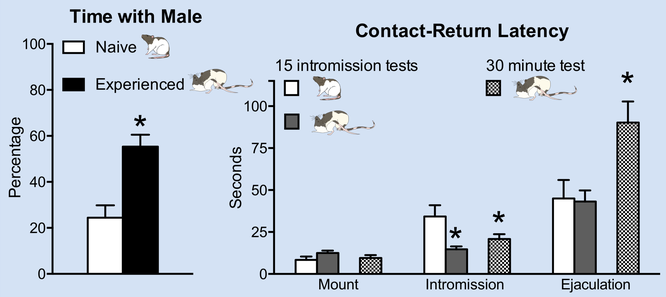
Introduction

Sexually experienced rats exhibit different patterns of paced mating behavior than naive rats.



Experiment 1: Is the longer contact-return to ejaculation in 30 minute tests relative to 15 intromission tests better explained by learning or the latency to receive each ejaculation?

Experiment 2: Does hormone regimen affect paced mating behavior in sexually experienced rats?

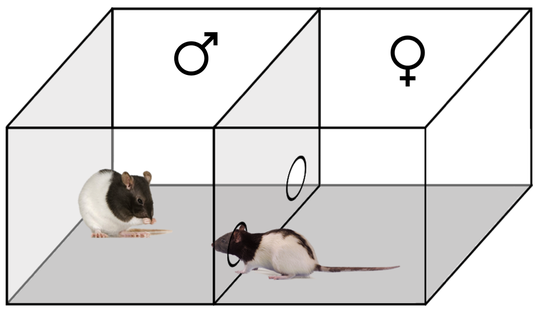
Methods

Ovaries Removed

Hormone Treated

- 10 µg estradiol benzoate (EB) 48 hrs pre-test
- 1 mg progesterone (P) 4 hrs pre-test

Paced Mating Tests



- Contact-Return Latency (CRL): time to return to male after receipt of a stimulation
- Interintromission Interval: time between each intromission
- Proceptive Behaviors: hops/darts and ear wiggles

Acknowledgements

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Can we determine the physiological processes underlying **sexual motivation** and **sensitivity** to genital stimulation?

Paced mating behavior in sexually experienced rats is influenced by **latency to ejaculations** and **hormone regimen**.

Sarah H. Meerts, Sophie L. Bokor, Helen Paglia, Yoojin Kim

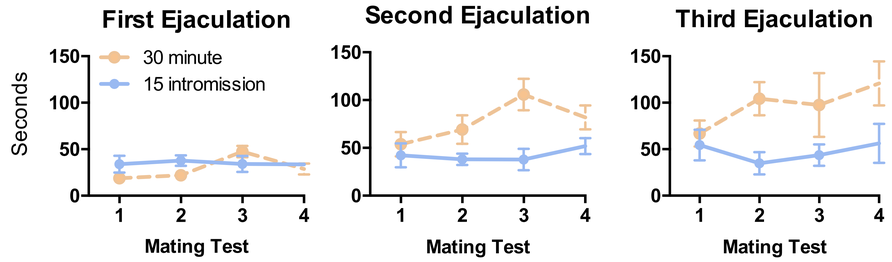
Department of Psychology, Carleton College, Northfield, MN

Meerts Lab

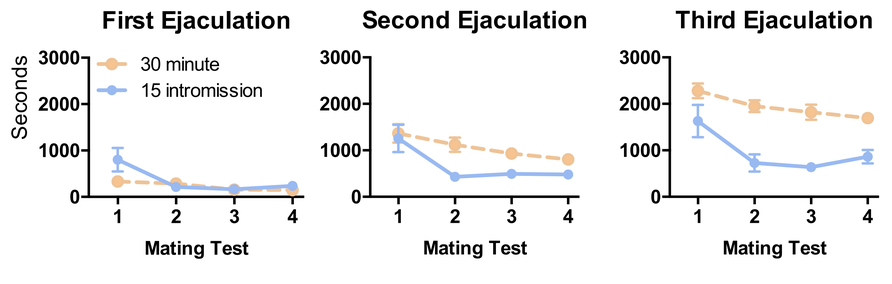
Experiment 1

30 minute/Same Male	Test 1	Test 2	Test 3	Test 4
15 intromission/Change Male	Test 1	Test 2	Test 3	Test 4

Contact-Return Latency

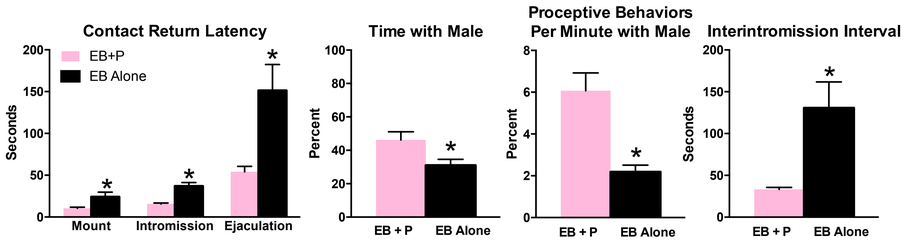


Latency to Ejaculation



Experiment 2

Three, 15 intromission paced mating tests to gain sexual experience → EB+P → EB Alone (2 µg EB/day x 6 days)



Discussion

Experiment 1: Second and third ejaculations were received later in 30 minute than 15 intromission tests.

Heightened genital sensitivity, rather than learning, better explains longer CRL to ejaculation.

If learning was a major contributor to the longer CRL to ejaculation in 30 minute tests, the effect would be evident on the first ejaculation in Tests 2-4.

Experiment 2: Progesterone matters.

Although EB Alone induced full receptivity, paced mating behavior differed substantially from rats given EB+P.

A common physiological process likely leads to longer CRLs in rats tested over a longer period of time (30 minute vs. 15 intromission tests) and without P.