

Studies suggest that gentle handling in early life, may help animals better cope with stress as adults.

Research question: What effect does Early Neurological Stimulation (ENS) have on puppies' behavioral stress responses in a commercial breeding kennel environment?

Methods

Subjects: 76 small-breed puppies from 16 litters at one commercial breeding kennel

Treatment was administered during the first 3 weeks of life

Puppies were randomly assigned to one of 3 treatment groups:

- **ENS:** specific handling exercises (30s daily)
- **HELD:** being held (30s daily)
- **CONTROL:** no handling

All groups (including control) received routine handling by the breeder for daily care

Stressors applied at 8 weeks of age:

- Transportation from kennel to distributor
- Isolation test (3 min)

ENS exercises include touching the puppy's foot with a q-tip, holding the puppy so they are resting on their back, and placing the puppy on a damp towel. Although it is proposed that ENS is beneficial to young animals, previous studies have shown mixed results.



Results

There was no difference between treatment groups in stress responses: the implementation of ENS did not have an effect on puppy behavior

Puppies showed more stress-related behaviors (vocalizations and decreased activity) after-transport compared to pre-transport.

Research Takeaways

We found no effect of ENS in this population of puppies from breeding kennels. Daily gentle early handling may be beneficial and is recommended; no specific protocols are needed.

Transportation is a potential stressor for puppies. Attempts to minimize the stress of transportation should be made.