The physiological response to a human infant crying is similar in dogs and humans

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Dog ownership

... are considered to be part of the family (79% dog owners vs 63% cat owners)

Sad owner, sad dog?

Responded to a person crying, but not to humming

Sad owner, sad dog?

Empathy

Cognitive empathy

Emotional contagion

Sympathy

Yawning – empathy?

... or not?

When a baby cries...

Our response:

- increase in the stress hormone cortisol level
- “empathy”
- increased attention

1. Flemings, Cortes, Stallings, & Steiner (2002)
2. Giardino, Gonzalez, Steiner, & Flemings (2008)
3. de Waal (2008)
Research questions

1. Do dogs show an increased stress response when listening to a human infant crying?
2. Do dogs show an increased stress response to any aversive stimulus (e.g., computer-generated white noise)?
3. How do dogs compare to humans?

Method

Data collection

Saliva

Behaviour

Cortisol results

ANOVA: 2 (Cortisol levels) x 3 (Condition)

Behavioural results

Research questions

1. Do dogs show an increased stress response when listening to a human infant crying?
2. Do dogs show an increased stress response to any aversive stimulus (e.g., computer-generated white noise)?
3. How do dogs compare to humans?
Conclusions

1. Both dogs and humans had higher cortisol levels after baby crying only.
2. Dogs’ response to crying was a unique combination of submissiveness and alertness.

→ emotional contagion

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