

# Inter-session and Intra-session Habituation of Highly Anxious (A/J) Mice

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## Background:

- A/J – extremely anxious mouse strain
- C57 (standard mouse strain) - shows normal habituation in intra- and inter-sessions
- A decrease in exploratory behavior is considered habituation
  - From previous studies, the A/J strain did show intra-session habituation, but *did not show inter-session habituation*.
- Previous research only used 5 minute inter-sessions



Example of an open field test box

**Objective:** The experiment here is to test if extending the time from 5 to 20 minutes will affect the inter-session results. It is possible that by increasing the time, the A/J strain will show habituation by a decrease of exploration, or will exhibit a different version of habituation due to anxiety.

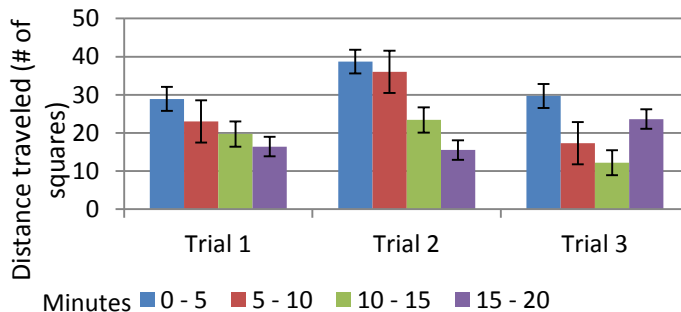
### Important Terms:

**Habituation:** commonly considered a decrease in response to a repeated stimulus

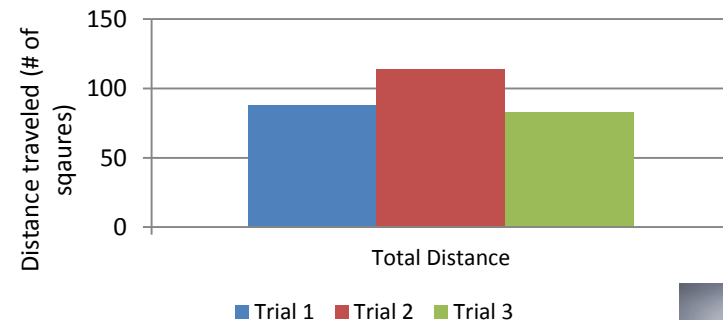
**Inter-session:** across multiple periods of time

**Intra-session:** within a single period of time

Average distance for intra-session



Average total distance for inter-session



## Results & Conclusions:

Based on distance traveled, the A/J strain showed evidence of intra-session habituation similar to previous studies. However, the inter-session results show evidence of habituation. This suggests that time spent in the open field is a critical variable for evaluation of inter-session habituation, especially when dealing with subjects predisposed to anxiety.



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