

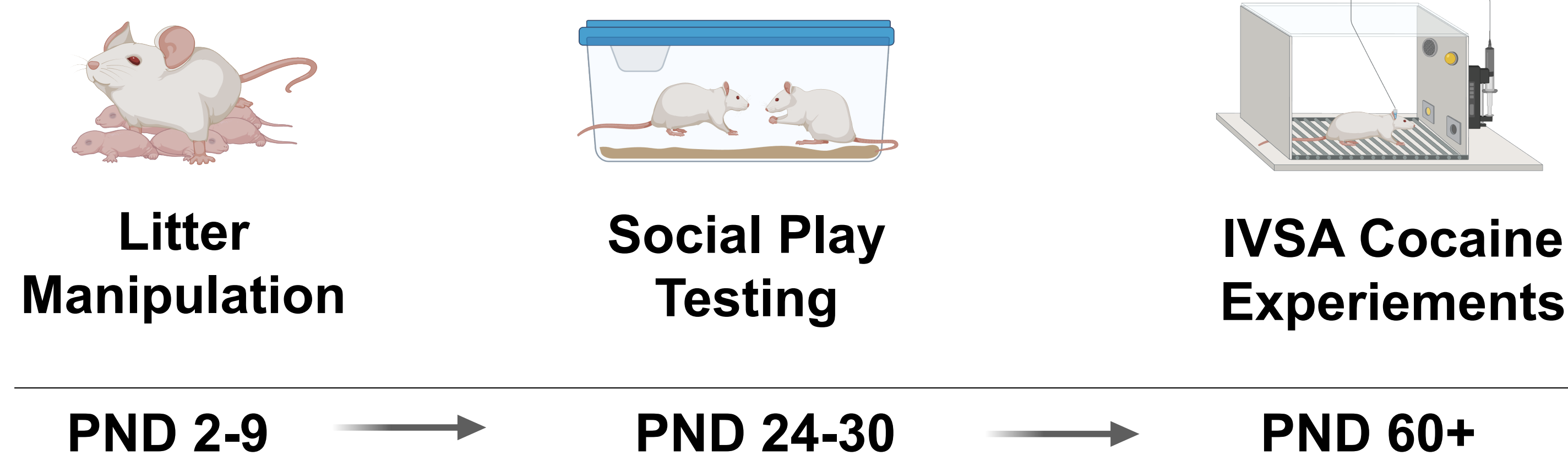
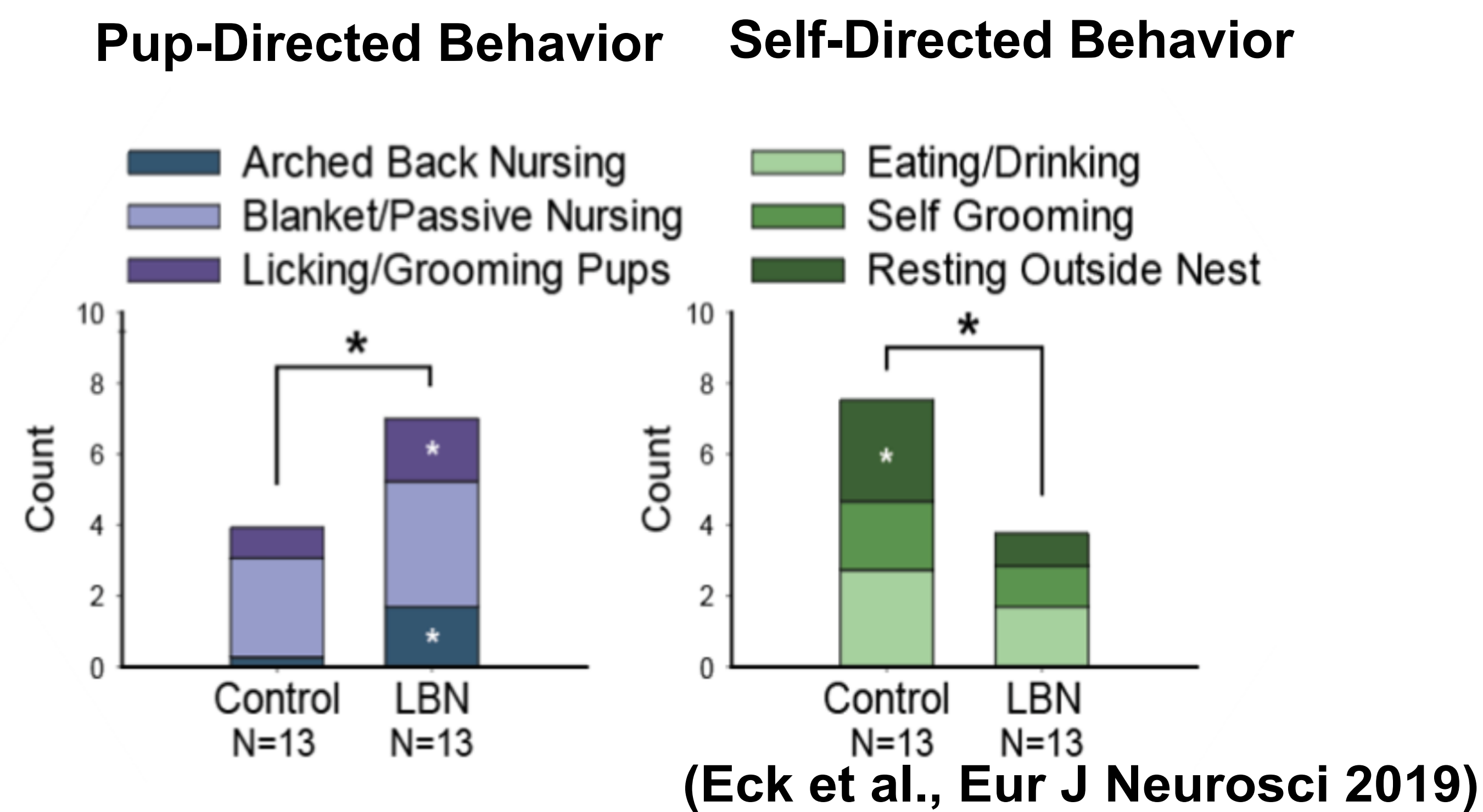
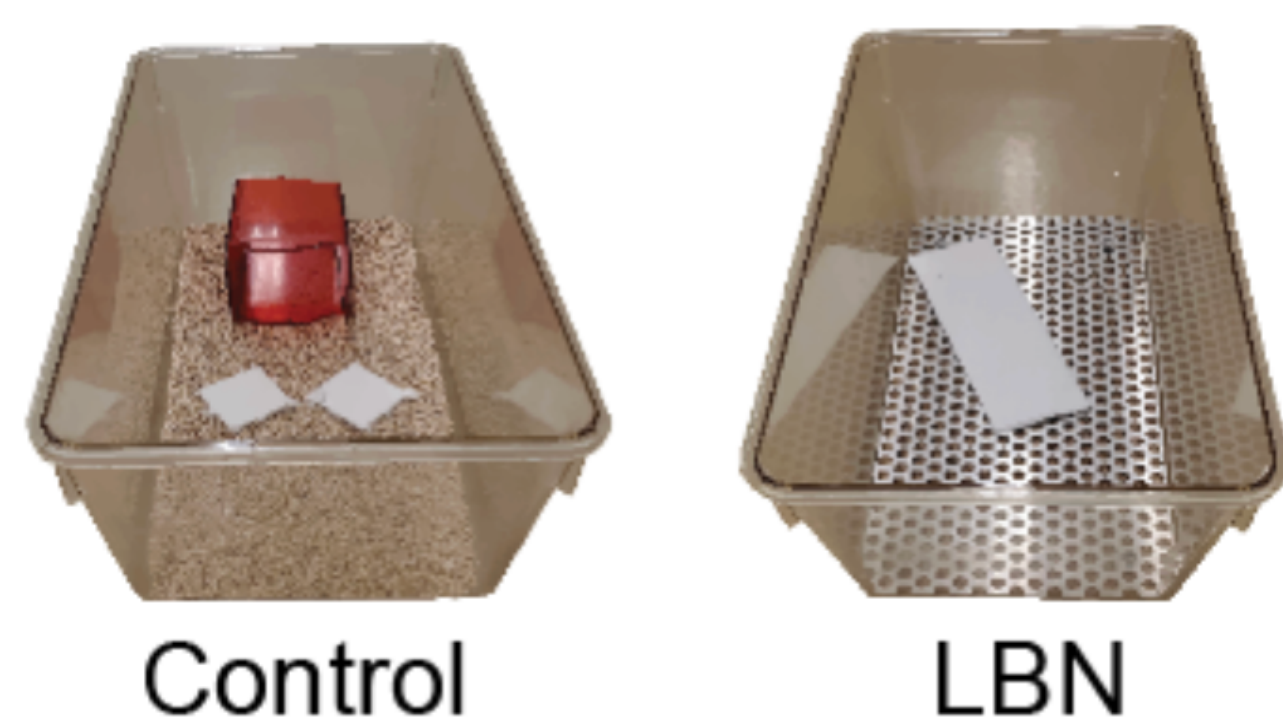
# Impact of Early Life Stress on Social Play and Drug-Taking Behavior

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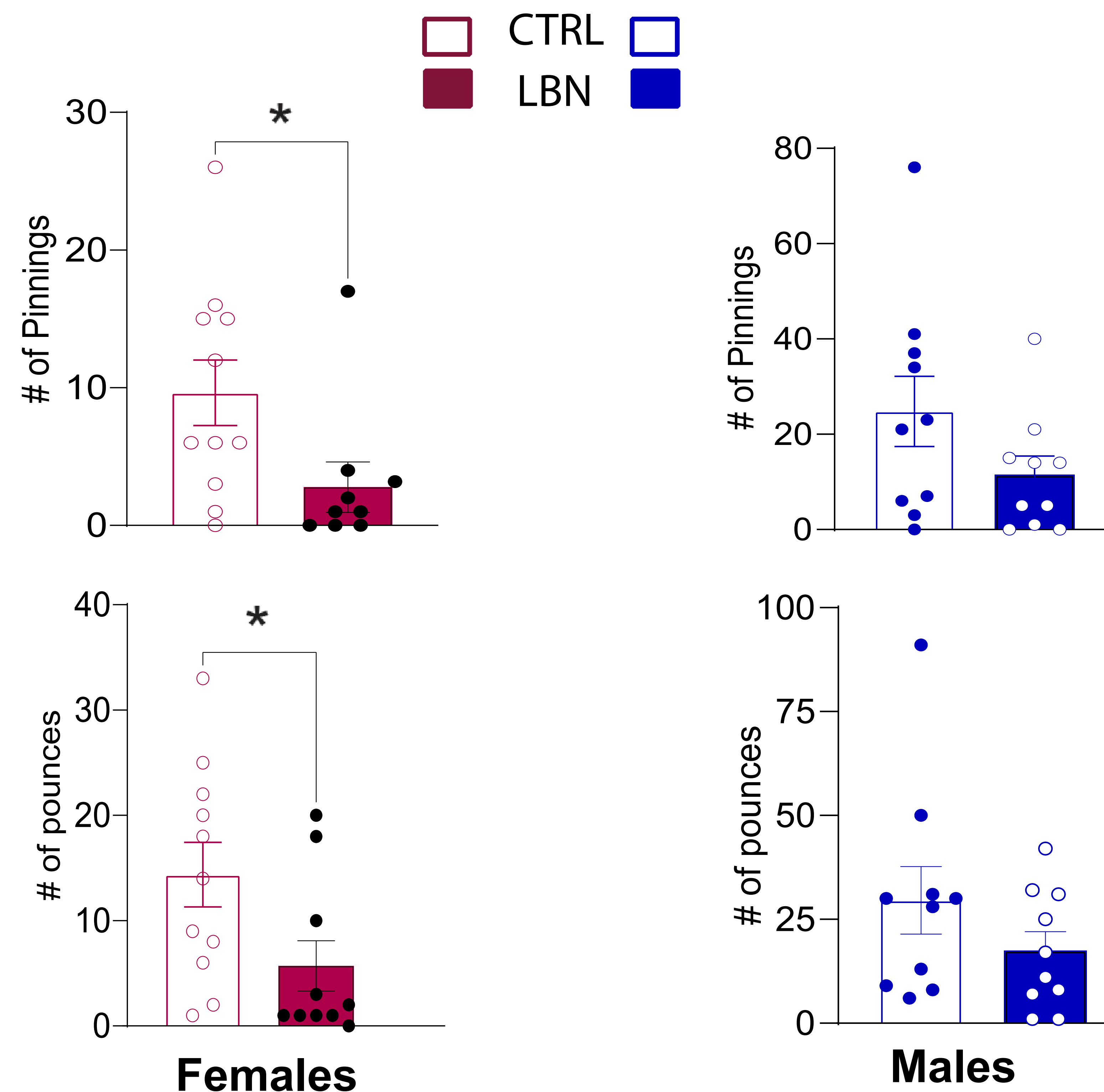
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## Experimental Design

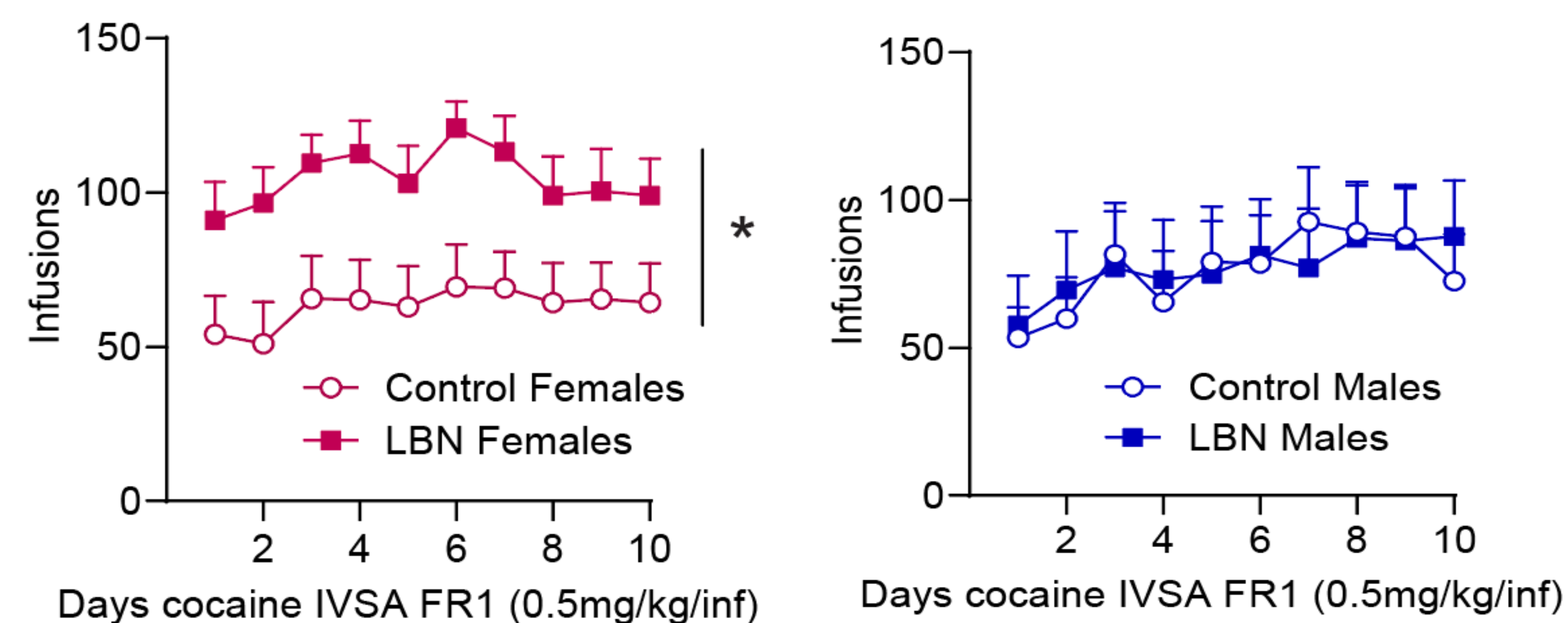
Low bedding and nesting paradigm mimics early life stress and has been shown to impact social behavior as well as increase vulnerability to future psychiatric disorders, such as substance use disorders



## 1 Early Life Stress Reduces Social Play in Adolescent Females Only



## 2 LBN Females Exhibit Increased Cocaine Intake Compared to Controls and Males



## Conclusion

- Adolescent females exposed to early life stress display significantly reduced social play behavior
- Adolescent males exposed to early life stress show no significant difference in play behavior compared to controls
- Adult females previously exposed to early life stress self-administer significantly more cocaine than control females
- Adult males show no significant difference in cocaine intake behavior regardless of ELS history

## Future Direction

- We are currently scoring individual social play behaviors to assess correlations with later drug-taking outcomes
- A Raspberry Pi system is being implemented to continuously record maternal behaviors during the LBN period
- We are also analyzing loading behavior during the initial 20-30 minutes of FR1 sessions to determine whether early-session intake reflects compulsive-like drug-taking tendencies