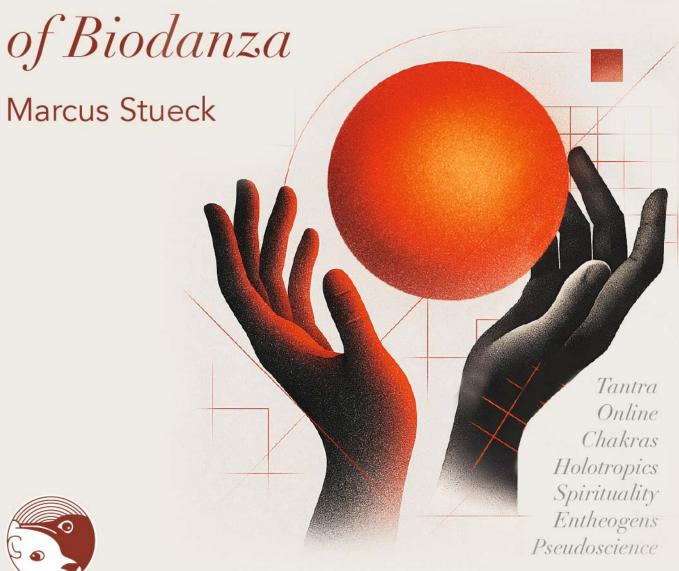
Explore the Unknown -Biodanza studies Vol.2

What Biodanza Can Integrate? Studies on the Limits





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Author's foreword

Marcus Stueck

This book became necessary after various spiritual (including chakra work) and substance-based practices (entheogenic psychotropic substances) were associated with Biodanza from within the Biodanza movement, which were not in line with Rolando Toro's ideas or his theoretical model. The same applies to theoretical contributions at conferences that address Biodanza and spirituality or Biodanza and quantum consciousness. This raises two legitimate questions:

Is Biodanza a system of inclusion or integration, and how much inclusion or integration can Biodanza withstand?

What can be included or integrated without losing the essence of Biodanza?

In this book ("The Limits of Biodanza"), two articles

- The Limits of Biodanza (Part 1) an analysis based on the relative bio-centric health theory and the legacy of Rolando Toros
- The Limits of Biodanza (Part 2) Why is online Biodanza not Biodanza?

First of all, a basic assumption that underlies the answers to these questions.

There are no absolute truths, only relative truths. They are relative to the individual who tries to find them. On this basis, the following biocentric basic assumptions are examined in the book:

- 1. On a human level, Biodanza is a system of inclusion. Here, the entire spectrum of connections is experienced without boundaries. On a methodological level, this is not the case. Here, the system of human inclusion becomes a system of methodological integration with boundaries. Not everything can be included. This means that the human and methodological levels must be considered separately.
- 2. Everything that is included on a human level and integrated on a methodological level must be consistent with the model or theory. Anything that is not permitted by the theoretical model cannot be integrated on the methodological side either.
- 3. In order to answer the question of where the limits of a method lie (integration limits), in addition to the theoretical model of the Biodanza method, a meta-theory is needed that explains what lies beyond the limits. In this book, this reference theory is the relative biocentric health theory (see Fig. 5).
- 4. Without reflection on limits, a method dissolves because it lacks a methodological immune system. The methodological basis for answering the questions in this book is
 - the analysis of Rolando Toro's original texts
 - the inclusion of historical research through interviews with contemporary witnesses who knew Rolando Toro
 - comparison with biodanza theory and the theoretical model
 - empirical research on the contraindications of Biodanza, i.e. on what Biodanza cannot achieve

The book ("The Limits of Biodanza") is volume 1 of the book series "Biodanza Studies – Explore the Unknown". This book series has been published by Marcus Stueck since 2025 to strengthen scientific and critical thinking (reflection) in the Biodanza movement and to publicise its effects. But also to disseminate

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knowledge about existing empirical studies so that Biodanza becomes what Rolando Toro wanted it to be, as the following quote shows:

"Biodanza has no magical connotations. It is based on conventional science, on biology, neurology, advanced psychology, anthropology, sociology, ecology and political science. But there is no magic in it, because things that we cannot explain in accordance with science are not taken into account." (Toro Araneda, 1991, p. 53).

Toro Araneda, R. (1991). Teoria da Biodanca: Coletânea de textos. Editora ALAB.

Chapter 4.5 describes what conventional science means. It refers to the second book in this series ("Biodanza Studies – Explore the Unknown" – Vol. 2: "How much research is there in Biodanza?") (Chap. 4.5, Fig. 7, download at www.bionet-research.com) and to the Biodanza research cycle in order to decide what can be integrated and what cannot (Chap. 4.5, Fig. 8).

Critical reflection is the basis of conventional science. The author of the book, who is a member of the IBFed's scientific methods commission and has been conducting Biodanza research for 30 years with numerous publications, critically reflects on the above-mentioned developments to include or integrate everything (Biodanza and spirituality, Biodanza with substance-based support) and on the two questions. Critical reflection is not a personal matter, but belongs to empirical science as the most important tool for deciding, based on data (facts), what is consistent with theory and models and what is not.

Article 1 explains why Biodanza is not a spiritual method, based on an examination of two articles by Rolando Toro ("The Energetic Transmutation" and "The Numinous Unconscious"). This is because it would mean that Biodanza would have to choose a concept of energy that assumes a consciousness energy outside the body (see chapters 4.2.2 and 4.2.3). This is something Rolando Toro would never have agreed to. His understanding of energy changed

- from the purely biological approach described in chapter 4.1.3.1 (quote from contemporary witness Sergio Cruz: "Rolando Toro understood energy to be the biological energy that arises in every cell at the moment of metabolism")
- to opening the door to a more metaphysical concept of energy in his concept of the numinous unconscious (see chapter 4.2.5.1). However, the transcendent and numinous were still based on sensory experiences.

Sensory experience is a distinguishing criterion that does not play a central role in the spiritual realm, as this realm is concerned with a general sense of being that exists universally and permanently and with which we are always connected (spirit, essence). This shows that, in spiritual understanding, human beings are more than just their bodies (spirit, essence, soul that reincarnates, see chapter). Chapters 4.2.5.2 and 4.2.5.3 describe what Rolando Toro said about reincarnation, for example, and the reasons for Rolando's rejection of Eastern practices in Biodanza (see contemporary witness Sandra Salmasso: "Rolando rejected Eastern, esoteric concepts, see chapter, 4.1.3.2) and his distancing himself from spirituality. However, Eastern philosophy and practices such as meditation, chakra work and tantra are necessary to grasp spirituality. However, they are not part of the Biodanza system and, according to the scientific analysis presented here, cannot be integrated into it. The same applies to holotropic breathing (see chapter ...). Only so-called metatheories, such as the relative biocentric health theory presented by Stueck (2025) with its

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concept of biocentric holism, determine the boundary between physical, measurable energy and metaphysical, non-measurable energy with the help of Planck's length (see Fig. 3, Chapter 4.2.2). In Chapter 4.2.2, in addition to the cosmic Big Bang, the spiritual Big Bang is also described for the first time in a scientific model of the visible and invisible planes of life (see Fig. 3, The visible and invisible are planes of one and the same dimension) by Stueck (2025), whereby everything visible comes from the invisible (biocentric basic assumption, see Chapter 4.2.4 Energy and biocentric holism, see Fig. 4). Chapter 4.2.5 explains why the concept of the numinous unconscious remains a provisional concept that is incomplete. Or it is complete and Rolando Toro draws a clear line between body and energy and between consciousness as energy outside the body, which emanates from a first uncaused cause and is responsible for the manifestations behind Planck's length (see Fig. 3, Manna, cited in Bazzotti, Manna, Stueck, 2025). Rolando Toro already draws this line by not calling the numinous unconscious the numinous conscious. For then he would have recognised the energy of consciousness (see Chapter 4.2.5). The scientific definition of spirituality according to Harris (2014) described in Chapter 4.2.5.2 also clearly shows the boundary that Rolando Toro draws in his provisional concept of the numinous unconscious.

"Spirituality is an experience in which the self is recognised as an illusion and 'pure consciousness' is experienced, which lies beyond thoughts and the usual ego identification or sensory perception."

Rolando Toro critically described the illusion of the Buddhist tradition ("Maya") (school material on biocentric education). And here it becomes clear how important the first biocentric basic assumption described in this foreword is, according to which the human must be considered separately from the methodological level. This consciousness energy outside the body, from which Toro distances himself, can possibly be experienced in vivencias. This is shown by research within the framework of the relative biocentric health theory on Biodanza Aquatica on time perception and the transition into the spiritual, intuitive field (from rhythm to frequency). However, there is a theoretical limit here that Biodanza teachers should respect when giving lectures on Biodanza and spirituality, incorporating chakra work into Biodanza, or integrating tantra, Bach flower remedies and quantum consciousness. Otherwise, Biodanza is no longer theory-compliant and loses its scientific foundation. If Biodanza does not want to remain a pseudoscientific method, e.g. in relation to spirituality, attitude towards substance-based support, etc., Biodanza representatives can also decide to change the theoretical model and include the metaphysical spiritual level, in accordance with metatheory (rbHT).

Metatheory also describes how the theoretical model of Biodanza is a classical scientific model, which, above all, has little scientific evidence. It is not a quantum model. Metatheory also describes how it could be converted into a quantum model parallel to the classical model. Chapters 4.4.1 and 4.5 of the book ("Grenzen von Biodanza" [Limits of Biodanza]) explain what is needed for a quantum psychological model (Chapter 4.5 "Relative and Absolute Superpositions"). The book "Grenzen von Biodanza" leaves this question open. This book is intended to stimulate reflection and further thought:

The second article in the book deals with the limits of Biodanza in relation to online Biodanza and the question of what reality is.

The limits of the biocentric principle are described in the first article in the concept of biocentric holism. For further discussion of this topic, reading the relative biocentric health theory (Stueck, 2025) is recommended.

"Biodanza is not a business. Through our ability to think critically and scientifically, we can preserve the essence of Biodanza. Every teacher has a responsibility to follow Rolando Toro's wish. If we lose this ability, Biodanza loses its immune system."

Leipzig, August 2025 Prof. Dr. habil. Marcus Stueck



This book is dedicated to Rolando Toro With deep gratitude Marcus Stueck

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The Limits of Biodanza – Part 1

An analysis based on the Biocentric Health Theory and the Legacy of Rolando

Toro

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ABSTRACT:

The question of the limits of Biodanza has become increasingly important in recent years, especially after the death of its founder, Rolando Toro. While Biodanza has proven to be a powerful and life-affirming method in scientific summaries of studies by Stueck, Thofts, (2016) and Ferraro, Aruta, Ambra, Distaso., Iavarone (2021), international Biodanza practice shows a tendency to incorporate content that is neither anchored in Toro's theoretical model nor compatible with Rolando Toro's intentions. Based on six problematic observations of practice, this article describes six central limits:

- (1) the use of psychotropic entheogenic substances
- (2) the adoption of non-measurable energy concepts such as chakras or Bach flower remedies,
- (3) Biodanza and holographic breathing
- (4) Biodanza and tantra
- (5) the transfer of biodanza to online formats
- (6) Ignorance of empirical science and critical reflection.

Transgressing these boundaries jeopardises the internal coherence of Biodanza. It leads to a weakening of its effects, a loss of scientific credibility and a fragmentation of its methodological integrity. A biocentric basic assumption in this article postulates that without the scientific definition of clear boundaries, Biodanza risks slipping into arbitrary or pseudoscientific reinterpretations. The Relative Biocentric Health Theory (rbHT), developed between 2020 and 2025, provides a scientific framework for reflecting on these boundaries. It describes holographic characteristics of life, understood as biospoietic connections in which each part reflects the whole. Within this model, boundaries are a fundamental holographic characteristic of life. They provide orientation, protection and clarity – and thus represent not a restriction, but a necessary condition for development. The definition of boundaries in Biodanza is an existential prerequisite for effectiveness and further development. Various methodological means are available to define these boundaries:

- (a) historical research into Toro's intentions, which clearly exclude, for example, the use of psychotropic substances or esoteric systems such as chakras,
- (b) the theoretical model and original definition of Biodanza, emphasising biological and relational processes and analysing two articles on the concept of energy and the numinous unconscious
- (c) meta-models such as relative biocentric health theory (rbHT, Stueck, 2025), which scientifically classify concepts outside the biodanza framework (including the concept of biocentric holism and the model of the four cardinal directions),
- (d) empirical studies on indications, contraindications and effects. In addition, the concept of **relative superposition** within rbHT enables the clear differentiation of different modalities of experience (observation, experience, reflection, evaluation), the mixing of which can jeopardise the essence of methods such as Biodanza.

Reflection on boundaries opens up perspectives for **quality assurance**, **professionalisation and research**. It strengthens open dialogue within the movement, protects the identity of the method and at the same time anchors Biodanza credibly in science, society and culture. Boundaries thus become an instrument of **renewal and sustainability**.

KEYWORDS Biodanza and boundaries, relative biocentric health theory (rbHT)

1 Introduction

In recent years, especially after the death of the founder of Biodanza, Rolando Toro, various developments have been observed in the practice of Biodanza that indicate an increasing blending with other methods. However, many of these additions are neither covered by Toro's theoretical model nor do they correspond to his original intentions. The introduction of new modules often takes place without critical, scientifically sound reflection. This raises fundamental questions about methodological integrity of Biodanza and at the same time affects the future of the international Biodanza movement. The aim of this article is therefore to determine the limits of Biodanza on the basis of Rolando Toro's legacy and the relative biocentric health theory, to analyse them critically and to perspectives for responsible identify development. Based on practical observations and examples of such blending, this article therefore examines the following key questions:

- 1. What are the limits of the Biodanza method and its theoretical model, i.e. what can Biodanza achieve and what can it not?
- 2. What are the consequences if the unreflective integration of new practices continues or the existing limitations of Biodanza are not recognised and respected?
- 3. What is necessary to preserve the essence of the Biodanza method while still integrating new aspects in a reflective and scientifically sound manner?
- 4. How can we cooperate with other methods despite the limitations described?
- 2 Practical observations and the necessity of boundaries

Research shows (e.g. Stueck & Tofts, 2016; Stueck & Villegas, 2018) that Biodanza can be a powerful and effective tool – but only if it is passed on in accordance with Rolando Toro's theoretical model and intentions.

Since Rolando Toro's death in 2010, however, developments have been observed in which these fundamental prerequisites for the effective work of Biodanza are increasingly being lost. The impression is that attempts are being made to integrate almost everything that seems possible into Biodanza. Many of these integrations would not have been envisaged by Rolando Toro, the founder of Biodanza, as historical research in this article shows.

The article therefore explores the following question:

Where are the limits of the flood of integration in Biodanza? In which aspects should the necessary distinctions be made within the Biodanza system in order to preserve the essence of the method?

Four *practical observations* are presented below to substantiate these statements. One example of this is the combination of entheogenic, psychotropic substances and biodanza (Entheogenic Dance Project). The word entheogenic comes from Greek (én-theos = "filled with God", gignomai = "to become, to arise"). Entheogenic substances are substances (mostly psychoactive plants, such as ayahuasca or mushrooms) that are used in ritual, spiritual or religious contexts to enable a feeling of connection to the divine, to the self or to nature. Historical sources show (see chapter 4.1.1) that Toro expressly rejected such combinations – yet they are still practised today (= **practical observation 1**).

Furthermore, in some workshops, the concept of energy is used in a spiritual or healing sense, for example in formats such as "Biodanza and Chakras", "Biodanza and Quantum Consciousness" or "Biodanza and Bach Flower Remedies". However, these concepts are not part of Toro's theoretical model and are neither empirically proven nor scientifically described (**Practical Observation 2**).

In recent years, various workshops have repeatedly attempted to combine Biodanza with elements of Tantra. This is not in line with Rolando Toro's intentions, as historical research shows (see chapter 4.1.3.2). Tantra as it is practised today at festivals is increasingly a methodology that has moved further and further away from its Indian origins. The original tantric teachings of India understood Tantra as a spiritual path of unity between body, mind and cosmos, in which sexuality, consciousness and energy were experienced as inseparable expressions of the divine. It was only in later Western adaptations

that the focus shifted increasingly to physical experience and sensuality, whereby the spiritual core was often lost.

Stück described these modern forms as methods of the "observed spiritual ego" within the framework of *relative biocentric health theory* (Stueck, 2025). By this he means a form of spiritual practice in which the ego – instead of dissolving – subtly persists and now identifies with spiritual experience in order to elevate or affirm itself (**Practice Observation 3**).

Another observation relates to Biodanza, which is conducted online. Since the COVID-19 pandemic, the number of online formats has increased significantly. In some cases, attempts have even been made to conduct extensions and applications online. In an earlier publication (Stueck, 2024), it was already critically reflected that Biodanza can only unfold its true power to a limited extent in virtual space. Central elements such as touch and non-verbal resonance cannot be fully experienced there, which marks a clear boundary (**Practice Observation 4**).

Finally, a fourth practical observation, which inspired the writing of this book 8 in the book series "Discover the Unknown – Empirical Studies in Biodanza", shows that there is insufficient engagement with empirical research in parts of the movement. Often, the necessity of primary studies on Biodanza is not recognised. These are empirical studies with Biodanza. Instead, the effectiveness of the method is justified with literature-based arguments. Literature-based argumentation is a form of argumentation in which assertions, interpretations or theses are not derived exclusively from one's own considerations or research, but are supported by evidence from literary texts or scientific works that have been collected using other methods. Examples include epigenetic effects, for which no primary studies exist, or regression processes, for which studies do exist but have not been read or taken into account. This ignorance of scientific reflection jeopardises methodological integrity and represents a limitation of Biodanza itself. A problematic development in connection with the ignorance of empirical sciences is the idea held by some representatives that Biodanza can universally "solve all problems". Such fantasies of omnipotence are

risky because they create false expectations. From a scientific point of view, it is essential to clearly define and critically reflect on the indications and contraindications for Biodanza. Without the scientific determination of contraindications – i.e. the limits of the method – it is not possible to speak of a scientifically based method, as Ebert (1993, cited in Stueck, 1997) emphasises (**Practical observation 5**).

Overall, it is clear that these developments deviate from Rolando Toro's original desire to establish Biodanza as a scientifically based method.

As these practical observations show, it is essential to define the limits of Biodanza in order to avoid misunderstandings, overstretching and misuse, and to protect the essence of the Biodanza method.

3 Key theses on why awareness of the limits of Biodanza is important?

Based on practical observations, addressing the limits of Biodanza can be considered essential in order to preserve the method. If Rolando Toro's original intentions are taken into account, Biodanza can unfold its full potential ly without giving rise to misunderstandings or overstretching. From a scientific point of view, there are six key reasons why awareness of limits is essential:

- Theoretical consistency: Biodanza only works when it's taught in line with Rolando Toro's theoretical model. Of course, this model can be developed further, but only by sticking to the so-called Biodanza research cycle, i.e. through critical scientific discourse.
- **Distinction from other methods:** Extensions through entheogenic substances or esoteric energy practices dilute the method and jeopardise its credibility.
- Indications and contraindications
 Clearly defining areas of application and limitations protects against delusions of omnipotence and enables the responsible use of Biodanza.
- Context dependency: Biodanza can only unfold its essence in specific settings; virtual formats or egocentric leadership tendencies significantly limit its effectiveness.

- Biodanza are essential to empirically prove its effectiveness; simply adopting foreign theories is not enough.
- Essence protection: Reflection on boundaries prevents misunderstandings and overstretching and helps to preserve the specific strength of Biodanza as an embodied practice.

3.1 The holographic nature of boundaries and their significance

Rolando Toro's biocentric principle centres on the statement that life and its protection are at the heart of everything. This brings about a change in perspective: the starting point is not abstract ideas, rational learning or dogmas, but life in its immediate, embodied experience.

In order to locate this statement scientifically, the relative biocentric health theory (rbHT, Stueck, 2025) was developed. For the first time, the rbHT describes scientifically testable characteristics that can be used to determine whether life and its cosmic principles are actually at the centre. This is done by introducing so-called holographic characteristics of life (see Fig. 1), which are developed in a process of biospoiesis. The concept of biospoiesis (Greek bios = life, poiesis = development) forms the basis for scientifically defining, proving and developing the biocentric principles developed by Toro.

Holographic characteristics in this concept of 3.2 The connection to the source biospoiesis mean that each individual element of a living system reflects the whole - just as in a hologram, the entire image is contained in each part (biospoietic hologram, see Figure 1). The relative biocentric health theory provides physiological and psychological measurement methods (biocentric process analyses) for the scientific determination of holographic characteristics. This provides an empirically verifiable basis for Rolando Toro's central statement on the biocentric principle – placing life at the centre. One of these holographic characteristics, as shown in Figure 1, concerns the importance of boundaries. According to a basic biocentric assumption, life unfolds in a biospoietic process alongside rhythms (process), leaps and

Empirical anchoring: Primary studies on instabilities (organisation), connections (structure) and boundaries. Boundaries provide orientation, protection and clarity. They are not a restriction, but according to the relative biocentric health theory, a necessary condition for the unfolding of life (biopoiesis) in Biodanza.

Figure 1 Scheme of holographic features in the biospoietic hologram

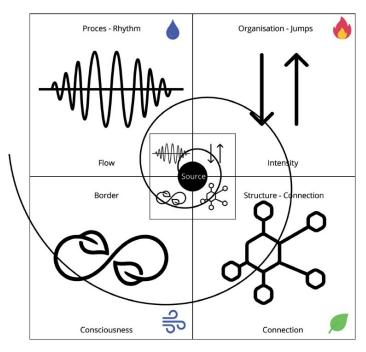


Figure 1 clearly shows that the holographic features – including the boundary – are always connected to the source.

In relation to Biodanza, this means honouring Rolando Toro's original intention and at the same time examining which further developments of the concept and the theoretical Biodanza model make sense in relation to this source. Historical research into the development of the method and the statements of its founder is of central importance here. The relative biocentric health theory also clearly describes what happens when the connection to the source is lost: pathological processes arise and the structure disintegrates. Applied to Biodanza, this means that severing the connection to the original foundations not only jeopardises the coherence of the model, but also

promotes undesirable developments in practice and theory.

4 Which methodological means help to determine and explain the limits of Biodanza?

Now that the necessity and reasons for describing boundaries to protect the essence of the Biodanza method have been demonstrated, it is time to turn to the question of how these boundaries can be formed. In order to clearly define and explain the limits of Biodanza, various methodological means are available that can provide guidance and prevent undesirable developments.

4.1 Historical research on the intentions of Rolando Toro

Historical research is central to the description of the boundaries of Biodanza. Historical research on the boundaries of *Biodanza* deals with the question of which elements clearly belong to the method and where its boundaries lie in relation to other methods.

- An important approach is to interview contemporary witnesses of the early development in order to obtain authentic perspectives on Toro's intentions and the original practice.
- In addition, Rolando Toro's writings are consulted, which provide key insights into the theoretical foundations and methodological guidelines.

The combination of eyewitness accounts and text analyses provides a nuanced picture of the historical contours and possible extensions or transgressions of Biodanza. Historical research also clarifies what desires and intentions Rolando Toro had as the developer of the method and which extensions he expressly excluded. These sources form an important benchmark for authenticity.

4.1.1 Historical research on the use of entheogenic psychotropic substances

In the first practical observation, the problem was raised that there are Biodanza teachers who work with so-called entheogenic psychotropic substances. In today's usage, *psychotropic* means "acting on the psyche or influencing mood, consciousness or

behaviour" (Greek *psyche* = soul, spirit; *tropos* = turn, orientation). The term *entheogenic* is derived from Greek and means "bringing forth the divine in ". In **Relative Biocentric Health Theory**, such substances are referred to as *entheogenic psychotropic substances*, as they have an altering effect on psychological processes and can also open up a connection to transcendental dimensions of experience in spiritual contexts.

Examples of entheogenic, psychotropic substances listed in Relative Biocentric Health Theory (rbHT):

- Ayahuasca
- Psilocybin-containing mushrooms
- MDMA (in specific ritual or therapeutic contexts, e.g. for trauma treatment)
- Cocoa (in ceremonial traditions)
- LSD

In rbHT, these substances are expressly distinguished from *Biodanza* and Rolando Toro's *biocentric principle*. This distinction is made for several reasons:

- Form of intervention: Entheogenic psychotropic substances have a pharmacological effect via neurochemical processes, whereas biodanza, as a non-substance-based method, also activates neurochemical processes, but these are based on music, movement and affective encounters.
- **Risk and safety profile**: The use of entheogenic psychotropic substances is associated with physiological and psychological risks (e.g. acute stress reactions, contraindications, legal problems), whereas Biodanza is geared towards organic, low-risk learning.
- **Methodological intention**: Toro understood Biodanza as a humanistic and biocentric development process that does not require substances and aims to promote vitality, affectivity and integration in everyday life.
- **Epistemological approach**: While entheogenic, psychotropic substances induce altered states of consciousness through external means, the biocentric principle pursues the activation of inner resources through natural, social and existential experiential processes.

The rbHT thus makes it clear that these are **complementary but independent paths** that follow different theoretical foundations and practical objectives.

As previous historical research has shown, Rolando Toro agrees with this assessment, as those who accompanied him from the very beginning unanimously state that Toro rejected **entheogenic**, **psychotropic** substances, even though he also experimented with them.

The following is a qualitative study report (pilot study) with original statements from a representative of the IBFed Methodology Commission (International Biocentric Federation) on the question of what Rolando Toro thought about the use of **entheogenic, psychotropic** substances.

Person 1 (Sandra Salmaso): "All Biodanza facilitators and teachers who met Rolando Toro Araneda in the 1980s and were trained by him know that he also explored states of expanded consciousness through the use of entheogenic substances (LSD). At that time, Rolando Toro was still in a research phase on expanded states of consciousness, which he conducted mainly through the controlled use of LSD in carefully prepared contexts and always under the supervision of doctors and qualified professionals who were ready to intervene if necessary. For Rolando, the goal of this research was to understand how far one could go with the use of psychoactive substances, understood as tools for expanding human perception and experience. After several years, however, he came to the firm conclusion that the use of LSD, like any other type of entheogenic substance, should not be part of the Biodanza practice. This decision was based on a fundamental insight: certain types of movements – such as flowing or extremely slow movements – performed with closed

eyes and accompanied by slow music and a "lysergenic" tone, can produce effects similar to those of entheogenic substances, but without side effects and in a safe and natural environment. We know that Rolando Toro experimented with LSD and believed that in later years, after appropriate scientific and molecular research, it could be used therapeutically to find out how certain traumas could be treated. He observed how the state of life in his physiology could be nourished through experiences with music, singing and dance that produce lysergic effects.

That is why he called it "integrative trance" and distinguished it from the dangers of other trance methods.

He, Rolando Toro, told us: neither substances nor holotropic breathing should be part of Biodanza – it is about naturally activating the molecular chemistry, peptides and neurotransmitters of love and joie de vivre. Rolando's deep understanding of human beings enabled him to develop the Biodanza methodology, thanks to these tools that are capable of promoting states of expanded consciousness through trance, regression and kinaesthetic movements, in conditions of well-being and in contact with nature. Today, however, we are seeing the spread of practices in some parts of the world that refer to Biodanza but in reality represent a dangerous deviation from the original system, as they attempt to reproduce Rolando Toro's "original research" without understanding his methodological development and fundamental decisions. For this reason, the IBFed Methodology Commission officially distances itself from any attempt to alter or distort the practice of Biodanza through the use of entheogenic, psychedelic or similar substances. At the same time, it calls on all facilitators and didactics of the international movement to use their judgement and reject any experiments that deviate from the basic principles of the system created by Rolando Toro. Person 2 (Maite Bernadelle): "It is also important to remember that these entheogenic and similar substances were not yet 'banned' by law at that time, and I believe that Rolando, when we talk about the 1990s, was in fact experimenting with all of this much earlier, namely since the 1980s. I come from

As a preliminary conclusion from these original statements, it can be stated that Rolando Toro experimented with entheogenic substances such as LSD under medical supervision in the 1960s to explore expanded states of consciousness. This phase was facilitated by the legal environment at the time. He soon came to the conclusion that substances should not be part of Biodanza practice. Instead, he developed the concept of "integrative trance," which enables similar experiences through music, movement and affective encounter – but without pharmacological risks. Biodanza thus methodically

that era and mention this in case it can help answer

the question by providing more precise information."

distances itself from substances. Today, the IBFed reaffirms this distinction and expressly distances itself from all attempts to combine Biodanza with entheogenic practices.

4.1.2 Historical research on Biodanza and holographic breathing

In the original statement by Person 1 (Sandra Sallmasso), the method of holotropic breathing also appears, in which it was said:

Person 1 (Sandra Sallmaso): "He, Rolando Toro, told us: neither substances nor holotropic breathing should be part of Biodanza – it is about naturally activating the molecular chemistry, peptides and neurotransmitters of love and joie de vivre." Why does Rolando Toro exclude holotropic breathing as part of Biodanza? Holotropic breathing is a method developed by Stanislav and Christina Grof in which altered states of consciousness are induced through consciously accelerated and intense breathing in combination with music. The aim is to make unconscious content accessible or to enable spiritual experiences. Due to possible physical and psychological risks (e.g. dizziness, cramps, overexertion), it is only used in supervised settings and thus differs fundamentally from gentle, organic methods such as Biodanza.

Similar to the original statement (Sandra Salmasso), the relative biocentric health theory (Stueck, 2025) also distinguishes holotropic breathing from the Biodanza method. Why?

The reason for the distinction from **holotropic breathing** lies in the same principles that have led to the distancing from entheogenic, psychotropic substances:

- External induction As with substances, an altered state of consciousness is forced by an artificially created physiological mechanism, not by organic integration.
- Biocentric principle Biodanza relies on safe, natural processes that promote life (*music*, *movement*, *encounter*) instead of taking risks for the body and psyche.
- **Methodological clarity** Toro wanted to clearly distinguish Biodanza from practices that induce trance through extreme means, and therefore

- developed *integrative trance* as a gentle, life-promoting path.
- **Risks and side effects** Holotropic breathing can cause physical stress (e.g. cramps, dizziness, disturbances of consciousness) and psychological destabilisation due to extreme hyperventilation.

In Biodanza, the human state of consciousness is expanded through naturally induced trance states (integrated trance), as shown by the original statement by Person 1 (Sandra Salmasso):

Person 1 (Sandra Salmaso): "He, Rolando Toro, observed how the state of life in his physiology could be nourished through experiences with music, singing and dance that produce lysergic effects.

That is why he called it 'integrative trance'.

What are lysergic effects? They refer to effects similar to those experienced under lysergic acid diethylamide (LSD), but produced without the external administration of LSD. In other words, they refer to states typically induced by LSD, but not produced by LSD:

- altered sensory perceptions (more intense colours, sounds, bodily sensations)
- dissolution of the sense of time and space
- altered self- and body perception (dissolution of the ego, experience of unity)
- increased emotionality and receptivity to music, images, symbols

Rolando Toro used the term to describe how music, singing and dance can induce similar expansions of consciousness to LSD – but in a natural, safe and integrative way, without pharmacological substances.

4.1.3 Historical research on Rolando Toro's concept of energy

A second practical observation in the introduction describes how, in some Biodanza workshops, the concept of energy is used in a spiritual or healing sense, for example in formats such as "Biodanza and Chakras", "Biodanza and Quantum Consciousness" or "Biodanza and Bach Flower Remedies".

4.1.3.1 Historical research on the biologicalphysical concept of energy Rolando Toros

Rolando Toro has a completely different concept of energy, as the small pilot study (qualitative suty report) shows.

Person 1 (Sergio Cruz): "Rolando understood energy not as abstract or esoteric concepts, but as the biological energy that is generated in every cell at the moment of metabolism. Every cell transforms substances into energy (ATP/ADP), thus generating the life energy of living beings. In doing so, it converts entropic processes (decay, dissolution) into negentropic processes – processes that build and sustain life.

This energy is effective in all natural processes of homeostasis: in breathing, in sleep, in hugging, in orgasm. These are organic, biochemical, electrical processes that constantly bring forth new life – right up to the conception of a child. In Biodanza, this natural energy can be intensely experienced through regression, touch and encounter. That is why it is sacred and experienced as transcendence. Rolando always emphasised: It is not a miracle of Biodanza, but a miracle of life.

4.1.3.2 Historical research on the limits of Biodanza in relation to the concept of energy in working with chakras

The following is a qualitative study report with original statements, examining the extent to which the extension "Biodanza and Chakras" is covered by the theoretical model and whether it can be accepted as an extension. The respondents were not anonymised as they are well known in the Biodanza movement and thus represent authorities:

Person 1 (Sandra Salmaso): "I spoke to a methodology consultant at a biodanza school in Brazil to ask her for information on the subject of this extension of the archetypes of the 7 chakras. She told me that they are cited in a book by Rolando and have therefore been accepted."

Person 2 (Maite Bernadelle): "I find this text you refer to very strange, because Rolando told anyone

who wanted to hear it that they did not believe in chakras or energy channels, that there was only one energy, the energy of life and love, and that there was no 'development' in it, from its most primitive to its most spiritual part, as the chakra theory claims."

Person 3 (Myriam Sofia): "It's strange, because we heard about energy and chakras from Rolando himself, and for him it was not something that needed to be taken into account."

Person 4 (Sandra Salmaso): "I studied with Rolando himself in 1990/93, and he always said that Biodanza had nothing to do with the Eastern culture of chakras, mainly because at that time, as I can imagine, one could not speak of 'spirituality' either. He spoke of transcendence... As we all know here. He repeatedly reminded us that the foundations of Biodanza are biological in nature and that he did not want it to be confused with anything esoteric or oriental. Especially because Biodanza is a relational and not a solipsistic development."

The term *solipsistic* describes an attitude in which someone is strongly fixated on themselves, their own perception or inner experience – often without any real connection to external reality or other people. A spiritual practice can become solipsistic if it only serves one's own experience or self-affirmation instead of connecting with life and other people. This is exactly what Rolando Toro wanted to prevent.

4.1.3.3 The development of energy models in Biodanza according to Rolando Toro

This chapter is based on a very important article that Sandra Salmaso found in the IBFed Methodology Commission on the question of chakra integration and made public.

(Source: Toro, R. A., Theory of Biodanza, Vol. 1, Chap. V: Models of Energy Transmutation, IBF-CIMEB)

This publication discusses the concept of "energy" and its significance for Biodanza from Rolando Toro's perspective. It becomes clear that the concept of energy has undergone a profound transformation in the history of the Biodanza method through Rolando Toro. While early interpretations still drew

on symbolic or spiritual ideas of energy, Toro's theoretical work developed a physical-affective and biologically based understanding.

1. From a symbolic to a physical understanding of energy

Toro understood "energy" not in the sense of esoteric concepts or metaphysical forces, but as a **lived experience** – perceptible in the body, in movement and in the affective encounter between people. He deliberately avoided terms such as "spirituality" or "energy centres" as they often create a separation between body and mind. Instead, he spoke of **transcendence** as an experienced unity with life – a form of consciousness development that arises from relationship, movement and empathy, not from the activation of invisible centres.

2. Overcoming symbolic models

A key step in this methodological development was Toro's decision not to incorporate the chakra model into the theoretical foundation of Biodanza. Although he recognised its cultural and historical significance, he gave three reasons for his rejection:

Reasons for rejecting the concept of chakras:

Cultural limitations – chakras are linked to specific religious-philosophical systems (Hinduism, Buddhism).

Risk of abstraction – invisible energy centres distract from the concrete, emotional experience (Vivencia).

Methodological openness – symbolic or spiritual language can exclude people who are oriented towards scientific or secular worldviews. In doing so, Toro brought about a paradigm shift: Biodanza describes human change not on the basis of external models or metaphysical maps, but from the experience of the here and now.

From spirituality to lived transcendence

In Biodanza, transcendence does not mean mystical elevation, but rather the **expansion of identity** in connection with life.

Through dance, music, touch and affective

resonance, a state of unity can arise in which vitality, creativity, sexuality, affectivity and transcendence interpenetrate each other. Toro emphasises that in Biodanza there is **no stimulation of energy centres**, but rather a **natural transformation** (**transmutation**) of life energy that occurs in relationship and movement.

The five lines of Vivencia as an experience-based model

Instead of a spiritual exercise system, Toro developed the model of the five lines of Vivencia: vitality, sexuality, creativity, affectivity and transcendence. These lines describe biological and psychological forms of expression of identity and form a universal, experiential system. Energy is not understood here as a force to be directed, but as a manifest principle of life that expresses itself in relationships, touch and movement. Each line unfolds only in interaction with specific environmental and relational contexts ("ecofactors") and thus contributes to the integration of body, emotion and identity.

The significance of energy in relation to feeling:

The development of energy models in Biodanza

illustrates a fundamental difference between Biodanza and spiritual practice systems. Biodanza does not operate with unmeasurable, metaphysical energies or symbolic maps, but with direct, embodied experience. Energy is an expression of the living process itself – perceptible in every breath, every movement, every encounter. Toro summarises this in a sentence that describes the core of the Biodanza methodology: "Intellectual knowledge does not produce existential change – only experience has this power." Biodanza thus clearly positions itself within a **biocentric paradigm** that understands life itself – biological, emotional and relational – as the origin and goal of all development. If Biodanza wants to change this, it must adapt its theoretical model, e.g. with the help of the relative biocentric health theory as a metatheory or the concept of biocentric holism contained therein (see Figure 4).

4.2 Meta-models as tools for determining the limits of the concept of energy in Biodanza

The value of framework models, i.e. models that are "bigger" than the Biodanza model, becomes apparent when the question is raised:

Which methods can be combined with Biodanza and which cannot?

When Rolando Toro was still alive, i.e. until 2010, he decided this himself. However, following his death in 2010, it must be decided on the basis of various criteria, which are described in this article.

- In addition to historical research,
- comparison with the theoretical model
- , it is the application of a meta-model, such as the relative biocentric health theory.

This meta-theory is helpful in explaining what exists beyond the boundaries of Biodanza. This is particularly necessary for concepts, terms and methods that go beyond the theoretical model and Biodanza definitions and are discussed in relation to the question of whether concepts, terms and methods can be integrated into the Biodanza system.

So-called meta-theories can be used to scientifically describe why certain concepts (e.g. chakras, psychotropic substances) do not belong to the theory of Biodanza and which other scientific and biocentric fields they cover.

The meta-model of rbHT also clarifies the difference between inclusion and integration in relation to Biodanza. This is because there is obvious confusion about this within the Biodanza movement.

4.2.1 The difference between integration and inclusion in relation to Biodanza

In the introduction, two basic assumptions were postulated with regard to integration and inclusion. These two basic assumptions describe the following five aspects:

- On a human level, Biodanza is a system of inclusion. Here, the entire spectrum of connections is experienced without boundaries.
- On a methodological level, Biodanza is not a system of inclusion. Here, the system of human

- inclusion becomes a system of methodological integration with boundaries. Not everything can be included.
- The human and methodological levels must be considered separately.
- Everything that is included on a human level and integrated on a methodological level must be consistent with the model or theory.
- Anything that is not permitted by the theoretical model cannot be integrated on the methodological side either.

The fact that attempts are made to include so many different methods in Biodanza (see practical observations in Chapter 1) shows that the human and methodological levels are obviously mixed.

Methodologically, there are limits, as not all of the methods fit the theoretical model. As already explained, Rolando Toro clearly points out the limits of Biodanza with regard to historical analyses. And he states that not everything can be integrated into Biodanza. Biodanza is therefore not a system of inclusion in which everything can be included, but rather a system of integration. This means that, out of a total population of possibilities, some possibilities must be left out:

- Those that do not conform to the model.
- Those not covered by the intentions of the developer Rolando Toros (historical research)
- Those who prove unsuitable in the empirical research process (contraindications)
- Those who do not comply with the affectiveethical biocentric principles of Biodanza

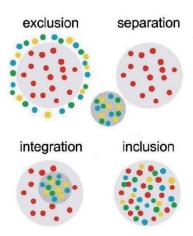
This definition of the boundary, i.e. the difference between integration and inclusion, is important for understanding the integration processes with regard to the Biodanza methodology.

Figure 2 shows what integration means in relation to the connection with methods, as opposed to the other levels of connection:

Not everything can be included in relation to the methods

From a human perspective, Biodanza is a system of inclusion, but not from a methodological perspective. Not everything can be included here. Here, it is a system of integration with boundaries.

Fig. 2: Exclusion, separation, integration, inclusion in relative biocentric health theory.



The meanings of the four system modalities are explained below with examples:

Exclusion: Methods or content that do not serve to protect life are excluded.

Example: Ideologies or approaches that promote violence, discrimination or manipulation, army/military.

Meaning: Biodanza consciously sets itself apart in order to preserve the biocentric principle.

Person 1 (Marcus Stueck): "During the Didacta training, I asked him: Rolando, what can't we integrate into the Biodanza system? He replied, anything that is hostile to life, e.g. the book "Mein Kampf" or the ideologies of Adolf Hitler."

Separation: Methods that exist but remain separate from Biodanza without any contact with it. **Example:** Parallel existing methods without reference to the Biodanza framework, such as working with psychotropic substances, energetic healing methods,

Meaning: There is no exchange, only peaceful coexistence.

Integration: Methods that are placed within a common framework but maintain internal boundaries.

Examples: Biodanza in connection with zodiac symbolism or the I Ching.

Meaning: A certain connection is created, but there are methodological or symbolic boundaries. The experience is the connecting factor.

Inclusion:

All methods are integrated into a common field. This does not apply to **Biodanza**, as it is based on a clearly defined theoretical model. Inclusion is possible for the **Relative Bio-Centric Health Theory (rbHT)** as a meta-theory with its clear awareness of the limits of the methods (relative superposition) and the description of an absolute superposition. This is because, with absolute superposition, the meta-theory rbhT describes a space of possibilities in which all possible options exist in constant change.

Example: Biocentric methods of the four cardinal directions, which are classified in a common field. Inclusion also means that the invisible, nonmeasurable and the measurable, visible levels are brought together. One example is biocentric holism. The merging of the methods into a meta-model or the integration of the methods (peaceful coexistence of the methods) is based on working with the research cycle (see Chapter 4.6, Fig. 6). This means that integration, inclusion, separation and exclusion must first be explained theoretically before these four processes of a system are then tested in practice and then also empirically examined and critically reflected upon. This may lead to the theory and practice having to be adapted.

4.2.2 The invisible and visible levels of life and energies from the perspective of a metatheory

In order to understand the concept of energy in an inclusive way, we need a concept that goes beyond the physical level of the concept of energy. This is where the meta-theory of relative biocentric health theory comes in. The meta-theory rBHT describes

- a material level of life with a physical concept of energy and, since life has a dual nature (principle of duality), also a
- non-material level of life with a metaphysical concept of energy:

What is physical energy?

Meta-theory (rbHT) understands this to mean a form of energy that can be described and measured in physics, such as mechanical, thermal, electrical or chemical energy. The four fundamental forces of gravity, magnetic field, weak and strong nuclear force also belong to this category. These physical energies are objective, quantifiable and expressed in

units such as joules or watts. In living organisms, physical energy is transformed into **biological energy**, for example in the form of adenosine triphosphate (ATP), which serves as a universal energy carrier for metabolic processes. Physical and biological energy thus together form the basis of all scientific processes, from the processes in inanimate nature to the regulatory mechanisms of living systems.

What is metaphysical energy?

In contrast, **metaphysical energy** refers to concepts of energy that lie beyond the dimensions that can be measured by natural science. These include ideas such as life energy, such as chi, prana, orgone energy or mana, as well as concepts of consciousness energy.

However, according to a biocentric basic assumption of the Relative Biocentric Health Theory (rbHT), this area does not assume different, separate energies, but rather a unified form of metaphysical energy that encompasses all known concepts (including chi, prana, orgone energy, mana). It is referred to as consciousness energy (biocentric basic assumption of rbHT).

Metaphysical energy (consciousness energy) cannot be measured directly, but can be experienced subjectively and is primarily located in spiritual contexts. It serves to describe phenomena of experience that lie outside scientific models – such as the feeling of being, healing energy or spiritual power.

According to rbHT, both levels are levels of one and the same dimension: some are invisible and cannot be measured, while others are observable and measurable. According to rBHT, energy on the physical level has its origin in the cosmic Big Bang, in which particles "exploded" from a state of nothingness, emptiness (with quantum fluctuation) and expanded into space and time. According to rBHT research, the source of metaphysical consciousness energy lies in a spiritual Big Bang, whereby consciousness energy emanates from a first uncaused cause, which is then responsible for the material manifestations of particles, i.e. also for the cosmic Big Bang and for the manifestation of minerals, plants, animals, humans (forms of

consciousness). These connections are the result of qualitative research with the spiritual teacher Manna (cited in Bazzotti, Manna, Stueck, 2025) and are also discussed in the article "The Cosmic and Spiritual Big Bang – How Science Deals with the Visible and Invisible Levels of Life". A biocentric basic assumption formulated by rbHT is fundamental here: "the invisible shapes the visible".

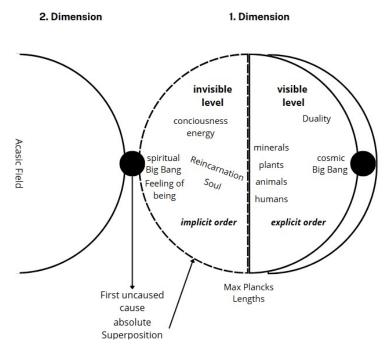


Fig. 3: The cosmic and spiritual Big Bang according to the meta-theory of relative biocentric health theory (Stueck, 2025)

Source: Stueck, M. (2025) "The cosmic and spiritual Big Bang – How science deals with the visible and invisible levels of life in one and the same dimension. IN: Stueck, M. (2025). The relative biocentric health theory. From ego-centred survival to life-oriented health BoD-Verlag (in press, available in Spanish 2026)

4.2.3 The boundary between the invisible and visible levels

The rbHT has dealt with the boundary between the visible and invisible planes.

In modern physics, the physical level extends to the limit of Planck's length, i.e. the smallest physically meaningful unit of measurement, which is approximately $1.6\times10-351$ {,}6 \times 10^{-35} } $1.6\times10-35$ metres. Below this limit, established

physical models lose their validity, as quantum fluctuations dominate and neither space nor time can be described in the form we know. (Biocentric basic assumption of rbHT)

From a scientific point of view, Rolando Toro's considerations, as evidenced by Sergio Cruz's statement (see chapter 4.1.3.1), focused on the visible and measurable dimensions of human experience and biological processes. In relative biocentric health theory, more precisely in the concept of biocentric holism, a decisive differentiation is made at this very interface of Planck's length.

Relative biocentric health theory points out that beyond Planck's length, an invisible, no longer measurable realm begins. This realm is no longer covered by classical natural sciences, but is understood as a level in which non-material, energetic and spiritual dimensions come into play.

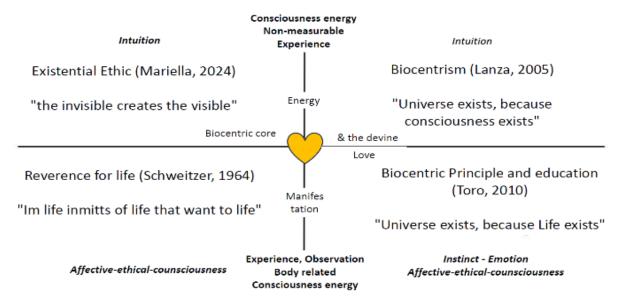
In this way, the relative biocentric theory of health connects the scientifically accessible realm with an expanded understanding of health that goes beyond the limits of what is measurable. However, this spiritual level is no longer covered by the theoretical model of Biodanza. Although this spiritual energy of consciousness flows in Biodanza practice, Biodanza cannot integrate it into its system and build its practice on it because the theory and model do not allow it. Methods such as "Biodanza and Chakras" or "Biodanza and Bach Flowers" cannot

be integrated. To change this, Biodanza would have to change its theoretical model. Figure 4 shows the schema of biocentric holism, developed within the framework of relative biocentric health theory (Stueck, 2025).

4.2.4 Energy and biocentric holism

How do these explanations of the concept of energy relate to the biocentric paradigm and Rolando Toro's work on it? One meta-concept that helps to position Biodanza in relation to the concept of energy is biocentric holism within the framework of the relative biocentric health theory according to Stueck (2025). As becomes clear in the previous chapter, the concept of energy was examined in depth in the relative biocentric health theory, whereby the question was: what happens beyond the physical, biological boundary? It is simply illogical to think that energy ceases to exist at some point when there is no longer any physical location. This is where the biocentric basic assumption from rbHT fits in, according to which the existence of the invisible is not a matter of faith, but a matter of logic. Even renowned quantum physicists such as Zeilinger (2014) come to this conclusion when they say that they arrive at a point of the smallest particles (Planck length) and then cannot go any further to what lies beyond: "Many phenomena at the microscopic level are blurred and challenge the limits of what can be known" (Zeilinger 2014).

Fig. 4 Basic diagram of the concept of biocentric holism (Stueck, 2025)



One of the basic assumptions to be examined in relative biocentric health theory is:

The invisible shapes the visible (biocentric basic assumption of rbHT).

This means that everything we can see, measure or observe arises from an invisible, unmeasurable source – that is, from a realm that underlies phenomena. In relative biocentric health theory (rbHT), the "phenomenon" is described as identity, based on research with Manna (cited in Bazzotti, Manna, Stueck, 2025). This statement corresponds to the biocentric basic assumption in rbHT that life, consciousness and relationship are the original creative forces from which material reality develops. This also means that, according to the principle of duality (see biocentric scientific principles, Stueck, 2025), every manifestation has a dual counterpart. This means that there must be an invisible, unmeasurable energy and a visible, measurable energy. This is not a matter of faith, but of logic (biocentric basic assumption). The question of what the non-measurable energy, the energy of consciousness, is was described in Chapter 4.1.3.1.1 using meta-theory (rbHT). In this meta-theory, Rolando Toro's biocentric principle is embedded in the concept of biocentric holism (see Figure 4). Within the framework of the concept of biocentric holism, this basic assumption and this principle of duality were applied and examined.

When researching biocentric paradigms in the literature, two areas emerge:

- fundamental works on the biocentric principle and biocentric education (Toro, 2010, Cavalcante, R., & Wagner de Lima Góis, C., 2017, Schweitzer, 1964, 2020), which use a physical, metaphysical concept of energy
- works by Lanza and Berner (2009), "Biocentrism: How Life and Consciousness are the Keys to Understanding the True Nature of the Universe", which are more metaphysical in nature.

Toro (2010) explains that his biocentric principle and biocentric education place life and its protection at the centre, primarily by raising affective-ethical awareness using the Biodanza method. He coined the phrase

"the universe exists because there is life".

Source: Toro, R. (2010). *The Biodanza System*. Hanover: Tinto Verlag. ISBN: 978-3-941684-04-1.

"... For him, life is above all a biological energy, as can be seen from the results of Sergio Cruz's historical statement (see chapter 4.1.3.2). Rolando did not understand energy as abstract or esoteric concepts, but as the biological energy that is created in every cell at the moment of metabolism. Every cell converts substances into energy (ATP/ADP) and thus generates the life energy of living beings.

The question arises here as to whether his understanding of energy has changed over the years.

To this end, the following two texts are compared (in Chapter 4.2.5.4):

- on models of energetic transmutation in Biodanza (chakras and the concept of energy)
 Toro, R. (n.d.). Models of energetic transmutation in Biodanza. In R. Toro Araneda, *Theory of Biodanza*, Vol. 1, Chap. V. IBF-CIMEB.
- on the numinous unconscious

 Toro, R. (n.d.). *The numinous unconscious*[Unpublished text, translation by B. Mutze].

 https://www.biodanza.org/download/... (Accessed on 20 September 2025)

When reading Lanza and Berner (2010) *Biocentrism:* How life and consciousness are the keys to understanding the true nature of the universe. (Dallas, TX: BenBella Books), one comes across the sentence:

"The universe exists because consciousness exists."

They explain how perceptions of time and space, which are considered fundamental in classical physics, are understood to be dependent on life and consciousness. This opens the door to consciousness as energy that lies outside the human body.

Source: Lanza, R., & Berman, B. (2010). Biocentrism: How life and consciousness are the keys to understanding the true nature of the universe. Dallas, TX: BenBella Books What Lanza and Berner (2010) express is a limitation for Rolando Toro (see historical statement by Sergio Cruz, chapter 4.1.3.2), because he could not imagine that there is something independent of the body that can be called consciousness (biocentric basic assumption of rbHT). How this attitude changes is examined in chapter 4.2.5.4.

The meta-theory of relative biocentric health theory (rbHT) clarifies this limitation by means of the concept of biocentric holism (see Fig. 4). The concept of biocentric holism now adds

- the level of "Toro and Schweitzer" and other proponents of his biocentric principle (including Freire, 2000; Morin, 2008; Cavalcante, Wagner de Lima Góis, 2017) with a physical-biological understanding of energy,
- the level of Lanza and Berner (2009), whereby this level is further supplemented by the work of Manna (2023, cited in Bazzotti, Stueck, Manna, 2025) on existential ethics.

Manna (cited in Bazzotti, Stueck, Manna, 2025) postulates that beyond all manifestations, there must be consciousness as energy, which is itself responsible for the manifestations, e.g. of cells, molecules, etc. Manna describes how this energy, which cannot be measured, flows out of the first uncaused cause (see Figure 3).

The following biocentric basic assumption can be derived from the current state of analysis:

The boundary of the biocentric principle and the Biodanza method, or rather the biocentric principle, runs exactly where the energy is measurable and visible at Planck's length (see Chapter 4.2.3). The question arises here as to whether his understanding of energy has changed over the years.

This means that there are two currents in the biocentric paradigm:

- While some understand consciousness itself as a form of energy that is responsible for manifestations and creative processes ("the universe exists because there is consciousness"),
- Rolando Toro, based on current knowledge, assumes a **biological energy** that carries vitality

and organic development ("the universe exists because there is life").

One is a spiritual approach and the other a scientific approach. An important biocentric basic assumption can now be derived from this:

Proof of how strongly Rolando Toro is rooted in the physical-biological level and not in metaphysical consciousness energy in his book "" is the fact that Toro speaks of the unconscious and not the conscious. The only consciousness that is central to him is affective-ethical consciousness (biocentric basic assumption).

4.2.5 Toro speaks of the unconscious, not the conscious

Rolando Toro links the biocentric principle to a specific concept of consciousness, which he calls affective-ethical consciousness. This consciousness is not based on abstract rationality, but on the ability to combine feelings, empathy and ethical responsibility. It is affective because it is based on emotional resonance and sensitivity, and it is ethical because it is oriented towards life and guides action in the sense of protecting, promoting and respecting living beings. Affective-ethical consciousness thus forms the core of the biocentric principle: not only to experience life, but also to preserve and respect it. Schweitzer expresses a similar view. In biocentric holism (Fig. 2), these are the quadrants below the consciousness energy limit (Planck length). Affective-ethical consciousness is linked to action, as the following statement shows:

Person 1 (Marcus Stueck). "Rolando, what is empathy? His answer was one word: action."

For Toro, consciousness is an embodied process, bound to the body, not something abstract and metaphysical. This is also evident in his approach to the unconscious. Toro has developed four concepts of the unconscious and placed them in his model, although one of them can be described as provisional:

- The personal unconscious
- The collective unconscious
- The vital unconscious
- The numinous unconscious

If he had taken up the suggestions of Lanza and

Berner or Manna on existential ethics, according to which consciousness as energy unfolds life, he would at least have called his concepts of the vital and numinous unconscious the vital and numinous conscious. The next chapter, 4.1.4.2, discusses the extent to which Rolando Toro, in the numinous unconscious, leaves open the possibility of consciousness as energy and what consequences this would have for the theoretical model of Biodanza, as he speaks there of numinous energy. What this is will be explained in the next chapter.

4.2.5.1 The numinous energy Rolando Toro's

The statements in this chapter refer to a publication by Rolando Toro, which can be downloaded from www.biodanza.org.

The numinous unconscious is a concept that cannot be considered complete.

In a text (Rolando Toro, summarised by Birgit Mutze, o.J.), he describes it as follows:

"I have called the 'numinous unconscious' the deepest layer of the human unconscious. It is based on a unity of potentials of extraordinary differentiation and subtlety that constitute the power of human excellence. On the other hand, these potentials are the most suppressed of all those that manifest the human condition. The totality of the numinous unconscious constitutes the 'eternal human' ... The numinous unconscious gives us access to a sense of intimacy, to boundless love and to creation as a revelation of beauty and mystery.

The numinous unconscious is supposed to answer the question of what it means to be human: "The essential question of all philosophy and anthropology is: What does it mean to be human?" It has the following characteristics:

- Not cultivated in modern education systems:
 Schools and universities promote cognitive and historical knowledge, but not the development of the numinous dimension.
- **Forms of expression**: It manifests itself with extraordinary power in artists, mystics, humanists (e.g. Bach, Rilke, Einstein, Teresa of Calcutta), but also in everyday people who are capable of love.

- **Transformation**: Numinous energy transforms "cosmic energy" into creative, ethical and loving expressions of life.
- **Anchoring**: It is anchored in the "numinous unconscious," which manifests itself in music, art, epiphanic love, motherhood, and the perception of the miraculous.
- **Essence**: It represents the original human condition and the deepest part of our identity the "eternal human being".

Numinous energy stands for what constitutes humanity in its greatness, creativity and capacity for love. It is not a measurable form of energy, but a concept used to describe those transcendental qualities that connect humans with the eternal, the cosmic and the miraculous.

"Numinous energy is a primal, transcendent dimension of human existence. It does not belong to the physically or biologically tangible energy, but is a metaphysical force that expresses itself in humans as the potential of the 'Eternal Man'."

In this concept, he expresses for the first time that there is energy on the metaphysical level. Within the framework of meta-theory, this concept takes him right to the borderline of the metaphysical.

The concept of the numinous unconscious remains provisional, as Rolando Toro was unable to complete his work on this topic. It therefore remains speculative how he would have described the further scientific approach to the boundary of numinous energy. The question of whether this is a physically or biologically detectable energy or – as Toro postulated – a metaphysical force requires further analysis and fundamental theoretical decisions.

From the perspective of Relative Biocentric Health Theory (rbHT), Toro's concept of the numinous unconscious would need to be further developed into a numinous conscious. This would require integrating consciousness itself as a form of energy apart from the body. Such an expansion would require a revision of the theoretical model of Biodanza in order to explicitly include the metaphysical dimension, in accordance with the biocentric basic assumption of rbHT.

The decision to step through the door to the metaphysical level is a consideration that can only be made in a scientific discourse. With the biocentric meta-theory rbHT, this discourse is possible.

From a practical standpoint, the door to metaphysics should not be opened without expanding the theoretical model and Rolando Toro's theory or referring to rbHT. What is currently happening with Biodanza and chakras, Bach flower remedies, etc., is that practitioners are beginning to work with the metaphysical concept of energy without the theoretical and scientific model adjustments being made (biocentric basic assumption of rbHT).

This is supported by a statement made by a Biodanza teacher at a conference

Person 1 (anonymous): "Consciousness as energy gives cells a certain intelligence that allows them to know what to do in the sense of a cosmic intelligence."

This view that "cosmic intelligence, which acts in all cells" is based on consciousness energy is not permitted by the theoretical model of Biodanza.

Toro writes (see school materials, biocentric principle), according to quantum physicist Bohm (1980), that there are implicit orders according to which the universe and life within it are structured, but he does not comment on how these implicit orders were formed, because then he would have had to describe a level and of the same dimension, which is metaphysical. Therefore, the concept of the numinous unconscious is not complete and must be considered provisional.

Bohm (1980, quoted in Stueck, 2025, based on Manna) describes how an electron transitions from a measurable energy level to a non-measurable energy level, transferring order structures from the implicit order to the explicit order. Here, there is an interconnection between quantum physics and spirituality.

4.2.5.2 Toro's relationship to spirituality

To clarify Rolando Toro's relationship to spirituality, more detailed historical research with contemporary witnesses is needed. However, an original statement should be mentioned here that provides insight into how he thought about spirituality.

Person 1 (Marcus Stueck): "We were on a trip to Tanzania. Rolando's answer to my question about what happens after death was: I don't believe in reincarnation, I believe in the transformation of my body, my atoms, etc. into other forms of nature, for example this tree over there, and he pointed to one."

This statement proves that Rolando Toro does not place his method in a spiritual, metaphysical context. This is also confirmed by a statement from another experienced Biodanza teacher.

Person 2 (Rosario Hernandez): "Biodanza is not a spiritual method."

Harris (2014) describes spirituality as an experience in which the self is recognised as an illusion and a "pure consciousness" is experienced that lies beyond thoughts and the usual identification with the ego and beyond ordinary sensory perceptions. Manna (cited in Bazzotti, Manna, Stueck, 2025) understands what Harris refers to as "pure consciousness" and what lies beyond ordinary sensory perception as the unchanging feeling of being in human beings. This feeling of being plays a major role in spirituality, because it is a disembodied feeling of being that is unchanging and characterised by light, love and conscious energy (Manna, 2025, cited in Bazzotti, Manna, Stueck, 2025). Toro (2010) cannot agree with this definition at all, because for him, physical sensory experience is very important for experiencing transcendent states. For him, the feeling of being is always on an embodied level: as lived vitality, as emotional intensity and as an experience of love in the here and now. The question of why Rolando Toro did not want to cross the boundary into the disembodied feeling of being points to historical research that still needs to be done, using eyewitness accounts and original sources. Relative biocentric health theory describes a biocentric core, a source that contains both

components, a disembodied and an embodied part, of the feeling of being. Gislon (2024, the A.T.M. method – Amore, Transformatione, Maturatione, cited in Stueck, 2025) describes this source as the connection to love and the divine.

The source of life can be described as a connection to love and the divine.

The spiritual level of the feeling of being must not, of course, be negated. But a boundary can be formed. Rolando Toro draws this boundary by saying that Biodanza is not a spiritual method. (See also Chapter 4.2.5.2 "Rolando Toro and the relationship to the spiritual").

Because Biodanza is not a spiritual method, topics such as chakra work, Bach flower remedies and also philosophical works on quantum physics and quantum psychology (quantum philosophy) form a boundary. And Rolando Toro did not want to cross this boundary from a scientific point of view (biocentric basic assumption).

4.2.5.3 What are the reasons for Toro's conscious distancing from spirituality?

From a scientific point of view, several motives can be reconstructed as to why Toro did not want to cross the boundary into disembodied being:

- **Empirical anchoring** Biodanza should be based on observations of human experience, not on metaphysical assumptions.
- Cultural connectivity a spiritual classification would have made access to secular educational contexts and therapeutic fields more difficult.
- **Methodological clarity** Biodanza aimed at affective, physical-emotional processes whose effects can be observed in relationships and movement.
- **Distinction from spiritual practices** practices such as chakra work, Bach flower remedies or quantum philosophy cross the boundary into the disembodied. Toro did not want to integrate these into the methodological core of Biodanza in order to protect the scientific and practical coherence of his method.

4.2.5.4 Comparison of two texts – Is there a change in the concept of energy in Rolando Toro's work?

There are two texts by Rolando Toro which, in our estimation, must have been written at least ten years apart. The second text is considered to be the older of the two, as Rolando Toro's concept of the numinous unconscious was described shortly before his death.

- On models of energetic transmutation in Biodanza (chakras and the concept of energy)
 Toro, R. (n.d.). Models of energetic transmutation in Biodanza. In R. Toro Araneda, *Theory of Biodanza*, Vol. 1, Chap. V. IBF-CIMEB.
- On the numinous unconscious

 Toro, R. (n.d.). *The Numinous Unconscious*[Unpublished text, translation by B. Mutze].

 https://www.biodanza.org/download/... (Accessed on 20 September 2025)

The question is whether Rolando Toro formulated a different concept of energy in his older text on **the numinous unconscious** than in connection with the **chakras**.

Toro does indeed use a different concept of energy here, which differs from his earlier biocentricbiological understanding, but without completely contradicting it. Here is the precise classification:

In the early theoretical phases (e.g. *Theory of Biodanza*, Volume 1, Chapter V), Toro emphasises the physical, emotional and biological nature of energy. He deliberately avoids the terms 'spiritual' or 'metaphysical' in order to keep Biodanza scientific, experience-based and culturally accessible. Here, energy is not a metaphysical principle, but an expression of lived vitality.

In his later writing on the *numinous unconscious*, Toro reopens the concept — but on a transpersonal level. He describes "numinous energy" as a primal, non-material dimension that transcends the biological. It no longer belongs to the biologically measurable life energy, but refers to the metaphysical, to a "transcendent source of life" that manifests itself in humans as the potential of the "eternal human".

This shift does not mean a return to spiritual practice energy systems (e.g. chakras), but rather an

expansion of his thinking towards a spiritualontological anthropology. While the chakras are understood as structured, culturally influenced models, Toro's *numinous unconscious* is a universal, non-symbolic principle that cannot be localised or mapped.

In short:

- Previously: Energy = biological-affective experience (embodied, experiential).
- Later: Energy = numinous, transcendent force (metaphysical, universal). Transition: from immanent biocentrism to transcendent biocentrism, i.e. an integration of biology and metaphysics.

Rolando Toro does not contradict himself by moving away from biological-affective experience (embodied, experiential), but rather develops his model further: from the biological experience of the living to the experience of the metaphysical, transcendent, but bound to sensory experience Here, the idea is attractive as to whether Rolando Toro, as described in chapter 4.2.5.1, opened a door that should be further developed. However, the statement regarding the rejection of the chakras as a boundary remains, as the theoretical model does not allow for anything else (biocentric basic assumption).

4.2.6 The boundary to Tantra

Tantra in the original Indian sense is energetic work involving sexual energies. In original Tantra, people did not touch each other at all. The concept of energy used in Biodanza, as described in the previous chapters, in contrast to the metaphysical concept of energy, also determines the boundary with Tantra. Above all, however, it is Rolando Toro's statements (see Contemporary Witnesses) that determine this boundary.

As Sandra Salmaso (quote – Person 4 ("Rolando Toro always said that Biodanza has nothing to do with Eastern culture...") describes in chapter 4.1.3.2, Rolando Toro rejects Eastern methods – including Tantra because it is an Eastern method – in his model.

Rolando Toro respects Eastern methods, but they do not fit into the theory of Biodanza

(biocentric basic assumption).

According to the analysis presented here, Tantra is a limitation because this method is energetically and spiritually-erotically oriented: sexuality is understood in Tantra as a path to spiritual transformation, with ritual and energetic practices for expanding consciousness. Not everything that is popularly marketed today as "Tantra" corresponds to classical Tantric teachings – often commercial sexualisation instead of spiritual practice. Biodanza, on the other hand, is biologically and affectively based. It strengthens the relationship to life and to other people without consciously activating energy centres (e.g. awakening Shakti, stabilising it and uniting it with the Shiva principle of "pure consciousness"). Biodanza focuses on natural experiences of movement, music and encounter – socalled vivencias – which promote feeling, sensing and authentic being in the here and now. Sexuality can appear as an expression of joie de vivre or affectivity, but it is not a goal or instrument of the

4.3 Mapping bio-centric methods and determining boundaries using the four cardinal directions method

The question now arises as to whether Eastern methods such as tantra, chakra work, energy work and Bach flower therapy are nevertheless biocentric methods.

For Rolando Toro, the boundary lies in whether life itself (bio) or something higher (spiritual, energetic, esoteric) forms the centre and frame of reference of the method and the assessment. Under this criterion, the above-mentioned methods can be considered non-biocentric. It depends on the frame of reference that is used as a basis. These questions need to be discussed further (biocentric basic assumption).

method.

4.3.1 Why is it important to map biocentric methods for determining boundaries?

One problem that exists is the large number of biocentric methods, which are relatively unorganised (basic biocentric approach).

There are a large number of biocentric methods, mainly originating in South America.

Person 1 (Marcus Stueck): "In 2006, I came across a book by Oliver Kahn, one of the legendary goalkeepers in German football. It contained an illustration that mentioned the anthropocentric and biocentric paradigms. I was very surprised and told Rolando about it. I asked him who had developed the idea of the biocentric principle, what the sources were, and whether we should conduct a scientific review of it. What is the source of your biocentric principle, because there are obviously several different views on it?"

4.3.2 Description of the method for mapping biocentric methods

To map biocentric methods, Stück (2025) proposes a concept of biocentric methods organised according to the four cardinal directions. This approach is described in the relative biocentric health theory.

Biocentric methods from the south:

Most biocentric methods in the Biodanza system come from the south (South America). It can be assumed as scientifically proven (historical research) that Rolando Toro respected most methods from Eastern cultures, but mostly rejected them for the biocentric principle and method. Exceptions are the connections between Biodanza and I Ching.

This assumption is confirmed by an original statement from chapter 4.1.3.1 (*Historical research on the limits of Biodanza in relation to the concept of energy in working with chakras*), which is repeated here.

Person 1 (Sandra Salmasso): ... he always said that Biodanza had nothing to do with the Eastern culture of chakras, mainly because at that time, as I can imagine, one could not speak of "spirituality" either.

He spoke of transcendence... He repeatedly reminded us that the foundations of Biodanza are biological in nature and that he did not want it to be confused with anything esoteric or Oriental. Above all, because Biodanza is a relational and not a solipsistic development.

By solipsistic development, Rolando Toro means an epistemological attitude according to which only one's own self exists with certainty. Everything else – fellow human beings and the outside world – could merely be projection or illusion. This view has parallels with the Buddhist concept *of Maya*, which understands the world as an illusion and a veil that conceals true reality. According to historical research, Toro rejected this idea.

Biocentric methods from the East, West and North:

The research question that arises here is whether there are also biocentric methods that connect people with life in Eastern, Western and Northern cultures. Eastern methods such as meditation, tai chi and qigong are not part of Biodanza. However, it does incorporate some movement sequences from tai chi, such as in the dance of flowing, series 1).

Biocentric method in the southeastern culture "8 Aboriginal Ways of Learning":

Taking India as a reference point (meditation, yoga), there is an interesting approach to biocentric education among the Aborigines in the southeast, in the Australian region. This approach is also known as the "8 Aboriginal Ways of Learning". It is an Aboriginal educational model that shapes learning not only through content, but also through cultural learning methods: with stories, images and symbols, with references to nature, non-verbal and practical activities, with holism (from the whole to the part), with creative logic and with a connection back to the community. This way of learning was developed by indigenous educators in Australia. The learning model is based on traditional forms of knowledge. The eight pathways are:

- **Story sharing** learning through stories and experiences.
- Learning Maps Knowledge is conveyed visually and spatially, e.g. in pictures, paths, symbols.
- Non-verbal learning learning through

observation, gestures, action and imitation rather than words.

- **Symbols and Images** learning through pictorial representations, metaphors and cultural symbols.
- Land Links Knowledge is linked to places, nature and landscape; learning takes place in contact with the environment.
- Non-linear Learning is cyclical and holistic, not in fixed steps or hierarchies.
- Deconstruct/Reconstruct Learning through reflection, experimentation and the reshaping of knowledge.
- **Community Links** Learning is socially embedded; knowledge is created and shared in the context of the community.

The "8-way path of the Aborigines" is biocentric because it places nature, community and vitality at the centre of learning. At its core, the path of the Aborigines contains what Rolando Toro calls Vivencia: the intense, present experience in which knowledge is not conveyed abstractly, but is embodied, felt and experienced (biocentric basic assumption).

This classification of methods into the four cardinal directions enables scientific mapping of biocentric methods based on an initial definition and selection criteria with the lowest common denominator. This reveals both similarities and differences, as well as limitations, within biocentrically oriented methods. By mapping the biocentric methods, the relative biocentric health theory not only contributes to the theoretical foundation of the biocentric principle, but also protects the independence and methodological clarity of Biodanza and its biocentric principle.

4.4 Reference back to the theoretical model and the definition of Biodanza as a method for determining boundaries

Another methodological tool, alongside historical research and text analysis, or the method of the four cardinal directions for determining the boundaries of Biodanza, is the theoretical model of Biodanza. Unfortunately, there is currently no scientific model for the biocentric principle presented by Rolando

Toro. The rbHT attempts to close this gap. The theoretical model and the definition of Biodanza itself set clear boundaries regarding the question of what can and cannot be integrated into Biodanza.

Rolando Toro (2010): "Biodanza is a system of human integration and self-regulation for organic renewal, affective relearning and relearning of original life functions. The method is characterised by triggering integrative experiences in the group through music, movements and movement situations."

This definition of Biodanza describes several contentrelated and methodological boundaries that distinguish the system from other approaches:

- Boundary with psychotherapy
 - It is not about pathological healing or depth analysis, but about integration and
- self-regulation.
 - The goal is not to "treat problems," but to stimulate life and promote natural self-regulation.
- Boundary with spirituality
 - No conscious work with energies, chakras or ritualistic-spiritual goals.
 - The focus is biological and affective, not metaphysical or mystical.
- Boundary to purely body-oriented methods (e.g. dance training, gymnastics)
 - Movement is not for performance or technique, but for affective and existential experience ("integrative experiences").
- Boundary to individual practice
 - Experiences arise in the group, through relationship and resonance, not in isolated selfawareness.
- Distinction from cognitive pedagogy
 Not rational learning, but "affective relearning",
 - i.e. learning through feeling, movement and relationships.
- 4.4.1 Does Biodanza allow for quantum mechanical or quantum psychological interpretations?

There are proponents of Biodanza who draw on quantum physics to explain the effects of Biodanza. One of the reasons why Biodanza cannot integrate quantum physics and quantum psychology is the fact that the theoretical model of Biodanza is not a quantum model, but a classical model. In order to

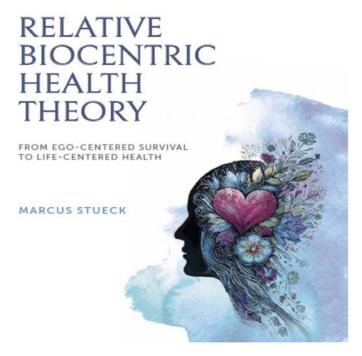
transform the theoretical model into a quantum psychological or quantum mechanical model that can exist alongside the classical model, relative and absolute superpositions would have to be inserted, as described theoretically by Stueck (2025) in the relative biocentric health theory. And yet, this theory and the superposition described in it can be used to highlight the limitations of Biodanza, as described in the next article.

4.5 Relative superposition as a tool for determining limits

The meta-theory of relative biocentric health theory is a tool for determining the limits of Biodanza.

Fig. 5 Publication on relative biocentric health theory (Information: www.bionet-research.com)

BIOCENTRIC HEALTH IN HUMAN DEVELOPMENT, BAND 1



One merit of relative biocentric health theory is that, through the description of holographic characteristics, Rolando Toro's statement "life at the centre" can be scientifically investigated for the first time. Other scientifically empirically investigable concepts are

- Heart intelligence with affective action
- Biocentric core
- Biocentric modulation factors and switching points, such as co-regulation
- Description of biocentric health and well-being

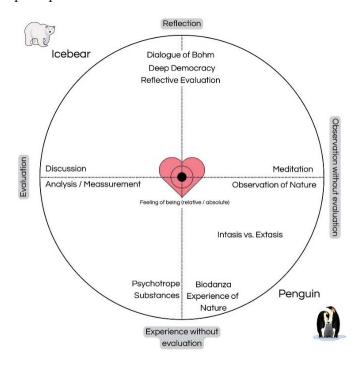
Work on the fundamentals of applied quantum psychology in theory makes it possible to define the limits of Biodanza. One tool for this is the absolute and relative superpositions used in the theory. Quantum mechanics and applied quantum psychology, which is based on the theory, assume a unified field of energies and information (quantum field) that is connected to an intuitive field, which in turn is connected to a so-called spiritual field from which the above-mentioned consciousness energy flows, which is then responsible for manifestations. The concept of relative superpositions forms a fundamental concept in both quantum mechanics and applied quantum psychology, which was developed by Stueck (2025, see article Fundamentals of Applied Quantum Psychology). It is a biocentric space field in which all possibilities are contained in constant change (absolute superpositions) or with smaller superpositions forming relative to this (relative superpositions) in which networks of possibilities develop. A relative superposition forms a field in which possibilities are superimposed (coherent). Only through consciousness do they become incoherent. The theory describes that relative superpositions can be formed rationally through a so-called quadlation, i.e. the formation of four aspects to an initial question. They also form irrationally, e.g. in a Biodanza Vivencia. If this is not clear, reading the theory is recommended. If we now direct our awareness to the question of possible human modes of perception (rational quadlation), four possibilities arise:

- Observation without evaluation, e.g. in meditation
- Experience without evaluation, e.g. in biodanza
- Reflection, e.g. in reflection methods such as Bohm dialogue
- Evaluation, e.g. in evaluation methods such as

prioritisation lists, etc.

Here we can see the clear boundaries between the four possibilities. Biodanza belongs to the possibility of experience and thus distinguishes itself from observation, reflection and evaluation. But even within the possibility of experience, there are distinctions between different possibilities. Biodanza distinguishes itself from entheogenic psychotropic substances and also from holotropic breathing. The levels of observation and experience belong to the penguin level because they belong to the irrational level (penguin-polar bear paradigm, Stueck, 2013). According to the relative biocentric health theory, the first two modes of perception (reflection, evaluation) are polar bear levels because they are rational.

Figure 6 Relative superposition of sensory perception.



A basic biocentric assumption of relative biocentric health theory states that the methods must not be mixed so that the essence of the method is preserved, even within the modality of perception. This means that biodanza should not be mixed with entheogenic-psychotropic substances, nor should methods of observation (meditation), experience (biodanza, psychotropic

substances), reflection (Bohmian dialogue) and evaluation should not be mixed, i.e. taking psychotropic substances and then dancing, or Biodanza followed by reflection. Here we see the value of meta-theories, such as relative biocentric health theory, because they can define the boundaries. In theory, biocentric methods are also discussed in connection with neurobiological structures

- **Cortex** responsible for cognitive processes, analysis and reflection (reflection, evaluation).
- **Limbic system** seat of emotion and motivation (Biodanza).
- **Brain stem** regulates basic vegetative functions (basal function, life support).
- **Epiphysis (pineal gland)** linked to biological rhythms and states of consciousness (meditation).
- **Abdominal brain (enteric nervous system)** closely linked to body perception, emotions and immediate experience (Biodanza).

Each modality (e.g. Biodanza, meditation, entheogenic substances) activates **different neural networks**. As a result, they have different profiles of action and should remain clearly separated, also from a scientific neurobiological point of view (boundaries).

4.6 Empirical research as a tool for determining boundaries

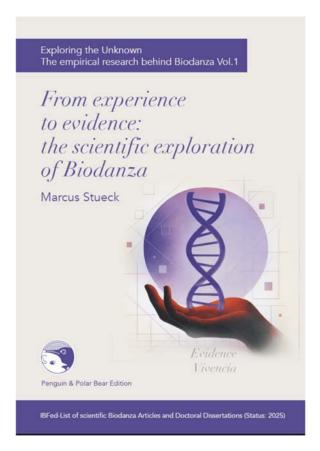
Empirical research and critical reflection play a decisive role in answering the question of boundaries. Studies on the effects, indications and contraindications of all formats used in Biodanza enable objective testing. This allows the possibilities and limitations of the method to be scientifically verified. Historical research has revealed the following statement by Sergio Cruz on the importance of science for Biodanza.

Person 1 (Sergio Cruz): "Rolando was always very keen to ensure that Biodanza was regarded as a science and not as a magical discipline."

In scientific discourse, boundaries can only be convincingly defined when historical clarity, theoretical consistency, unambiguous scientific classification and the possibility of empirical verification are combined. In this context, Marcus Stück gave a lecture entitled

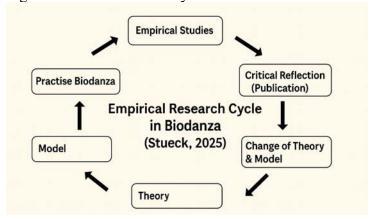
The role of empirical research in Biodanza? How much science is there in Biodanza?

Fig. 7: Source of the lecture Stueck, Marcus (2025) Download www.bionet-research.com



In the lecture and publication (see Fig. 7), previous research on Biodanza was critically reflected upon. Stueck (2025) emphasises that a sustainable scientific foundation for Biodanza and the biocentric principle can only be achieved through clearly structured research that encompasses the steps of theory – practice – questions – empirical investigation – critical reflection – change in practice (known as the Biodanza research cycle, Stueck, 2025, Fig. 8).

Fig. 8: Biodanza research cycle



This cycle allows theoretical models to be transferred into practice, where systematic observations and new questions can be developed and tested through empirical research. The resulting findings flow back into critical reflection, which in turn leads to changes in practice, thus ensuring the continuous process of further developing and refining the theory.

5 Derivation of the limits

The following six central limits of Biodanza can be derived from the ideas described here:

5.1 Use of entheogenic and psychotropic substances as a limitation

This limitation has already been discussed in detail in section 4.1.1. The question of limitations can be summarised as follows. Biodanza is based on the activation of healthy life processes through music, movement and encounter. The use of entheogenic-psychotropic substances contradicts this basic principle. Substances artificially alter consciousness and can override or distort the self-regulation of life. This dilutes the foundation of Biodanza and shifts responsibility to an external agent.

5.2 Non-physically measurable energy concepts as a boundary

This limitation has also been described in great detail (see chapter 4.1.3). The basic statements can be summarised as follows. In Biodanza, the term "energy" is associated with biological and

physically experiential processes. Concepts such as chakras or "quantum consciousness" are neither described by Rolando Toro nor scientifically proven. If they are integrated into Biodanza, confusion arises and the method loses its connection to research and practice.

5.3 Tantra as a boundary

Tantra aims at spiritual-erotic transformation and works with energies (e.g. chakras, kundalini). Biodanza, on the other hand, is biologically and affectively based, without energy work or sexual rituals.

The boundary lies in the fact that Biodanza understands life and relationships, not sexuality and spirituality, as a path to integration.

5.4 Holotropic breathing as a boundary

Chapter 4.1.2 describes a historical research finding according to which Rolando Toro described holotropic breathing as a limit of Biodanza or even of his biocentric understanding because it is not "organic".

5.5 Biodanza in online format as a limit

A practical observation described a problem whereby, after COVID-19, Biodanza content was increasingly being passed on in online format. A publication has already been published on this topic in response to current events (Stueck, 2024). The question of the use of online formats could not be answered from a historical-scientific perspective, as Rolando Toro was no longer alive at the time. The scientific-analytical answer to the question, based on reflection on the theory and model of Biodanza, can be summarised as follows: The essence of Biodanza lies in real encounters, in which physical resonance, touch and non-verbal communication play a central role. Online formats cannot fully reflect this. Although exchange over distance may be useful, the actual biodanza experience is limited or even prevented in virtual space. An article by Stueck (2023) has already written extensively about this limitation.

5.6 Ignorance of empirical science and critical reflection as a limitation

The sixth limitation concerns the ignorance of empirical research in biodanza. Biodanza needs research and scientific reflection in order to understand its effects, scope and limitations. If empirical results are ignored or devalued, the method lacks an important corrective. Without critical examination, there is a risk of arbitrary expansion, which weakens credibility and prevents scientific discourse. Furthermore, the scientific determination of contraindications (limitations) and indications of the method is only possible through empirical scientific work (see Stueck, 2025, Fig. 7).

6 Consequences of unawareness of the limits of Biodanza

What are the consequences if the unreflective integration of new practices continues or the existing limits of Biodanza are not recognised and respected? For Biodanza, this means:

It is an existential question to clearly describe and adhere to the limits of the method. If limits are not observed, as became clear in the practical observations, two risks arise:

- The Biodanza model is interpreted arbitrarily and overlaid with foreign content.
- There is a lack of awareness that certain topics or practices are not covered by the model.

The six problematic activities described in the practice observations at the beginning of Chapter 2 weaken the effectiveness of Biodanza. Through the integration of interventions that are foreign to the model (e.g. ayahuasca, chakra teachings, Bach flower remedies, quantum consciousness) or through teaching that does not conform to the model (ethics), the method loses its internal logic and clarity. This has several concrete consequences:

- Loss of scientific credibility: When unproven or pseudoscientific content is integrated into Biodanza, its compatibility with research and the professional world declines.
- Weakening of effects: Exercises do not develop the originally intended depth because they are

mixed with foreign concepts that have not been empirically tested.

- **Risk of misinterpretation**: Participants may become confused or have false expectations, such as assuming that Biodanza can offer spiritual healing or universal solutions.
- Threat to methodological identity: If every leader adds their own extensions, a patchwork of variants emerges. This results in a loss of unity within the method.

In summary, this means that without a clear definition and adherence to boundaries, Biodanza risks losing its power, clarity and commitment — both in practice and in its international development.

7 Strategies and perspectives for the problem of boundaries

What is required (strategies, perspectives) to preserve the essence of the Biodanza method while still integrating new aspects in a reflective and scientifically sound manner?

7.1 Strategies for dealing with the problem of boundaries

The problems can be solved by establishing clear standards, scientific orientation and professional training. In this way, Biodanza retains its original strength and at the same time gains credibility.

- Psychotropic substances: Clear demarcation:
 Biodanza should be practised without substances.
 National and international associations can develop guidelines that clearly define this.
- Non-physically measurable energy concepts:
 Create theoretical clarity: Only use concepts that are anchored in Tori's theory or in scientific research. Spiritual content requires conscious separation to avoid confusion.
- **Holotropic breathing:** Create theoretical clarity: Only use concepts that are anchored in Toro's theory or in scientific research.
- **Tantra:** The same applies to tantra as to holotropic breathing.
- **Biodanza in online format:** Clear differentiation: Online formats can be used for theory, exchange and supervision but not for the actual biodanza experience. Clear quality standards are needed here.

- Ignorance of science

Integrating research: Results from empirical studies must be incorporated more strongly into training and practice. International collaborations (e.g. IBRA, universities) can help to anchor Biodanza scientifically and develop it critically.

The problems can be solved by establishing clear standards, scientific orientation and professional training. In this way, Biodanza retains its original strength and at the same time gains credibility.

7.1 Derived perspectives

Examining the limits of Biodanza clearly shows that it is necessary to clearly define and adhere to these limits in order to preserve the method's power and integrity. Rather than being a restriction, limits open up new possibilities: they create orientation, security and clarity. This gives rise to several perspectives for the future:

- **Quality assurance**: International associations can develop binding standards that clarify which content is part of Biodanza and which is not.
- **Training and supervision**: Teachers should receive in-depth knowledge of indications, contraindications and psychological principles, accompanied by continuous supervision.
- Research and reflection: The integration of empirical science into practice makes it possible to demonstrate effects, identify undesirable developments at an early stage and establish the method internationally in a credible manner. Empirical science must be incorporated into schools and Didacta training courses.
- **Preserving the essence**: Online formats, new cultural contexts and extensions can be useful if they are used in clear distinction from the core elements of Biodanza.

This opens up the opportunity for Biodanza not only to remain authentic and effective, but also to be developed in a sustainable manner in dialogue with science, society and culture.

8 Methodological cooperation in the context of Biodanza

How can one still cooperate with other methods? The question of meaningful cooperation between Biodanza and other methods arises particularly against the backdrop of increasing interdisciplinary health programmes and integrative approaches. It is crucial to preserve the theoretical independence of the respective methods while at the same time exploiting potential synergies.

8.1 Complementary cooperation

Cooperation means that each method remains within its own frame of reference. Instead of mixing theoretical models, the approaches are juxtaposed in an add-on structure. In this way, Biodanza, as a physical-emotional experiential method, can be combined with meditation (mindfulness-based observation), entheogenic methods (pharmacologically induced changes in consciousness) or energy work (focus on invisible, non-measurable energies of consciousness) without distorting the respective theory.

8.2 Research-oriented collaboration

A particularly fruitful form of cooperation opens up at the level of scientific studies. Biodanza interventions can be examined as a comparison group alongside meditation, energy work or entheogenic approaches. The advantage is that this allows direct comparative data to be generated without undermining the respective theoretical basis. While Biodanza primarily affects the limbic-hypothalamic system, the effects of energy work can be located more in the realm of non-measurable, subjectively experienced energies of consciousness.

Methodically controlled studies can empirically clarify differences, additions and overlaps.

8.3 Dialogue level

Cooperation can also take place at the communicative level. Specialist conferences, publications and round tables offer opportunities to discuss method-specific mechanisms and learn from each other. It is essential that Biodanza is not replaced or blurred by foreign concepts, but remains positioned as an independent method in exchange with other modalities – such as energy work or neuroscience.

8.4 Practical integration

Finally, practice opens up the possibility of multimodal integration. Biodanza can be embedded in programmes for stress management, resilience promotion or addiction prevention. Energy work can also be presented as a separate component in such settings. It is important to pursue a building block approach here: the methods are presented and applied side by side without mixing their theoretical foundations. This creates a synergistic overall programme based on the diversity of approaches without compromising scientific clarity.

Methodological cooperation is possible when respect for the inherent logic of the procedures is combined with structured **forms of cooperation** (complementary, research-oriented, dialogical, practical). Biodanza, meditation, energy work and entheogenic procedures can thus coexist, retain their specific profiles of action and yet contribute jointly to an expanded understanding of health and consciousness.

9 Concluding remark

Relative Bio-Centric Health Theory (rbHT) offers a theoretical toolkit for clearly defining the boundaries of Biodanza while also mapping neighbouring methods. By distinguishing between different levels of energy and consciousness (physical, biological, metaphysical), it enables precise classification: Biodanza remains located at the level of embodied experience, while other methods – such as meditation, energy work or entheogenic approaches – operate at different levels. In this way, rbHT helps to protect Biodanza from confusion, preserve its essence and yet make responsible collaborations visible. Examining the boundaries of Biodanza makes it clear that only through clear demarcation and critical reflection can methodological integrity, theoretical consistency and scientific connectivity be preserved. The biocentric principle Rolando Toro places life at the centre and calls for an affective-ethical consciousness based on the protection and promotion of life. In this sense, boundaries are not to be understood as restrictions, but as necessary conditions for development, responsibility and authenticity. They secure the essence of Biodanza, open up scope for responsible cooperation with other

methods and contribute to the effective and credible further development of the method as an embodied practice in the future.

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The limits of Biodanza - Part 2

Why is virtual Biodanza not Biodanza, but a virtual encounter with elements of Biodanza?

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SUMMARY

This article is about the question of whether Biodanza can incorporate the way of working of Online Biodanza into its concept or not. Online Biodanza was introduced during the COVID-19 period because, as a result of the lockdown, it was forbidden for people to meet, e.g. in Biodanza classes. After the end of the COVID-19 period, Online Biodanza was continued by some Biodanza teachers worldwide. From the point of view of this article, this is the limit of Biodanza, because the online version of Biodanza does not take into account certain requirements that the Theoretical Model of Biodanza specifies (e.g., sensory reduction, time shift in the vivencia, lack of possibility to do certain exercises). In addition, some aspects do not go along with the visions of the founder Rolando Toro (e.g. regarding the political function of Biodanza teachers and regarding the omnipotence of technologies in the coexistence of people). The scientific analysis in this article is based on interview statements by Rolando Toro and other experienced Biodanza teachers. As a result, it can be stated that online media are beneficial for some applications in the context of Biodanza (e.g. for study groups, for theoretical discussions). However, working directly with Biodanza in weekly classes, in school modules, workshops and extensions and applications is not possible. There are simply too many necessary conditions missing for implementation. The analysis also explores the reasons why Biodanza teachers are not open to these arguments and still continue to work online. Among other things, the lack of self-reflection as components of autoregulation in the Theoretical Model and the lack of understanding of the visions of the founder of the method are pointed out here. The article summarises the risks of integrating Biodanza, Online Biodanza, without naming its contraindications, its limits. Biodanza, without these limits, destroys itself or loses its effectiveness. Biodanza-Online is at best a digital encounter with elements of Biodanza, but it is not Biodanza.

KEYWORDS

Biodanza Online, Biodanza and contraindications/limits, Self-reflection and Biodanza, Theoretical Model and Self-reflection

1. Introduction

The question in the title is important. Because it asks what has already been written in the title: what are the limits of Biodanza? This method seems to be capable of integrating everything, for example, Biodanza and Chakras, and now also virtual Biodanza?

In his Theory of Relative Biocentric Health, Stueck (2023) formulates the following basic biocentric assumption: If a method does not reflect and define its limits, it loses its effect. This is because it allows everything to be integrated without filtering or reflection. The substance, the medicine, of the method, which is determined by the theoretical model of a method, becomes contaminated and has a different, reduced effect. This can even lead to the self-destruction of the method (basic biocentric assumption, Stueck, 2023).

Why is it important to determine the limits of a method? Because the limits indicate what a method can and cannot do, and what it can and cannot integrate.

SOURCE - Stueck, M. (2025). *The limits of Biodanza: An analysis on the basis of the Biocentric Health Theory* (Biodanza Research — Explore the unknown, Vol. 1). BoD Penguin-Polar Bear Publishing. Download from https://www.bionet-research.com/Bionet-Extentions, Trainings, Conferences, Material

In scientific intervention research, the limitations of a method are referred to as contraindications. In 1994, when I was a young scientist working on the first of my two doctoral theses on the development of a scientifically based children's yoga programme, one of my mentors, Dr Ebert from the Carl Ludwig Institute of Physiology at the University of Leipzig, said something that has stayed with me throughout my working life and my life as an intervention researcher:

"Marcus, the most important thing about a method is determining its contraindications." Contraindications reveal something about the limitations of a method in the following aspects (Stueck, 1997)

- what the method cannot do,
- where it loses its effect, where it has negative effects,
- what, even if it has an effect, deviates from the theoretical model in the way it works,
- what it can integrate and what it cannot.

This last aspect in particular is currently being discussed, especially after the death of Rolando Toro Araneda. This is because there are calls to integrate biodanza and the chakras and virtual biodanza. How is this decided in a scientific approach? Normally, until 2010, the creator of the model decided what could be integrated and what could not. He knew this through his own studies, intuition and vision. After his death, it is now up to him to critically examine the model, if possible on the basis of empirical data and theoretical documents.

This is the core of scientific work: critical reflection on a method and determining its limits. Critical reflection is necessary, that is, scientific examination of the question of what can be integrated and what cannot.

2. Questions about the limits of Biodanza in relation to virtual Biodanza

In accordance with the Relative Biocentric Theory of Health (Stueck, 2023), according to which there are relative truths rather than absolute ones and questions can be answered from different perspectives that do not contradict each other but rather complement each other, I would like to

attempt to answer the following questions:

- 1. What are the contraindications or limitations of biodanza with regard to virtual biodanza from a scientific-psychological, biological or physical point of view, but also from a historical perspective?
- 2. What are the reasons why these limitations are not reflected by the directors of schools and teachers of biodanza who have been practising biodanza for a long time?
- 3. How would Rolando Toro Araneda answer this question about virtual Biodanza if he were still alive?
- 4. How does virtual Biodanza change teaching and communication?

There are other limitations of Biodanza that will be described in a separate article or have already been discussed in an article (Stueck, 2023).

2.1 Regarding question 1 about the limitations of virtual Biodanza:

the IBFed Methodological 2023, Commission recommended in a bulletin after COVID-19 that Biodanza should no longer be practised online, as this does not correspond to the principles of Biodanza. Here are some excerpts from the Methodological Commission's position paper: "The 2020 pandemic was unexpected and took us by surprise with little or no preparation for virtual platforms... Some of us were encouraged with great conviction by the people in our groups to connect via computer to talk about what was happening to us, how we were doing and how we could help each other. As a daring experiment, we also began to think about how we could do our usual Biodanza session in a room, now on a computer screen, using some Biodanza exercises in virtual conditions. We managed to approach this possibility with dances that we proposed on an individual level, in many cases resorting to the biological memory of the body, using music familiar in Biodanza, especially in the motor integration phase. Caresses arose spontaneously from the looks on the screen, and so we were able to overcome those moments of crisis in which people needed to feel that they were doing something for themselves, maintaining the bond that had been built up over time and being aware that we were not really applying Biodanza. But like everything in life, the pandemic has ended and

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fortunately, we can return to the present and return to true Biodanza. This system was created and described to be practised with people in a group, because its methodology is the integrative experience that fades away through kinesthetic stimuli that favour direct contact and cannot be replaced by anything else where the integration of music, movement and experience takes place. We are now faced with the question of when to continue with virtual meetings. Methodologically, we believe that they can be useful for study groups, exchanging opinions and theoretical discussions. However, we firmly believe that the basic experiential work in the Biodanza system cannot achieve its objectives virtually. School modules, extensions, regular group sessions, applications and methodological extensions cannot be done virtually in any way; the experiential transfer of knowledge completely loses the kinesthetic component, organic learning, the non-verbal exchange of information in a semantic biological, physiological and existential field that contact, gaze, smell, and the embrace of the other and others generate in us. So let us embrace face-to-face contact and not seek to maintain a virtuality that limits us and fails to transform our existence into a deep connection with life. However, there were and still are Biodanza teachers who continue to work with virtual Biodanza. Of course, the advantages of virtual sessions are obvious: there are no long distances, you work from home, it is convenient and could reach people who otherwise would not be able to attend. But is it still Biodanza? (Position the Methodological paper of Commission "Virtuality in Biodanza: If YES ... If NO")

In what follows, these positions will also be critically reflected upon from a scientific perspective. From a scientific perspective, the question of the limits of Biodanza will not be answered politically, but by comparing the components of virtual Biodanza with the theoretical model and some of Rolando Toro Araneda's original statements.

This article does not aim to publish a new request, but rather to analyse why virtual Biodanza has reached its limit and what conclusions should be drawn from this. The reasons why it has reached its limit are shown below:

2.1.1 Virtual Biodanza reduces sensory awareness

Biodanza develops internal values to protect life and feel others as part of ourselves in order to develop ethical awareness. This is an important statement by Rolando Toro Araneda (2010) at a time when individualism dominates.

Ethical awareness is the finest and most developable human quality. People who practise Biodanza can achieve this emotional awareness by changing their values. This change can only be achieved through emotionality. I have to learn to feel the other person as part of myself. What happens to the other person happens to me.

Through virtual biodanza, can we feel the other person as part of ourselves when 50% of our senses are missing? The answer is no. In virtual contact, only the senses of sight and hearing are present, and in a limited way. The sense of touch is active with us, that is, in self-palpation. The senses of smell and taste and the sense of touch, that is, touching the other person, are excluded. We need encounters based on real contact (Toro, 2010) in the present moment to get in touch with ourselves, with others and with nature.

2.1.2 Concrete contact, the real concrete basis of Biodanza

An important part is extracted in virtual Biodanza, the concrete, the real concrete contact: real hugs, real kisses, real eye contact, real caresses. What does Rolando Toro Araneda say about this?

"I saw Biodanza as a poetics of human encounter. In a world where love is lacking and what we need most is tenderness." (Toro, 2014)

Tenderness can only be achieved through physical contact. I cannot touch another person through the camera. We all have kinesthetic and relational aspects, real contact, eyes, feelings. Certain exercises are not possible in virtual Biodanza, for example, caressing another person. Feeling and touching the other leads to understanding: touch is the basic perception and communication for gaining ethical awareness and being in contact with life and love (Wagner, 2000). Rolando Toro Araneda also sees it this way, saying (Toro, 2014):

"Perhaps Biodanza was born out of desperation. Out of a desire to redeem ourselves. Out of our impoverished gestures, our lack of love, tenderness, our loneliness." (Toro, 2014)

For him, it was important to remain grounded in a scientific and concrete basis of life, love, and concrete action. That is to say, as long as, for example, tenderness can take place in real contact. One day, during our trip to Tanzania in 2009, I asked Rolando, "What does empathy mean to you?" He gave me three words: concrete and real action. That's why I wouldn't have agreed with virtual biodanza. How can I develop empathy if I look the other person in the eye through a camera or touch them on a screen? The position of a camera always reduces what is really there, because of the quality of the camera, the framing, the different distances.

What he says has a really concrete basis. In a speech given at the inauguration of the Biodanza Clinical Forum, Stueck (2023) expressed the relationship between Rolando Toro Araneda and the concrete in this way: "When Rolando talks about love, he always relates it to the biological basis of human beings (for example, also in his work with angels, neo-shamanism). He always worked on a scientific and concrete basis. When he spoke of the cosmos, he was referring to the cosmic material in our cells; when he spoke of angels, he was speaking of the archetypes of love within us. When he spoke of death, he was speaking of the transformation of atoms into other forms of life, into trees or into the earth. He did not talk much about energy or Spirit. He did not talk about reincarnation or quantum physics in relation to human consciousness. He talked about David Bohm and the implicit and explicit order of electrons. The metaphysical, the non-real are the limits of his theoretical model of Biodanza. The immune system of Biodanza. We always have to include that. Yes, Biodanza is a system of integration. If we think in scientific terms, then we can integrate each thing in its dual expression, according to the theoretical model of Biodanza, as long as it has a concrete expression and takes place in the here and now. And there is a problem of time displacement in the digital relationship.

2.1.3 Through the digital time lag, people in the digital encounter dance their own dance – an illusion of encounter.

Through virtual biodanza, an illusion of encounter is danced. The illusion consists of people believing that they are meeting in the moment, but it is an illusion because, firstly, there is a time delay and, secondly, the data packets are digitally encoded in 0s and 1s, which results in reduced and altered communication between sender and receiver, as communication scholars have studied (Krajnik, 2021). Thirdly, they only see a limited part of the moment displaced in time through the camera.

In virtual biodanza, the moment is impeded, firstly by the time lag, by the reduction of data (digital encryption) and by the reduction of the section of reality. Only part of reality can be experienced because the camera's perspective is limited and only 50% of the senses can be used. The same applies to the limitations of sound and camera quality. This creates an illusion of the moment, which is not complete. But the biggest mistake is that the dancers find themselves in two different moments and believe that it is a shared moment (basic biocentric assumption).

The separation created by the COVID-19 crisis is reinforced by virtual biodanza. The fact that COVID-19 has led to separation, especially in the body and mind, relationships, etc., has been scientifically analysed in the article

"Pandemic Management Theory and Biocentric Evolution" (Stueck, 2021).

The person on the screen has the illusion that they are in the same time as the other person. From experience, it is about experiencing the moment (Toro, 2010); this is the limit of Biodanza. This is not what Rolando Toro Araneda really wanted. One criterion he mentions, among other characteristics of an experience, is the reference to time. This criterion is not met by virtual biodanza.

"Experiences are subject to temporality. They arise in a period of time 'here and now'. They are temporary and represent an experience of 'current genesis'." (Toro, 2020)

Returning to the definition of Biodanza, Biodanza is a system of self-regulation, integration and organic self-renewal that works in a real group context, with real contact, dancing and singing together in the here and now, in the moment. Let's take the example of singing together in virtual Biodanza:

Do two people sing together when they sing on the computer? No, each sings separately, because the signal needs time to reach the other person. One sings first, the other later. The synchronicity of the encounter is digitally shifted. In chronobiology, this process is called phase shift: one rhythm shifts from the other rhythm. Sergio Cruz (2023) describes this phase shift in a very impressive way:

Working with the voice is one of the most delicate and important tasks at an experiential level. The voice is resonance, vibration, deep regression, and so on. It would be absolutely unacceptable to do this virtually. A theoretical presentation, a lecture, or a round table discussion on a topic is one thing, but movement or voice training is another, where both movements and sounds arrive in the virtual world with a delay of more than a second in chronological time. When I proposed at a global meeting of orchestra conductors at the beginning of the pandemic that we sing together, we had to deal with this problem of sound delay, which we more or less solved when Victor from Argentina conducted the music from Buenos Aires so that I could sing from Italy. It worked more or less, also because it was symbolic at that moment in the pandemic when we sang "I dreamed that one dreamed, it's just a dream... and together it came true..." and the conductors cried with emotion for what was a historic moment for all of us... Well, fortunately that happened... we cannot continue virtually because of the true biodanza of Rolando Toro Araneda (Cruz, 2023).

The moments of true encounter are deferred, not synchronic. They are an illusion of encounter in the here and now. They are encounters with a counterpart who is in the past. It is as if one were encountering oneself at different moments. Then one only encounters oneself, or an image of the other, but not at the same moment.

Biodanza takes place in the moment. It is a synchronisation of two or more people in the moment.

Here the question is, can I express real affection? No, because when I see the other person, I see them as they were a second ago. I attended the World Congress of Psychology in Japan in 2016. There, an android was presented that could read the emotions

of others by capturing the person's muscles and facial expressions with a camera and comparing them with emotions. It felt like empathy, but it was not empathy because the essence of the encounter was missing. However, the human being and the machine did not sit opposite each other in a delayed manner, as in virtual biodanza, but in real contact. Empathy arises, among other things, through eye contact and the observation of facial expressions. This changes very quickly, in seconds, milliseconds. This activates the part of the social brain that is responsible for emotions, the amygdala (Adolfs, 2010, cited in Stueck, Villegas, 2020). But it has to happen simultaneously. The person who sees the other's face and eyes must see them simultaneously. With virtual biodanza, you capture a state that lies in the past. We need relationships in the present moment to connect with ourselves, with others and with nature. But the moment is not present in virtual Biodanza, but delayed, as the previous example of singing shows. For him, it was important to remain on a

2.1.4 The holism of Biodanza is lost through virtual Biodanza, because some exercises are not possible.

concrete action.

scientific and concrete basis of life and love and

As former Biodanza teachers who developed Biodanza with Rolando Toro Araneda know, Rolando Toro Araneda protected the Biodanza by distinguishing it from psychotherapies. Luis Ottavio summarises it as follows: "... especially from the attempt by psychotherapists to extract parts and incorporate exercises and them into psychotherapies". This is exactly what is happening now with virtual Biodanza. When working with virtual Biodanza, one can only work with parts of the Biodanza system, meaning that the criterion of the totality of Biodanza's possibilities to fully unfold its purpose and potential is no longer fulfilled.

2.1.5 Political Role of the Biodanza Teacher

Rolando Toro Araneda described the Biodanza teacher as someone who has a political function. Because they fight to keep kisses and hugs alive in this world.

A world is opening up where purity and naturalness

are commonplace in the midst of love. Love is not just a word. It seems to me that people who are already too exhausted have not discovered the meaning, the profound sense of love. It is much more than loving your dog, your children or your husband. Love is an organising force that exists in human beings and goes beyond the individual; in other words, love has a global meaning. It is powerful, radiant, inclusive, extraordinary. It is not limited to the individual. It is a cosmic force, and the task of Biodanza is to awaken this cosmic force. The destiny of human beings is love.

It seems to me that the greatest political act that exists, the best political act, is the embrace. The embrace, the kiss, the encounter are not as harmless as one might think. In a world of wars like this one, a world in which millions and millions of people are being and have been killed, we propose the

dance, song, embrace. It is absolutely necessary. For every rifle, for every missile, for every bomber, we must kiss and dance.

These words by Rolando Toro show us a path, a vision. They clarify what Rolando wanted. Hugs, kisses, affection for others. None of this can be done in online biodanza. Teachers who teach biodanza online support a culture of disconnection. But it is about integrating and connecting with our roots. This is the political task of Biodanza and the Biodanza teacher. To end the separations of human beings.

Biodanza online separates Biodanza from its roots. It seems trivial to turn on the computer and dance. But that is not the deeper meaning of Biodanza. It is the limit because it promotes separations, especially from the anthropocentric roots of human beings (basic biocentric assumption, Stueck, 2023).

2.1.6 Detachment from roots

Would a shaman offer virtual rituals, for example with Ayawaska? No, because he knows that these are not the roots of the tradition as transmitted by his teachers. The rituals, the communal singing, the resonance and the relationship have changed. The same has happened with yoga and mindfulness, where Western mindfulness programmes no longer mention the roots of yoga. A yoga teacher teaches a path of practice based on a long tradition.

Our Western culture tends to separate things that are useful: for example, in mindfulness, parts are separated and packaged into intervention methods without taking into account the roots of yoga, the ancient texts of Patanjali or the path of practice on which yoga and meditation are based, for example. It is like cutting the roots of a tree. And in Biodanza it is the same. Rolando Toro has proposed real encounters, real kisses, real hugs to achieve, among other things, a skill, the affective-ethical expansion of consciousness. In Biodanza, it is about following the path of practice proposed by Rolando Toro, according to which certain exercises and rituals require concrete contact between teacher and student.

Sergio Cruz (2023), an experienced teacher who developed Biodanza with Rolando Toro, puts it this way: "For all of us, it is really very serious. Especially formations of four elements, Minotaur, Tree of Desires, etc., where there are important and fundamental challenges and rituals that must be done in the present."

2.2 Regarding question 2 on the reasons for the lack of critical reflection

What are the reasons why these limits are not reflected by school principals and Biodanza teachers who have been practising Biodanza for a long time?

2.2.1 Teachers' lack of awareness of the specificity of Biodanza

Now we can say that yes, virtual Biodanza puts an end to loneliness. Yes, that is true. But loneliness can also be overcome through an online sports or dance group. However, the specificity of Biodanza is missing. Question 2 attempts to answer

why the specificity of Biodanza, unlike Bio-danza, is not recognised by those who offer virtual Biodanza.

2.2.2 One of the reasons is a lack of awareness of the limitations described above

It is evident that some Biodanza teachers have not learned to critically reflect on the specifics of the method. An important part of the scientific basis of Biodanza is critical reflection on the limitations of the theoretical model. Biodanza teachers must be

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able to answer the question of what Biodanza cannot do and critically reflect on the Biodanza method.

One must also be able to critically reflect on what one loves in order to protect the method. And one must understand the specificity of a method and its limits, which destroy this specificity (basic biocentric assumption, Stueck, 2023).

In a speech at the Biodanza Clinical Forum, Stück (2023) summarised it in the following words:

Biodanza has been around for 60 years. The question arises time and again as to why Biodanza, this magical method, has not gained wider recognition in institutions in different countries or as a method of intervention. It is also important to address the issue of the limits of Biodanza, because after the death of Rolando Toro Araneda, methods such as chakra energy work and virtual Biodanza were added. The exercises are being changed, with the danger of increasingly diluting the method and its effects. The result is a varied 'salad' of methods without sufficient effects. Above all, everything that means integration with life is integrated under the term biocentrism. That is why we need to assess the contraindications and engage in critical reflection based on empirical data, logical thinking and self-reflection. Other methods provide a much clearer picture of scientifically contraindications, as shown in publications (Handbook of Dance and Wellbeing, for example Dance Movement Therapy, etc.). I am not going to talk much about a critical reflection on the Biodanza method. But if this method is to be considered scientific and if this method is to be developed, then we have to deal with it.

An example of critical reflection is the publication of studies on stress reduction and Biodanza (Stück, M.; Tofts, PD, 2016, Effects of Biodanza on Stress Reduction and Well-being — A Review of the Quality and Results of the Study. De Gruyter: Signum Temporis. 8 [1], 57–66) but also in the doctoral thesis on Biodanza in schools (Critical Reflection on the Theoretical Model of Biodanza, Stueck, 2007, University of Leipzig).

On the need for critical reflection, it was also stated:

2.2.3 "During my second doctorate on Biodanza, I

had to learn from my professors to criticise a method that I love. The committee stopped my work, which took me nine years, because there was insufficient evidence for the theoretical model, especially regarding instincts and transtasis. And there was no critical reflection on Biodanza. Scientists need to maintain a critical distance." (Stueck, 2023) A second reason is the lack of self-reflection.

If teachers who have critically reflected on all the points in question 1 still continue to work with virtual Biodanza, there may be various reasons for this. One reason is that it is convenient. A second reason could be that it has an effect, so why should I change anything? But again, it is not about effects, which is an anthropocentric view. Biodanza is about the mechanisms of effects, that is, how effects are achieved, for example, through real contact. In the case of the comfort zone, self-reflection is lacking, why it is important to step out of one's own comfort zone and tell participants that virtual Biodanza is over. This requires self-reflection. What is the role of self-reflection in Biodanza? According to Lazarus (1999) and Schröder (1992, 1996), self-regulation involves two components: the regulation of emotions and self-reflection. What is specific to Biodanza is the regulation of emotions, for example, in contrast to other methods of self-regulation (Stueck, 2023). Selfreflection should not be confused with the verbal intimacy of Biodanza. It is the ability to perceive one's own limits, feelings and thoughts, among other things, and to regulate them (Stueck, 2007). Psychological self-reflection, as part of selfregulation, is missing from the theoretical model. This was found in a critical analysis of the limits of Biodanza by Stueck (2023). This is possibly the reason why there are multiple problems in Biodanza with boundaries (e.g. ego boundaries, thoughtless fears, impulsive behaviour, competitive fear).

2.3 Question 3: How would Rolando Toro answer this question about virtual Biodanza if he were still alive?

The best way to address this question is with an original quote from Rolando Toro Araneda: Here he states that Biodanza is a radical counter-design to the omnipotence of money and technology. Virtual

Biodanza is based on technology.

Biodanza creates the bomb of love to awaken the energy of love that reaches the entire planet. When it is my turn to say goodbye to the world, I will leave without sadness, I will leave with a great feeling that better times will come. Better times, without massacres, without competition, without injustice, without serious illnesses, without crime. We will have better times, of that I have no doubt, because that is the destiny of humanity. The destiny of humanity is not the omnipotence of money, nor the omnipotence of technology." (Toro, 2012)

Here he refers to technology and rejects it in relation to Biodanza. Biodanza is natural. The music is organic, the relationship is natural in the moment and does not change over time; technology should only be used where absolutely necessary.

2.4 Question 4: How does virtual biodanza change teaching and communication?

The teacher and the student. Due to the position of the camera, both only perceive part of reality. Virtual Biodanza also lacks the resonance field of the class, which is important for teaching. The teacher cannot perceive the real resonance field online, but only an illusion, a hypothesis of it. There are now more training courses and manuals on virtual Biodanza for Biodanza teachers that do not reflect the limitations mentioned above at all.

3. Conclusion

The statements in this article can be summarised in the following points, and therefore the questions can be answered in summary form.

- Virtual Biodanza has limitations; the benefits do not outweigh the costs. It was beneficial to work with virtual Biodanza during the pandemic, but this is no longer the case for the reasons summarised in question 1.
- A summary of the pros and cons of face-to-face and online Biodanza means that virtual Biodanza cannot be integrated as a Biodanza method (question 1).
- Virtual Biodanza can be a gateway to Biodanza, but it should then be given a different name, as it is not Biodanza. For example, a virtual encounter with elements of Biodanza (question 1).

- The fact that virtual Biodanza continues to be offered after Covid-19 is due to a lack of critical reflection and self-reflection on the part of teachers (question 2).
- After analysing some of Rolando Toro's original quotes, one can conclude that Rolando Toro would not agree with virtual Biodanza (question 3).
- Virtual biodanza also changes the teaching of biodanza teachers (change in time, lack of resonance field) (question 4)

As Sergio Cruz says, it is time to "really reflect and accept limits with love" (Cruz, 2023). Otherwise, the Biodanza system cannot be protected in the way Rolando Toro suggested. The Biodanza system runs the risk of self-destruction in this way. It is very subtle and requires a high level of critical reflection self-reflection. and What is happening methodically and ethically with online Biodanza at the moment is not acceptable. The limitations of Toro's theoretical model and vision are not being sufficiently considered. Let us return to Rolando Toro Araneda's Biodanza, please. Nothing less than the future of the Biodanza method is at stake.

The following steps are still necessary for this:

- Critical reflection on the limits of Biodanza
- The alignment of new methods with the Theoretical Model of Biodanza and the vision of its creator, Rolando Toro Araneda
- Self-reflection by teachers and the incorporation of self-reflection as part of self-regulation in the Biodanza model
- Perceive and consult the many scientific studies published specifically on Biodanza that Biodanza has produced over the last 60 years.

What exactly should happen now? It is questionable whether the online biodanza movement can still be stopped, but the following points are necessary from my point of view:

- School directors must recognise the problem and, if they are working with online biodanza, stop this work.
- If you do not want to or cannot stop them, you should at least make the participants aware that what is happening in the groups is not Biodanza. Either that, or it should be given a different name. Or, after a certain amount of time, the participants

- should be transferred to face-to-face groups.
- Discussion groups should be held with those who still want to continue working with Online Biodanza. This is not about moral rules and prohibitions, but rather an exchange of arguments.
- On the part of the IBFed's methodological commission, the limits of Biodanza must be made very clear in the form of recommendations, and members must be role models and have a clear attitude.

This analysis is ongoing and should be used as a basis for initiating discussions. The analysis is not yet complete and needs to be further developed. However, it must be strongly emphasised that the basic experiential work in the Biodanza system cannot achieve its objectives virtually. The reasons for this have been presented in this article, scientifically justified. Therefore, online work with Biodanza cannot be used in the following areas:

- school modules,
- marathons,
- regular group meetings,
- Applications and methodological extensions

This Biodanza work cannot be done virtually under any circumstances, because the transfer of knowledge based on experience completely loses the kinesthetic component, the synchronous nonverbal exchange of information in a biological, physiological and existential semantic field. This field of resonance is created by a group that is in contact, through tender caresses, glances, smells, and hugging each other. So let us embrace the presence of the moment and the balance between the virtual, where it is useful, and the presence that manages to transform our existence into a deep connection with life.

Literature

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May 2023 Opening Speech. Clinical Biodanza Forum Proceedings.

Toro, R. (2010) The Biodanza System. Editorial Tinto.

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Wagner, U. (2000). Feeling – touching – grasping: touch as perception and communication. Oldenburg: Library and Information System of the University of Oldenburg.

How to make Biodanza more visible? External scientific communication through publications

Current IBFed list of review publications and doctoral theses - as of 2025

Created and reviewed by IBfed subcommittee "Biodanza and Investigation"

c/o Marcus Stueck

RECEIVED & REVIEWED Under review

RECEIVED 20 October 2025 ACCEPTED

EDITED Martina Goth

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Abstract:

Critical observations show that empirical studies are hardly taken into account in training and practice, resulting in a loss of scientific depth and credibility of Biodanza. Pseudo-scientific explanations of the effects of Biodanza are given without evidence from studies to back them up. Evidence-based practice in Biodanza means ensuring that subjective experience is linked to verifiable data. Publications are crucial in this regard, as only published results create visibility and legitimacy. This article presents a list of research published worldwide, divided into the following categories:

- Peer-reviewed articles on Biodanza and biocentric education (Biodanza with children)
 21 articles
- Doctoral theses and postdoctoral theses on Biodanza (2 doctoral theses, 1 postdoctoral thesis)
- Peer-reviewed articles on the biocentric principle and biocentric education (in general)
 3 articles
- Doctoral theses and postdoctoral theses on the biocentric principle and biocentric education (in general) = 3 doctoral theses
- Book chapters in scientific books with review system = 1 book chapter
- Reviewed books = 2 books with review system

In total, there are only 32 high-quality Biodanza publications. That is not enough. In other systems (e.g. body movement and dance therapy), there are an estimated 500 review articles. Due to the low quality of the publications, the visibility of Biodanza in institutions, organisations and the academic world is severely limited. But the biggest problem is that Biodanza representatives are unaware of this critical situation. Conclusion: Biodanza must integrate empirical research more strongly in order to remain scientifically recognised. Research is not a threat, but an act of love for life – it combines experience and evidence and leads Biodanza into a reflective, sustainable form. This makes it clear that only through the consistent combination of lived experience, methodological rigour and international research can Biodanza realise its original claim – to be a science of life that harmonises emotion and knowledge.

KEYWORDS Biocentric Paradigm, Biocentric Health, Biocentric Methods

IBFed Publication List "Biodanza and Science"



Created and reviewed by IBFed Subcommission "Biodanza and Investigation"

c/o Marcus Stueck (BIONET database – www.bionet-research.com)

Scientific (peer-reviewed) journal publications on Biodanza and biocentric education (Biodanza with children)

Meta-analysis (0)

Systematic Biodanza study reviews

- Stueck, M., & Tofts, P. (2016). Biodanza effects on stress reduction and well-being A review of study quality and outcome. Signum Temporis, 8(1). Peer review: Yes (review). DOI: 10.1515/sigtem-2016-0018. (Source: (ResearchGate))
 Brief description: Systematic/narrative overview of study quality and findings regarding stress reduction and well-being through Biodanza.
- Ferraro, F. V., Aruta, L., Ambra, F. I., Distaso, F. P., & Iavarone, M. L. (2021). *Pedagogic intervention for health: A narrative systematic review on Biodanza. Movimento* (SciELO), 27, e27069. Peer review: Yes. DOI: 10.22456/1982-8918.111547. (Source: (SciELO))
 Brief description: Narrative systematic review of Biodanza interventions and health outcomes (SanRA/Kappa rated).

Review article (19)

- 1. Perche, F., Stueck, M., Villegas, A., & Balzer, H.-U. (2007). New ways to reduce stress in the teaching profession: Biodanza and yoga as body-oriented methods for reducing psycho-vegetative tension. Ergomed, 03/2007, 68–75. Peer review: Yes. DOI: none found. (Source/review: (ResearchGate))
 - Brief description: Comparative presentation of biodanza and yoga as body-oriented methods for reducing stress in teachers; practical examples and case studies.
- 2. Stueck, M., Villegas, A., Mazzarella, L., Terren, R., & Schröder, H. (2008). Dancing away stress? Biodanza as a new body-oriented psychological intervention method for stress management for

teachers. Ergomed, 02/2008, 34–43. — Peer review: Yes. DOI: none found. (Source: (ResearchGate))

Brief description: Presentation and evaluation of Biodanza as an intervention method to support teachers in stressful situations.

- 3. Stueck, M., Villegas, A., Bauer, K., Terren, R., Toro, V., & Sack, U. (2009). *Psycho-immunological process evaluation of Biodanza*. *Signum Temporis*, 2(1), 2009. Peer review: Yes. DOI: 10.2478/v10195-011-0024-7. (Source: (archive.sciendo.com))

 Brief description: Process evaluation of the immunological and psychological effects of Biodanza (exploration data, antibodies/stress parameters).
- Carbonell-Baeza, A., Aparicio, V. A., Martins-Pereira, C. M., Gatto-Cardia, C. M., Delgado-Fernández, M., & Ruiz, J. R. (2010). Efficacy of Biodanza for treating women with fibromyalgia.
 Journal of Alternative and Complementary Medicine, 16(11), 1191–1200. Peer review: Yes. DOI: 10.1089/acm.2010.0039. (Source: PubMed)
 Brief description: Randomised controlled trial on the efficacy of Biodanza in women with fibromyalgia; measures: pain, function, quality of life.
- 5. López-Rodríguez, M. del M., Castro Sánchez, A. M., Fernández-Martínez, M., Matarán-Penarrocha, G. A., & Rodríguez-Ferrer, M. E. (2012). *Effectiveness of aquatic biodanza on sleep quality, anxiety and other symptoms in patients with fibromyalgia. Atención Primaria*, 44(11), 641–650. Peer review: Yes. DOI: 10.1016/j.aprim.2012.03.002. (Source: PubMed) Brief description: Study on "aquatic biodanza" in fibromyalgia patients; outcomes: sleep quality, anxiety, pain.
- 6. Stueck, M., Villegas, A., Schoenichen, C., Bauer, K., Tofts, P., & Sack, U. (2013). Effects of an evidence-based dance programme (TANZPRO-Biodanza) for kindergarten children aged four to six on immunoglobulin A, testosterone and heart rate. Problems of Education in the 21st Century, 56, 128–143. Peer review: Yes. DOI: 10.33225/pec/13.56.128. (Source: (scientiasocialis.lt)) Brief description: Intervention with kindergarten children; measurement of immunological (sIgA), hormonal (testosterone) and cardiovascular parameters.
- 7. Stueck, M., Villegas, A., Lahn, F., Bauer, K., Tofts, P., & Sack, U. (2016). *Biodanza for kindergarten children (TANZPRO-Biodanza): Reporting on changes of cortisol levels and emotion recognition. Body, Movement and Dance in Psychotherapy*, 11(1), 75–89. Peer review: Yes. DOI: 10.1080/17432979.2015.1124923. (Source: (bionet-research.com)

 Brief description: Follow-up study on TANZPRO; focus: stress markers (cortisol) and social/emotional skills.

- 8. Greaves, V., Stueck, M., & Svence, G. (2016). Changes in the emotional and social skills of first-grade school children in the TANZPRO-Biodanza intervention group. Society. Integration. Education. (Conference/Proceedings) Peer review: Proceedings / Programme committee review. DOI: 10.17770/sie2016vol1.1528 (if available / Proceedings ID). (Source: (journals.rta.lv)) Brief description: Conference paper on the effects of TANZPRO-Biodanza on emotional and social skills in school beginners (bionet-research.com).
- Piña López, J. A. (2015). A critical analysis of the concept of resilience in psychology. Annals of Psychology, 31(3), 751–758. Peer review: Yes. DOI: 10.6018/analesps.31.3.185631. (Source: (scielo.isciii.es))
 Brief description: Critical conceptual analysis of the term resilience in psychology (theoretical work/review).
- 10. López-Rodríguez, M. M., Baldrich-Rodríguez, I., Ruiz-Muelle, A., Cortés-Rodríguez, A. E., López-Estepa, T., & Román, P. (2017). *Effects of Biodanza on stress, depression, and sleep quality in university students. Journal of Alternative and Complementary Medicine*, 23(7), 558–565. Peer review: Yes. DOI: 10.1089/acm.2016.0365. (Source: (Liebert Publishing))

 Brief description: RCT or controlled study with students: stress, depressive symptoms, sleep quality.
- 11. Segura-Jiménez, V., Carbonell-Baeza, A., Aparicio, V. A., Femia, P., Ruiz, J. R., & Delgado-Fernández, M. (2017). Biodanza reduces acute pain severity in women with fibromyalgia. Pain Management Nursing (or related publication), 2017. Peer review: Yes. DOI: 10.1016/j.pmn.2017.03.007. (Source: PubMed)
 Brief description: Investigation of the acute pain effects of biodanza in fibromyalgia patients (mixed methods/quantitative pain scales).
- Widiasmara, N., Novitasari, R., Trimulyaningsih, N., & Stueck, M. (2018). School of Empathy for enhancing children's wellbeing. International Journal of Social Science and Humanity, 8(8), 230–234. Peer review: Journal states peer review; indexing/quality variable. DOI: 10.18178/ijssh.2018.V8.966. (Source: (IJSSH))
 Brief description: Quasi-experimental pilot study on the "School of Empathy" intervention and its effects on children's emotional well-being.
- 13. Stueck, M., Kaloeti, D. V. S., Villegas, A., & Utami, D. S. (2019). The influence of Biodanza and School of Empathy verbal—respectful communication on the ability to express emotions and needs: A pilot study among adults in Indonesia. Health Psychology Report, 7(4), 334–340. Peer review: Yes. DOI: 10.5114/hpr.2019.88665. (Source: (hpr.termedia.pl))

 Brief description: Pilot study in Indonesia: Biodanza + School of Empathy elements and their influence on the expression of emotions/needs.

- 14. Calamassi, D., Palfrader, A., Biagiotti, C., & Galli, R. (2019). *Biodanza in healthcare residences: Qualitative study. Open Journal of Nursing* (SCIRP), 9(1), 41–58. Peer review: Publisher indicates peer review (SCIRP). DOI: 10.4236/ojn.2019.91005. (Source: (SCIRP))

 Brief description: Qualitative study of Biodanza programmes in care facilities (experiences of residents and staff).
- 15. Calçada, J., & Gilham, C. (2022). Biodanza and other dance forms as a vehicle for social-emotional learning in schools: A scoping review. LEARNing Landscapes, 15(1), 53–73. Peer review: Yes. DOI: 10.36510/learnland.v15i1.1059. (Source: (learninglandscapes.ca))
 Brief description: Scoping review of dance forms (including biodanza) as a means of social-emotional learning in school contexts.
- 16. Chiesi, F., Gori, E., Collini, F., Palfrader, A., Galli, R., Guazzini, A., Collodi, S., Lorini, C., & Bonaccorsi, G. (2021). Biodanza as a non-pharmacological dance movement–based treatment in older people with Alzheimer's disease: An Italian pilot study in two Tuscan nursing homes. Holistic Nursing Practice, 35(5), 264–272. Peer review: Yes. DOI: 10.1097/HNP.00000000000000470. (Source: PubMed)
 Brief description: Pilot study with institutionalised older people with Alzheimer's; outcomes: neuropsychiatric symptoms, agitation, feasibility.
- 17. Vitale, C., Rosa, R., Agosti, V., Siciliano, M., Barra, G., Maggi, G., ... Santangelo, G. (2024). Effects of Biodanza® SRT on motor, cognitive, and behavioural symptoms in patients with Parkinson's disease: A randomised controlled study. Journal of Personalised Medicine, 14(6), 588. — Peer review: Yes. DOI: 10.3390/jpm14060588. (Source: (PMC)) Brief description: RCT in Parkinson's patients; measurement of motor, cognitive and behavioural outcomes after Biodanza® SRT intervention.
- Cohen Zilka, G., & Tempel, S. (2024). Biodanza and a sense of resilience in times of war. Journal of Bodywork & Movement Therapies, 40, 2136–2146. Peer review: Yes. DOI: 10.1016/j.jbmt.2024.10.054. (Source: (ScienceDirect))
 Brief description: Mixed-methods study on mechanisms through which Biodanza can strengthen resilience, vitality and morale in times of war.
- 19. Zilka, G. C., et al. (2025). *Impact of Biodanza on children's movement, music, and encounters*. (Submitted / Preprint / Research in Dance Education 2025). Peer review: if published in *Research in Dance Education* → Yes; current status: Preprint / Listing, DOI: not yet available (Preprint / DOI possibly later). (Sources/Listing: (ResearchGate))

 Brief description: Report/study on Biodanza programmes for kindergarten/preschool children; focus on movement, music and encounter development.

TOPICS

1. Occupational stress & interventions (teachers, emergency services personnel)

In brief: Interventions for stress reduction in the work context / emergency assistance

- 1. Perche et al. (2007). Biodanza & yoga for stress reduction among teachers (practice/case studies).
- 2. Stueck et al. (2008). Evaluation of Biodanza as an intervention method for teachers.
- 3. Stueck et al. (2009). Psycho-immunological process data; relevant for stress response patterns of participants (also in a professional context).
- 4. Stueck et al. (2016) Systematic review of stress studies

2. Clinical interventions — Fibromyalgia & pain

In short: RCTs / clinical studies with pain/fibromyalgia outcomes

- 4. Carbonell-Baeza et al. (2010). RCT effectiveness of Biodanza in women with fibromyalgia (pain, function).
- 5. López-Rodríguez et al. (2012). Aquatic Biodanza in fibromyalgia (sleep, anxiety, symptoms).
- 12. Segura-Jiménez et al. (2017). Acute pain reduction through biodanza in fibromyalgia.

3. Children, nursery & school (development, SEL, School of Empathy)

In short: Biodanza / TANZPRO in educational settings, promoting social-emotional skills

- 6. Stueck et al. (2013). TANZPRO in 4–6-year-olds (sIgA, testosterone, heart rate).
- 7. Stueck et al. (2016). TANZPRO: Cortisol changes & emotion recognition in children.
- 9. Greaves, Stueck & Svence (2016). Conference paper: Emotional and social skills in school starters.
- 13. Widiasmara et al. (2018). "School of Empathy" Pilot study for child well-being.
- 23. Zilka et al. (2025). (Preprint) Biodanza for preschool children: movement, music, communication development.

4. Psychophysiology / Biomarkers

In short: Studies with biological stress/immune markers or physiological measurements

• 3. Stueck et al. (2009). — Psycho-immunological process data (antibodies/stress).

- 6. Stueck et al. (2013). sIgA, testosterone, heart rate in children.
- 7. Stueck et al. (2016). Cortisol measurements in children.
- 21. Vitale et al. (2024). RCT in Parkinson's disease with motor/cognitive/behavioural and physiological measures.

5. Older people / neurodegenerative diseases / care facilities

In short: Biodanza in care settings, Alzheimer's, Parkinson's

- 20. Chiesi et al. (2021). Pilot study in nursing homes with Alzheimer's patients.
- 16. Calamassi et al. (2019). Qualitative study on Biodanza in nursing home settings (experiences of staff, residents).
- 21. Vitale et al. (2024). Parkinson's RCT (motor/cognitive/behavioural).

6. General mental well-being / community & adults

In short: Effect of Biodanza / "conscious dance" on stress, depression, well-being in non-clinical groups

- 11. López-Rodríguez et al. (2017). Students: stress, depression, sleep quality.
- 15. Stueck et al. (2019). Pilot study with adults in Indonesia: expression of emotions/needs.

7. Reviews, scoping & methodological reviews

In brief: Overview studies, quality assessments and scoping reviews

- 8. Stueck & Tofts (2016). Review of study quality and Biodanza outcomes.
- 2. Ferraro et al. (2021). Narrative systematic review of Biodanza (Movimento).
- 17. Calçada & Gilham (2022). Scoping review: dance forms for social-emotional learning in schools.

8. Qualitative research, implementation & practical questions

In short: implementation, feasibility, experiences in applied settings

- 16. Calamassi et al. (2019). Qualitative study in nursing homes (practical implementation aspects).
- 19. Chiesi et al. (2021). Pilot implementation in two nursing homes (feasibility & outcome measurement).

9. Resilience, conceptual work & special contexts (sport, war)

In short: Resilience theory, resilience as a predictor, biodanza in crisis contexts

- 10. Piña López (2015). Critical analysis of the concept of resilience (theoretical).
- 14. González, Castillo & Balaguer (2019). Resilience & basic psychological needs in women's sport (predictors of quality of experience).
- 21. Cohen Zilka & Tempel (2024). Biodanza & resilience in times of war (mixed methods).

Primary country of origin (first mention) — Frequency

- 1. Germany: 6
- 2. Spain: 5
- 3. Italy: 4
- 4. Indonesia: 2
- 5. Israel: 2
- 6. Latvia: 1
- 7. Mexico: 1
- 8. Canada: 1
- 9. International (USA/UK): 1

IBFed publication list "Biodanza and Science"



Doctoral theses and postdoctoral theses on Biodanza

Doctoral theses

D'Alencar, Bárbara Pereira — Biodanza as a process of existential renewal for the elderly: ethnographic analysis (Doctoral thesis)

Year: 2005 — Institution: University of São Paulo (School of Nursing of Ribeirão Preto, USP) — Language: Portuguese — Degree: Doctorate (Doctoral thesis).

Brief description: Ethnographic doctoral thesis that uses participant observation and interviews to examine the subjective meanings and effects of Biodanza for older people. D'Alencar shows how Biodanza can promote feelings of autonomy, social participation, meaning and quality of life among seniors, and provides detailed qualitative insights into the everyday and physical practices of the participants. The thesis is considered one of the first scientific-qualitative doctoral theses on Biodanza. The full text and abstract are available in the USP repository and via SciELO.

Supervisor: Prof.^a Maria Manuela Rino Mendes.

A. Villegas, Alejandra — Process evaluation of BIODANZA (dissertation)

Year: 2006 — Institution: University of Leipzig (Faculty of Biosciences) — Language: German / — Degree: Dissertation / PhD.

Brief description: Empirical-quantitative dissertation that conducts a process evaluation of BIODANZA interventions. Villegas combines standardised measurement methods (psychological parameters) with process observations to document the mechanisms of action and short- to medium-term effects of Biodanza. The work is considered one of the first scientific-quantitative doctoral theses on Biodanza and has been cited many times in specialist literature and anthologies on Biodanza research.

Supervisor: Prof. Harry Schröder

Habilitation theses

Stück, Marcus — Development and empirical evaluation of a stress management concept for the teaching profession (using Yoga and BIODANZA) (Habilitation thesis)

Year: 2007 — Institution: University of Leipzig — Language: German — Degree: Habilitation (Venia legendi).

Brief description: Habilitation thesis on the development and empirical testing of an intervention programme for stress management for teachers that integrates body-oriented methods (yoga and elements from Biodanza). The thesis describes the design, implementation and evaluation (pre/post measurements) of the programme and was published as an important scientific basis for the transfer of body-oriented methods to school contexts and summarised in a Schibri volume.

Supervisor: Prof. Dr. habil. Evelyn Witruk

IBFed publication list "Biodanza and Science"



Scientific (peer)-reviewed book chapters or books on Biodanza and biocentric education (Biodanza with children)

Reviewed book chapters

Stueck, M., & Villegas, A. (2017). Evidence-based BIODANZA programmes for children (TANZPRO-Biodanza) in schools and kindergartens: Some effects on psychology, physiology, hormones, and the immune system. In V. Karkou, S. Oliver, & S. Lycouris (Eds.), *The Oxford Handbook of Dance and Wellbeing* (pp. 77–98). Oxford University Press.

Short summary (English): Stueck & Villegas describe the TANZPRO-Biodanza programme — an evidence-based, structured Biodanza curriculum adapted for kindergartens and primary schools — and review empirical findings on its possible impacts. The chapter summarises small-scale, mainly naturalistic studies that report effects across psychological (e.g., affectivity, self-regulation), physiological (motor/behavioural regulation), endocrine (hormonal responses) and immunological markers, arguing that Biodanza interventions for children may support emotional and self-regulatory development. The authors are careful to note methodological limitations (small samples, naturalistic designs) and call for larger, controlled studies to confirm mechanisms and effect sizes.

Reviewed books

Stück, M., & Villegas, A. (Eds.). (2008). *Biodanza im Spiegel der Wissenschaften* (Vol. 2). Strasburg: Schibri-Verlag. Brief description / classification

The Schibri series *Biodanza im Spiegel der Wissenschaften* brings together empirical studies and articles on the effects of biodanza (psychological, physiological, hormonal and immunological findings). Volume 1 ("Dancing for Health?") and Volume 2 ("The Danced Path" — Villegas) contain dissertations, process and evaluation studies, and review articles, and have been published in several languages (German, English, Italian, Spanish). The volumes serve as central compilations of empirical research on Biodanza.

Strnadová, K. (2025). *Language in Biodanza*. University of West Bohemia in Pilsen. https://doi.org/10.24132/ZCU.2025.13140.

Brief

description: The book analyses the linguistic dimensions of Biodanza along three central areas: (1) silence or absence of language, (2) spoken language (e.g. sharing, introduction of dances, poetic language, voice) and (3) written language (e.g. study materials). It combines theoretical reflections (including mirror neurons and protolanguage) with practical examples and a research section that examines the question: What is the potential of language in Biodanza? (including chapters on protolanguage, mirror neurons, poetic language, voice and study materials).

IBFed publication list "Biodanza and Science"



Peer-reviewed publications on the biocentric principle and biocentric education

Stueck, M. (2021). "The Pandemic Management Theory. COVID-19 and biocentric development" Brief description: Theoretical article discussing the biocentric principle as a basis for health-related practices and educational concepts; combines Rolando Toro's biocentric ideas with public health perspectives and addresses implications for education and community interventions.

Zilka, G. C. (2022). "Biodanza and the Implementation of the Principle of Biocentric Education in Kindergartens." Review of European Studies / Research in Education Studies (CCSE Journals). Brief description: Qualitative study (peer-reviewed in regional journals) documenting the practical implementation of biocentric education through Biodanza interventions in kindergartens and describing effects on affectivity and the relational climate. Useful as a practical case study.

Stueck, M., Kaloeti, D. V. S., Kankeh, H., Farrokhi, M., & Bidzan, M. (2023). Editorial: Biocentric development: studies on the consequences of COVID-19 towards human growth and sustainability. Frontiers in Psychology, 14, 1176314. https://doi.org/10.3389/fpsyg.2023.1176314 description (German): The editorial introduces the research topic "Biocentric Development: Studies on the Consequences of COVID-19 Towards Human Growth and Sustainability" and summarises the motivation and thematic scope of the collected contributions. It embeds the debate on biocentric development in the context of the COVID-19 pandemic — with a view to psychological consequences, adaptation and coping processes, and possible perspectives for sustainable, life-centred approaches to education and health. The editorial is edited by Marcus Stueck and colleagues and serves as a thematic framework for the eight articles Why is the research topic important at Frontiers? Classification: in the research topic. The editorial highlights and brings together a growing, peer-reviewed debate on biocentric perspectives in psychology, education and health research, particularly with regard to the social and individual consequences of the pandemic. It combines conceptual considerations (e.g., on biocentric development and pandemic management theory) with empirical contributions that examine aspects such as anxiety, coping, resilience, and community sustainability.

IBFed publication list "Biodanza and Science"



Doctoral theses and postdoctoral theses on the biocentric principle and biocentric education

Doctoral theses

Delshad, V. (n.d.). Modelling of the bio-psychological health assessment in Tehran pre-hospital emergency staff based on the theory of bio-centric health management [Unpublished doctoral dissertation, University of Social Welfare & Rehabilitation Sciences, Tehran, Iran].

Brief description: Delshad's dissertation project aims to develop a model for bio-psychological health (risk) assessment for employees of the pre-clinical emergency services in Tehran, based on the Theory of Bio-Centric Health Management. Methodologically, the work combines instrument development (including calibration/validation of a questionnaire/assessment battery, based on the "Health Cube/Health Cube Battery"), descriptive surveys and structural equation modelling (SEM) to map psychobiological risk and protective factors for EMTs. The samples and study phases include systematic reviews, cross-sectional surveys in various districts of Tehran, and the development of validated measurement instruments for recording individual resources, stress factors, physiological reactions, and bio-centric performance indicators. The work is embedded in a research programme on the application of biocentric concepts in health diagnostics and preventive care for emergency personnel and also serves as a methodological basis for the implementation of predictive risk models.

Supervisors:

Prof. Dr Hamidreza Khankeh,

Prof. Dr. habil. Mariola Bidzan

Prof. Dr. habil. Marcus Stueck

Müller-Haugk, S. (2024). The relationship of movement-oriented pre-experiences and biocentric health aspects during the COVID-19 pandemic [Doctoral dissertation, Gdańsk University of Physical Education and Sport].

Brief description: The dissertation links Relative Biocentric Health Theory (RBHT) with empirical research on the extent to which previous movement-oriented experiences (e.g. yoga, biodanza, other body-related practices) have protective or moderating effects on biopsychological health and coping parameters during the COVID-19 pandemic. The aim of the thesis is to develop an integrated model that relates individual background factors (biographical movement experiences), psychological coping styles and health outcomes (including anxiety, self-regulation, subjective health indicators) and thus tests the applicability of biocentric concepts in health research and prevention.

Supervisor: Prof. Marcus Stueck

Senarath, S. (2009). Psychological adjustment and mediator intervention for tsunami-affected children in Sri Lanka [Unpublished doctoral dissertation, University of Leipzig].

Brief description: The dissertation examines the psychosocial adjustment of children and adolescents affected by the 2004 tsunami in Sri Lanka and evaluates a "mediator intervention" programme (including elements such as Hatha yoga and Biodanza) to support emotional coping and social reintegration. Methodologically, the work includes longitudinal/cross-sectional surveys, qualitative interviews, observations and evaluations of intervention phases; the aim is to derive effective factors and long-term consequences for education, stress and trauma consequences, as well as recommendations for school and community-based intervention programmes. According to sources, the work was submitted to the University of Leipzig in 2009.

Supervisor: Prof. Dr. habil. Evelin Witruk