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Environmental Factors Affecting the Transmission of Attachment Between Non-
Autonomous Mothers and Their Securely Attached Infants
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I. Abstract

The purpose of this study is to understand and identify the factors bridging the transmission gap between mothers who were not securely attached to their primary caregiver (women who are classified as non-autonomous or unresolved in the Adult Attachment Interview measure), but whom are securely attached to their infant. Multiple meta analyses (Sette, Coppola & Cassibba, 2015; Verhage et. al, 2016) have demonstrated that maternal sensitivity only accounts for partial transmission of attachment. This noteworthy but low correlation has been identified in psychological literature as the 'transmission gap' (van IJzendoorn, 1995). In their meta analysis, Sette, Coppola & Cassibba found that 74% of autonomous mothers had securely attached infants, 57% of dismissing mothers had avoidant infants, and 21% of preoccupied mothers had resistant infants. Based on these findings, my aim for this study is to explain the discrepancy in non-autonomous (dismissing and preoccupied) mothers and low rates of transmission of these attachment styles to their infants. Literature (Verhage et. al. 2016) has called for more studies into this specific population. My study will include 80 biological mother-infant dyads. Foster and adoptive dyads will be excluded because rates of transmission in these populations have been found to be different than in biological populations (Bernier & Dozier, 2003). Specifically, as mentioned, only dyads comprised of non-autonomous mothers and secure infants will be included. Non-autonomous mothers will be identified through the Adult Attachment Interview (AAI). Infants' secure attachments will be identified through the Strange Situation measure. Because Strange Situation is only appropriately implemented between the ages of 12-24 months (Kretchmar & Jacobvitz; 2002), infants out of this age group, and subsequently their mothers, will not be included. Once establishing these attachment types in mother and

child, environmental factors in each dyad will be assessed longitudinally (Low-risk and high-risk factors, culture, and social support). My hypothesis for this study is environmental factors have the most mediating and moderating effects on the transmission gap between non-autonomous mothers and secure infants, more so than maternal sensitivity.

II. Introduction

There has been a relatively recent paradigm shift in models of thought explaining the intergenerational transmission of attachment. Specifically, considerations have shifted from a linear model to an ecological model of attachment transition (Sette, Coppola & Cassibba, 2015). The linear model contends that a caregiver's sensitivity to the needs of his/her child maintain the pathway of attachment transition (van IJzendoorn, 1995). A caretaker's cognitive schema of the self and others, formed beginning with the attachment they had to their main caregiver, informs a working model in the expectations of others. For example, a person who had a secure attachment learned through their caregiver's responses to their needs that other people are responsive and sensitive (Sette, Coppola & Cassibba, 2015). A person with an insecure attachment may come to perceive others as unpredictable and may view the self as unlovable. In sum, schemas formed from early attachment anticipate the caregiver's ability to understand and attenuate their own offspring's needs in a consistent and sensitive manner. This sensitivity, particularly the sensitivity of a mother, is the main mediator of attachment transmission.

However, a meta analysis conducted by van IJzendoorn in 1995 concluded that while maternal sensitivity was a factor of intergenerational transmission of attachment, it was only a partially responsible mediator, suggesting that there are other pathways to

attachment transmission. Other studies have confirmed these findings (Sette, Coppola & Cassibba, 2015). This discrepancy, known as the transmission gap, has given way to consideration of the ecological model as a potential moderator of attachment transmission. The ecological model takes into consideration external, environmental factors that are not associated with maternal sensitivity, such as socioeconomic status, high and low-risk households, various means of support, and attachments that the mother has formed in non-caregiver relationships, such as romantic relationships (Sette, Coppola & Cassibba, 2015). However, there is not enough literature to assert the degree to which factors associated with the ecological model affects attachment transition (Verhage et. al, 2016). Furthermore, no studies have been conducted specifically assessing the transmission gap between non-autonomous mothers and their securely attached infants. My study attempts to identify such environmental factors and my hypothesis is drawn from the influence of the ecological model.

Certain definitions of attachment styles—both in adulthood and infancy—must be stated here in order to correctly interpret study methods and findings. Infancy attachment, measured through the Strange Situation, seeks to identify the attachments that infants have with their primary caregiver (Ainsworth & Bell, 1970). Securely attached infants become upset upon the departure of their caregiver and are happy upon their return. Securely attached infants are confident that their needs will be attended to by their caregiver. Anxious-avoidantly attached infants seem to be indifferent to the departure and return of their caregiver, due to inadequate caregiving and perception by the child that their signals of distress will not affect the resolution of their needs. Resistantly attached infants become upset upon the caregiver's departure and remain inconsolable—even angry—upon the caregiver's return, due to inconsistent caregiving and perception by the

child that they must act upset in order to receive care. Disorganized attached infants act inappropriately and unpredictably to the departure and return of their caregiver, displaying such behaviors like freezing or collapsing, due to extreme fear of the caregiver. These attachments often arise from abuse or neglect by caregivers.

Adult attachment, measured through the Adult Attachment Interview (AAI) seeks to identify the attachments that adults had with their caregivers in infancy and childhood (George, Kaplan, & Main, 1985). Adult attachment is categorized into two categories: autonomous and insecure (with dismissing, preoccupied, and unresolved subtypes). Autonomous adults were securely attached with their caregivers in early life. In the AAI, they are able to rationally and reliably reflect on memories of their caregivers and generally understand that their early attachments affected their development as individuals. Conversely, insecure adults lack these coherencies. Dismissing subtypes were avoidantly attached to their caregivers and deny the influence their caregivers had on their development in life. Preoccupied subtypes were resistantly attached to their caregivers and in adult life were still engrossed in past caregiver experiences and as a result are unable to reflect on their experiences from a removed, mature standpoint. Unresolved subtypes had disorganized attachments with their caregivers and remembered their caregivers vaguely because they had not come to terms with trauma they experienced. Unresolved attachment may have come from abuse/neglect, or from the loss of an attachment figure (death, incarceration, divorce, etc.).

III. Methods

My hypothesis for this study is environmental factors will have the most mediating and moderating effects on the transmission gap between non-autonomous mothers and secure

infants (as opposed to mother sensitivity, considered to be most affective by the linear model). The independent variables in this study are environmental factors experienced by the non-autonomous mother that may affect or reinforce her transmission of secure attachment to her infant. The dependent variable is the attachment the mother has transmitted. In this case, the population consists only of securely attached infants. The main purpose of this study is to understand *how* the dependent variable is affected by the independent variable (*how* a non-autonomous mother managed to transmit secure attachment onto her child), not *if* the dependent variable is affected by the independent variable. As mentioned, previous literature has already established this relationship (Sette, Coppola & Cassibba, 2015; Verhage et. al. 2016).

My study includes 80 infant-mother biological dyads. To draw as representative a sample of the population of mothers and infants in the United States as possible, ethnicities of dyads should be as diverse as possible. Additionally, dyads from low and high-risk backgrounds should be roughly equal in number. Such risk backgrounds can be widely applied to various groups and situations, however, for the purposes of this study, they are more narrowly defined. High-risk factors in this study include people of low socioeconomic status (low income and low levels of education), as well as poor social support (familial, romantic, and non-familial platonic friendships). Conversely, low-risk factors in this study include people of middle or high socioeconomic status and high-quality social support. However, it should be noted that both high and low risk factors do not preclude non-autonomous attachment styles experienced by the mother in her early life. Therefore, risk factor in this study can be described and analyzed as mediators of current mother-infant attachments. Additionally, the macro-system influence of culture (specifically, individualistic versus collectivistic cultures) will be evaluated in this study.

This study will be longitudinal (approximately 1 year), specifically for the purpose of maintaining the validity of the preliminary findings in the dyads. Particularly, using longitudinal measures will help to maintain that attachment status is stable in dyads. Longitudinal measures will also be used for frequent observation of mother-infant interactions in both clinical and home settings, and recurrent semi-structured interviews with the mother (to identify mother sensitivity and also risk-factors that may not be immediately apparent or in states of transition).

Specific measures used to study these factors and attachment-related behaviors in mothers include the Experiences in Close Relationships Scale-Revised (ECR-R) (Fraley, Waller, & Brennan, 2000), as well as non-psychological or clinical measures such as self-reporting on annual income, occupation, hours worked per week, and education level. Additionally if applicable, these same measures will be collected for the mother's partner. Furthermore, sources of social support (close friends, family members, etc.) for the mother should be identified. Finally, the culture in which the mother is embedded (individualistic or collectivistic) will be considered as a mediating factor. Additionally, the Strange Situation measure will be implemented more than once as another method of gauging attachment stability.

The ECR-R measures avoidant and anxious attachments and behaviors in romantic relationships, regardless of if an individual is currently involved in a romantic relationship (Fraley, Waller, & Brennan, 2000). Individualistic cultures emphasize the importance of individualism and self-reliance. Mothers of these cultures may be expected to be solely responsible for the care and well being of her child. Collectivistic cultures, by contrast, emphasize social harmony and willingness to work toward a common goal. Mothers of these cultures may have more support with childcare.

IV. Conclusion

The purpose of this study was to identify the environmental influences that allow a non-autonomous mother to form a secure attachment with her infant. The observational, longitudinal study included 80 infant-mother dyads. Non-autonomous mothers were identified through the Adult Attachment Interview. Secure infants were identified through the Strange Situation. Other measures included the Experiences in Close Relationships Scale, conducted on the mother, as well as measures of environmental factors, including factors that indicate risk status. My hypothesis for this study was environmental factors have the most mediating and moderating effects on the transmission gap between non-autonomous mothers and secure infants, more so than maternal sensitivity.

I expect that the findings of this study will support my hypothesis. Specifically, I believe that low-risk status, social support, high socioeconomic status, and dyads in collectivistic cultures most positively reinforce a secure mother-infant attachment style. Women without these supports who are identified in this study—and who still have secure attachments with their infants—should be studied in depth. Possible explanations for this population may be more influenced by non-environmental factors, such as personality type of the mother, temperament of the mother and infant, and resiliency of the mother to hardships.

There are specific limitations for this study that should be addressed in other research, including father-infant dyads, non-biological dyads (foster or adoptive), attachments in older children, attachments in parent-twin dyads, and the effects of other macro-system influences (such as political climate and freedom, the overall quality of a

local or federal welfare or social system, or certain traumatic influences such as war and natural disasters).

The results of this study may have important implications for identifying the most effective methods of intervention in women who are not securely attached to their infants. This study can help intervention by identifying which environmental factors have the most impactful and positive influence for the formation of secure mother-infant attachments.

Finally, this study may also be useful in setting a baseline of risk factors that should be paid special attention to in caregiver-infant dyads. Are there significant similarities or differences in certain caregiver populations? If so, why? What implications do these hold for our wealth of knowledge of the intergenerational transmission of attachment? The trends and correlations this study may reveal have the potential to positively impact child welfare bureaucracy, the psychological field of the study of attachments throughout life, and the well being of a multitude of caregivers and their children.

References

- Ainsworth, M. D., & Bell, S. M. (1970). Attachment, Exploration, and Separation:

 Illustrated by the Behavior of One-Year-Olds in a Strange Situation. *Child Development*, *41(1)*, 49-67.
- Bernier, A., & Dozier, M. (2003). Bridging the attachment transmission gap: The role of maternal mind-mindedness. *International Journal of Behavioral Development*, 27, 355–365.
- Fraley, R., Waller, N., & Brennan, K. (2000). The Experiences in Close Relationships Revised (ECR-R) Questionnaire. *Journal of Personality and Social Psychology*, 78, 350-365.
- George, C., Kaplan, N. & Main, M. (1985). *Adult Attachment Interview*. Unpublished manuscript, University of California, Berkeley.
- Kretchmar, M. D., & Jacobvitz, D. B. (2002). Observing Mother-Child Relationships Across Generations: Boundary Patterns, Attachment, and the Transmission of Caregiving. *Family Process*, *41*(3), 351-374.
- Sette, G., Coppola, G., & Cassibba, R. (2015). The transmission of attachment across generations: The state of art and new theoretical perspectives. *Scandinavian Journal of Psychology*, *56*, 315-326.
- van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, 117, 387–403.
- Verhage, M. L., Schuengel, C., Pasco Fearon, R., Cassibba, R., Madigan, S., Oosterman, M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2016). Narrowing the Transmission Gap: A Synthesis of Three Decades of Research on

Intergenerational Transmission of Attachment. *Psychological Bulletin, 142(4),* 337-366.