022). Recent studies indicate that adolescents and adults are disproportionately affected, particularly in contexts marked by economic instability, job insecurity, and prolonged uncertainty caused by global crises (Santabárbara et al., 2021; Penninx et al., 2021). These conditions have intensified chronic stress exposure, reinforcing the persistence and severity of generalized anxiety symptoms.

The impact of GAD extends beyond psychological distress, significantly affecting physical health and overall quality of life. Prolonged anxiety is associated with sleep disorders, cardiovascular risk, immune dysregulation, and increased vulnerability to comorbid mental health conditions such as major depressive disorder (Penninx et al., 2021). Without effective intervention, GAD may act as a foundational disorder that exacerbates or precedes other forms of psychopathology, underscoring the importance of timely and effective treatment strategies.

Cognitive Behavioral Therapy (CBT), particularly exposure-based interventions, remains a first-line treatment for anxiety disorders. Exposure therapy aims to reduce anxiety responses through repeated, controlled confrontation with feared stimuli, facilitating habituation and cognitive restructuring (Craske et al., 2022). However, in the case of GAD, conventional exposure techniques often demonstrate limited effectiveness because they rely on identifiable stimuli or scenarios. Clients with GAD frequently struggle to imagine or sustain exposure to abstract, future-oriented, and internally generated worries, resulting in inconsistent therapeutic engagement (Newman et al., 2019).

Current exposure-based media and digital interventions largely employ realistic visual simulations, typically designed for disorders involving concrete fear triggers such as phobias or panic disorder. While immersive technologies such as virtual reality (VR) have shown efficacy in these contexts, their application to GAD remains limited and conceptually misaligned with the disorder's abstract nature (Carl et al., 2019). Moreover, existing visual exposure tools rarely offer self-guided, structured experiences tailored specifically for GAD, nor do they integrate exposure and relaxation phases within a unified therapeutic framework.

These limitations reveal a critical research gap: the absence of exposure media capable of representing the symbolic, diffuse, and non-objective qualities of generalized anxiety. Additionally, immersive 360° technologies have yet to be systematically explored as a medium for symbolic exposure in GAD, particularly within frameworks that integrate artistic visual language with CBT principles. There is also a lack of therapeutic models that combine exposure, affective modulation, and relaxation in a single, cohesive media experience.

To address these gaps, this study proposes the development of a 360° animation-based exposure therapy model through the practice-based creation of Calmavisio. The model employs non-realistic, symbolic visual strategies inspired by surrealistic principles to externalize internal anxiety states using metaphors, archetypal imagery, and psychological landscapes. Such an approach enables safe and controlled exposure to abstract emotional experiences without relying on literal representations that may intensify distress (Malchiodi, 2020). The integration of cinematic 360° animation enhances presence and emotional engagement, while guided narration ensures alignment with CBT protocols and supports self-guided therapeutic use.

Accordingly, the purpose of this article is to highlight the growing urgency of addressing GAD in the contemporary digital era and to propose an innovative, interdisciplinary exposure therapy model that integrates art, psychology, and immersive technology. By positioning artistic creation as a legitimate mode of therapeutic inquiry, this study contributes to the development of adaptive mental health interventions that respond to the complex psychological challenges of modern society.

LITERATURE REVIEW

1. Development of CALMAVISIO as a Symbolic Exposure Medium

The primary result of this study is the creation of CALMAVISIO, a 3D cinematic animation in a 360° immersive format designed as a symbolic visual exposure therapy medium for individuals with Generalized Anxiety Disorder (GAD). CALMAVISIO functions as a visualization of calm, integrating therapeutic exposure, emotional reflection, and relaxation within a single continuous experience.

Unlike conventional exposure therapies that rely on realistic or object-specific anxiety stimuli, CALMAVISIO employs surrealistic visual symbolism to externalize the diffuse, anticipatory, and non-specific nature of GAD. This design directly addresses a core limitation of traditional exposure approaches, where

individuals with GAD often struggle to identify concrete fear objects or scenarios (Newman et al., 2019).

The use of a 360° immersive format enhances the sense of presence, allowing users to experience emotional engagement without direct confrontation with real-world stressors. Presence operates here as a mediating mechanism that supports emotional involvement while maintaining psychological safety (Slater & Sanchez-Vives, 2016).

CALMAVISIO is structured into three symbolic animation series, each corresponding to a therapeutic phase:

1. Exposure, presenting metaphorical representations of uncertainty and existential threat.
2. Response, visualizing fight-flight-freeze reactions as dynamic emotional processes.
3. Recovery, providing a calming visual environment that facilitates emotional downregulation.

Together, these series form a coherent symbolic narrative that mirrors the therapeutic logic of exposure and habituation while remaining aesthetically mediated.

2. Theoretical and Conceptual Implications

The findings demonstrate that symbolic surreal animation can function as an effective intermediary between internal psychological states and therapeutic exposure. Drawing on Jungian symbolic psychology, visual metaphors in CALMAVISIO operate as non-literal representations of unconscious emotional conflicts, enabling users to engage anxiety in a tolerable and reflective manner (Jung, 1968). From a semiotic perspective, CALMAVISIO applies Peircean sign relations, where visual elements act as interconnected systems of meaning rather than isolated images. This semiotic structure allows anxiety to be interpreted relationally, supporting cognitive reframing and reflective distancing (Chandler, 2017). Formal aesthetic control, informed by Bell's concept of significant form and Wölfflin's formal principles, regulates visual intensity across therapeutic stages. High visual tension characterizes the exposure and response phases, while formal simplification and chromatic harmony dominate the recovery phase. This modulation aligns with findings that excessive sensory stimulation can undermine therapeutic effectiveness (Bell, 2018; Arnheim, 2004). The integration of exposure and relaxation within a single experiential continuum represents a conceptual contribution to exposure-based interventions for GAD. Conventional CBT models often separate exposure and relaxation techniques; CALMAVISIO demonstrates that these elements can be symbolically integrated without diminishing therapeutic intent (Craske et al., 2022).

3. Transdisciplinary Contribution, Implications and Limitations

This study contributes to interdisciplinary research by positioning immersive animation as a therapeutic interface, not merely a representational medium. CALMAVISIO bridges clinical psychology, visual semiotics, aesthetic theory, and immersive technology, offering a model for practice-based research where artistic creation generates both experiential and theoretical knowledge. Rather than replacing established therapies, CALMAVISIO functions as a complementary modality, particularly suited to individuals who experience

difficulty with verbalization or imaginal exposure. The findings support the growing view that aesthetic experience can play a meaningful role in emotional regulation and mental health interventions (Malchiodi, 2020).

While CALMAVISIO demonstrates strong conceptual and aesthetic coherence, this study is limited to qualitative and practice-based outcomes. Future research should incorporate empirical validation through clinical trials or physiological measures to assess therapeutic efficacy quantitatively. Nonetheless, the present findings establish a robust conceptual foundation for further development of symbolic immersive media in anxiety treatment.

METHODS

This study adopts a descriptive qualitative methodology with a creative practice-based research approach to investigate the development of CALMAVISIO, a 3D cinematic 360° animation designed as a visual exposure therapy medium for individuals with Generalized Anxiety Disorder (GAD). Qualitative descriptive research is appropriate for examining psychological, artistic, and experiential phenomena, as it prioritizes meaning, interpretation, and contextual understanding rather than numerical measurement (Moleong, 2005). The research focuses on clarifying how abstract anxiety experiences can be translated into symbolic visual forms through an interdisciplinary integration of art, psychology, and technology. Data are expressed in the form of verbal narratives, visual materials, creative artifacts, and reflective observations.

The methodological structure of this research is guided by INSPIRA, a creative model developed to systematize the artistic and analytical process. INSPIRA consists of seven interconnected stages that ensure conceptual coherence between psychological theory and visual realization.

Table 1. INSPIRA Creative Research Model

Stage	Description	Research Function
Identification	Identifying anxiety-related problems (causes, symptoms, impacts)	Problem formulation
Navigation	Collecting interdisciplinary references	Conceptual orientation
Synthesis	Integrating psychology, semiotics, and aesthetics	Analytical foundation
Projection	Developing ideas and visual concepts	Conceptual translation
Implementation	Producing the artwork using AURA Method	Creative realization
Reflection	Evaluating meaning and aesthetic balance	Validation & refinement
Actualization	Presenting the work publicly	Dissemination

The process begins with Identification, where anxiety is examined as a psychological and social phenomenon, focusing on its causes, symptoms, impacts, and therapeutic challenges, particularly in GAD. This stage establishes the relevance and problem orientation of the study. Navigation involves the collection of interdisciplinary data that inform the creative direction, including theories of clinical psychology, symbolic and spiritual imagery, visual semiotics, and aesthetic studies. These materials function as references and conceptual guides for artistic decision-making. In the Synthesis stage, collected data are analytically integrated using symbolic psychology, Peircean visual semiotics, formalist aesthetics, and visual perception theory. This stage translates abstract psychological constructs into visual-symbolic design principles. Projection represents the conceptual development phase, where ideas evolve into preliminary concepts, narrative structures, visual metaphors, and compositional strategies. This stage bridges theory and artistic planning. The Implementation stage realizes the work through the AURA method—a structured creative production process comprising Awareness, Understanding, Realization, and Activation.

Table 2. AURA Production Method

Phase	Description	Creative Outcome
Awareness	Raising awareness of anxiety experiences	Emotional orientation
Understanding	Interpreting anxiety symbolically	Conceptual clarity
Realization	Producing the 3D 360° animation	Visual embodiment
Activation	Delivering the experience to users	Therapeutic engagement

This ensures that the final animation remains aligned with therapeutic intent and conceptual clarity. Following production, Reflection is conducted to evaluate the work using formal aesthetic analysis, visual semiotics, and psychological aesthetics. This stage assesses whether visual harmony, symbolic meaning, and emotional impact are balanced and effectively communicated. Finally, Actualization involves presenting CALMAVISIO through exhibitions and digital platforms, including YouTube, allowing public engagement and contextual evaluation.

This study utilizes primary and secondary data sources to ensure methodological rigor. Primary data were obtained through in-depth interviews with psychiatrists, art therapists, animation and illustration experts, as well as direct observation of patients diagnosed with anxiety disorders at Usadha Sidhi Hospital, Denpasar. These data provide clinical insight into anxiety characteristics and therapeutic needs. Secondary data include institutional documentation, academic books, peer-reviewed journal articles, and digital resources that support theoretical grounding and contextualization.

Data analysis follows an interpretive qualitative strategy, emphasizing thematic interpretation and visual analysis. Psychological meanings are interpreted through symbolic and semiotic frameworks, while aesthetic elements are analyzed using formal visual principles and perceptual psychology (Arnheim, 2004). All research procedures involving human participants were conducted with informed consent. Participant anonymity and psychological well-being were strictly maintained in accordance with ethical qualitative research standards.

RESULTS

1. Identification (Problem Definition)

The research begins with identifying key issues related to Generalized Anxiety Disorder (GAD), a condition characterized by diffuse, persistent, and future-oriented anxiety that is often difficult to externalize through conventional exposure media (American Psychiatric Association [APA], 2022; Newman et al., 2019). The identification phase focuses on understanding the causes, symptoms, daily-life impacts, and existing treatment limitations of GAD, particularly the challenges faced in imaginal and exposure-based therapies when anxiety triggers are abstract and internally generated.

This phase establishes the conceptual foundation for developing an alternative exposure medium capable of translating intangible emotional states into perceptible visual forms.

1) Navigation (Data Collection)

Data collection was conducted through triangulated qualitative methods to ensure validity and interdisciplinary relevance.

First, in-depth interviews were conducted with psychiatrists and art therapists to obtain clinical perspectives on anxiety mechanisms, exposure therapy practices, and emotional regulation strategies. Interviews with animation and visual design experts were also carried out to inform technical and aesthetic decisions in immersive animation production.

Second, a literature review was undertaken across three core domains: clinical psychology, visual arts and aesthetics, and immersive media technology. Scholarly books, peer-reviewed journal articles, and reputable digital sources were selected to support theoretical grounding and methodological alignment.

Third, observational analysis examined existing therapeutic media and related artistic works, including CBT-based exposure models, symbolic art practices, surrealist animation, 3D visual techniques, and 360° video applications. This observation focused on identifying visual strategies, symbolic modalities, and immersion techniques relevant to anxiety therapy (Craske et al., 2022; Slater & Sanchez-Vives, 2016).

2. Synthesis (Analytical Framework)

Collected data were critically analyzed and synthesized using an interdisciplinary theoretical framework. Jung's symbolic psychology informed the use of metaphor and archetypal imagery as mediators of emotional transformation (Jung, 1968). Peircean visual semiotics guided the interpretation of visual elements as relational signs—iconic, indexical, and symbolic—structured across narrative transitions (Chandler, 2017).

Formal aesthetic principles derived from Bell and Wölfflin were applied to regulate visual intensity, composition, and stylistic tension, ensuring a balance between emotional stimulation and perceptual safety (Bell, 2018; Wölfflin, 2015). Additionally, Arnheim’s visual perception theory supported the management of spatial dynamics, focal points, and visual equilibrium to prevent sensory overload (Arnheim, 2004).

This synthesis generated an integrated conceptual basis for developing CALMAVISIO as a symbolic exposure medium.

3. Projection (Concept Development)

Based on the identified research gaps, CALMAVISIO was conceptualized as a symbolic exposure therapy medium integrating exposure, emotional transformation, and relaxation into a continuous visual experience. The work employs surrealistic 3D animation to externalize internal anxiety dynamics through metaphorical landscapes and symbolic forms, addressing the limitations of literal exposure approaches for GAD.

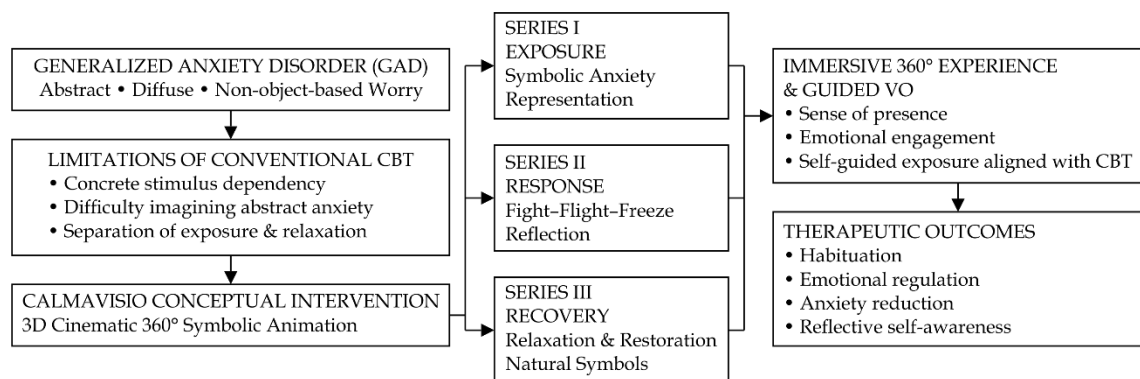


Figure 1. Conceptual Diagram of the CALMAVISIO Model

The psychological framework of CALMAVISIO is structured into three sequential stages:

1. Exposure, presenting symbolic representations of anxiety sources such as uncertainty and existential tension.
2. Response, visualizing fight-flight-freeze reactions through dynamic motion and rhythmic intensity.
3. Recovery, offering calming visual environments dominated by natural elements and harmonious color palettes to facilitate emotional downregulation and habituation (Craske et al., 2022).

4. Implementation (Creative Production)

The implementation phase operationalizes the concept through the AURA method – Awareness, Understanding, Realization, and Activation. Awareness includes narrative development, voice-over scripting, and moodboard design. Understanding involves storyboard creation and animatic development. Realization encompasses 3D modeling, animation, and 360° cinematic production. Activation refers to digital dissemination through the CALMAVISIO YouTube platform.



Figure 2. CALMAVISIO Logo

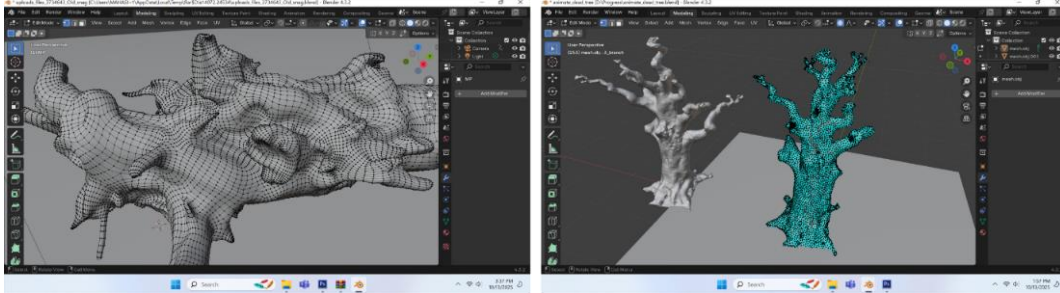


Figure 3. Modeling Process Using Blender Software

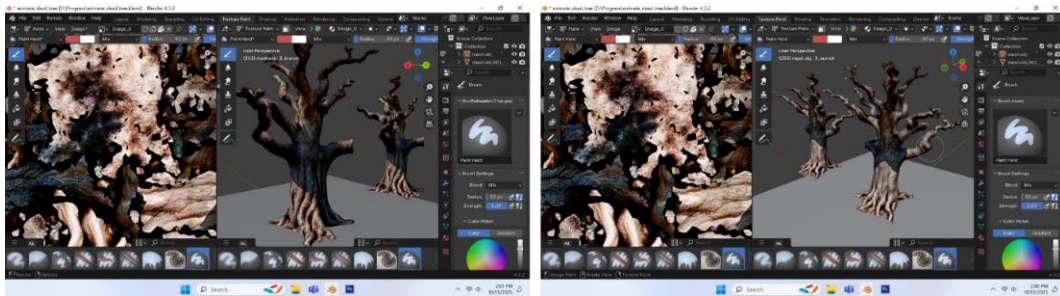


Figure 4. Texture Paint Process Using Blender Software

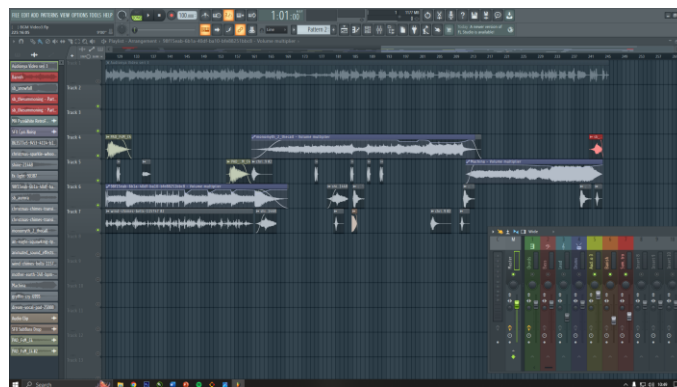








Figure 5. Music Editing Process Using FL Studio 2024 Software

5. Reflection (Evaluation)

Evaluation is conducted through reflective analysis using formal aesthetic, visual semiotic, and psychological aesthetic approaches. This stage examines the coherence between visual form, symbolic meaning, and therapeutic intent, ensuring that emotional messages are conveyed without compromising aesthetic integrity (Malchiodi, 2020).

Table 3. Analysis of Video Meaning

<p>Video Series 1 Symbolic Exposure to Anxiety Landscapes (MP4 06:45)</p>		
		
		
<p>Interpretation: CALMAVISIO Series 1 functions as the initial symbolic exposure stage within the CALMAVISIO visual therapy framework. Presented as a 360° cinematic animation, this series introduces users to metaphorical representations of anxiety commonly experienced in contemporary social life. Rather than confronting viewers with realistic stressors, the work employs symbolic and surreal imagery to facilitate a safe yet emotionally resonant exposure. The vast desert environment, steep rock formations, dark skies, and storm elements operate as visual metaphors for psychological pressure, isolation, and existential uncertainty. These elements do not signify physical danger but represent internalized social stress, role demands, and persistent emotional tension characteristic of Generalized Anxiety Disorder (GAD). In this context, anxiety is externalized into a controllable visual landscape, allowing users to engage with emotional discomfort without traumatic confrontation. The recurring bird figure serves as an archetypal symbol of the psyche or inner awareness, guiding users through the anxiety landscape without offering rescue or resolution. Within Peircean semiotics, the bird operates as a symbolic representamen that directs interpretation toward self-awareness and recognition of anxiety as an integral psychological process. The surreal visual style reinforces the abstract and ambiguous quality of anxiety, enabling users to “feel” rather than rationalize the experience. Consequently, Series 1 does not aim to induce calmness but to initiate awareness, acceptance, and emotional habituation through repeated symbolic exposure.</p>		



Interpretation:

CALMAVISIO Series 2 advances the therapeutic process by focusing on human adaptive responses to anxiety, specifically the fight-flight-freeze mechanisms. This series deepens the exposure process by shifting attention from environmental anxiety cues to internal response patterns, encouraging reflective rather than reactive engagement.

Visual narratives depict the bird enacting three distinct response modes in relation to a stone house symbolizing emotional security, family, and existential stability. Flight is represented by avoidance and withdrawal, freeze by immobility and emotional stagnation, and fight by active resistance against environmental threats. These responses are portrayed not as pathological reactions but as natural defensive mechanisms arising under psychological pressure.

The desert landscape, storms, and lightning continue to frame the emotional intensity of this stage, while dynamic motion, rapid transitions, and heightened visual contrast amplify the experience of inner conflict. Through surreal symbolism, users are invited to recognize their dominant response patterns and understand anxiety as a dynamic process rather than a fixed condition. Series 2 thus functions as a reflective bridge, fostering emotional insight and cognitive flexibility as prerequisites for adaptive regulation.





Interpretation:

CALMAVISIO Series 3 represents the **recovery and relaxation stage**, completing the symbolic therapeutic arc. Following the intensity of the previous series, this stage introduces a significant visual shift toward tranquil natural environments, including flower gardens, calm lakes, and elevated hilltops. These spaces symbolize psychological openness, balance, and receptivity to restoration.

The visual rhythm slows, lighting softens, and color palettes transition toward calming green and blue tones, implicitly supporting physiological relaxation and emotional downregulation. Within a semiotic framework, these elements function as signs referring to bodily calm, controlled breathing, and emotional stabilization. The immersive 360° format enhances presence, allowing viewers to inhabit a restorative space rather than merely observe it.

Mindfulness principles are embedded implicitly through sustained attention to the present visual moment, encouraging non-judgmental awareness and release from anticipatory worry. The final ascent to the hilltop symbolizes clarity, inner peace, and reflective maturity. Importantly, recovery is framed not as the elimination of anxiety but as the attainment of psychological distance and balance. The interpretive outcome emphasizes integration – recognizing anxiety as part of lived experience while cultivating emotional regulation and self-awareness.

6. Actualization (Presentation)

The final stage involves presenting CALMAVISIO to its intended audience through digital exhibition platforms, emphasizing accessibility and experiential engagement. Actualization confirms the work's function as both an artistic output and a therapeutic interface.



Figure 6. Visual Display of Each Video Series

DISCUSSION

This study demonstrates that CALMAVISIO constitutes a viable transdisciplinary model for symbolic visual exposure therapy tailored to the characteristics of Generalized Anxiety Disorder (GAD). By integrating surreal cinematic animation, immersive 360° technology, and principles derived from exposure-based psychotherapy, CALMAVISIO addresses a critical limitation of conventional anxiety interventions—namely, the difficulty of representing abstract, diffuse, and non-object-specific anxiety experiences.

The three-series structure of CALMAVISIO establishes a coherent therapeutic continuum consisting of symbolic exposure (Series 1), response awareness and adaptation (Series 2), and recovery through relaxation and mindfulness (Series 3). This progression aligns with the psychological logic of exposure and habituation while embedding aesthetic modulation as an active therapeutic mechanism. Unlike traditional CBT approaches that separate exposure and relaxation into distinct sessions, CALMAVISIO integrates both within a single immersive narrative, thereby enhancing continuity, emotional engagement, and self-guided usability.

Table 4. Therapeutic and Symbolic Mapping of the CALMAVISIO Series

Series	Therapeutic Stage	Dominant Visual Symbols	Psychological Focus	Expected Therapeutic Function
1	Symbolic Exposure	Desert landscape, dark sky, storm, bird guide	Awareness of diffuse anxiety and existential uncertainty	Initiates emotional exposure, promotes recognition and acceptance of anxiety, supports early habituation
2	Response Awareness & Adaptation	Bird-stone house-storm dynamics	Fight-flight-freeze responses, emotional reactivity	Enhances insight into personal anxiety response patterns, supports cognitive

				flexibility and adaptive awareness
3	Recovery & Integration	Garden, lake, hilltop, soft light	Emotional regulation, mindfulness, balance	Facilitates relaxation, physiological downregulation, reflective integration, and inner calm

From a theoretical standpoint, this research contributes to the expanding discourse on art-based and technology-assisted mental health interventions by demonstrating how symbolic imagery, semiotic structure, and aesthetic control can mediate emotional regulation. The findings support the proposition that immersive artistic experiences are not merely representational but can function as therapeutic interfaces capable of facilitating reflection, emotional distancing, and adaptive coping.

Practically, CALMAVISIO offers an alternative or complementary medium for individuals with GAD who experience difficulty with verbal articulation or imaginal exposure. As a self-guided and repeatable visual experience, it holds potential for integration into preventive mental health programs, digital therapy platforms, and hybrid clinical practices. While further empirical validation is required to assess clinical efficacy quantitatively, this study establishes a robust conceptual and methodological foundation for future interdisciplinary research at the intersection of art, psychology, and immersive technology.

CONCLUSIONS AND RECOMMENDATIONS

This study presents *CALMAVISIO* as an interdisciplinary creative research outcome that integrates symbolic visual art, psychological theory, and immersive technology into a 360° cinematic animation designed for anxiety exposure therapy. By employing a descriptive qualitative approach and the INSPIRA creative model, this research demonstrates how abstract anxiety experiences – particularly those associated with Generalized Anxiety Disorder (GAD) – can be translated into symbolic visual narratives that are perceptually engaging and psychologically meaningful.

The findings indicate that symbolic animation, when structured through formal aesthetics, visual semiotics, and perceptual psychology, has strong potential as an alternative or complementary medium for exposure-based therapeutic practices. The immersive nature of 360° animation enables gradual emotional engagement while maintaining psychological safety, which is critical in anxiety-related interventions. *CALMAVISIO* thus functions not only as an artistic artifact but also as a reflective therapeutic environment that facilitates emotional awareness, interpretation, and regulation.

Furthermore, the application of the AURA production method ensures that the creative process remains aligned with therapeutic intent, balancing aesthetic expression with psychological sensitivity. The reflective and actualization stages confirm that artistic practice can operate as a systematic research methodology capable of producing knowledge beyond purely visual outcomes.

Overall, this research reinforces the value of practice-based methodologies in interdisciplinary studies and highlights the role of immersive symbolic visuals as a promising medium in contemporary mental health discourse.

This study contributes to existing scholarship in four significant ways:

1. Conceptual Contribution

This research introduces *CALMAVISIO* as a conceptual framework that positions symbolic 360° animation as a form of visual exposure therapy. It extends conventional exposure therapy models by incorporating symbolic abstraction, allowing users to engage with anxiety stimuli in a non-literal, emotionally mediated manner.

2. Methodological Contribution

The development of the *INSPIRA* model offers a structured creative research methodology that bridges artistic practice and psychological inquiry. *INSPIRA* provides a replicable framework for future interdisciplinary research that seeks to integrate creative production with qualitative analysis.

3. Artistic Contribution

CALMAVISIO advances the discourse of contemporary digital art by demonstrating how cinematic 3D animation and immersive media can function beyond aesthetic objectives, serving therapeutic and reflective purposes grounded in psychological theory and symbolic meaning.

FURTHER STUDY

Despite its interdisciplinary contributions, this study has several limitations that should be acknowledged. First, *CALMAVISIO* was developed and evaluated within a qualitative, practice-based research framework. While this approach allows for in-depth conceptual and experiential analysis, it does not provide quantitative evidence regarding clinical efficacy. As such, the therapeutic impact of *CALMAVISIO* on symptom reduction in individuals with Generalized Anxiety Disorder (GAD) cannot yet be empirically generalized.

Second, user engagement and psychological responses were explored primarily through expert validation and observational interpretation rather than standardized psychometric instruments. This limits the ability to objectively measure emotional regulation, habituation, or anxiety modulation resulting from exposure to the 360° animation environment. Additionally, the study focuses on symbolic and aesthetic interpretation, which may vary across cultural backgrounds and individual cognitive styles.

Third, the technological implementation was limited to non-interactive 360° cinematic animation. While immersion enhances presence and emotional engagement, the absence of user-controlled interaction may constrain personalization and adaptive therapeutic responses. Moreover, accessibility issues—such as the need for compatible devices and varying levels of digital literacy—may affect broader implementation in clinical settings.

Future research should therefore pursue mixed-method or experimental designs to evaluate the clinical effectiveness of symbolic immersive animation in anxiety therapy. Quantitative studies using standardized anxiety scales, physiological measures, or longitudinal assessments would strengthen the empirical foundation of CALMAVISIO as a therapeutic medium. Comparative studies between symbolic exposure and traditional imaginal or VR-based exposure could further clarify its relative efficacy.

In addition, future development may explore interactive or adaptive versions of CALMAVISIO, incorporating user feedback, biofeedback, or guided therapeutic narration. Cross-cultural studies are also recommended to examine how symbolic visual language is interpreted across different sociocultural contexts. These directions would expand both the scientific validity and practical applicability of immersive symbolic animation in mental health interventions.

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