EEICC® A Path of Empowerment Through the Creative Experience of Work of Art: Evaluation of Psychophysical Effectiveness

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ABSTRACT

The aim of this research is to facilitate the observation of how individuals perceive their psychosomatic state in motion during the experience of engaging with a work of art, as well as to evaluate the effectiveness of the "Conscious Creative Embodied Aesthetic Experience®" as a method of non-verbal communication. Scientific studies regard aesthetic experience as the result of a complex physiological activity involving various cognitive processes, including perception, attention, memory, emotions, and imagination.

This observational process sought to uncover unconscious mental dynamics and explore new motor patterns in interpersonal relationships. From 2020 to 2022, a total of 103 individuals, aged between 20 and 65 years, participated in groups focused on health education and preventive interventions for mental and psychological well-being. Participants completed the "Diade Rev. 3" Kinetic Self-Assessment form both at the beginning and the end of a "EEICC®" program. This tool was used to evaluate the method's effectiveness as a creative pathway to self-awareness in interpersonal relationships.

For data analysis, the non-parametric Wilcoxon Signed Ranks Test was employed to compare results before and after the program. The study aligns with existing literature and is reproducible thanks to its specific focus on observing expressive and morphological postural characteristics, as well as monitoring their variations within a continuum of perceptive and evocative experiences.

INTRODUCTION

Body-mediated psychotherapy approaches, currently adopted by various therapeutic models, integrate and enrich predominantly "verbal" psychotherapy frameworks. The "psychic" process and the "bodily" language creates a link between the emotional and affective world and somatic expressiveness, translating movements closely tied to the inner sphere [1] into embodied forms.

Considering the Gestalt theory [2], which emphasizes the profound connection between psychology and creative art, it becomes evident how our understanding of art is influenced by fundamental principles of perceptual organization. These

principles of perceptual organization. The principles allow us to explore and appreciate the

magic of visual perception. Thanks to proximity, similarity, and continuity, art creates a unified visual experience, guiding our gaze and inviting us to interpret the relationships between various elements.

For artists, this understanding can influence their creative choices and compositions, enabling them to produce artworks capable of capturing attention, conveying complex messages, and eliciting emotional reactions. In this way, artists can lead viewers through a deeply meaningful creative affective experience.

In 1890, American psychologist William James [3] first hypothesized that eye movements could be

related to unconscious internal representations, clear and established possessing meanings. Supporting this hypothesis, the theory of embodied simulation [4] developed after the discovery of "mirror neurons" [5] posits that higher affective and cognitive functions emerge from the motor interaction process between an organism and its environment. This process activates in the observer the same neural circuits as those involved in the actions, emotions, and sensations experienced by others, in an automatic, unconscious, and prereflective manner.

This principle has profound implications for the creation and enjoyment of art and can enhance the understanding and emotional impact of artworks [6]. Moreover, creativity in art is often associated with divergent thinking and the originality of ideas underlying the amplification of awareness and the transformative capacity of human beings. Through

1





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2

the creative process, art can "reinvent" reality, endowing the artwork with therapeutic potential and universal social significance [7].

In this study, the method examined for its effectiveness in relational and psychophysical awareness is the "Conscious Creative Embodied Aesthetic Experience® (EEICC®) [8]". This method stimulates perceptual and aesthetic capacities through a process of bodily reconnection and imitative decoding of a work of art, using empathy as a resource.

This approach is based on neuropsychological theories, specifically the construct of Embodied Simulation, which explores how the body and mind interact in the aesthetic experience, and on neuroaesthetics, which studies the neural foundations of artistic perception. It also integrates the principles of Embodied Cognition [9], which emphasizes the role of the body in shaping cognitive processes, and Gestalt psychology, which analyzes how human beings perceive and organize stimuli into meaningful units.

This methodology takes shape through the integration of expressive techniques from dance

movement therapy and art therapy, promoting a creative process that engages the body, emotions, and awareness. The EEICC aims to foster a deep connection between the individual and the artwork, facilitating a transformative and therapeutic experience.

Specifically, the visualization technique allows conscious perception through a non-focused and thus more "lived" attention. Giving space to the imagination enables the reworking of intrapsychic

content set in motion by contact with the artwork. The gestural re-elaboration of this experience proposed by the method fosters awareness of identification and the development of empathy, while motor action encourages the growth of creativity, coping skills, and improved relational abilities. Once the interlocutor is "engaged" through catharsis, the method facilitates the embodiment of new roles and observes modifications in one's rhythm through continuous interaction with the artwork and the group, always maintaining focus on bodily selfawareness.

A kinetic self-assessment was incorporated into this process to monitor and evaluate the effectiveness of the embodied reworking of movement in its relational significance [9].

Hypothesis and goals

Using artistic representation, combined with psychophysical techniques [10] for reclaiming the body and imitative decoding of works of art—supported by the principles of Neuro-Linguistic Programming (NLP) [11] and emotional intelligence—a process of "calibration" of motor behavior, as well as postural and expressive characteristics, was initiated.

Embodied simulation [9] is viewed as a creative adaptation, which can be described simply as a

way to "influence a person's behavior and promote change," offering new alternatives, perspectives,

and directions. Achieving this objective required the active engagement of each participant in terms of "responsibility." Attention and involvement in group motor activities necessitated identifying various "markers": the component generating limiting behavior, the underlying need of such behavior, and the new empowering behavior capable of fulfilling this intent. This facilitated the integration of different parts that comprise the personality.

The scientific study aimed to assess the observation of empathetic micro-experiences of "mirroring" activated through EEICC i.e., the reflection and awareness of artistic postures and emotional atonement with individual and group representational experiences. This was conducted to examine the quality of energy perceived by the body while maintaining contact with the entire cognitive and affective world.

The importance of processing and expressing emotional experiences lies in the possibility of resignifying them to integrate them into the narrative of one's life story. Focusing on these experiences sought to improve relational, empathetic skills and deepen the understanding of the profound aspects of one's psychological and existential reality [12]. This was achieved through exploring the motor aspect in the interactive/aesthetic process with the artwork, thereby enhancing the ability to recognize bodily signals and legitimize choices in interacting with others and the environment. This also aimed at developing life skills, creativity, and coping abilities within an atmosphere of trust and relaxation.

The cognitive and scientific aspects of the process, implying an evaluation that gives meaning to actions, remained fundamental. A participatory evaluation methodology was thus employed, enabling reflection on the creative experience lived.

MATERIALS AND METHODS

Among the exploratory and creative tools used, the setting assumed the value of a "space for

meeting and aggregation." This allowed the exploration of free and expressive movement, listening through the body, and reconnecting with myths and rituals belonging to the collective unconscious.

The observation of this area was made possible using the construct of the "Diade Rev. 3 Form [13],

(Pic. 1)" which, in a transversal manner, allowed the measurement of psychophysical and relational transformations throughout the duration of the bodyawareness process. Through self-observation, this tool enabled the emergence of one's transformational capacities in relationships with others.

To evaluate the process of body awareness in the aesthetic experience, the Diade Rev. 3 Form was administered at the beginning and end of the course as a kinetic and relational self-assessment tool. This



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encouraged participants to observe changes in motor behavior and postural and expressive characteristics of the body.

In the Diade Rev. 3 Form, scores are expressed on a Likert scale, where each of the 8 items potentially ranges from 1 to 5. Here, 1 corresponds to a minimum value and 5 to a maximum. However, the "Motor Control Rigidity" item is scored inversely, with 1 indicating high rigidity and 5 indicating low rigidity.

The examined categories represent the quality of non-verbal communication expressed in relationships and pertain to elements of gesture and movement quality that are most sensitive to changes in relational aspects.

These are:

Chinesphere: The ability to move relative to the body's center of gravity or central axis, defining

one's ability to explore limits, possibilities, and balance within the space encompassing individual

identity in relation to others.

Centrality: Motor impulses originating from the

Rigidity: Level of global tonic-muscular control in the presence of defensive contractions.

Intensity: Movements originating from the body's center that imbue gestures with emotional expression.

Target

The EEICC® method has been applied in various contexts: within training courses and/ or psychophysical psychotherapy with university students, specialized course students, healthcare workers, and patients [14-16]. To all these participants, the Diade Rev. 3 Form was administered both at the beginning and at the end of the program to identify any variations in motor expression, also due to the acquisition of new motor frameworks.

Between 2020 and 2022, a total of 103 Diade Rev. 3 Forms were collected in both pre- and postintervention stages of the EEICC[®] program.

DATA ANALYSIS

To investigate the outcomes regarding bodily and kinetic perception in relationships with others,

		Dia.De r	ev.3	
	Extensi	ion of movement in	space/ki	nesphere
1Near	2	3	4	5 Far
		Centrality of move	ment	
1Peripheral	2	3	4	5 Central
	1	Structuring of mov	ement	
1 Structured	2	3	4	5Spontaneous
	-	Rhythm of moven	nent	
1 Disharmonic	2	3	4	5Harmonic
		Coordination		
1Uncoordinated	2	3	4	5 Coordinated
	-	Flow of moven	nent	
1 Stopping	2	3 Interrupted	4	5 Continuous
		Rigidity in motor	control	
1 High	2	3	4	5 Low
		Intensity of mov	ement	
1 Weak	2	3	4	5 Strong

Tab. 1

body's core, or visceral area.

Structuring: Defined movements within technical frameworks, studied to become spontaneous expressions of the unconscious.

Rhythm: Motor harmony with music, timings suggested by the facilitator, and the group's overall

movement.

Coordination: Harmony in the execution of gestures or goal-directed actions.

Flow: Energy transmission throughout the body without tonic-muscular or relational barriers/ blocks.

both a qualitative analysis of movement and a statistical analysis using the non-parametric "Wilcoxon Signed Ranks Test" were conducted. These analyses aimed to highlight changes in participants' self-perception as well as the statistical significance of the test used. By employing this statistical analysis, a degree of statistical validity was attributed to all the data (N=103) collected during the study.

Qualitative Movement Analysis

The experiential kinetic trace observed through participants' self-assessment after the EEICC®

3



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/ licenses/by/4.0/). experience showed an expansion in movement, indicating the group's development in exploring new balances and fostering encounters with others in shared space.

Specifically, movements were perceived by most participants as more central and intense, meaning they were experienced viscerally. There was an increased willingness to engage in broader spatial movements, and the exploration of new horizons and perspectives became less inhibited.

The intensity of emotions in relational exploration increased, leading to less inhibited, more open

interactions. These findings reflect an improvement

in the overall quality of participants' movement, prompting a reflection on individual gestural and relational models. (Graph. 1)

Statistical analysis

Using the Wilcoxon Signed Ranks Test, a significant positive increase was recorded in the total

scores across all items (Tab. 1):

The Wilcoxon test also highlighted differences in the items significance, as presented in tab. 2:

All examined items were statistically significant, confirming the appropriateness of the test for measuring the observe changes.



Qualitative analysis

Tab. 2

TEST STATISTICS (a)

	Kinesphere	Centrality	Structuring	Rhythm	Coordination	Flow	Rigidity	Intensity
•	Ex Ante-Ex Post	· Ex Ante-Ex Post ·	Ex Ante-Ex Post	Ex Ante-Ex Post	• Ex Ante-Ex Post	Ex Ante-Ex Post	Ex Ante-Ex Post	Ex Ante-Ex Post
z	-3.343%)	-3.791 ^(b)	-3.114 ⁶	-5.423%)	-5.913®	-4.187%)	-5.581	-4.933%)
Asymp. Sig. (2-tailed)	.001	.000	.002	.000	.000	.000	.000	.000

^(a) Wilcoxon signed-rank test. ^(b) Based on negative ranks.

Tab. 3

Significance	Item
Sig. lev. <0,000	Centrality, Rhythm, Coordination, Flow, Rigidity, Inten-
sity [Asymp. Sig. (2-tailed)].	
Sig. lev. <0,001	Chinesphere [Asymp. Sig. (2-tailed)].
Sig. lev. <0,002	Structuring [Asymp. Sig. (2-tailed)].





DISCUSSION

The shared aesthetic experience of creative motor expression allowed participants to rediscover

the pleasure of being in harmony with themselves and others. The evaluation included observing others' movements and comparing self-perception with the perception of observed movements. This relational observation, linked to the mirroring phenomenon at the heart of embodied simulation, lays the foundation for further research into the phenomenology of body language and movement. This observation fosters the activation of empathetic channels, which, in turn, can inspire the reproduction of observed movements and demonstrate how certain psychological processes influence the surrounding world and interpersonal relationships [17]. By developing greater awareness of one's body and movements during interactions, participants could expand their motor repertoire through reciprocal learning.

Statistical analysis further highlighted significant aspects, including the meaningfulness of the items

and measurable improvements. The test was therefore essential in reinforcing the qualitative findings.

The study aligns with existing literature [13,18] and remains reproducible due to its focus on postural,

expressive, and morphological characteristics, as well as their variations within a continuum of perceptive and evocative flows. It restores the body's natural expression of unmet emotional needs and unexplored states of consciousness, emphasizing engaged interaction with art and others.

Early perceptual-corporeal intervention, whether collective or individual, regardless of diagnostic

presence, informs the quality of relationships and the structuring of the proto-self [19]. As such, it can serve as a primary goal within salutogenic programs, emphasizing control or management of communication

in its para-verbal and non-verbal aspects, representing 93% of communicative processes.

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RESEARCH ARTICLE

5

Year 2025 - Volume 7 Issue 1

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6