

Reflection Article

Body-mediated intervention with pregnant women: guidelines and fundamentals

Prática de mediação corporal com gestantes: orientações e fundamentos

Jorge Fernandes^{a,b} , José Marmeleira^{a,b} , Paulo Gutierres Filho^c 

^aDepartamento de Desporto e Saúde, Escola de Ciências e Tecnologia, Universidade de Évora, Évora, Portugal.

^bComprehensive Health Research Center - CHRC, Lisboa, Portugal.

^cUniversidade de Brasília – UNB, Brasília, DF, Brasil.

How to cite: Fernandes, J., Marmeleira, J., & Gutierres Filho, P. (2020). Body-mediated intervention with pregnant women: guidelines and fundamentals. *Cadernos Brasileiros de Terapia Ocupacional*. 28(2), 682-692. <https://doi.org/10.4322/2526-8910.ctoARF1998>

Abstract

This article approaches some theoretical notions that support a prophylactic and therapeutic intervention with pregnant women, through body mediation. Considering that the processes related to motherhood can make it difficult for the pregnant woman to accept their own body and the construction of their mother's identity, we present the psychocorporeal changes inherent to this period, as well as the importance of establishing an empathic relationship between mother and *the child inside*. Based on this framework, we approach theoretical and practical indications that support the relevance of the use of corporeality and body mediation in the acceptance and use of the pregnant woman's body in daily life. Thus, final considerations include some guidelines that allows psychomotor therapist, occupational therapists and others, to reflect on how to support a pregnant woman to accept her new body in the surrounding environments and contexts, in order to facilitate the process of thinking, imagining and desiring the child.

Keywords: Pregnation, Human Body, Parenting.

Resumo

Este ensaio versa sobre algumas noções teóricas que fundamentam a intervenção profilática e terapêutica com gestantes por intermédio da mediação corporal. Tendo em conta que os processos relativos à maternidade podem dificultar a aceitação do próprio corpo pela gestante e a construção da identidade de mãe, apresentam-se as alterações psicocorporais inerentes a este período, assim como a importância do estabelecimento de uma relação empática entre mãe-criança *do interior*. Com base nesse enquadramento teórico, abordam-se indicações teórico-práticas que alicerçam a pertinência da utilização da corporeidade e da mediação corporal na aceitação e utilização do corpo da gestante no cotidiano. Neste sentido, as considerações finais abarcam linhas orientadoras que permitem aos terapeutas,

Received on Aug. 10, 2019; Accepted on Sept. 30, 2019.



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

independentemente de serem psicomotricistas, terapeutas ocupacionais ou outros, refletirem sobre a forma de auxiliar na aceitação do corpo pela gestante nos ambientes e contextos que a envolvem, com vista a facilitar o processo de pensar, imaginar e desejar o filho.

Palavras-chave: Gestação, Corpo Humano, Maternidade.

1 Introduction

There are maternal and neonatal health care services in basic health units, outpatient clinics in mixed units, hospitals or maternity hospitals (Agência Nacional de Vigilância Sanitária, 2014). In these institutions it is possible that different health professionals (e.g. psychocomotrician, occupational therapist) use body mediation and corporeity techniques to optimize the relationship of pregnant women with the external environment, assisting them to express their feelings, with affective exchanges and their self-image perception (Potel, 2012; Ferigato et al., 2018). In this context, Ferigato et al. (2018, p. 769) advocate that occupational therapy uses corporeity through action, experience and occupation, “[...] not to correct or normalize, but to produce new bodies and new ways of doing in different existing daily lives”. Potel (2012) states that Psychomotricity uses body mediation to help the person to *inhabit their body*, understood here as the psychic act of processing sensory-motor and tonic-emotional information that allows the formation of identity and acquire the feeling of “being inside your body” permanently. Mediations can vary and go through art (dance, singing, music, painting, among others), words by telling events, spontaneous or directed playing, the aquatic environment, and body mediation through corporeity (generic name given to the unity of the body that is real, biological, neurophysiological, cognitive, emotional, symbolic and relational), that is, by the implication of the person’s body and therapist engaged in the relationship. Thus, in addition to facilitating the relationship establishment, it favors the actions necessary for a transformation or development (Gatecel & Giromini, 2012; Potel, 2012).

Each of the perspectives mentioned, despite the possibility of being associated with different praxis, are based on universal theoretical knowledge that complements each other in the search for improving the pregnant woman’s daily life and developing the *prenatal child inside*, as Missonier (2007a, 2007b) says. Thus, it is intended to present some *know-how* associated with the theoretical knowledge (Theoretical Know-how) necessary for the elaboration of a therapeutic praxis of body mediation (Practical Know-how) that can constitute necessary information, for any team of health professionals related to Psychomotricity (e.g., occupational therapy, nursing and physiotherapy), to develop interdisciplinary interventions.

Motherhood processes can lead pregnant women to have difficulties in accepting their new body and in elaborating their identity as a mother. As Spiess (2002) points out, the body is the first place where the entire existential problem that affects the pregnant woman in her being, in her identity or in her desires is expressed, which justifies the pertinence and adequacy of a prophylactic or therapeutic intervention.

In this context, the objective of a body mediation intervention focuses on the possibility of helping pregnant women to become aware of their body, to elaborate their body image, to experience their interior and body structure, to inhabit their new body and, thus facilitate the process of thinking, imagining and desiring the child.

In general, body mediation aims to: (i) propose a space of experiences, sensations and perceptions; (ii) help transform the experiences lived into representations; and (iii) promote bodily experiences in a structuring relationship (Potel, 2012). We assume that achieving these objectives allows the pregnant woman to establish a good relationship with herself and, thus, facilitate the establishment of the relationship with the *child inside*. However, any intervention requires a *theoretical know-how* that allows to base a *practical know-how* adapted to the needs of the group or the person concerned (Gatecel & Giromini, 2012). Therefore, it is relevant to know the body and psychic state of the pregnant woman and their influence on the development of the *prenatal child*, in order to outline the guidelines necessary for a body mediation intervention with this population.

2 Motherhood and Mother-child Relationship

The result of the intimate encounter of the bodies of parents will be, in the future, a new body that, in metaphorical terms, is born on a *blank sheet of paper* and will have to *be designed*, as the body of *Vitruvian Man* (created by Leonardo da Vinci) with a balanced psycho-physical structure. This picture begins through the representations that parents design on their child before birth. These representations are expressed, as Stern (1997) refers, through subjective interactions and dialogues between parents and children, which are particularly influenced by the history and unconscious organization of the mother.

During pregnancy, the child feels properly enveloped inside the mother's body because she provides an environment of contrasts, between hyperactivity and calm, between anguish and tranquility, however, in a balanced emotional and affective dimension. In this sense, Missonier (2007b, 2010) states that there is a Virtual Object Relationship (VOR) associated with the biopsychic interaction that is established during the prenatal period between future parents and the *child inside*. For the parents, this child is halfway between the *prenatal virtual child* and the *updated postnatal child* (Missonier, 2007b), in an imaginary place in which they will be thought before being in the real place. This is the space of psychic representations, in which the mother thinks, dreams, desires her child, elaborates her own image and defines her style of motherhood (Bayle, 2005).

Regarding this relational dynamics, Lebovici et al. (2009) specify 4 types of representations that the mother can make about the child: (i) an *imagined child*, when thinking about the characteristics of the future child during pregnancy; (ii) a *phantasmatic child*, elaborated based on her own history and experiences when she was a child; (iii) a *mythical child* that corresponds to the imagery system of the mother projected onto the child; (iv) or a *narcissistic child* associated with the idea of how she will represent their parents in the future as successor to the family dynasty.

In general, the mother's *psychic transparency*, that is, the psychological characteristics of the mother during pregnancy, which are influenced by her personal history (Bydlowski, 2001), will condition the *anticipatory representations* (Missonier & Golse, 2013) previously presented, which, on the one hand, induce the well-being of the child in prenatal care and, on the other, allow, during the postnatal period, to establish safe bonds with their caregivers (Missonier, 2010).

Through VOR, the parents will understand the needs and desires of their child, by decoding, transforming and responding in an organized way to their interactions with the child (Missonier, 2007a, 2007b), in order to design their *Psycho-corporal* structure. The mother's reactions and perceptions during VOR influence the child's development, which leads Cotiga (2013) to mention that the mother's responses and the emotional way of involving influence the process of optimizing the genetic development of fetus.

It is observed that the mother-child *relationship* is a fundamental and constant factor in prenatal life. However, it is influenced by *transgenerational transmission* (Golse, 2007; Lebovici, 1993; Missonier & Golse, 2013), which means, it is associated with the way current mother has related in the past with her mother, which will influence how she relates today to her son. Thus, a relationship conditions another relationship. If the relationship in the past was with a mother that Winnicott (1975a) calls *good enough* (which creates empathy, adapts to the child and meets her needs in a balanced way), there will be a greater possibility for the current mother to develop, throughout pregnancy, a *primary maternal concern*, which is what Winnicott (2000) considers to be the fundamental condition for establishing the proper care and necessary relationships with the child.

3 Psycho-corporal State of the Mother vs. Child Development

Talking to women about events during their pregnancy it is evident that they realize that life does not begin on the day of birth and that the child lives before birth. Thus, it will be possible to notice that, from the 3rd month of pregnancy, the child she carries in the womb performs movements that are associated with global motor responses, or that, from the 6th month, they perform motor responses to sensory stimuli (Marx & Nagy, 2015). This means that there is psychomotor life before birth.

The psychological birth of the child occurs at some point during the time of his pregnancy (Waddell, 2003). Objectively, the construction and development of the body, which precedes thought, happens throughout the embryonic and fetal period, in a space of protection that is the mother's body. In this space a double experience is operationalized by integrating, on the one hand, the sensory-motor and tonic-emotional aspects and, on the other, the feeling of being and being contained (Bourguiba, 2015; Cyrulnik, 2002). The child perceives and integrates these sensations because they are in a containment space that allows para-excitation, in the sense of modeling the movement and filtering the reception of sensations. Thus, the multiple exchanges that are established between the mother and the fetus allow the latter to perceive and record mnemonic traces of bodily sensations and movements (Cyrulnik, 1995, 2002).

Those sensations, associated with cutaneous, olfactory, gustatory, vestibular, auditory and visual sensory systems, are part of the first psychic organization of the *child*

inside (Foster & Verny, 2007; Lacaunet & Schaal, 2002). In this perspective, Vecchiato (2003) states that the sensations that the fetus experiences in the uterus can be grouped into three types: (i) *fusion feeling*, associated with the non-separation between the fetus and the mother because there is a constant indifferenciation; (ii) *diffusion feeling*, associated with the sensations of discontinuity given by sensory alternation, silence consecutive to noise, continuous succession of immobility and agitation, growth and centripetal and centrifuge body movements, giving the fetus a rudimentary sense of being; and (iii) the *rhythmic feeling* that the fetus will feel with the rhythms of the mother's heartbeat and respiratory rhythm, providing a perceptual constancy that allows, even in a rudimentary way, the sensation of existing (Vecchiato, 2003).

In these interactions, the mother's rhythms not always synchronize with the ones of child. The mother's deep and melodious voice contrasts with the silences, her movements contrast with rest, which produces a stimulating effect that is at the origin of psychic life (Cyrułnik, 1995). In this way, the mental world of the fetus is a world of representations that is organized around sensation and non-sensation. These contrasts that are associated with an affective load, when experienced through sensations, perceptions and motor expressions that occur in this dual mother-child relationship, express the existence of a prenatal psychomotor life (Bayle, 2005).

This empathic relationship, which is based on a tonic-emotional-affective resonance, is fundamental for the *Psychomotor development of the child inside* and, as Bayle (2005) points out, allows the birth of a fetal protopsimotricity. These sensory experiences, movements, states of consciousness and affective states experienced by the fetus in the intrauterine space, are part of the mental experience and earlier psychic life, that is, *protomental*, if we use Bion's terminology (Bion, 1991).

As Cyrułnik (1995, 2002) points out, the encounter between the child's biological apparatus and sensory, emotional and body information provided by the mother the psychic organization and prenatal mental life are created. Thus, the psychocorporal relationship established between the mother and the child is the necessary link for the beginning of the psychic and motor organization, which arises in the intrauterine space. However, when referring to the psychic life of the *child inside*, it is not in the sense of psychic organization as egoistic structure, or self-consciousness, but in the sense of identity, which Bayle (2005) calls *conceptional identity* or *psychogenetic identity*, which is acquired from conception and is part of ontogenetic development because it is inserted in its own psychosociocultural structure. On the contrary, when approaching the mother's psychic organization, we talk about a self-consciousness, which presupposes the construction of a body and psychic envelope consisting of a barrier called the *Skin-ego* by Anzieu (1989), which allows to distinguish the *Self* from the *non-Self*. So, there is a psychic organization that participates in the construction of identity and self-awareness (Potel, 2012). If so, there is a *space-body* that, when inhabited as a house, allows the mother to overcome all the psychocorporal changes that may happen throughout life and thus maintain a good relationship with herself, with others and, in particular, with the child she carries in the womb.

4 Psychocorporal Processes During Pregnancy

The woman, during the nine months of pregnancy, undergoes psychocorporal changes, which provoke the need to adapt her body and body image scheme to new realities. What are these realities? The various anatomical and physiological changes to which she is subject, such as changes in body mass index, overall body balance and posture, belly size or body temperature, for example, as well as a set of metabolic, hormonal, dermatological, respiratory and cardiovascular changes (Soma-Pillay et al., 2016; Spiess, 2002). All these changes can cause psychic distress in the pregnant woman, because she feels that she loses control over herself, because she does not recognize herself in her body or cannot represent herself in this body (Spiess, 2002).

Being mother is a moment of great sensitivity and psychocorporal availability before the child who will be born. The future mother can be prepared and wish her child. Nevertheless, often, when she becomes aware that she carries a *stranger*, an *aquatic endoparasite*, as Ferenczi (1967) says, she is disturbed and reacts negatively to the transformations of her body, expressing anguish. Thus, there may be alterations in identity and transient psychic problems, associated with narcissistic crises, emotional problems and personality changes (Rofé et al., 1993).

Some authors describe the changes that are expressed during the 3 trimesters of pregnancy (Bydlowski, 2004; Rofé et al., 1993). During the 1st trimester, an emotional lability externalized by moments of anxiety, irritation, or depressive state without clinical manifestations. These emotional changes are often associated with physiological changes that happen with the onset of pregnancy. However, they can also relate to the fear of having a child with problems, of miscarriage, of having a disappointment, or of feeling that she is not able to fulfill the role of mother (Bydlowski, 2004). In these first 3 months, the body changes are minimal and the various hormonal changes, expressed through vomiting, nausea, fatigue, changes in appetite, amenorrhea, among others. (Rofé et al., 1993).

Throughout the second trimester, emotional instability, anguish and physical symptoms decrease, while body changes are more noticeable. It is a period of serenity for the mother, who accepts the presence of the baby in her womb. Parents will think about their gender, their name, who they will resemble and make imaginary projections about their future (Rofé et al., 1993).

In the third trimester, the fear of childbirth and the desire for the child to be born in perfect health causes the mother's anguish. Thus, in this last phase of pregnancy, the mother's emotional changes are fundamentally associated with the approach of delivery and its possible consequences (Bydlowski, 2004). During this period the mother identifies the rhythms between her and her baby, slowly evolving into a *primary maternal concern* (Winnicott, 2000). All these steps present symptoms that are not necessarily pathological, but rather an adaptation to a new condition.

These changes and alterations lead Bydlowski (2004) to mention that both adolescence and pregnancy are periods of exaggerated conflict, as if there was a maturing crisis. The woman, during pregnancy, has moments of specific psychic states, in which fragments of the pre-conscious and unconscious return to consciousness, causing her identity conflicts. In this scenario, the mother is expected to inhabit her new body and establish a VOR with the *child inside*. This maternal space for the psychic construction

of the *prenatal child*, that Bayle (2005) calls the *Maternal Space of Psychic Identification and Differentiation of the Conceived Human Being*, is the focus of a practice of body mediation by the request of corporeity.

Mediation is a means that sustains the relationship between the person and the therapist, and that allows the existence of conscious and unconscious intersubjective exchanges and communications, called tonic-emotional dialogue (Potel, 2012). The use of mediation implies the existence of an *intermediate meeting zone*, in which mediators improve the relationship and facilitate conflict resolution (Potel, 2012). All therapeutic mediation takes place in this area between interior and external reality, which Winnicott (1975b) calls a *potential space*. Thus, monitoring the person's body participation when establishing a relationship of body mediation allows creating *intermediate spaces of action* with techniques (relaxation, motor expression, therapeutic touch, playful play, movements controlled, among others) adapted to their needs, in order to enhance the control of movement, gesture adaptations, the feeling of existence continuity and the feeling of self-identity (Gatecel & Giromini, 2012; Potel, 2012).

In this context, the practice of body mediation objective is the mother can *live in a body for two* (Potel, 2012; Spiess, 2002) and acquires a maternal concern that generates a prenatal *holding and handling* (Winnicott, 2000) and, returning to metaphorical images, allow her to *draw a Vitruvian son* wrapped in a circle (*psychic structure*), and in a square (*physical structure*), which support their body and their being. So, body mediations, associated with a specific intervention, modify movement and sensation by giving them meaning, that is, they transform movement into gesture, sensation into affective experience, and the body in *Me-body* (Brun et al., 2013), which helps pregnant women to inhabit their new body. Thus, she will be able to establish an empathic relationship with the *child inside*, which will facilitate their psychic and physical development.

5 Final Considerations

This essay presented a set of fundamentals necessary for a mediation practice that requests the body, corporeity, sensory-motor and tonic-emotional structure, whose premise aims to act at the level of the psychocorporal structure of pregnant women and facilitating the child's development. Thus, we can schematize the reference knowledge developed in this essay through the following topics:

1. Motherhood is a process that begins in childhood, before the desire to have a baby and depends on *transgenerational transmission* (Lebovici, 1993; Missonier & Golse, 2013), that is, the relationships that the mother, today, established with her mother as a child;
2. Pregnancy is characterized by a particular psychic state that Bydlowski (2001) calls *psychic transparency*, since the fragments of the unconscious express easily in the conscious, which can lead the mother, as Spiess (2002) points out, to have difficulty in drawing up her identity as a mother and accepting her *new* body;
3. The personal history, ghosts, fears and desires of the pregnant woman can cause her psychic distress (Spiess, 2002), associated with changes in body image (identity, self-consciousness, among others) and hamper her ability to inhabit her body for two;

4. Body mediation intends that the mother updates her representations of the body, acquire self-awareness and ability to inhabit a body that carries another body (Bourguiba, 2015);
5. The *child inside* (Missonier, 2007a, 2007b) who is in the uterine cavity is in constant connection with the mother, in a direct relationship without mediation, in which a VOR is established (Missonier, 2007b, 2010). These experiences, supported by an empathic relationship between the *mother-child inside*, will facilitate the psychomotor development of the infant;
6. A facilitating environment should be fostered, providing a sufficiently good relationship between *mother-child inside*, in order to promote primary maternal concern (Winnicott, 2000);
7. The therapeutic intervention of body mediation aims to transform and update the body image of the pregnant woman, for the benefit of the *body image* construction of the *child inside*, their development, the construction of their protopsychomotricity (Bayle, 2005).

All this knowledge about changes that the pregnancy causes in the psychocorpocorporal state of the woman, as well as the importance of establishing an empathic relationship between *mother-child inside*, allows therapists, regardless of whether they are psychomotor, occupational therapists or other professionals, reflect on how to delineate an intervention that meets the needs of the pregnant woman, operationalized by a body mediation that in daily life helps to inhabit her new body and build a *new corporeity*. To finish, we present some guidelines for the establishment of an intervention

- a. Using mediators (water, body expression, therapeutic touch, among others) to request body unity by causing the perception of a border that divides the interior of the outside and, thus, request a positive body image, the feeling to exist and the pleasure of transporting the child who will be born;
- b. Using mediators (water, controlled movements, relaxation, among others) who (i) request dynamic body awareness through the perception of exteroceptive and proprioceptive information, which (ii) require a greater perception of the surface of the body, and that (iii) stimulate the sensation of a narcissistic body, in order to facilitate self-consciousness and the existence of a new body;
- c. Using mediators (movements, singing, body awareness, among others) that: (i) associate breathing with movement and states of body tension and (ii) allow the body perception of external and internal stimuli (sounds, vibrations and breathing), to give the pregnant woman the feeling of being enveloped and protected;
- d. Using playful situations, gentle and constant movements, or vigorous and discontinued, so that the child who is in an aqueous medium (amniotic fluid), balances and thus stimulates the sensory cells of the macula, saccule and semicircular channels that, according to Bullinger (2011), constitute the foundations of the feeling of presence in the world, in this case, in the intrauterine world, to later acquire the feeling of existing and being;

- e. Requesting body awareness, the interior of the body and the body envelope, through the so-called *bone percussions*, by touching the body with the fingers (or in a double work, by touching the other's body), to find points of resonance (forehead, face, nose, sternum, clavicle and upper parts of the shoulder blade), in the caudal-cephalic direction, followed by touches sliding the hands on the shoulders, spine, arms and hands.

All experiences that require the limits of the body, *bone percussions*, breathing, kinesthetic sensations, will allow the awareness of the new volumes of the body, of a *new* interior space and, thus, maintain the perception of a unified body. From the global perception of the body, it is possible to restructure the body image, enable the pregnant woman to elaborate and accept her new identity, and inhabit her body.

What becomes relevant is to understand that there are no prescriptions or recipes, but the therapist's ability to operationalize a practice that can meet the specific needs of pregnant women with whom they will intervene and thus decide and implement the appropriate intervention. In this sense, Fernandes (2012) states that the therapist approach should be contrary to any rigid and pre-established intervention based on "*guidelines*", but that meets the needs, peculiarities and specificities of the person (*mindlines*), in which they puts, as Potel (2013) points out, their creativity at the service of the patient.

References

- Agência Nacional de Vigilância Sanitária – ANVISA. (2014). *Serviços de atenção materna e neonatal: segurança e qualidade*. Brasília: ANVISA.
- Anzieu, D. (1989). *O eu-pele*. São Paulo: Casa do Psicólogo.
- Bayle, B. (2005). *L'identité conceptionnelle. Tout se joue-t-il avant la naissance?* Paris: L'Harmattan.
- Bion, W. (1991). *Elementos de psicanálise*. Rio de Janeiro: Imago.
- Bourguiba, L. (2015). Acompanhement en psychomotricité de femmes enceintes dans l'eau. In E. Pireyre. *Cas pratiques en psychomotricité* (pp. 168-183). Paris: Dunod.
- Brun, A., Chouvier, B., & Roussillon, R. (2013). *Manuel des médiations thérapeutiques*. Paris: Dunod.
- Bullinger, A. (2011). *Le développement sensori-moteur de l'enfant et ses avatars*. Paris: Érès.
- Bydlowski, M. (2001). Le regard intérieur de la femme enceinte, transparence psychique et représentation de l'objet interne. *Devenir*, 13(2), 41-52. Recuperado em 23 de junho de 2018, de <https://www.cairn.info/revue-devenir-2001-2-page-41.htm>
- Bydlowski, M. (2004). La relation foeto-maternelle et la relation de la mère à son fœtus. In S. Lebovici, R. Diatkine & M. Soulé. *Nouveau traite de psychiatrie de l'enfantet de l'adolescent* (pp. 1881-1891). Paris: Quadrigue/PUF.
- Cotiga, A. C. (2013). Intrauterine Experience and Emotional Development of the Fetus: aspects of group therapy approach. *Procedia: Social and Behavioral Sciences*, 84, 530-533.
- Cyrlunik, B. (1995). *Os alimentos do afeto*. São Paulo: Ática.
- Cyrlunik, B. (2002). Etologia das interações precoces. In J. Cohen-Solal & B. Golse. *No início da vida psíquica* (pp. 235-254). Lisboa: Instituto Piaget.
- Ferenczi, J.(1967). *Thalassa: psicanálise das origens da vida sexual*. Rio de Janeiro: Bup.

- Ferigato, S. H., Silva, C. R., & Ambrosio, L. A. (2018). Corporeidade de mulheres gestantes e a terapia ocupacional: ações possíveis na Atenção Básica em Saúde. *Cadernos Brasileiros de Terapia Ocupacional*, 26(4), 768-783.
- Fernandes, J. (2012). Abordagens emergentes em psicomotricidade. In J. Fernandes & P. Gutierrez Filho. *Psicomotricidade: abordagens emergentes* (pp. 1-12). Barueri: Manole.
- Foster, S. M., & Verny, T. R. (2007). The development of sensory systems during the prenatal period. *Journal of Prenatal & Perinatal Psychology & Health*, 21(3), 271-280.
- Gatecel, A., & Giromini, F. (2012). La formation des psychomotriciens dans le cadre universitaire. In C. Potel. *Être psychomotricien: un métier du présent, un métier d'avenir* (pp. 435-448). Paris: Érès.
- Golse, B. (2007). *O ser-bebé*. Lisboa: Climepsi.
- Lacaunet, J. P., & Schaal, B. (2002). Sensory performances in the human foetus: a brief summary of research. *Intellectia*, 1(34), 29-56.
- Lebovici, S. (1993). On intergenerational transmission: from filiation to affiliation. *Infant Mental Health Journal*, 14(4), 260-272.
- Lebovici, S., Golse, B., & Moro, M. R. (2009). Les interactions fantasmatiques. In S. Lebovici. *L'arbre de vie: éléments de la psychopathologie du bébé* (pp. 73-86). Paris: Érès.
- Marx, V., & Nagy, E. (2015). Fetal behavioural responses to maternal voice and touch. *PlosOne*, 10(6), 1-15. Recuperado em 11 de março de 2019, de <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0129118>
- Missonier, S. (2007a). La parentalité prénatale, la préparation à la naissance et l'entretien précoce. *Contraste*, 26(1), 55-79. Recuperado em 23 de abril de 2018, de <https://www.cairn.info/revue-contraste-2007-1-page-55.htm>
- Missonier, S. (2007b). Une relation d'objet virtuelle? *Le Carnet PSY*, 120(7), 43-47. Recuperado em 23 de abril de 2018, de <https://www.cairn.info/revue-le-carnet-psy-2007-7-page-43.htm>
- Missonier, S. (2010). Introduction aux connaissances de la psychologie Clinique fœtale. *EMC-Psychiatrie*, 8(2), 1-9.
- Missonier, S., & Golse, B. (2013). *La consultation thérapeutique périnatale: un psychologue à la maternité*. Toulouse: Érès.
- Potel, C. (2012). *Être psychomotricien: un métier du présent, un métier d'avenir*. Paris: Érès.
- Potel, C. (2013). Passer par l'actepsychomoteur. *Enfances & Psy*, 61(4), 20-31. Recuperado em 28 de abril de 2018, de <https://www.cairn.info/revue-enfances-et-psy-2013-4-page-20.htm>
- Rofé, Y., Blittner, M., & Lewin, I. (1993). Emotional experiences during the three trimesters of pregnancy. *Journal of Clinical Psychology*, 49(1), 3-12.
- Soma-Pillay, P., Nelson-Piercy, C., Tolppanen, H., & Mebazaa, A. (2016). Physiological changes in pregnancy. *Cardiovascular Journal of Africa*, 27(2), 89-94. Recuperado em 15 de setembro de 2018, de <https://www.cairn.info/revue-dialogue-2002-3-page-42.htm>
- Spiess, M. (2002). Le vacillement des femmes en début de grossesse. *Dialogue*, 157(3), 42-50. Recuperado em 12 de maio de 2018, de <https://www.cairn.info/revue-dialogue-2002-3-page-42.htm>
- Stern, D. (1997). *A constelação da maternidade*. Porto Alegre: Artes Médicas.
- Vecchiato, M. (2003). *A terapia psicomotora*. Brasília: Editora UnB.
- Waddell, M. (2003). *Vida interior: psicanálise e desenvolvimento da realidade*. Lisboa: Assírio Alvim.
- Winnicott, D. (1975a). O papel do espelho da mãe e da família no desenvolvimento infantil. In D Winnicott. *O brincar e a realidade* (pp. 153-162). Rio de Janeiro: Imago.
- Winnicott, D. (1975b). Objetos transicionais e fenômenos transicionais. In D. Winnicott. *O brincar e a realidade* (pp. 10-47). Rio de Janeiro: Imago.
- Winnicott, D. (2000). A preocupação materna primária. In D Winnicott. *Da pediatria à psicanálise: obras escolhidas* (pp. 399-405). Rio de Janeiro: Imago.

Author's Contributions

All authors contributed equally to the conception of the article and approved the final version of the text.

Corresponding author

Jorge Fernandes

e-mail: jorgef@uevora.pt