



Discomfort-related use of audible and ultrasonic calls across development in pups of the fat-tailed gerbil *Pachyuromys duprasi*



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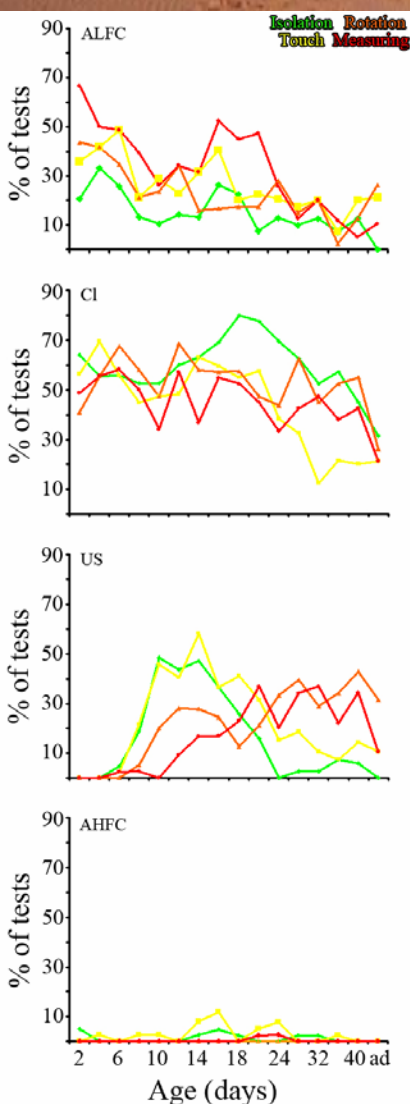
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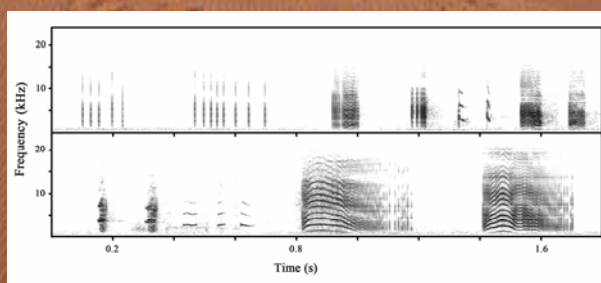
40 fat-tailed gerbil pups

Age – 1- 40 days

Total – 590 tests

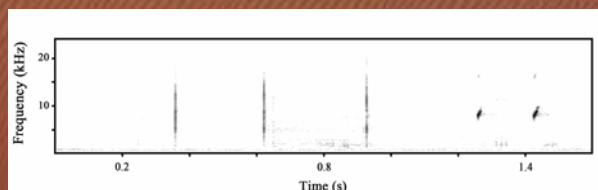


Audible low-frequency calls (ALFC)

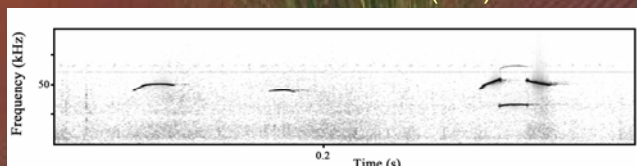


Clicks (CI)

Audible high-frequency calls (AHFC)



Ultrasonic calls (US)

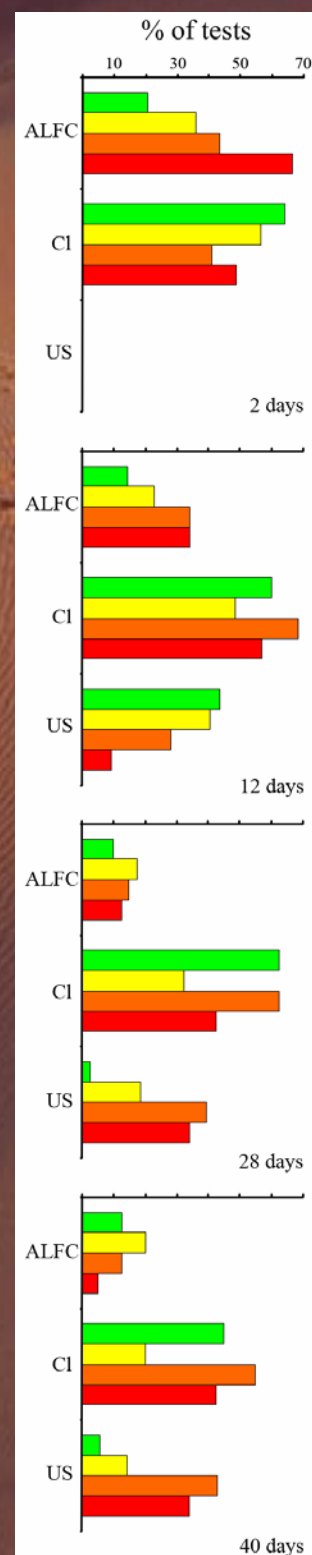


Acoustic indicators of discomfort are age-dependent in the fat-tailed gerbil. The USs are applicable as indicators of discomfort only after 6 days of age.

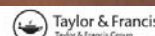
Test (420 s) contains

4 sequential steps: **Isolation**,

Touch, **Rotation** and **Measuring**



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Discomfort-related changes in pup ultrasonic calls of fat-tailed gerbils *Pachyuromys duprasi*

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