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Do Parent Internal Working Models Affect Cortisol levels, The Development of Positive Attachment in Infants and Promote Positive Affect Regulation?

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Memories of early relationships and early attachments as encoded into the brain as an “internal working model.” These models include expectations, beliefs, emotional appraisals, and rules for processing or excluding information. When a child develops a poor internal working model, a blueprint is then formed that serves as the blueprint from which all other relationships may be judged and modeled.

Current literature indicates children with secure attachments to their primary caregiver develop positive internal working models with minimal psychopathology and negative behavior. This study will examine the implications that a one-to-one parenting instructional approach may have on the parent child attachment relationship, internal working model, and child affect regulation. Saliva samples will be collected pre and post intervention and measured for cortisol, a steroid hormone frequently examined in studies of stress. Elevated cortisol levels are linked to memory deficits, immune-system impairments, lowered thresholds for activation of fear and anxiety neural circuits, and sometimes irreversible damage to neurons. 20 infant/mother dyads will receive an intervention of 12 weeks of infant/child psychotherapy using a reflective observation and filial therapy model. The attachment styles of the dyads will be categorized and coded. All mothers will complete a measurement measuring self internal working models. 10 mothers of the dyads will also receive individual therapy. By understanding the relationship between cortisol, attachment, and affect regulation, it is proposed that parenting programs could be developed for high risk infants consequently improving child and adult trajectories consequential to negative internal working models, poor early attachment and parenting.



Do parent internal working models impact cortisol levels, affect regulation, and promote secure attachment in infants at risk?

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Abstract

Memories of early relationships and attachments are coded into the brain as an internal working model or "blueprint". These models include expectations, appraisals, and rules for processing or excluding information that remain throughout development.

Children with secure attachments develop positive internal working models with minimal psychopathology and negative behavior.

Insecure attachments are linked to elevated cortisol due to anxiety. Elevated cortisol levels contribute to memory deficits and lowered thresholds for activation of fear and anxiety neural circuits that control affect regulation and behavior. Damage to neurons may be irreversible.

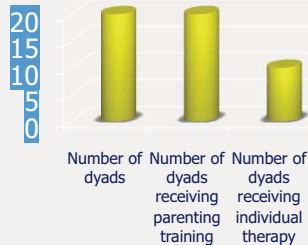
Possible consequential long term effects include: child and adult psychopathology, learning difficulties, and overall societal decline as children repeat the negative trajectories of the internal working model.

Introduction

By understanding the contribution of cortisol to parenting anxiety, the internal working model, and the development of secure attachment, a specialized parenting program could be developed for infants at risk for developing insecure attachments that make them vulnerable to repeating the internal working model of their mothers. For the purposes of this study, mothers who are involved with the state child welfare system will be studied.

Methodology

- 20 Infant/Mother dyads will be observed and coded using an observation tool and then attachment styles will be coded according to secure, insecure, avoidant, and anxious/avoidant.
- All dyads will receive 20 weeks of infant/parent psychotherapy using a reflective listening model and filial therapy approach.
- 10 of the mothers will receive individual psychotherapy conjoint with the infant/parent psychotherapy intervention.
- Cortisol samples will be taken for all mothers and infants via saliva.
- All mothers will be between the ages of 19-26 and will also complete the Parental Bonding Instrument (PBI) to better understand their perceptions of their relationship with their child and internal working model.
- Mothers will be referred from the judicial system with a "direct file" legal status to avoid further judicial action.
- Mothers will have been previously diagnosed as having a DSM IV-TR Axis I Disorder.



Tools

- "Strange Situation" Observation Tool (Ainsworth)-To measure attachment style and code accordingly.
- Parental Bonding Instrument (Gordon)-25 questions that measures parental perceptions of how they were parented. Includes 13 "over protection" and 12 "care" questions. High internal reliability according to multiple studies.
- SARSTEDT Salivette Collection kits.

Expected Outcomes

- Mothers with higher cortisol levels will have higher scores on the PBI assessment for authoritarian parenting styles.
- Mother and child attachment styles coded as insecure, avoidant, and anxious avoidant will have increased levels of cortisol.
- Mothers who received individual therapy will have lower cortisol levels, as opposed to those who did not receive this intervention.
- The children of mothers who received individual therapy conjoint with the parenting intervention will have lower cortisol levels than children whose mothers had not received this additional intervention.

Conclusion

- Teaching parents to understand how their internal working model affects their parenting styles will improve child attachment. Children will be less vulnerable to potential abuse and potential child and adult psychopathology will be reduced.
- Overall benefit to society: reduced learning and behavior problems in schools and communities. Children will grow into productive adults that contribute to society.
- Healthy relationships build healthy communities and create productive citizens.

Literature Cited

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