

Psicoendocrinologia do comportamento parental humano. Alterações hormonais, síndrome de couvade e responsividade parental em pais-expectantes

Results:

(Note: The current project produced a relatively large amount of data; the results reported next constitute the ones the investigators consider most relevant.)

Animal studies have been documenting the association between hormonal changes and the emergence of parental behavior in both males and females of a variety of species. Human data have been very scarce, but findings of three previous studies showed that hormone levels of human fathers can change during the reproductive period. The results of the current project constitute a step forward in the study of the psychoendocrinology of parental behavior, by indicating that hormone changes experienced by men during their partner's pregnancy associate to the expression of paternal involvement after the birth. Thus, fathers who presented higher levels of paternal behavior after the birth (HIF, high-involvement fathers), but not less involved fathers (LIF), were found to have increased levels of Progesterone, Estradiol and Testosterone during pregnancy comparing to postpartum hormone levels and to hormone levels of controls; in addition, Prolactin levels were found to be increased from pregnancy to postpartum in HIF, but not in LIF, whereas Cortisol levels were found to be elevated after the birth in LIF only. These results are generally consistent with previous findings on the neuroendocrinology of paternal behavior in mammals, and add support to the hypothesis that in bi-parental mammals, including humans, the expression of paternal and maternal behavior involve homologous neuroendocrine mechanisms. These findings can contribute to 'validate' the experience of more parentally motivated men, as well as to inform about conditions in which pro-social behavior, including parental investment, is compromised.

Published work:

- Gomez, R. & Leal, I. Vinculação parental durante a gravidez: Versão portuguesa da forma materna e paterna da 'Antenatal Emotional Attachment Scale'. *Psicologia, Saúde & Doenças*. Lisboa, Portugal: Sociedade Portuguesa de Psicologia da Saúde(Ed.). 2007. Vol. 8(2), pp. 153-165.
- Gomez, R., & Leal, I. (2007). Envolvimento paterno no pós-parto: Estudo de validação da Escala de Confirmação das Expectativas Maternas de Suporte. *Psicologia: Teoria, Investigação e Prática*, 12(2), 305-317.
- Gomez, R., & Leal, I. (2008). Ajustamento conjugal: Características psicométricas da versão portuguesa da Dyadic Adjustment Scale. *Análise Psicológica*, 4(26), 625-638.
- Gomez, R., & Leal, I. (2009). Stress parental no período pós-parto: Adaptação do Parental Stress Inventory para a população portuguesa. *Psychologica*, 50, 375-386.
- Gomez, R., Oliveira, R., Sobrinho, L. & Leal, I. Hormone changes from pregnancy to the postpartum in human fathers and paternal involvement after birth. *Submitted*.
- Gomez, R., Oliveira, R. L. & Leal, I. Hormonal, emotional and behavioral correlates of the couvade syndrome in Portuguese expectant fathers. *In preparation*.
- Gomez, R., Leal, I., Oliveira, R. & Sobrinho, L.G. Maternal and paternal endocrine responses to infant-related stimuli during late pregnancy. *In preparation*.
- Gomez, R., Oliveira, R. L., Leal, I. & Sobrinho, L.G. Hormonal and non-hormonal co-variables of maternal postpartum depression. *In preparation*.

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-Leal, I., Oliveira, R., Gomez, R. & Sobrinho, L. Couvade syndrome: a new contribution. . *In preparation.*

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