The moderating effects of childhood and adult pet attachment on the association between childhood adversity and long-term health

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Introduction

Background

Pet effects: The idea that companionship with a pet can be mutually beneficial, and even improve an individual's physical health and psychological well-being (Herzog, 2011).

Adverse Childhood Experiences (ACE): Are associated with several negative health impacts, including poorer mental health (Rodriguez et al., 2021).

4 or more ACEs are known to double the risk of cancers, hospitalization, stroke, etc., and significantly increase the risk of substance use disorders, depression, and suicide (Felitti et al., 1998).

Attachment Theory: Attachment insecurity develops from unmet needs in childhood and is linked to negative long-term health consequences, such as breast cancer, cardiovascular disease, chronic pain, and stroke (Meredith & Strong, 2019; Pietromonaco & Beck, 2019; Widom et al., 2018).

Pet effects and human-animal interactions are linked to immediate and short-term reductions in stress and physiological anxiety (Ein et al., 2018). However, no studies have explored the long-term effects of human-animal interactions on health. The present study seeks to to gain insight on the relationship between childhood and adulthood pet attachment, adverse childhood experiences (ACEs), and long-term health outcomes.

Hypothesis

The authors predict that current pet attachment will moderate the association between ACEs and long-term health outcomes. Additionally, we predict an association between ACEs and adult pet attachment will be mediated by childhood attachment to pets during ACEs.

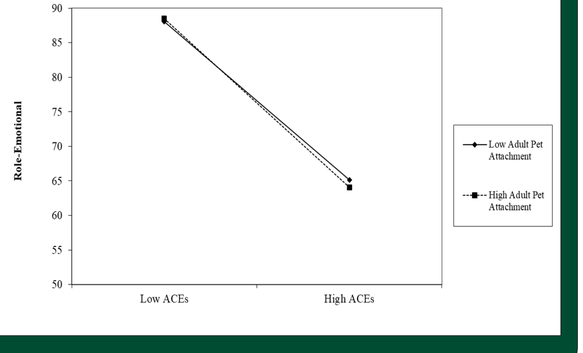

Figure 2.

Methods

Participants

1,550 participants were recruited via a Qualtrics panel and were given a small monetary compensation; the exact amount was determined by Qualtrics. The population was restricted to adults 30 years or older.
Sex: 50% male; 50% female.
Pet Ownership: Approximately 33% current pet owners; 33% previous, but not current, owners, and 33% non-pet owners

Measures

Adverse Childhood Experiences: ACE-10 scale, including self-reports of childhood pet attachment at the time of the most severe instance and most typical instance for each ACE
Long-term health: General Health Survey Questionnaire SF-36; a chronic illness self-report (e.g., heart disease, stroke, diabetes); a mental health self-report --assessing the presence of anxiety, depression, and substance abuse
Pet Attachment: Study asks participants to recall all previous and present pet ownership statuses, and rate attachment to each pet on a 1-7 scale, with 1 having little or no attachment to a pet and 7 being strongly attached to a pet.

Results

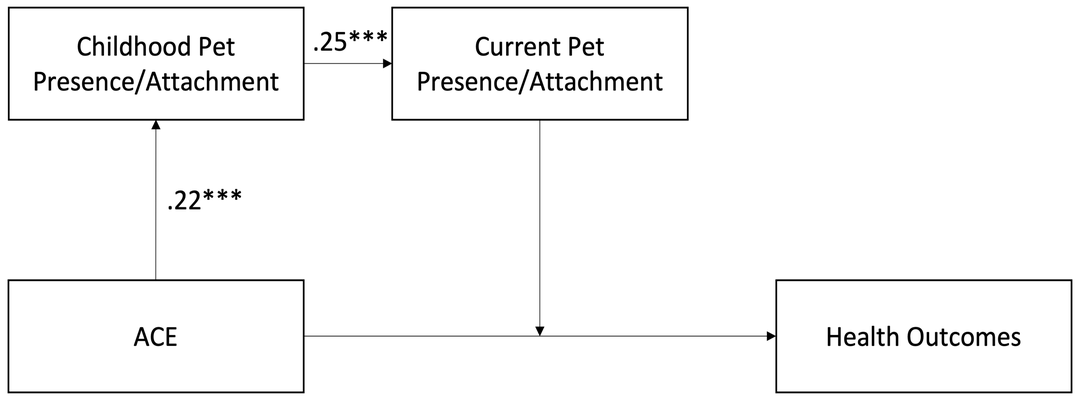

Figure 1. Pathway Analysis

Statistical analyzes confirmed the significance of the predicted pathway analysis (Figure 1.). Strong correlations existed between the selected variables: ACE and Childhood Pet Presence/Attachment; Current Pet Presence/Attachment and Childhood Pet Presence/Attachment.

Takeaway: Strong attachment to a pet in adulthood was associated with better physical functioning, but poorer emotional functioning, among those who reported high ACEs.

Discussion

ACE Effects

The results are congruent with previous studies on the negative impacts of ACE. As observed in figures 2 & 3, those who reported a high number of ACEs had significantly poorer physical and emotional functioning than those with low ACE scores. These results are consistent in all other measures of health outcomes, excluding kidney disease diagnosis.

Among the various health outcomes, the following was discovered:

- There is a significant, positive difference in physical functioning among those who have a high adult pet attachment and a high ACE score, compared to those with low adult pet attachment and a high ACE score.
- Those with high adult pet attachment were also less likely to report a heart disease, stroke, diabetes, or Alzheimer's diagnosis.
- There was an opposite effect with mental health measures: those with high adult pet attachment and a high ACE score were found to have poorer vitality, emotional functioning, and overall mental health than those with low adult pet attachment and a high ACE score.
- Those with high adult pet attachment were also more likely to report an anxiety or depression diagnosis.

Limitations

- There may be other underlying factors that contribute to higher rates of mental health symptoms among those with high adult pet attachment that were not thoroughly assessed in the study.
- Specific ACEs– ex. physical abuse vs incarceration of a caregiver, may play a role in how great the child-pet relationship impacts mental health

Implications

- Advances research on the role of pets in childhood trauma in association with health outcomes
- Provides insight on possible protective factors in the face of stress and adverse childhood experiences.

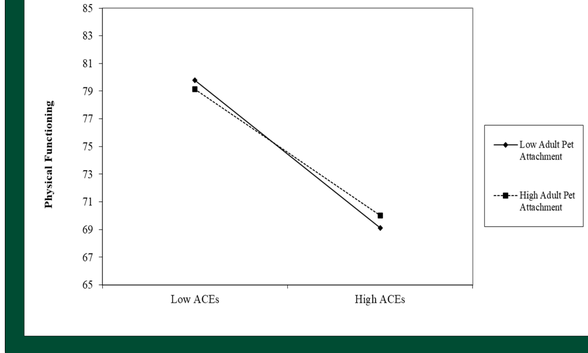

Figure 3.