

Title: The Relationship Between Infant-Family Routines, Number of Caregivers and Infant Basal Cortisol

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Background: Family routines have been found to be related to child adjustment, marital satisfaction, and parenting competence (Fiese, 2002). Persistent stress, and the resulting frequent activation of the body's stress responses, can result in excessive wear-and-tear on the body and brain known as allostatic load (McEwen, 2000). In infants, basal cortisol levels act as an instrument to measure allostatic load (White, 2020). To our knowledge, no existing work on the impact of routines on infant development has examined the role of family structure. In traditional and minority cultures it is common for caregiving responsibilities to be divided among multiple individuals. Similarly, cultural shifts in the rigidity of gender norms have led to an increase in father's taking on a major caregiving role. Thus, it is possible that the number of caregivers in the home could be a metric of home stability that infants are sensitive to such that caregiver inconsistency elevates their stress when accompanied with a low adherence to routines. Accordingly, this study examined whether adherence to household routines will moderate the relationship between number of caregivers and cortisol levels in a sample of 3.5-month-old infants.

Methods: Participants were 3.5-month-old infants (n=108; White, 2020) surveyed at the University of Kentucky Infant Memory Lab. Families were surveyed from November 2018-March 2020. Parents reported adherence to routines using an adapted version of the Daily Living Routine subscale of the Child Routine Inventory (Sytsma, Kelley, & Wymer, 2001) and cortisol levels were assessed using saliva samples.

Results: A linear regression where cortisol was predicted by routines, number of caregivers (one vs. multiple), and the interactions of routines and number of caregivers was conducted. There was a marginally significant effect of number of caregivers such that more than one primary caregiver was associated with lower infant cortisol levels and all other effects were non-significant.

Discussion: It was expected that adherence to family routines would act as a protective factor against adverse effects resulting from home instability in the form of the number of caregivers and elevated cortisol levels. Contrary to hypothesis, adherence to household routines does not moderate the relationship between number of caregivers and cortisol levels in infants. Instead, the greater number of caregivers infants had the lower their cortisol levels were. Findings suggest that an increased number of caregivers may be a protective factor against infant stress.