CHANGING EMBODIED RELATIONAL PATTERNS IN METACOGNITIVE INTERPERSONAL THERAPY

Antonella Centonze¹, Felix Inchausti², Angus Macbeth³, Raffaele Popolo¹ and Giancarlo Dimaggio¹

¹Centro di Terapia Metacognitiva Interpersonale. ²Departamento de Salud Mental, Servicio Riojano de Salud. ³Centre for Applied Developmental Psychology, Department of Clinical and Health Psychology, School of Health in Social Science, University of Edinburgh

Las personas con trastornos de personalidad tienden a atribuir significados según patrones mentales estereotipados que les dificultan alcanzar una adaptación y satisfacción social. Estos patrones van más allá de ser meras representaciones cognitivas sobre uno mismo y los demás, sino que están repletos de emociones, disposiciones de conducta y experiencias somáticas. El objetivo principal de este trabajo es presentar cómo la terapia metacognitiva interpersonal trabaja con los patrones corporales a través del uso de imágenes mentales y ejercicios sensoriomotores. Como se expone, este tipo de técnicas ayudan a revisar los componentes corporales de los patrones interpersonales desadaptativos y promueven la aparición de otros nuevos más saludables. Se pretende que los patrones resultantes incluyan aspectos más funcionales que impidan la puesta en marcha de las estrategias de afrontamiento impulsadas por los esquemas problemáticos. A través de la exposición de un caso clínico, se subraya que el trabajo experiencial debe llevarse siempre a cabo en el contexto de una regulación constante de la relación terapéutica que permita detectar cualquier posible impasse o ruptura. Igualmente, se muestra cómo el uso de ciertas técnicas en las fases iniciales puede permitir una formulación más dinámica y enriquecida de los esquemas disfuncionales. Finalmente, se discuten algunas implicaciones clínicas y se sugiere el trabajo experiencial como un componente crucial en el tratamiento de pacientes con problemas interpersonales graves, como ocurre en los trastornos de personalidad.

Palabras clave: Trastornos de personalidad; Terapia metacognitiva interpersonal;C corporizada; psicoterapia; Técnicas experienciales.

Individuals with personality disorders tend to attribute meaning according to stereotyped relationship patterns which prevent them from achieving social adaptation and fulfilment. These mental patterns are more than mere cognitive representations of the self and others. They are embodied and laden with affect, behavioral dispositions, and somatic experiences. The main purpose of this work is to present how metacognitive interpersonal therapy provides a platform for changing embodied patterns, via imagery and sensorimotor work. As discussed, these techniques facilitate the correction of the embodied component of maladaptive patterns and promote the emergence of new and healthier patterns. These new patterns comprise more adaptive aspects and correspondingly impede the enactment of previous maladaptive coping strategies that were driven by pathological schemas. We note how experiential work is best performed in a context of constant regulation of the therapeutic relationship, in order to detect any possible relational impasses and ruptures, reflecting on them until they are repaired. We also show the use of techniques in the initial phase of therapy to allow a more dynamic and rich case formulation. Finally, we discuss the implications of how experiential work might be a crucial component in psychotherapy for persons experiencing severe interpersonal problems such as personality disorders.

Key words: Personality disorders; Metacognitive interpersonal therapy; Embodied cognition; Psychotherapy, Experiential techniques.

any people with personality disorders (PD) have significant difficulties adapting to their social world as a result of using rigid and inflexible mental patterns to make sense of their interpersonal relationships (Inchausti et al., 2018a). In the scientific literature, these patterns have been called maladaptive interpersonal schemas

Received: 18 March 2020 - Accepted: 5 May 2020 Correspondence: Felix Inchausti. Departamento de Salud Mental, Servicio Riojano de Salud. Unidad de Salud Mental Infanto-Juvenil. Avda. Pío XII, 12 Bis. 26003 Logroño. España. E-mail: finchausti@riojasalud.es (Dimaggio, Montano, Popolo, & Salvatore, 2015; 2020; Luborsky, 1984; Luborsky & Crits-Christoph, 1998). The main objective of this work is to present the reader with the procedures used in metacognitive interpersonal therapy (MIT; Dimaggio et al., 2015; 2020) to work with these schemas in a global way through the use of mental images and various sensorimotor exercises. With this objective, the article is organized as follows. First, the basic structure of the interpersonal schema according to MIT principles is presented and some clinical examples are given. Next, the main findings that support the use of mental images and body work in

psychotherapy are presented. Then, the procedures to implement these types of techniques in MIT are described and, to facilitate the exposure, these methods are illustrated in a clinical case. Finally, the clinical implications of experiential work are discussed as a particularly useful component in working with patients with severe interpersonal problems, as occurs in PDs.

BASIC STRUCTURE OF AN INTERPERSONAL SCHEMA IN MIT

Under the principles of MIT (Dimaggio et al., 2015; 2020) and following a modified version of the core conflictual relationship theme (Luborsky, 1984; Luborsky and Crits-Christoph, 1998), a schema is structured with three elements:

- A primary personal desire or motive (e.g., attachment, social status, group inclusion, or autonomy/exploration);
- A central self-image underlying the above desire or main motive (e.g., «I am worthy» vs. «I am unworthy», «I am autonomous and feel supported by others» vs. «I am dependent and feel frustrated by others»);
- 3. An expected or desired response from the other. When psychopathology exists, this response usually confirms an underlying negative self-image; for example, when the other acts carelessly, the patient interprets this as strengthening their idea of being «unworthy». Similarly, patients continually test, both in their internal dialogue and in their actual social interactions, whether the other's response is positive, something they demand inflexibly to reinforce their more benevolent self-images of themselves. Following the example above, the patient needs to prove that they are «valuable» by being validated by others (Gazzillo et al., 2019; Weiss, 1993).

From a clinical approach, for example, a patient driven by an intense desire to feel valued and who also tends to portray others as negligent individuals, is very likely to feel unloved. To deal with their secondary suffering and frustration, they may behave in a way that not only does not help them but increases their discomfort and further deteriorates their social relationships. For example, they may react by distancing themselves, abruptly ending their relationships, or isolating themselves whenever they perceive others to be unkind to them. Alternatively, they may resort to self-sacrifice and caring for others to maintain their personal relationships. While these strategies may help the patient to cope better with their feelings of loneliness in the short term, they will hardly allow them to meet their initial needs-to be cared for and lovedin the long term. There is abundant evidence that these kinds of interpersonal patterns eventually crystallize, perpetuate themselves, and lead to high levels of suffering and hopelessness (Dimaggio, et al, 2007; Inchausti et al., 2020).

BODY WORK AND THE IMAGINATION

Schemas not only include cognitions and emotions, they also take root in the body, or in other words, they are embodied (Dimaggio et al., 2020; Centoze, Inchausti, Macbeth, & Dimaggio, 2020). If we start from the first observations of William James (1884) and the postulates of the theory of embodied cognition, the body is a fundamental element in cognitive processing (Shapiro, 2011; Osypiuk, Thompson, & Wayne, 2018; Castro-Alonso, Paas, & Ginns, 2019). We humans understand our emotional experiences through awareness of the interactions between body signals and behavior (Damasio, 1995). The theory of embodied cognition provides multiple examples of this influence and, in particular, of how posture and body movements affect emotions and cognitive processes. For example, when a person is asked to adopt an upright posture and laugh, they are more likely to recall pleasant autobiographical episodes sooner (Riskind, 1984). Similarly, when a positive result is received (for example, in a test) in an upright position, more feelings of pride tend to be experienced than when this occurs in a relaxed posture (Stepper & Strack, 1993). Broadening the chest has been shown to increase the likelihood of remembering positive episodes of joy and pride versus remembering negative experiences of disappointment and guilt (Hepach, Vaish, & Tomasello, 2015). Conversely, when negative words associated with disappointment are listed. postural height decreases compared to when words associated with pride are included (Oosterwijk, Rotteveel, Fischer, & Hess, 2009). It has been described that people with depressive disorders tend to maintain more stooped postures (Wilkes, Kydd, Sagar, & Broadbent, 2017), and walk more slowly and flaccidly than non-clinical controls (Michalak et al., 2009).

In various experimental conditions it has been shown that adopting expansive postures often associated with power facilitates the emergence of subjective experiences of pride, responsibility, and authority. However, available studies do not yet confirm that this has effects on risk decision making or its physiological parameters (Carney, Cuddy, & Yap, 2010; 2015; Ranehill et al., 2015; Credé & Phillips, 2017; Simmons & Simonsohn, 2017), and its influence appears to be mediated by context, level of consciousness, and interpersonal variables (Gronau et al., 2017; Cesario & McDonald, 2013; Cesario, Jonas, & Carney, 2017).

There is also evidence that experimental manipulation of facial expressions not only induces changes in the autonomous response, but also generates the subjective feelings associated with that emotion (Laird, 1974; Levenson, Ekman, & Friesen, 1990; Mori & Mori, 2009; Coles, Larsen, & Lench, 2019). Recent research has proposed that various physical responses, such as bowel sensations, posture, habitual voluntary gestures, or facial expressions, constitute the somatic correlates of schemas that have been internalized in the body over time through the effect of repetition (Ogden & Fisher, 2015). In a way, it is as if our body records the way we relate to the important people in our lives (Liotti, 1994; Ogden & Fisher, 2015; Van der Kolk, 2014). Body work in some traditions of psychology, such as Gestalt (Perls,

Hefferline, & Goodman, 1994), bioenergetic therapy (Lowen, 1971), or focused therapy (Gendlin, 1981), has always aimed at promoting a greater awareness of one's own inner states.

There are several clinical implications of these findings. For example, if a patient is found to be rigidly and inflexibly directed by a self-image of vulnerability and weakness, they may be invited not only to observe and analyze their cognitions, emotions, and behaviors, but also to pay attention to where in their body these sensations are located. The patient could track their posture and discover, for example, if in those situations they feel weakness in their arms. In this way, the patient would also be able to develop an embodied self-image and, more importantly, identify it as a state of mind of their own rather than as a mere reaction to external stimuli.

As will be illustrated below, in MIT, body aspects are generally integrated with imagery work (Centonze et al., 2020). In fact, the processes associated with the use of mental images are also relevant from the perspective of embodied cognition. Mental images involve the sensory and proprioceptive experience, and go beyond cognition and emotion (Hackmann, Bennett-Levy, & Holmes, 2011). When individuals imagine specific autobiographical memories, subjective experiences rich in emotional and sensory elements often surface (Holmes et al., 2006). At the same time, imagining actions has been shown to activate the premotor cortex and neural networks associated with the actual performance of that action (Cattaneo, Caruana, & Jezzini, 2009; Pilgramm et al., 2016). Carrying out a concrete task with a specific purpose and imagining it with the same purpose seems to activate similar areas of the brain, especially in the regions where mirror neurons are located (Rizzolatti & Sinigaglia, 2016).

The use of mental imagery has a long tradition in psychotherapy, although it has been in recent years that its scientific relevance has been proven (Blackwell, 2017). Mental images refer to «the representations and their associated sensory experiences that are triggered without the direct presence of an external stimulus» (Pearson, Naselaris, Holmes, & Kosslyn, 2015, p. 590). It has often been considered a type of «mental vision» (Kosslyn, Ganis, & Thompson, 2001) and a «weak» form of perception (Pearson et al., 2015). It seems that the mental overlap of these types of images establishes direct channels with the episodic memory and with the emotional and behavioral systems (Blackwell, 2017). Thus we human beings have an exceptional capacity to simulate mentally stimuli that are not physically present. For example, motor images (O'Shea & Moran, 2019; Lotze & Halsband, 2006; Decety, 1996) allow mental actions to be carried out while motor impulses are inhibited (Jeannerod, 2006). Characteristically, these types of images are accompanied by subjective visual or kinesthetic sensations, that is, one believes they see or feel the movement of the body (Moran, Guillot, MacIntyre, & Collet 2012). This phenomenon explains why many people are able to reexperience in their mind past episodes with an emotional activation even higher than the one they experienced live (Mathews, Ridgeway, & Holmes, 2006).

These results have relevant implications since they provide a justification for psychotherapeutic work from a bottom-up perspective to alter cognitive and affective processes related to dysfunctional interpersonal schemas (Dimaggio et al., 2020; Ogden & Fisher, 2015). In particular, guided rewriting in imagery (Hackmann et al., 2011; Blackwell, 2017; Hitchcock, 2017; Jain & Fonagy, 2020) has been gaining relevance in MIT in recent years (Dimaggio, et al. 2018; 2020; Centonze et al., 2020). This technique consists of helping the patient to relive specific autobiographical episodes, often with their eyes closed, and subsequently alter in their imagination what happened. To carry it out, the patient is first asked to remember and imagine a specific event. It is important to note that we are not asking them to relate what happened, but to imagine and re-experience it in as much detail as possible. It is necessary to retrieve multimodal elements, that is, all the sounds, smells, and tactile sensations that were present during the episode, and to integrate them later into a micro-narrative (Damasio, 1994). The therapist must help the patient to retrieve any details and then explore the thoughts, emotions, and somatic states that appeared, as they developed. Once this has been achievedand not before- the therapist invites the patient to alter the course of events, rewriting what happened through imagined scenes. This may include, for example, adopting different body postures when dealing with a situation or expressing one's own desires and needs in a difficult interpersonal situation. The aim is for the person to be able to modify the way in which they usually understand and act in their relationships, establishing the embryo for a later «rewriting» of their dysfunctional interpersonal schemas. It is important to emphasize that this rewriting does not mean changing the past but rather its meaning, so that the new alternative endings (with their respective results) act as a new psychological map that facilitates the altering of the relational world. In this context, the use of mental images should not be understood as an act of fantasy, but as an attempt to activate different neuroanatomical areas related to movement. When a person imagines a scene in another way, they are preparing their body to act in another way (Dimaggio et al., 2020).

USE OF IMAGES AND BODYWORK IN MIT

In MIT, manualized procedures are used to encourage psychotherapeutic change. Mental imagery and body techniques follow formalized decision-making procedures (Dimaggio et al., 2015; 2020; Centonze et al., 2020). The main objectives of the combined use of mental imagery and body techniques are as follows:

1. To improve the knowledge of one's own mental states,

which we will call here metacognitive monitoring (Semerari et al., 2003). These techniques are used to increase awareness of one's emotional experiences and help patients recognize and label them.

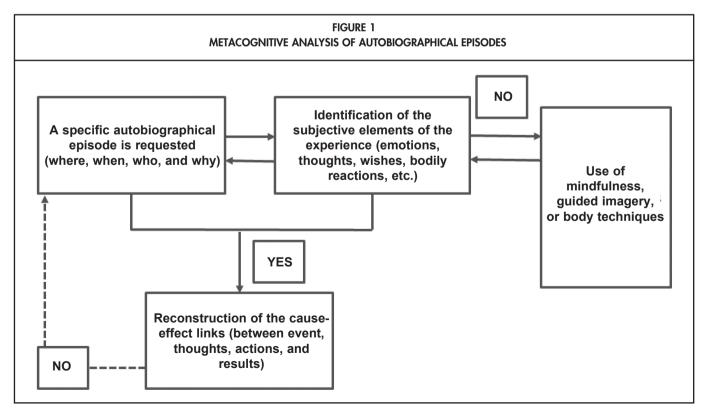
- 2. To encourage a sense of agency. Through experiential techniques, patients are guided to discover that they have the capacity to control their inner mental states (sense of agency). This will allow them to set aside their dysfunctional self-images as «passive» or «weak» subjects compared with others and to achieve a more adaptive self-image—including bodily aspects—in which they can be aware that they are in control of their experiences, that they are not simply hostages of their emotions, and that they are capable of acting according to their own needs and intentions.
- 3. To promote metacognitive decentering. This objective, which includes the second, aims to overcome the initial belief of patients that they are merely passive recipients of the intentions of others and that they cannot control their own reactions. In order for the processes of decentering to be possible, it is first necessary for the patient to discover that his or her beliefs about him- or herself, others, and the world are subjective, are linked to an egocentric cognitive perspective, and are therefore able to be modified. Figure 1 represents the process of shared (patient-therapist) analysis of autobiographical episodes in order to promote monitoring and metacognitive decentering. The ultimate

goal is for the individual to be aware that their ideas about human relationships do not necessarily reflect reality.

4. To access a healthier self-image. This objective seeks to make patients acquire a more balanced self-awareness that includes positive aspects, such as «affectionate», «worthy», «kind», «capable», or «strong». In general, the more severe the patient's difficulties, the more limited is their insight into the impact of negative self-images on their social functioning. This often results in them under-using positive self-images or not even being able to access autobiographical memories with positive self-images. The techniques described below and in the clinical case have been shown to be effective in facilitating access to healthier self-images.

INTERVENTION PROCEDURE

When patients have acquired sufficient knowledge about what they think, feel, and experience, body work aims to change the procedural aspects of dysfunctional interpersonal schemas (Dimaggio et al., 2018; 2020). When the patient is asked to breathe consciously, adopt other postures, or carry out other behaviors when imagining problematic episodes, what we want is for them to position themselves to face their interpersonal world in a different way. The construction of these mental images and the use of body techniques is developed based on a specific base of narrative episodes (Dimaggio et al., 2018; 2020; Centonze et al., 2020;



Neimeyer, 2000). If the patient is not able to access their mental states during the episode, the aim of the body experiments will be to help them to do so or to enrich the information available. If the patient is able to adequately monitor their mind during the episode, the goal will be to rewrite it. To do this, the patient is first asked to sit down, usually with their eyes closed. Usually in this phase, use is made of the deep, conscious breathing characteristic of mindfulness. To ensure that the practice begins in a wellregulated basal state, it usually starts with grounding exercises (Lowen, 1971). In these exercises, the person assumes an upright posture, with legs slightly open and knees subtly bent. After a few minutes in this posture, the sensation that is usually described is one of groundedness, presence in the world, and stability. Throughout the exercise, the bodily tension produced by this posture will help to avoid mental detachment from the episode on which we are working. As mentioned before, it is important to obtain the maximum number of specific and experienced details so that the spatial-temporal coordinates of the episode are as exact as possible: the landscape, the walls, the furniture, the sounds, the smells, etc. Then, the patient is asked to discover details of the people who appear in the scene: their face, clothes, posture, voice, etc. In parallel, moment by moment, possible cognitive-affective resonances are investigated. For example: «So now you see your father angry and critical, what do you see in his eyes? How do you feel at this moment? What are you thinking when you see his face?».

Sometimes, when exploring traumatic memories, patients may be momentarily deregulated so the clinician can make use of mindfulness exercises, body practices or, if necessary, distraction strategies until effective emotional regulation is restored. It is very important to attend to these increases of greater emotional arousal since they usually prevent access to the full range of sensory material of the episode. Once the emotions have been regulated, what has happened must be explored with the patient because these events usually reveal the core of the dysfunctional schema that triggers the suffering. During the exercise, the clinician must carefully keep the patient in the experience and prevent them from rationalizing the episode. If they rationalize it, the clinician should offer non-directive indications such as, «That idea is fine; we can focus on it after the exercise, but now please concentrate on your partner's face and voice again. What do you notice? How do you feel?

Once the scene has been scanned in depth, the exercise ends, and we ask the patient to take one more deep breath before opening their eyes. It is at this point that the therapist invites the patient to reflect on the event and look for new connections. The memories that emerge in this phase should be included in the metacognitive analysis since they usually allow the formulations of the dysfunctional schemas to be enriched. The more information that is analyzed, the easier it will be for the patient to recognize their dysfunctional schema and activate their decentering abilities. Once the formulation of the schema has been agreed upon, the rewriting phase will begin.

Articles

In the rewriting phase, the patient is again asked to close their eyes and relive the episode for a second time, but this time they are asked to modify the story. The aim now is for the patient to act in coherence with their original desire or motive (e.g., to be autonomous and independent or to feel loved and valued). If the patient is unable to do so, the therapist can recommend actions consistent with the patient's basic need. For example, the therapist may request that they persist in their desire for autonomy, fun, or exploration. If they wish to feel cared for, the therapist invites them to ask for it without submission. If they wish to feel valued, they are encouraged to persist in their efforts to maintain a positive self-image rather than giving up if they perceive others as critical. In addition, patients may be asked to stop any dysfunctional coping behavior, such as acting with perfectionism, avoiding, or escaping the situation, or reacting aggressively. When people are able to maintain their primary needs, new emotions and more detailed thoughts usually appear, progressively increasing the ability of patients to monitor their inner world.

Rewriting does not simply mean telling what happened differently, but rather it is intended to change, for example, behaviors (e.g., by moving away from a parent who hinders autonomy and denies approval) or body position (e.g., adopting a different posture, or modifying the prosody and tone of voice when responding to aggressive or careless individuals). After rewriting the episode, there is an additional reflection phase where patients become aware of their new experiences, gain insight into their control and power over their mind, and identify areas for future work. The mechanism of change proposed by MIT is the increase of the patient's awareness that the core of their problem lies more in the inner world than in the outer world. However, if a patient is found to be living in an environment of risk (e.g., with an abusive partner), one of the goals of therapy should be to help them to build a safer environment, for example, by motivating the patient to protect him- or herself and end an abusive relationship.

THE CASE OF LUCÍA

This case was treated by the first author, a clinical psychologist with some 18 years of experience as a psychotherapist and 7 years specifically with MIT.

Lucía (not her real name) is a 31-year-old woman who at the time of the first consultation was working as a paleontologist at a university. After a first evaluation of Lucía with the Structured Clinical Interview for Axis II Disorders of DSM-IV (SCID-II; First et al., 1995) and the International Neuropsychiatric Interview MINI (Lecrubier et al., 1997), symptoms and clinical signs compatible with a (covert) narcissistic personality disorder were identified, as well as paranoid and dependent features. Additionally, she presented

a social anxiety disorder related to an intense fear of acting inappropriately and being criticized by others. She feared «not measuring up» in her work and considered herself inferior to her colleagues who, she said, tended to angrily disdain everything she did whenever they had the chance. The score on the Global Assessment of Functioning scale (GAF; APA, 2000) was 41, indicating severe symptomatology and impaired functionality.

From the first sessions, the therapist had significant difficulties in monitoring Lucía's emotional states, which complicated the formulation of the case. She was not able to describe how she felt, and although she admitted to being nervous, she did not know why. For example, in one session she related that a few days earlier she had had a panic attack while working on the computer. As she explained in the session, she felt that she had to finish an article, but when she tried to do so she began to feel strong anxiety, anger, tightness in her chest, and an intense headache. At that point, she decided to take a break and stop working for the rest of the day. The therapist tried to better explore this episode in order to understand, for example, what image she had of herself at that moment, but Lucía objected, first with silence and then with criticism: «How difficult it is for me to answer your questions, I don't know what to answer! I already told you that I felt overwhelmed and had a headache...». Lucía seemed to fluctuate between nervousness and detachment during the session, which seemed to indicate the presence of mild dissociative symptoms.

The therapist proposed some exercises to Lucía to reduce her anxiety and to regulate her levels of activation, using diaphragmatic breathing, muscle relaxation, and grounding exercises (Dimaggio et al., 2020). However, she refused to do them, said that she had a strong headache, and devaluated all the therapeutic proposals in that session: «None of this works with me. Do you really think that I can solve my problems with this nonsense? Her attitude was one of intense criticism and protest, but in reality, as will be seen later, these types of messages are the expression of a negative self-image.

This type of impasse occurred in several sessions and it was very difficult for the therapist to explore what Lucía was feeling in the therapeutic relationship. When the therapist asked her openly about what was happening to her in the sessions, Lucía would give automatic answers: «Nothing, I'm just struggling, that's all. This triggered the therapist's countertransference feelings of fatigue and that she was making an effort for nothing.

After several sessions, an event occurred that was significant for the therapeutic relationship. Half an hour before the session, Lucía notified the therapist by email that she would be arriving late for the session. The therapist, who was attending another case at the time, read the message, but did not reply. When Lucía arrived at the office, she sat in the waiting room and watched her therapist speak with another patient that Lucía knew from her gym. After a few minutes, the therapist called her, as usual. At that moment, Lucía entered the session visibly upset:

Patient (P): Did you see my message, doctor?

Therapist (T): Yes, of course, there is no problem, you know. I didn't answer you because I was in a session.

P: No, I left home late because I got a phone call and it made me late... I came in a rush...

Lucía was red in the face and her body posture was shrinking. At this point, the therapist explored Lucía's inner states.

T: I feel that you are worried and upset. Are you annoyed with me about something?

P: No... I'm a little stressed out because I came in a hurry...

T: I'm sorry. You know that it's no problem as long as you let me know that you're running late.

P: Yes, yes...

T: Is there anything else about me that's upsetting you? I have the impression that there is...

P: No, no, nothing!

This was her usual automatic response. The therapist then decided not to investigate further at that point. Afterwards, Lucía remained distant and passive.

T: Well, how are you doing?

Q: As always... having some problems at the university...

T: What do you mean?

T: Well, the usual. Manuel has been acting in his usual way, with his unbearable competitiveness.

Q: Would you like to tell me more about what happened?

T: Pfff... I can't remember very well. Honestly, I don't want to talk about it.

T: As you wish... (...)

During the session, Lucía did not want to talk about or remember any episodes. The therapist then communicated this openly. After this, Lucía was free and was able to express what she thought from the beginning: «Well, look doctor, honestly, I want to stop coming to the sessions, I don't have time, I don't need anything. We've been going around the same thing for a long time. I'm canceling the next session and I don't want to come back anymore».

The therapist, disoriented, asked Lucía to keep the next appointment so that she could talk more calmly about her decision, since there was no time at that moment, and gently told her not to act impulsively. Lucía refused, apologized, and left.

This passage makes it clear how the patient's dysfunctional interpersonal pattern has been activated in the therapeutic relationship: the feeling of devaluation and inferiority, which appeared only sporadically in her account in the sessions, was revived in the therapeutic relationship, and Lucía turned it into proof of her scarce worth (Gazzillo et al, 2019; Weiss, 1993): she expected to receive attention and consideration but feared that the therapist, consistent with her dysfunctional schema, would ignore her as she felt everyone else was doing and leave her in the background, confirming that she is an inferior and useless person. If the therapist acted according to this pattern, she would not pass the test and the therapeutic relationship would be broken. Without realizing it, the therapist had confirmed Lucía's maladaptive pattern.

Reflecting on what happened, the therapist decided to send her an email after a few hours: «I have the impression that you have felt misunderstood and that I did not appreciate your efforts to try to be on time for the session. I am very sorry about what happened and that you are stopping the therapy». The next day, fortunately, Lucía responded: «I'm sorry, I was angry, I lost control, now I've calmed down. I want to continue with the therapy». The therapist responded with satisfaction and they agreed to keep the next appointment.

During the meeting, Lucía maintained a completely different attitude from that expressed in the previous sessions and was able to describe what had happened to her. She explained that she was angry because the therapist had not responded to her email while she was trying to get to the session on time. Then, she got the usual feeling of being underestimated, ignored, and rejected by others. Also, she thought this was unacceptable coming from a therapist. Consequently, she arrived at the session that day feeling «invisible», which she confirmed when she saw her therapist talking to her companion from the gym. This led her to believe that her therapist preferred her gym companion over her. Lucía was angry and thought, «Well, I'll tell her I want to quit therapy right at the end of the session, so she'll be worried and we won't be able to talk about it.

The therapist, on the other hand, revealed to her how she had felt that day: «disoriented», «helpless», and «not meaning to hurt her». Also, her sadness for all the pain she had caused her by making her feel rejected. After validating her emotions, Lucía was able to verbalize the following: «Wow, I really feel like shit sometimes! Then I get angry and the problems appear... I completely lose my senses». The therapist then asked her, «Does feeling unappreciated or unimportant happen to you often? At that moment, the patient realized that her anger attacks were frequent: «Yes, it happens to me very often. Before, I was aware that I had this problem, and I think we talked about it a little bit, but now I just realized how strong the attacks are and that it has happened to me with you too. In those moments I don't see things as they really are. I've always trusted you and I know you care about me.

After this insight, the relational style changed completely and Lucía was much more relaxed and accessible in the sessions. This led her to agree to try some experiential techniques. The formulation was taking shape and some aspects that were still confusing became clearer: when Lucía felt the need to be valued, others represented themselves as critical, devaluing, and even sometimes manipulative and harmful. Her core image of herself was that she must be a foolish and inadequate person. The resulting feelings were failure and shame. On rare occasions, Lucía experienced situations where she was guided by positive self-images («I felt good that time when I was doing my PhD», «Yesterday with my friend I felt appreciated and capable»), but she experienced them as strange and fleeting experiences. Her sense of failure was often accompanied by anger at perceiving others not only as superior but also as hostile and indifferent, so she felt «crushed» and «humiliated». This, in turn, led her to react with intense anger over the feeling of mistreatment.

Articles

After this first formulation it was easier to understand Lucía's coping strategy: the fear of being criticized or rejected led her to develop unreasonably perfectionist behaviors. Sometimes she was successful and therefore the positive feedback reinforced these problematic behaviors; but at other times, of course, this was not possible and intense feelings of failure and shame appeared. Starting work in the office [each day] was very difficult for her: as soon as she turned on the computer to work, a strong feeling of humiliation and anxiety was triggered related to her idea of having to be perfect and not being able to make mistakes, and she imagined the criticism from her colleagues, so she competed to be better than them. The fear of not doing a brilliant job or not being able to finish it on time made those moments extremely hard and exhausting, to the point that she tended to avoid them. postponing them in a harmful way, which caused her to accumulate work, receive complaints from her colleagues, and increased her feeling of uselessness.

Her social avoidance behaviors encompassed all kinds of situations. Lucía reported that she had several opportunities to get money by participating in scientific conferences, but she always rejected them because of her intense fear of feeling inferior. This fed back into her feelings of social inferiority. Lucía told how, at a work meeting, she felt a lot of anger and anxiety because she thought her colleague had conspired against her by speaking badly of her work to a professor to prevent her from participating in a project. Within a collaborative treatment relationship and with the right alliance (Prado-April, Gimeno-Peón, Inchausti, & Sánchez-Reales, 2019), the therapist encouraged Lucía to explore her inner world. With a certain amount of difficulty, she was able to identify how her face turns red when she is angry and how her legs tremble and her arms go weak, sensations she was able to associate with fear. The therapist then proposed she focus attention on her body state (Gendlin, 1981; Ogden & Fisher, 2015). To do this, the therapist asked her to close her eyes and observe the areas of her body where she felt fear and muscle weakness, letting her thoughts and images emerge and flow freely. On this occasion, Lucía did not object and allowed herself to perform the exercise. In terms of understanding the problematic patterns, Lucía recounted a very significant autobiographical episode. At the age of 5, she remembered being at the beach with her family and feeling very happy while playing with other children in the sand. As she told it, she began to walk alone and at one point she stopped and realized that she had gotten lost. She started crying,

Articles • • • • • • • • • • • •

«Mommy! Daddy! She felt fear and a sense of weakness and paralysis. She felt lost and terrified. Her father appeared after a while, yelling at her, "Oh, so you wanted to get away!" Her father had seen her leave and followed her in secret, leaving her to get lost on purpose to teach her a lesson. The therapist then suggested that she face the episode in her imagination. First, the scene was recreated in detail. Lucía was able to make contact with her intense fear of getting lost: «I want my mother. Oh my gosh! I need my parents; I am afraid of losing them». Lucía described a feeling of paralysis and weakness in her legs. Then, the therapist asked her to open her eyes and proposed a grounding exercise (Lowen, 1971) for a first modulation of that state. Lucía recovered the feeling of stability and firmness in her body and, at the same time, managed to regulate her breathing. Together, the therapist and the patient then explored the aspects that characterized Lucía's suffering, which made it possible to enrich the formulation of the case. When Lucía's attachment system was activated, feelings of weakness, vulnerability, and being unworthy of attention appeared, often leading to panic. When her exploration system was activated, she would become paralyzed, feeling inadequate to explore the outside world, causing her to feel sad and withdrawn. At the same time, Lucía was able to recognize that she was a person worthy of attention and protection from others, and also that her desire to be independent was legitimate.

Finally, the therapist invited Lucía to rewrite the event. During this second exercise of guided imagination, new elements of the patient's inner landscape came to the surface, from which an increase in her capacity for metacognitive self-reflection was inferred (Semerari et al., 2003; Inchausti et al., 2017; 2018b). Lucía closed her eyes and went back to the episode. She visualized herself again at the age of 5, walking, turning around in the hope of finding her mother or father to smile at her as a sign of approval. Instead, she found herself first alone and then in front of her father who was scolding her. Lucía felt afraid and her heart was pounding. She was embarrassed and judged herself to be a «foolish» and «incapable» child, but she also felt «humiliated» by a man whom she perceived as a tyrant. In this second part, the therapist helped Lucía modulate her emotional state by adopting a posture of strength. In these states, Lucía experienced a greater sense of strength that allowed her to get in touch with her more benevolent self-images. Later, the therapist asked her to return to the scene and, from a stronger adult self-perspective, asked her to try to change the ending of the scene. Lucía hesitated, but after a few minutes she was even able to tell her child self the following: «Hello little one, are you afraid? Poor thing, you just want to play on the beach. You are not doing anything wrong. You are a child and it is logical that you want to play. You got scared when you found yourself alone... It is normal, you just want to play». Lucía became emotional when she said those words. Then she felt the rage emerge again towards her

father: «That's no way to treat a little girl! Those tricks are not good. At that point, Lucía decided to take the girl by the hand and take her to play.

THERAPY RESULTS

The psychotherapy lasted two years (50 individual sessions, in total) and, at the end of the treatment, the patient was reevaluated with the SCID-II (First et al., 1995) and the MINI (Lecrubier et al., 1997). At the time of discharge, Lucía did not meet diagnostic criteria for a narcissistic personality disorder and her paranoid and dependent personality traits had diminished. On the EEAG (APA, 2000), her score rose to 75, indicating the presence of some mild symptoms or some difficulty in social or work activity, but with acceptable overall functioning.

Lucía said that she had stopped procrastinating and her maladaptive perfectionism had been considerably reduced. Her social anxiety virtually disappeared as Lucía learned to control her social avoidance and to regulate her emotions associated with the belief that she was inadequate. At times, she reported feeling inferior and embarrassed, but now she was able to quickly recognize that these were ideas and feelings related to her dysfunctional schema and she could quickly modulate them.

When she was guided by the desire to demonstrate her qualities (e.g., in her work), she was able to more easily embody a positive self-image of ability without representing the other as disabling or harmful. In the presence of another very competitive person, Lucía acted naturally and tried to maintain her personal projects without feeling, for example, «I am always the one who misses out».

If a friend or partner seemed distant, Lucía could understand that this attitude did not mean that they wanted to abandon her for «more important things», but that it was probably because they were busy doing other more important things. She was also able to quit her job at the university once she understood that it did not bring her satisfaction, and she started working at a school with children.

In the follow-up sessions, Lucía reported that she had started a new relationship. Although she still felt ambivalent when her partner did not seem present and was afraid of relapsing into her low self-image or imagining her partner as manipulative or even a despot, Lucía was aware of this pattern and was able to re-center and modulate her mental states.

CONCLUSIONS

Therapeutic change means altering the way individuals represent others' responses to their needs, as well as successfully accessing healthier and more benevolent selfimages. Throughout the therapy, the aim is that patients acquire more flexible mental schemas, discarding those more problematic positions that generate discomfort and that activate maladaptive coping styles. The ultimate goal is to encourage a sense of self-efficacy and agency in patients, who connect positively with others and who can satisfy their own desires and needs.

From the MIT approach, it is considered that interpersonal patterns go beyond simple verbal narratives or thought processes, but that they also include affective and corporal information about human relations. Change, therefore, requires influencing the bodily processes that support the representations of the self and others. Mental images and body work offer unique opportunities to accelerate this change and are a potential alternative therapy when other techniques have proven ineffective (Inchausti et al., 2018b). Guiding patients to re-experience problematic episodes allows them to explore nealected and hidden aspects of the inner experience. Through imagination and somatic rewriting, individuals can learn new body patterns, allowing them to become more aware of the negative influence of their old ones. However, as we have seen in this clinical case, before using these techniques it is essential to carefully attend to and regulate the therapeutic relationship (Inchausti et al., 2018b; Prado-April et al., 2019). Thanks to this regulation and the tactical use of the relationship, patients are able to increase their awareness and better communicate their inner states, as well as access and relate important autobiographical memories (Singer et. al., 2013).

As the main limitation of this work, it should be noted that the therapeutic results of the case described were not monitored throughout the treatment with standardized instruments and that it is only one therapeutic success (n=1). Future studies should focus on replicating these results in large samples and using more rigorous psychometric assessments to examine the mechanisms of change in patients with other psychopathological presentations.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

REFERENCES

- American Psychiatric Association [APA] (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). APA.
- Blackwell, E.S. (2017). Mental imagery: From basic research to clinical practice. *Journal of Psychotherapy Integration*, 29, 235–247. https://doi.org/10.1037/int0000108
- Briñol, P., Petty, R.E. & Wagner, B. (2009). Body posture effects on self-evaluation: A self-validation approach. *European Journal of Social Psychology, 39*, 1053–1064. https://doi.org/10.1002/ejsp.607
- Carney, D.R., Cuddy, A. J. & Yap, A. J. (2015). Review and summary of research on the embodied effects of expansive (vs. contractive) nonverbal displays. *Psychological Science*, 26, 657–663. https://doi.org/10.1177/0956797614566855
- Carney, D.R., Cuddy, A.J. & Yap, A.J. (2010). Power posing: Brief nonverbal displays affect neuroendocrine levels and

risk tolerance. *Psychological Science*, *21*, 1363–1368. https://doi.org/10.1177/0956797610383437

Articles

- Castro-Alonso, J.C., Paas, F. & Ginns, P. (2019). Embodied cognition, science education, and visuospatial processing. In J.C. Castro-Alonso (Ed.), Visuospatial processing for education in health and natural sciences (pp. 175-205). Springer International Publishing. https://doi.org/10.1007/978-3-030-20969-8
- Cattaneo, L., Caruana, F. & Jezzini, A.G. (2009). Representation of goal and movements without overt motor behavior in the human motor cortex: A transcranial magnetic stimulation study. *Journal of Neuroscience*, 29, 11134–11138.
- Centonze, A., Inchausti, F., Macbeth, A. & Dimaggio, G. (2020). Changing embodied dialogical patterns in metacognitive interpersonal therapy. *Journal of Constructivist Psychology*. https://doi.org/10.1080/10720537.2020.1717117
- Cesario, J. & McDonald M.M. (2013). Bodies in context: Power poses as a computation of action possibility. *Social Cognition*, *3*, 260–274. https://doi.org/10.1521/soco.2013.31.2.260
- Cesario, J., Jonas, K.J. & Carney, D.R. (2017). CRSP special issue on power poses: What was the point and what did we learn? *Comprehensive Results in Social Psychology*, 2, 1–5. Doi: https://doi.org/10.1080/23743603.2017.1309876
- Coles, N.A., Larsen, J.T. & Lench, H.C. (2019). A metaanalysis of the facial feedback literature: Effects of facial feedback on emotional experience are small and variable. *Psychological Bulletin, 145,* 610–651. https://doi.org/10.1037/bul0000194
- Credé, M. & Phillips, L.A. (2017). Revisiting the power pose effect. *Social Psychological and Personality Science*, *8*, 493– 499. https://doi.org/10.1177/1948550617714584
- Damasio, A.R. (1994). Descartes' error: Emotion, reason and the human brain. New York, US: Putnam. https://doi.org/10.1177/00030651970450030301
- Damasio, A.R. (1995). Toward a neurobiology of emotion and feeling: Operational concepts and hypotheses. *Neuroscientist*, 1, 19–25. https://doi.org/10.1177/107385849500100104
- Decety J., (1996). The neurophysiological basis of motor imagery. Behavioural Brain Research, 77, 1–2, 45-52.
- Dimaggio, G., Fiore, D., Salvatore, G. & Carcione, A. (2007). Dialogical relationship patterns in narcissistic personalities: session analysis and treatment implications. *Journal of Constructivist Psychology*, 20, 23–51.
- Dimaggio, G., Montano, A., Popolo, R. & Salvatore, G. (2015). Metacognitive Interpersonal Therapy for personality disorders: A treatment manual. Routledge. https://doi.org/10.4324/9781315744124
- Dimaggio, G., Ottavi, P., Popolo, R. & Salvatore, G. (2020). Metacognitive Interpersonal Therapy: Body, imagery and change. Routledge.
- Dimaggio, G., Popolo, R., Ottavi, P. & Salvatore, G. (2018). Metacognitive Interpersonal Therapy as a dialogical practice.

Experiential work in session with personality disorders. In A. Konopka, H.J.M. Hermans, M.M. Gonçalves (Eds.), Handbook of Dialogical Self Theory and psychotherapy: Bridging psychotherapeutic and cultural traditions. London, UK: Routledge. https://doi.org/10.4324/9781315145693

- First, M. B., Spitzer, R. L., Gibbon, M., Williams, J. B. W., Davies, M., Borus, J. & . . . Rounsaville, B. (1995). The Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II). Part II: Multi-site test-retest reliability. Journal of Personality Disorders, 9, 92–104, https://doi.org/10.1521/pedi.1995.9.2.92
- Gazzillo, F., Genova, F., Fedeli, F., Curtis, J. T., Silberschatz, G., Bush, M. & Dazzi, N. (2019). Patients' unconscious testing activity in psychotherapy: A theoretical and empirical overview. *Psychoanalytic Psychology*, *36*, 173. https://doi.org/10.1037/pap0000227
- Gendlin, E.T. (1981). Focusing. Bantam Books.
- Gonçalves, M.M., Ribeiro, A.P., Mendes, I., Alves, D., Silva, J., Rosa, C., Batista, J. Navarro-Fernández, P. & Braga, C. (2017). Three narrative-based coding systems: Innovative moments, ambivalence and ambivalence resolution. *Psychotherapy Research*, *3*, 270–282. https://doi.org/10.1080/10503307.2016.1247216
- Gronau, Q.F., Van Erp, S., Heck, D.W., Cesario, J., Jonas, K.J. & Wagenmakers, E.J. (2017). A Bayesian model-averaged meta-analysis of the power pose effect with informed and default priors: The case of felt power. *Comprehensive Results* in Social Psychology, 2, 123–138. https://doi.org/10.1080/23743603.2017.1326760
- Hackford, J., Mackey, A. & Broadbent, E. (2019). The effects of walking posture on affective and physiological states during stress. *Journal of Behavior Therapy and Experimental Psychiatry*, 62, 80–87. https://doi.org/10.1016/j.jbtep.2018.09.004
- Hackmann, A., Bennett-Levy, J. & Holmes, E.A. (2011). Oxford guide to imagery in cognitive therapy. Oxford, UK: Oxford University Press.
- Hepach, R., Vaish, A. & Tomasello, M. (2015). Novel paradigms to measure variability of behavior in early childhood: Posture, gaze, and pupil dilation. *Frontiers in Psychology*, *6*, 858. https://doi.org/10.3389/fpsyg.2015.00858
- Hermans, H.J., Kempen, H.J. & Van Loon, R.J. (1992). The dialogical self: Beyond individualism and rationalism. *American Psychologist*, 47, 23–33. https://doi.org/10.1037/0003-066X.47.1.23
- Hermans, H.J.M. & Dimaggio, G. (Eds.) (2004). The dialogical self in psychotherapy. London, UK: Brunner-Routledge. https://doi.org/10.4324/9780203314616
- Hitchcock, C., Werner-Seidler, A., Blackwell, S.E. & Dalgleish, T. (2017). Autobiographical episodic memorybased training for the treatment of mood, anxiety and stress-related disorders: A systematic review and metaanalysis. *Clinical Psychology Review 52*, 92–107 https://doi.org/10.1016/j.cpr.2016.12.003

- Holmes, E. A., Mathews, A., Dalgleish, T. & Mackintosh, B. (2006). Positive interpretation training: Effects of mental imagery versus verbal training on positive mood. *Behaviour Therapy*, 37, 237– 247. https://doi.org/10.1016/j.beth.2006.02.002
- Inchausti, F., García-Poveda, N.V., Ballesteros-Prados, A., Ortuño-Sierra, J., Sánchez-Reales, S., Prado-Abril, J., Aldaz-Armendáriz, J.A., Mole, J., Dimaggio, G., Ottavi, P. & Fonseca-Pedrero, E. (2018a). The effects of metacognition-oriented social skills training on psychosocial outcome in schizophrenia-spectrum disorders: A randomized controlled trial. *Schizophrenia Bulletin, 44*, 1235–1244. https://doi.org/10.1093/schbul/sbx168
- Inchausti, F., García-Poveda, N.V., Ortuño-Sierra, J. & Ballesteros-Prados, A. (2017). Metacognitive abilities in adults with substance abuse treated in therapeutic community. *Adicciones*, 29, 74–82. https://doi.org/10.20882/adicciones.719.
- Inchausti, F., Moreno-Campos, L., Prado-Abril, J., Sánchez Reales, S., Fonseca Pedrero, E., Macbeth, A., Popolo, R. & Dimaggio, G. (2020). Metacognitive Interpersonal Therapy in group for personality disorders: Preliminary results from a pilot study in a public mental health setting. *Journal of Contemporary Psychotherapy*. https://doi.org/10.1007/s10879-020-09453-9
- Inchausti, F., Prado-Abril, J., Sánchez-Reales, S., Vilagrà-Ruiz, R. & Fonseca-Pedrero, E. (2018b). El trastorno de personalidad por evitación: Una propuesta de tratamiento especializado en la sanidad pública española [Avoidant Personality Disorder: A Specialized Treatment Proposal in Spanish Public Health]. Ansiedad y Estrés, 24, 144–153. https://doi.org/10.1016/j.anyes.2018.05.002
- Jain, F. A. & Fonagy, P. (2020). Mentalizing imagery therapy: Theory and case series of imagery and mindfulness techniques to understand self and others. *Mindfulness*, 11, 153–165. https://doi.org/10.1007/s12671-018-0969-1

James, W. (1884). What is an emotion? Mind, 9, 188-205.

- Jeannerod M. (2006). Motor cognition: What actions tell the self. Oxford, UK: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198569657. 001.0001
- Konopka, A., Hermans, H.J.M. & Gonçalves, M.M. (Eds.) (2018). Handbook of Dialogical Self Theory and psychotherapy: Bridging psychotherapeutic and cultural traditions. Routledge.
- Kosslyn, S.M., Ganis, G. & Thompson, W.L. (2001). Neural foundations of imagery. *Nature Reviews Neuroscience*, 2, 635–642. https://doi.org/10.1038/35090055
- Laird, J.D. (1974). Self-attribution of emotion: The effects of expressive behavior on the quality of emotional experience. *Journal of Personality and Social Psychology*, 29, 475–486. https://doi.org/10.1037/h0036125
- Lecrubier, Y., Sheehan, D. V., Weiller, E., Amorim, P., Bonora, I., Harnett Sheehan, K. & . . . Dunbar, G. C. (1997). The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: Reliability

and validity according to the CIDI. *European Psychiatry*, *12*, 224–231. https://doi.org/10.1016/S0924-9338(97)83296-8

- Levenson, R.W., Ekman, P. & Friesen, W.V. (1990). Voluntary facial action generates emotion-specific autonomic nervous system activity. *Psychophysiology*, *27*, 363–384. https://doi.org/10.1111/j.1469-8986.1990.tb02330.x
- Liotti, G. (1994). La dimensione interpersonale della coscienza. Carocci.
- Lotze, M. & Halsband, U. (2006). Motor imagery. *Journal* of *Physiology*, *99*, 386–395. https://doi.org/10.1016/j.jphysparis.2006.03.012
- Lowen, A. (1971). The language of the body. Macmillan General Reference.
- Luborsky, L. (1984). Principles of psychoanalytic psychotherapy. Basic Books.
- Luborsky, L. & Crits-Christoph, P. (1998). Understanding transference: The Core Conflictual Relationship Theme Method. Basic Book.
- Lysaker, P.H. & Lysaker, J.T. (2002). Narrative structure in psychosis: Schizophrenia and disruptions in the dialogical self. *Theory and Psychology*, *12*, 207–220. https://doi.org/10.1177/0959354302012002630
- Mathews, A., Ridgeway, V. & Holmes, E.A. (2013). Feels like the real thing: imagery is both more realistic and emotional than verbal thought. *Cognition and Emotion, 27*, 217–29. https://doi.org/10.1080/02699931.2012.698252
- Michalak, J., Troje, N.F., Fischer, J., Vollmar, P., Heidenreich, T. & Schulte, D. (2009). Embodiment of sadness and depression-gait patterns associated with dysphoric mood. *Psychosomatic Medicine*, *71*, 580–587. https://doi.org/10.1097/PSY.0b013e3181a2515c
- Moran A, Guillot A, MacIntyre T & Collet C. (2012). Reimagining motor imagery: Building bridges between cognitive neuroscience and sport psychology. *British Journal of Psychology*, *103*, 224–247. https://doi.org/10.1111/j.2044-8295.2011.02068.x
- Mori, K. & Mori, H. (2009). Another test of the passive facial feedback hypothesis: When your face smiles, you feel happy. *Perceptual and Motor Skills, 109, 76-78.* https://doi.org/10.2466/PMS.109.1.76-78
- Nair, S., Sagar, M., Sollers, I.I.I.J., Consedine, N. & Broadbent, E. (2015). Do slumped and upright postures affect stress responses? A randomized trial. *Health Psychology*, 34, 632– 641. http://dx.doi.org/10.1037/hea0000146
- Neimeyer, R.A. (2000). Narrative disruption in the construction of self. In R.A. Neimeyer & J.D. Raskin (Eds.), Construction of disorder. Meaning making frameworks for psychotherapy (pp. 207–241). American Psychological Association. https://doi.org/10.1037/10368-000
- O'Shea H. & Moran A. (2019). Revisiting imagery in psychopathology: Why mechanisms are important. *Frontiers in Psychiatry*, 10, 457. https://doi.org/10.3389/fpsyt.2019.00457

Ogden, P. & Fisher, J. (2015). Sensorimotor Psychotherapy. Norton & Company.

Articles

- Oosterwijk, S., Rotteveel, M., Fischer, A.H. & Hess, U. (2009). Embodied emotion concepts: How generating words about pride and disappointment influences posture. European Journal of Social Psychology, 39, 457– 466. https://doi.org/10.1002/ejsp.584
- Osypiuk, K., Thompson, E. & Wayne, P. M. (2018). Can Tai Chi and Qigong postures shape our mood? Toward an embodied cognition framework for mind-body research. *Frontiers in Human Neuroscience*, 12, 174. https://doi.org/10.3389/fnhum.2018.00174
- Pearson, J., Naselaris, T., Holmes, E.A. & Kosslyn, S.M. (2015). Mental imagery: Functional mechanisms and clinical applications. *Trends in Cognitive Sciences*, 19, 590–602. https://doi.org/10.1016/j.tics.2015.08.003
- Perls, F.S., Hefferline, R.F. & Goodman, P. (1994). Gestalt Therapy: Excitement and growth in the human personality. Profile Books.
- Pilgramm, S., de Haas, B., Helm, F., Zentgraf, K., Stark, R., Munzert, J. & Krüger, B. (2016). Motor imagery of hand actions: Decoding the content of motor imagery from brain activity in frontal and parietal motor areas. *Human Brain Mapping*, 37, 81–93. https://doi.org/10.1002/hbm.23015
- Prado-Abril, J., Gimeno-Peón, A., Inchausti, F. & Sánchez-Reales, S. (2019). Pericia, efectos del terapeuta y práctica deliberada: El ciclo de la excelencia [Expertise, therapist effects, and deliberate practice: The cycle of excellence]. *Papeles del Psicólogo/Psychologist Papers, 40*, 89–100. https://doi.org/10.23923/pap.psicol2019.2888
- Ranehill, E., Dreber, A., Johannesson, M., Leiberg, S., Sul, S. & Weber, R.A. (2015). Assessing the robustness of power posing: No effect on hormones and risk tolerance in a large sample of men and women. *Psychological Science*, 26, 653–656. https://doi.org/10.1177/0956797614553946
- Riskind, J.H. & Gotay, C.C. (1982). Physical posture: Could it have regulatory or feedback effects on motivation and emotion? *Motivation and Emotion*, *6*, 273–298. https://doi.org/10.1007/BF00992249
- Rizzolatti, G. & Sinigaglia, C. (2016). The mirror mechanism: A basic principle of brain function. *Nature Reviews. Neuroscince*, 17, 757–765. https://doi.org/10.1038/nrn.2016.135
- Schacter, D.L., Addis, D.R., Hassabis, D., Martin, V.C., Spreng, R.N. & Szpunar, K.K. (2012). The future of memory: Remembering, imagining, and the brain. *Neuron*, *76*, 677– 694. https://doi.org/10.1016/j.neuron.2012.11.001
- Semerari, A., Carcione, A., Dimaggio, G., Falcone, M., Nicolò, G., Procacci, M. & Alleva, G. (2003). How to evaluate metacognitive functioning in psychotherapy? The Metacognition Assessment Scale and its applications. *Clinical Psychology and Psychotherapy*, 10, 238–261. https://doi.org/10.1002/cpp.362

Shapiro, L. (2011). Embodied Cognition. Routledge.

Simmons, J.P. & Simonsohn, U. (2017). Power posing: P-

curving the evidence. *Psychological Science*. 28, 687–693. https://doi.org/10.1177/0956797616658563

- Singer, J.A., Blagov, P., Berry, M. & Oost, K.M. (2013). Selfdefining memories, scripts, and the life story: Narrative identity in personality and psychotherapy. *Journal of Personality*, 81, 569–582. https://doi.org/10.1111/jopy.12005
- Stepper, S. & Strack, F. (1993). Proprioceptive determinants of emotional and nonemotional feelings. *Journal of Personality and Social Psychology*, 64, 211-220

Van der Kolk, B. (2014). The body keeps the score: Mind,

brain and body in the transformation of trauma. Penguin.

- Weiss, J. (1993). How psychotherapy works: Process and technique. Guilford Press.
- Wells, A. (2009). Metacognitive therapy for anxiety and depression. Guilford Press.
- Wilkes, C., Kydd, R., Sagar, M. & Broadbent, E. (2017). Upright posture improves affect and fatigue in people with depressive symptoms. *Journal of Behavior Therapy and Experimental Psychiatry*, 54, 143–149. https://doi.org/10.1016/j.jbtep.2016.07.015