

Megan R. LaFollette
Project Summary 2016

Rats are initially afraid of humans, which leads to negative affect, poor welfare, and difficult handling. These negative effects may be reinforced in pet store rats by high-levels of novelty and human interactions that may be infrequent, inconsistent, and aversive. Playful handling, or “tickling,” is a positive handling technique that mimics rat play to reduce fear. During tickling some rats consistently produce more positive vocalizations (**high-callers**) and react differently to novelty than rats that vocalize less (**low-callers**). We hypothesized that tickling pet store rats would improve rat welfare and human-rat interactions, particularly for high-callers, as compared to controls (standard, minimal handling) or low-callers.

In my experimental design, I compared control rats to tickled high-callers and low-callers. Tickled rats received 14 minutes of tickling across 7 days. We evaluated the impacts of our procedures and individual differences by assessing rats in a 3-part unfamiliar approach and restraint test; fecal corticosterone; and play behavior in cage.

My results showed that short-term tickling improves ease of restraint with an unfamiliar handler. High-calling rate is associated with reduced fear in an unfamiliar approach test, in comparison to a low-calling rate. Overall, our results suggest that applying tickling to pet store rats, especially high-callers, may improve some human-rat interactions and rat welfare.

The Center for Animal Welfare Science facilitated the oral presentation of this work at the 50th International Society for Applied Ethology Congress. While presenting my research in the Humans and Animals Section, I gained valuable feedback from audience members and made connections with leading researchers in ethology. Additionally, while participating in a unique Measuring Animal Emotion Workshop at the conference, I learned highly relevant research techniques that are certain to be key parts of future projects.

LaFollette, M.R., Cloutier, S., O’Haire, M.E., Gaskill, B.N. 2016. Tickling pet store rats: impacts on human-animal interactions. *Proceedings of the 50th Congress of the international society for applied ethology*. July 12 – 16, Edinburgh, United Kingdom.