S.I.A.B.







MIXED-METHOD RESEARCH ON THE EFFECTIVENESS OF THE PROCESS OF BIOENERGETIC THERAPY IN FOSTERING EMBODIMENT AND "GROUNDED TRANSFORMATIVE NARRATIVES"



Applicant: Livia Savarese Bioenergetic Therapist, SIAB, Italy, Ph.D, post-doctoral fellow at University of Naples Federico II, Department of Humanities;

<u>Research group:</u> Silvia Pasqualini, Bioenergetic Therapist, SIAB, Italy; University of Naples Federico II, Department of Humanities, Giovanna Esposito, Ph.D, Research fellow and Maria Francesca Freda, PH.D, Associate Professor

#### 1.INTRODUCTION

Given the lack of research on the effectiveness of Bioenergetic Analysis in the filed of Psychotherapy Research, the aim of this research project is to analyze the process of change fostered by Bioenergetic Analysis in the hypothesis that the process of Bioenergetic Analysis, in combining a bodily, analytic and relational understanding of the person by a dynamic and energetic epistemology, may foster the connection between bodily processes and symbolic verbal processes within a narrative elaboration of the client's experience that arises from a deep understanding and grounding in her/his own embodied experience and history of character structures.

2.HYPOTHESIS We hypothesize that the process of Bioenergetic Analysis, in combining a bodily, analytic and relational understanding of the person by a dynamic and energetic epistemology, may foster this connection between sub-symbolic bodily processes and symbolic verbal processes. That is, the symbolic and narrative elaboration of the client's experience arise from a deep understanding and grounding in her/his own embodied experience and history of character structures. This narrative is therefore ad embodied, grounded, narrative, that corresponds with the "shape" of the somatosensory, affective and cognitive history of the clients therefore an effective Bionergetic Therapy may foster effective changes in the dysfunctional and disconnected narratives of the client, as far as in her/his energetic processes and structures (Lowen, 1958).

#### 3.METHOD AND TOOLS

Within a mixed-method research design, two 20-session Bioenergetic Therapies will be evaluated by an in-depth analysis of the impact of the bodily techniques on the psychological processes of the client, from the perspective of two different constructs and their measures for the analysis of the mechanisms of change in psychotherapy:

- 1) The software for the analysis of Referential Process (Bucci, 1997; Bucci and Maaskit, 2007)
- 2) the Innovative Moments Coding System (Gonçalves , 2011)
- the analysis of a physiological measure(Skin conductance).

To reach a complete understanding of the therapeutic process, outcome measures of the overall symptomatology(SCL-90) and the emotion regulation(TAS-20 and ERQ) will be evaluated as Well-

#### 4.RESULTS

We expect results to shed light on the specificity of the processes of change fostered by BA. Process research by the means of the Innovative Moments coding system and the software for the analysis of RA should help us to detect the characteristic of the psychological processes elicitated. Outcome measures should help us to read these results in terms of effective improvements and achievements reached by BA. We expect these improvements go in the direction of showing high quality Innovative moments detected by the IMCS, and in narratives coded as Refective by the software for the analysis of Referential Process. Moreover, we expect also the outcome measures show an improvement in the overall symptomatology and in the emotion regulation measures. Results will be discussed in proper scientific papers with reference to two overarching scopes: 1. disseminating the principles and mechanisms of BA in the wider community of psychotherapy researchers

2. reflecting, within the BA scientific community, on the effectiveness of the treatment

Corresponding author: liviasavarese@gmail.com



C. Berguedà, 21 2º 5ª, 08029 Barcelona iiba.spain@bioenergeticanalysis.com +34 936 007 448

# **IIBA AWARDS 2019**

### **RESEARCH WORK**

Mixed-method research on the effectiveness of the process of bioenergetic therapy in fostering embodiment and "grounded transformative narratives"

Livia Savarese



1/14



#### SUMMARY

Given the lack of research on the effectiveness of Bioenergetic Analysis intense filed of Psychotherapy Research, the aim of this research project is to analyze the process of change fostered by Bioenergetic Analysis in the hypothesis that the process of Bioenergetic Analysis, in combining a bodily, analytic and relational understanding of the person by a dynamic and energetic epistemology, may foster the connection between bodily processes and symbolic verbal processes within a narrative elaboration of the client's experience that arises from a deep understanding and grounding in her/his own embodied experience and history of character structures.

Within a mixed-method research design, two 20-session Bioenergetic Therapies will be evaluated by **an in-depth analysis of the impact of the bodily techniques on the psychological processes of the client, from the perspective of two different constructs and their measures for the analysis of the mechanisms of change in psychotherapy:** 1) The software for the analysis of Referential Process (Bucci, 1997) and 2) the Innovative Moments Coding System (Gonçalves , 2011) 3) the analysis of a physiological measure(Skin conductance). To reach a complete understanding of the therapeutic process, outcome measures of the overall symptomatology (SCL-90) and the emotion regulation (TAS-20 and ERQ) will be evaluated as well.





C. Berguedà, 21 2º 5ª, 08029 Barcelona iiba.spain@bioenergeticanalysis.com +34 936 007 448

#### **Research hypothesis**

Despite the growing interest for the role di the body in psychotherapy and in mental health, current literature shows a lack of theoretical ad well as empirical works dedicated to this theme. Moreover, within this limited number, papers making reference to the work of Alexander Lowen and its psychodynamic approach, Bioenergetic Analysis, are quite rare (Nickel et al., 2006; Koemeda-Lutz et al., 2006; Bemak & Young, 1998; Hadar, 2001; Ventling, 2002).

This absence of BA from the academic and scientific literature has to be addressed probably to two main issues: 1) the ever surviving distance between psychotherapeutic clinical practice and academic research; 2) the lack of engagement of Bioenergetic Psychotherapists in the attempt of working for disseminating the process of change fostered by BA by grounding its therapeutic mechanisms within the literature of psychotherapy research.

In the last years literature on the psychotherapy research is showing an ever increasing proliferation of constructs and methodologies for the evaluation of the outcomes and the process of psychotherapeutic relationship (biblio), and a number of clinician or client-report questionnaires, together with linguistic and stylistic measures of the psychotherapy process have been developed(biblio).

Moreover, research on the psychotherapy process of change is witnessing an increasing interest for deepening the role of embodiment processes in the cognitive processes of reflexivity (Fonagy, Bucci,) and emotional awareness (Lane, ...). Some studies show that the connection with a sub-symbolic visceromotor activation may foster processes of reflexivity on oneself of higher complexity, comparing with the ones resulting only from a cognitive activation (Esposito, Savarese & Squitieri, 2017). We hypothesize that the process of Bioenergetic Analysis, in combining a bodily, analytic and relational understanding of the person by a dynamic and energetic epistemology, may foster this connection between sub-symbolic bodily processes and symbolic verbal processes. That is, the symbolic and narrative elaboration of the client's experience arise from a deep understanding and grounding in her/his own embodied experience and history of character structures. This narrative is therefore ad embodied, grounded, narrative, that corresponds with the "shape" of the somatosensory, affective and cognitive history of the client; therefore, an effective Bioenergetic Therapy may foster effective changes in the dysfunctional and disconnected narratives of the client, as far as in her/his energetic processes and structures (Lowen, 1958).

In the light of these issues, the aim of this research project is to analyze the process of change fostered by Bioenergetic Analysis **by an in-depth analysis of the impact of the bodily techniques on the psychological processes of the client, from the perspective of** 





## two different constructs for the analysis of the mechanisms of change in psychotherapy that analyze the narrative exchanges:

- 1. The Referential Process (Bucci, 1997) and
- 2. Innovative Moments (Gonçalves, 2011).

The choice of these specific construct relies both on the interest of the researchers for the detection of these processes with regard to the impact of a body psychotherapy on narrative processes detectable form the explicit verbal exchanges within the therapy. Moreover, the researchers own an expertise as reliable coders of these methods. **The first** (Referential Process) is focused on the study of the integration between sub-symbolic viscero-motor and symbolic coding system of the experience; **the second one,** is aimed at detecting and differentiating the innovations in the client's mental processes and dysfunctional schemas, elicited by different types of therapist interventions.

In addition, the choice of using both of them relies on the methodological feature of the appropriateness of using in combination a clinician-based and a software-based coding system, in order to balance the potentials as far as the limitation of each research method, which consist mainly in risks for an individual bias of interpretation due to the subjectivity of the clinician, and a mechanical elaboration of data in the case of the software-based analysis.

Finally, we intend to detect also a physiological measure of the bodily and psychological processes within the therapeutic relationship, by measuring a physiological arousal index, the skin conductance.

#### RP and the Multiple Code Theory

Wilma Bucci's Multiple Code Theory (Bucci, 1997, 2002) is accounted as a general framework for understanding the nature of the patients' problems and to establish comprehension about the process of change in psychotherapy (Bucci 2011, 2014). This theory relies both on cognitive science and psychoanalysis (Mariani & De Coro, 2013) and assumes that the human organism is a "…multi-state, multi-format information processor…" (Bucci, 2011, p. 210), wherein emotional information is processed by different codes and formats that function simultaneously via different interactive devices only partially connected: (nonverbal) subsymbolic codes, nonverbal symbolic codes, and verbal codes (Bucci, 1997).

According to this model (Nonverbal) sub-symbolic codes operate by continuous and analogical processes of elaboration of the flux of the experiential information. The plural declination highlights that the operation exists in as many codes as the number of modalities for the reception of information (e.g., sensorial, visceral, kinesthetic). Therefore, codes are modality-specific. Elaboration operates by continuous, analogical, and global dimensions and is active in every sensory activity. Elaboration also contributes to other



**BA** INTERNATIONAL INSTITUTE FOR BIOENERGETIC ANALYSIS



activities such as responses to continuous movement, body language, and non-symbolic components of language (e.g., intonation).

Symbolic codes are divided into nonverbal and verbal codes. First, nonverbal symbolic codes operate on discrete entities that can be combined in infinite variations, making them referable to different entities. Symbols can either be images or words and, if recombined, can form brand new visual representations or sentences, giving birth to unlimited narrations. This information elaboration is subject to deliberate conscious control, is mode-specific, and, to some extent, engages the same channels of perceptual processing (Bucci, 1997). Second, verbal symbolic codes operate on words that represent symbols by definition—in other words, by arbitrary reference. These symbolic codes are a-modal: they can potentially carry the same meanings in written and spoken forms. Language is the code most easily influenced by conscious control; it transmits knowledge and culture and permits organization of events into temporal sequences (Bucci, 1997).

These different codes must be connected to permit a global functioning of information elaboration, integration between different functions, organization of goal-oriented behavior, and construction of a unitary sense of self. Integration between systems is therefore necessary to allow people to talk and to connect others' words with their own experiences so as to reflect and transform the meanings of their own experience, as in a therapeutic setting. This competence of translating nonverbal experience into words, especially the affective competence, characterizes RP, seen as a unique function of the mind that works in a coordinate but independent way with respect to other cognitive functions (Bucci, 1984, 2015; Bucci & Freedman, 1978, 1981). RP is "a function for the integration of the different multiple components of the human system for the elaboration of the information, which associate the diverse modality-specific representations of the nonverbal system one to each other and then to words" (Bucci, 1997, p.172). In other words, RP describe the general process of bringing nonverbal material, existing both outside of and within awareness, into a form that can be translated into language. Bucci describes RP as a proper cognitive function. As much as people can display differences in verbal or representative abilities, they can also differ in the ability to integrate diverse systems for elaborating emotions (Bucci, 2001, 2002; Bucci, Maskit & Murphy, 2015).

Moreover, Bucci distinguishes three RP stages according to the modalities for the expression of the experience: first, Arousal foresees activation of the sub-symbolic elements of an emotional schema. Second, in Symbolization, we link sub-symbolic experience with symbols, even by the construction of prototypical mental representations wherein the experience is organized in functionally equivalent classes, by narrating either of the prototypical images and episodes in which emotions are present or by describing schemata's images and metaphors (Bucci, 1997). In the third stage—Reflection and Reorganization—recognizing and identifying emotions is possible. In this stage, we find an episode's verbalization, construction of links, and the association between the speaker and





the listener. Emotion recognition may occur at the end of this stage, especially in the most complex experiences (Bucci, 1997). In the first series of analyses, the third stage was labeled Reflection and Evaluation (Bucci, 1997).

If these three stages appear in the order listed above in an analysis of a therapeutic session, they form what Bucci calls the Referential Cycle (RC), which can be thought of as a model of a good, effective therapeutic session (Bucci, 1997).

RA is conceived as a direct linguistic measure of RP, which indexes clients' quality and style of language by evaluating the level of nonverbal experience in the mind of the client who is talking or writing. By providing information about the quality of language productivity at a semantic level, RA also shows the degree of dissociation, if any, from the subject's nonverbal experience connected to an episodic or cumulative traumatic experience. High RA levels are typical of an immediate and vivid language that evokes in the listener a clear, immediate, and detailed sense of the experience narrated. Conversely, low RA levels are high in abstraction, vagueness, and genericity. Speakers seem disconnected with their experience and cannot involve the listener in it (Bucci, 1997).

Furthermore, while an analysis of RA was performed in the first attempts through clinicianbased manual coding of therapeutic sessions' transcripts (Bucci, 1997), in later years, a software-based analysis has been developed and adapted to different languages (Maskit & Murphy, 2011).

#### The IMCS

From a narrative perspective, the interpretation and organization of life experiences entail a dynamic process through which the plurality of events become interconnected and articulated in a coherent meaning system (Adler, Skalina, & McAdams, 2008; Angus, Levitt, & Hardtke, 1999). As a result of this selective process, the dominant meaning system might not incorporate important aspects of individuals' lives that may play an important role in their self-reconstruction (Dimaggio, 2006; White & Epston, 1990). Thus, according to White and Epston (1990), the therapy provides an opportunity for individuals to achieve a new sense of coherence by changing the dominant meaning system and moving toward the construction of novelties. In an attempt to capture this phenomenon, Goncalves and colleagues (2011) constructed the IMCS, which focuses on the movement of self-reconstruction.

The notion of IMs was inspired in White and Epston's (1990) concept of unique outcomes, defined as exceptions toward a problematic self-narrative. Thus, IMs are all the events in therapy in which the client describes or narrates him- or herself differently than one would expect from the perspective of the problematic self- narrative that brought him or her to therapy. These can emerge in different forms: as a thought, a plan, a feeling, or an action that falls outside the influence of the rules of the problematic self-narrative that organizes the client's life. If the problematic self- narrative is the rule (e.g., lack of assertiveness: "He'll





raise his voice and I simmer down and either walk away, or just forget about what was said and I don't fight it out''), then IMs are all the exceptions to this rule, all those times that the client experiences and narrates something that, implicitly or explicitly, challenges or rejects the problematic self-narrative that has been shaping his or her life (e.g., "I am me and these feelings belong to me, and if I want to tell him, I will").

#### Psychophysiological measures in psychotherapy research

Psychophysiologic measures of the autonomic nervous system are well established correlates of emotional responses (Lang et al., 1998) so as demonstrated by recent studies on the fluctuations in psychophysiology and central nervous system activity (Critchley et al., 2000; Patterson et al., 2002). Early research provided indirect evidence for a physiologic component to "empathic relatedness" during psycho- therapy (Kaplan and Bloom, 1960). Later studies using psychophysiology during psychotherapy found similar links between physiology and aspects of patient-therapist emotional process using different measures and different research designs (Busk et al., 1976; Stanek et al., 1973).

Skin conductance is considered as a measure of ANS activity because "unlike most ANS responses, [SC] provides a relatively direct and undiluted representation of sympathetic activity" (Cacioppo, Tassinary, & Bernston, 2007), thus offering a straightforward interpretation of this specific component of autonomic nervous system activation, directly connected with emotional responses and arousal. Furthermore, SC has also been used in the great majority of previous studies focused on PS in psychological intervention, hence rendering our data comparable to the evidence provided by literature at least at theoretical level (Kleinbub, 2017).

#### The methodology to be used for testing

This is a mixed-method research design within the domain of psychotherapy research, specifically using tools for the qualitative analysis of the process and the outcome of BA, and a measure for the detection of the physiological index of skin conductance. Statistical analyses will be executed to detect any correlation between the results from the process and outcome analysis and physiological data. Analysis will be executed by trained clinical psychologist and, when required (IWRAD and IMCS) by reliable coders of the methodologies used.

#### The sample proposed

The material to be analysed should consist of n.2 cycles of a n.20 sessions of Bioenergetic Psychotherapy conducted by a certified Bioenergetic Psychotherapist who is completing his supervision training to reach the level of Certified Bioenergetic Therapist (CBT).



7/14



Therapists that will take part to the study will have to manifest their voluntary candidature after the publication and diffusion of the project on the SIAB site and mailing-list.

Clients will be informed by the therapist that in the case they accept to participate to the study, they will be video-registered for the whole the cycle of 20 session, and the therapy will be provided at a discounted fee – that has to be established by a personal clinical evaluation within the specific relationship between client and therapist-.

Both the therapist and the client will sign an informed consent to participate to the study and the privacy policy – based on the last international guidelines in the field, the GDPR 2016/679-.

The therapist and the client will share the awareness that the cycle will end at the 20th session, and will set realistic objectives to be pursued in this limited time of therapy. These objectives of the therapy should to be referred to the promotion of the awareness for the client's bodily sensations and emotions, and to a reflection on the main schemas related to the more actual and prevalent character structures (Lowen, 1958; Reich, 1945) of the client.

#### The tools to be used

Methodologies for the analysis of the process of psychotherapy:

The same research material – verbatim transcription of the therapeutic session- will be analyzed, independently, by the means of two methods for the analysis of the process of psychotherapy, relying both on the video recordings and on the transcripts of each session. By this procedure, the impact of the body-oriented interventions on the narrative interaction will be point-to-point evaluated.

Data from skin conductance will be evaluated in synchrony with the therapeutic interaction as well.

#### IWRAD

This software analyzes RA levels by word recognition via an ad hoc dictionary, the Weighted Referential Activity Dictionary (WRAD; Bucci & Maskit, 2007; Bucci et al., 2004a, 2004b).The WRAD consists of a great number of spoken-language words that have been assigned an RA value. The software additionally identifies two brand new indexes—the disfluency index (I-DF) and the index of reflexive words (I-REF)—both relying on two additional dictionaries, which have been judged by the authors to refer to verbal hesitation and reflection, respectively (Mariani et al., 2013).

Analysis of the Referential Activity: we used the last Italian version of the DAAP software (Discourse Attribute Analysis Program), the I.DAAP03.3. By This tool allows to carry out a text analysis of a whole transcript for the elaboration of diagrams on the pace of some linguistic variables (Mariani et al., 2013; Maskit, 2011; Maskit, Murphy, 2011). It produces a medium





trend line for each speech turn. This software led to the application of a new dictionary for RA, the "Weighted Referential Activity Dictionary" (WRAD: Bucci & Maskit 2005; Bucci et al. 2004). Currently its Italian version (I-WRAD: Mariani et al., 2013) includes 9569 words with a coverage of the spoken language of 94%, and with an increased accord between clinical judges (Mariani et al., 2013). The I-WRAD activation threshold is 0.5, meaning that every time that this value is exceeded, we will talk of a high I-WRAD; when it's lower than 0.5 we will talk of a low I-WRAD, when it's equal to 0.5 it will be a medium I-WRAD.

Furthermore, in the IDAAP03.3 other dictionaries for the evaluation of additional linguistic variables have been developed:

- A dictionary of reflective words (I-REF) that includes terms related to cognitive or logical functions such as "think", "assume" (Mariani et al., 2013). The threshold of activation of the corresponding index ranges between 0 and 0.4, and the words of this dictionary generally indicate a moment of analysis, rationalization and reflection on the event is told. These words correspond to the subject's attempt to explain to the listener what he thinks, but moving away from the sub-symbolic emotional level. In this sense, the reflective index of the words can be seen as the flip side of the coin of referential activity: normally if RA is high, the proportion of reflective words is low (Mariani & Negri, 2015).
- A dictionary containing words of disfluency, related to the difficulty to express oneself with clarity (I-DF), as "mmh", "thus", "ie" (De Choir, 2007). Also in this case the activation threshold is between 0 and 0.4.

With the construction of these additional dictionaries of I-DAAP it is also possible to compute the amount of the point-to-point covariation between them in the flow of speech (Bucci & Maskit, 2007; Andrei et al., 2008; Mariani et al., 2013; Mariani & De Coro, 2013).

Data resulting from the co-variation of the three indexes produced through the I-WRAD, the I-DF and the I-REF allow to describe operationally the referential cycle and its phases, in particular:

- 1. Arousal: characterized by high I-DF and low I-WRAD;
- 2. **Symbolisation:** characterized by high I-WRAD, low I-REF and low I-DF;
- 3. **Reflection and Reorganization:** characterized by high I-REF, low I-WRAD and medium I-DF (Kingsley, 2009; Bucci W. (2014)

• Innovative Moments Coding Systems

This system is constructed for the analysis of narratives of the psychotherapy work by an ad hoc coding system which foresees seven different categories of novelties (or IMs) that occur throughout the therapeutic process as the client progresses from the dominant and problematic meaning system to an alternative, more adjusted one These categories





are: Actions 1 and 2 (previously termed performing change), Reflections 1 and 2, Protests 1 and 2, and Reconceptualization.

- 1. Action 1 refers to specific actions that challenge a problematic narrative, whereas
- 2. Action 2 refers to change through new future plans.
- 3. Reflection 1 is a new form of understanding the problematic narratives and their implications in the client's life, whereas
- 4. Reflection 2 refers to feelings and thoughts on clients' change.
- 5. Protest 1 contains a position of critique against the problematic narratives, whereas
- 6. Protest 2 represents the emergence of new assertive and empowering positions.
- 7. Reconceptualization is a meta-reflective process that presents a contrast between past and present positions and describes the processes by which changes have been occurring. (Esposito et al., 2017).

Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. Journal of personality, 72(6), 1301-1334. Previous research using the IMCS in different therapeutic modalities and samples (e.g., Alves et al., 2014; Goncalves, Mendes, Ribeiro, Angus, & Greenberg, 2010; Matos, Santos, Goncalves, & Martins, 2009) showed that this is a reliable and feasible method for tracking change in psychotherapy. There are several main findings from these studies: (a) Successful psychotherapy involves more time spent in the elaboration of IMs; (b) high-level IMs are more typical of successful psychotherapy, whereas low-level ones dominate unsuccessful cases; and (c) successful psychotherapy usually involves the elaboration of Reconceptualization IMs during the middle of psychotherapy, and they often become dominant IMs as therapy concludes.

#### Questionnaires of the outcome evaluation

• Symptom Check-List (SCL-90) (Derogatis, 1979)

The Symptom Checklist-90 Revised is a method to evaluate psychological problems and identify symptoms, yielding nine scores along primary symptom dimensions and three scores among global distress indices.

The primary symptom dimensions that are assessed are somatization, obsessivecompulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, and a category of "additional items" which helps clinicians assess other aspect of the client's symptoms (e.g. item 19, "poor appetite"). The three indices are global wellness index, hardiness, and symptom free. [1] A high number of studies have been conducted demonstrating the reliability, validity, and utility of the instrument. [2] It is one of the most widely used measures of psychological distress in clinical practice and research.

 Toronto Alexithymia Scale (TAS-20) Toronto Alexithymia Scale (Bagby, Taylor& Parker,1994)





TAS-20 is a self-report 5 points-likert scale of 20 items that assesses alexithymia, a concept that refers to the lack of words for emotions and was introduced in the early 1970s from the observation of patients with classic psychosomatic diseases [20–22]. The concept encompasses various deficits in the cognitive processing of emotions, including difficulty in identifying feelings, difficulty in describing feelings to others, externally oriented thinking, and a limited imaginative capacity [22]. The TAS-20 consists of 20 items, which represent the three factors

- "Difficulty identifying feelings",
- "Difficulty describing feelings" and
- "Externally oriented thinking".
- Emotion Regulation Check-list (John & Gross,2004).

The Emotion Regulation Questionnaire (ERQ) is a 10-item self-report scale designed to assess habitual use of two commonly used strategies to alter emotion: cognitive reappraisal and expressive suppression. Participants respond to each item using a 7point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cognitive reappraisal involves thinking differently about a situation in order to change its meaning in order to alter one's emotional experience. Expressive suppression involves decreasing the outward expression of emotion. Six items contribute to the subscale for cognitive reappraisal (e.g., "When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm"). Four items contribute to the subscale for expressive suppression (e.g., "When I am feeling negative emotions, I make sure not to express them").

 Evaluation of skin conductance: SC will be continuously and simultaneously collected from both client and therapist of each dyad through the BIOPAC MP-150 system by using the tools BioNomadix wireless amplifiers.

#### The timeframe proposed for the research project

Time-frame foreseen:

Pre-test, intervention, and post-test: 6 months max

Verbatim transcription of the session and analysis: 6 months

Overall duration of the study- from data collection to the first publication of the results: 1,5-2 years

Pre-test questionnaires will be administered at the end of the first meeting: administration of the scales...

1 to 20th session: video recording of the sessions (5 months)





Post-test questionnaires will be administered at the end of the last meeting.

#### The expected results to be obtained

We expect results to shed light on the specificity of the processes of change fostered by BA.

Process research by the means of the Innovative Moments coding system and the software for the analysis of RA should help us to detect the characteristic of the psychological processes elicitated.

Outcome measures should help us to read these results in terms of effective improvements and achievements reached by BA. We expect these improvements go in the direction of showing high quality Innovative moments detected by the IMCS, and in narratives coded as refective by the software for the analysis of Referential Process. Moreover, we expect also the outcome measure to show an improvement in the overall symptomatology and in the emotion regulation measures.

Results will be discussed in proper scientific papers with reference to two overarching scopes:

- 1. disseminating the principles and mechanisms of BA in the wider community of psychotherapy researchers
- 2. reflecting, within the BA scientific community, on the effectiveness of the treatment.

#### Bibliography

Bagby, R. M., Taylor, G. J., & Parker, J. D. (1994). The twenty-item Toronto Alexithymia Scale—II. Convergent, discriminant, and concurrent validity. Journal of psychosomatic research, 38(1), 33-40.

Bemak, F., & Young, M. E. (1998). Role of catharsis in group psychotherapy. Journal of Group Psychotherapy, Psychodrama and Sociometry, 50(4), 166.

Bucci, W. (1997). Psychoanalysis and cognitive science: A multiple code theory. Guilford Press.

Bucci, W. (2007). Dissociation from the perspective of multiple code theory, part I: Psychological roots and implications for psychoanalytic treatment. Contemporary Psychoanalysis, 43(2), 165-184.

Bucci, W. (2002). The referential process, consciousness, and the sense of self. Psychoanalytic Inquiry, 22(5), 766-793.

Derogatis, L. R. (1979). Symptom Checklist-90-Revised (SCL-90-R). Lyndhurst, NJ: NCS Pearson.



**12**/14



Downing, G. (1996). Körper und Wort in der Psychotherapie: Leitlinien für die Praxis. Kösel.

Esposito, G., Savarese, L., & Squitieri, B. (2018). Relation between referential and reflexive processes: an explorative study. Counselling Psychology Quarterly, 1-19.

Esposito, G., Ribeiro, A. P., Alves, D., Gonçalves, M. M., & Freda, M. F. (2017). Meaning coconstruction in group counseling: The development of innovative moments. Journal of Constructivist Psychology, 30(4), 404-426.

John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. Journal of personality, 72(6), 1301-1334.

Mendes, Ines, Ribeiro, Antonio P., Angus, Lynne, Greenberg, Leslie S., Sousa, Ines and Gonçalves, Miguel M.(2010) 'Narrative change in emotion-focused therapy: How is change constructed through the lens of the innovative moments coding system?', Psychotherapy Research, 20: 6, 692 — 701

Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. Review of general psychology, 2(3), 271.

Gross, J. J., & Feldman Barrett, L. (2011). Emotion generation and emotion regulation: One or two depends on your point of view. Emotion review, 3(1), 8-16.

Gross JJ. (2014) "Emotion regulation: conceptual and empirical foundations", in Handbook of Emotion Regulation edn.2. New York, NY: The Guilford Press, 3-20

Hadar, B. (2001). The therapeutic approach to the body in psychoanalysis and its relation to movement therapy and bioenergetic analysis. Journal of The American Academy of Psychoanalysis and Dynamic Psychiatry, 29(3), 483-490.

Kleinbub, J. R. (2017). State of the art of interpersonal physiology in psychotherapy: a systematic review. Frontiers in psychology, 8, 2053.

Koemeda-Lutz, M. K. M., Revenstorf, D. S. T., & Weiss, H. S. U. (2006). Evaluation of the effectiveness of body-psychotherapy in out-patient settings (EEBP). PPmP-Psychotherapie Psychosomatik Medizinische Psychologie, 56(12), e6.

Lowen, A. (1958). Physical dynamics of character structure: Bodily form and movement in analytic therapy.

Lowen, A., & Watts, P. (1969). The betrayal of the body. Collier.

Nickel, M., Cangoez, B., Bachler, E., Muehlbacher, M., Lojewski, N., Mueller-Rabe, N., ... & Kettler, C. (2006). Bioenergetic exercises in inpatient treatment of Turkish immigrants with





chronic somatoform disorders: a randomized, controlled study. Journal of psychosomatic research, 61(4), 507-513.

Reich, W. (1945). Character analysis. Macmillan.

Ventling, C. D. (2002). Psychotherapy of Patients with Incurable Disorders. In Body psychotherapy in progressive and chronic disorders (pp. 1-13). Karger Publishers.

