

Title: Effects of early life experiences on later problematic behaviors in homeless, rescue shelter kittens

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Abstract: The effects of early familial separation have been studied in owned cats, revealing a relationship between early separation and problem behaviors, such as aggression toward humans and increased incidence of stereotypic behaviors. However, no studies to date have focused on homeless, rescue kittens. It is possible that stress experienced by their mothers may negatively affect these kittens' social development, with stress during early sensitive periods predisposing these animals to behavioral problems later in life. Behavioral and social assays provide an important window into the effects of such stress. Kittens are tested using open field, novel human approach, and novel human holding tests. These assays provide data regarding how active, social, and engaged the kittens are. At the end of the study, 60 foster kittens will have been tested at 8, 10, and 12 weeks of age. During the approach test, variables including latency to approach are measured. During the novel human holding test, variables such as duration of calm holding are measured. It is possible that there is a relationship between latency to approach and duration of willingness to be held, which would provide insight into the sociability of these kittens and whether it can be predicted. Currently, testing has been completed on 11 8-week-old foster kittens. Latency to first approach ranges from 4.66-121 seconds; and duration of first hold ranges from 1.3-20.52 seconds. Data collection is ongoing, and will provide a larger sample size. The results of this study can be used to inform guidelines for the foster program at the PEI Humane Society, as well as inform future studies with the hope to mitigate the impact of early life stress and deprivation on kittens.

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