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Relationship between Dog Companionship and Perceived Stress among Adults

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Abstract: This study explored how dog companionship relates to perceived stress in adults and investigated whether gender plays a role in influencing stress levels or the strength of the dog owner relationship. The sample consisted of 160 adult individuals who owned dogs. Data collection involved the use of two standardized instruments: the Perceived Stress Scale (PSS) and the Cat/Dog Owner Relationship Scale (CDORS). Statistical evaluation was carried out using SPSS software, applying Pearson's correlation coefficient and independent samples t-tests. The findings indicated a significant inverse relationship between stress levels and the quality of dog companionship, suggesting that participants with stronger bonds to their dogs experienced less perceived stress. Furthermore, gender-based analysis showed that males reported significantly higher stress levels than females. However, no significant difference was found between men and women in terms of their emotional attachment to their dogs, indicating that both genders develop similarly strong bonds with their pets. These outcomes underscore the value of dog companionship as a potential non-therapeutic means of stress reduction and reinforce existing research on the emotional and psychological benefits of human-animal interactions.

Keywords: Dog Companionship, Perceived Stress, Adults

1. Introduction

In today's fast-paced and demanding world, stress has emerged as a common experience for many adults. It often stems from personal, professional, social, and environmental pressures. Although occasional stress may be manageable or even motivating, persistent or chronic stress has been linked to several negative health outcomes, including emotional exhaustion, anxiety, depression, sleep disturbances, and compromised immune functioning (Cohen et al., 1983; Schneiderman et al., 2005). As the global focus on mental well-being increases, there is growing interest in alternative strategies that individuals can adopt independently to support their psychological health—particularly those that are non-clinical, accessible, and cost-effective.

One area receiving increased attention is the impact of companion animals, especially dogs, on human emotional well-being. Dogs are not only popular domestic animals but also valued members of many households. Their role frequently extends beyond that of a pet, offering consistent emotional support, affection, and companionship. Unlike human relationships, the bond with a dog is typically unconditional, nonjudgmental, and consistent, making it a unique form of emotional connection (Julius et al., 2012). Research has suggested that dog companionship may help reduce psychological stress, enhance mood, and provide social and emotional benefits, including reduced feelings of loneliness and improved emotional regulation (McConnell et al., 2011; Wells, 2009).

The mechanisms by which dogs support mental health appear to be complex and multifaceted. Interaction with dogs—through touch, play, or co-presence—has been associated with physiological benefits, such as increased oxytocin release and decreased cortisol levels, which are markers of emotional bonding and stress reduction, respectively (Handlin et al., 2011; Beetz et al., 2012). Additionally, caring for a pet can introduce routine, responsibility, and a sense of purpose into the daily lives of adults, especially during emotionally turbulent phases. Dogs can also encourage social interaction and outdoor physical activity, which contribute indirectly to better mental health outcomes (Friedmann & Son, 2009).

The concept of perceived stress focuses on how individuals interpret and respond to stressors in their environment, rather than the objective presence of those stressors. It reflects an individual's belief in their ability to handle demands placed upon them. The Perceived Stress Scale (PSS), developed by Cohen et al. (1983), is a widely used tool to assess how unpredictable, uncontrollable, and overwhelming individuals perceive their lives.

Understanding how dog companionship influences perceived stress can offer valuable insights into informal coping mechanisms that may be culturally and personally relevant.

Although evidence continues to grow regarding the emotional benefits of pet ownership, most empirical studies have been conducted in Western populations. Cultural attitudes toward pets, emotional expression, and stress management strategies may differ substantially in nonWestern contexts like India. Therefore, this study addresses a gap by focusing on the Indian population, where both pet ownership and conversations around mental health are becoming more prevalent. Understanding whether dog companionship can serve as a stress-buffering resource in the Indian socio-cultural setting is both timely and significant.

Gender is another important variable in this context, as prior research suggests that men and women may differ in how they experience stress and in the nature of their relationships with pets. Women are generally found to exhibit greater emotional expressiveness and stronger empathic connections with animals, while men may engage with pets in more task-oriented or recreational ways (Herzog, 2007). Exploring gender differences in both perceived stress and dog companionship can add an important dimension to the findings of this research.

To explore these associations, this study utilizes two standardized instruments: the Perceived Stress Scale (PSS) and the Companion Dog Owner Relationship Scale (CDORS). The sample consists of adult dog owners, and the research aims to investigate: (a) whether stronger dog owner relationships are associated with lower levels of perceived stress, and (b) whether gender differences exist in stress levels and dog companionship quality. In doing so, the study contributes to the broader field of human-animal interaction and adds empirical evidence to support the psychological benefits of pet ownership in adult populations.

The anticipated outcomes of this research may hold relevance for mental health professionals, dog owners, and policymakers. If supported by the findings, encouraging healthy pet-owner relationships—especially for adults dealing with high stress—may serve as a complementary practice alongside traditional therapeutic approach. Furthermore, recognizing the role of nonhuman companions in emotional resilience can broaden the scope of well-being strategies in both clinical and everyday contexts.

2. Review OF LITERATURE

A study by Krouzecky et al. (2019) explored how owning a dog affects stress perception and a psychological construct known as sense of coherence (SOC). Contrary to common assumptions, dog owners experienced more stress from routine life challenges than individuals without pets. The study also indicated that those with a greater number of human and animal social relationships perceived daily events as more stressful. Interestingly, dog ownership had no notable impact on SOC, which involves a person's capacity to comprehend, manage, and

find meaning in life events. These results challenge the prevailing notion that having a dog automatically leads to reduced stress and highlight the complexity of human-animal interactions in the context of psychological well-being.

González-Ramírez et al. (2018) conducted a study among 483 dog owners in Mexico to examine how the dog-owner relationship influences perceived stress and happiness. Using structural equation modeling and validated tools like the Monash Dog Owner Relationship Scale and the Perceived Stress Scale, they found that the quality of owner-pet interactions influenced how owners perceived their relationship with their pets. The findings also showed that the dog-owner bond and external stressors together predicted the owner's stress levels. Moreover, stress was found to negatively influence overall happiness. This study emphasized the importance of engaging, shared activities between dogs and their owners as a determinant of the psychological benefits of pet ownership.

Merkouri et al. (2022) explored how owning a dog and the strength of the dog-human bond affects mental health outcomes. Through a survey of 1,693 dog owners in the UK, the research found that stronger emotional bonds with dogs were associated with a greater sense of emotional support and companionship, but also with elevated anxiety and depressive symptoms. Lower perceived burdens of dog care were linked to improved mental health. Qualitative responses suggested that dogs help provide meaning, companionship, and distraction from negative thoughts. However, strong attachments also led to anticipatory grief and anxiety about caregiving. The study indicates that while dog ownership supports both emotional fulfillment and mental resilience, it may also introduce psychological challenges that require consideration.

Handlin et al. (2012) examined the hormonal effects of human-dog interactions. Their study showed that short-term interactions between owners and their dogs increased oxytocin and reduced cortisol levels in humans, whereas in dogs, both oxytocin and cortisol levels rose. Additionally, behaviors such as kissing dogs were linked to higher oxytocin levels in both species. Owners who experienced lower stress from dog care had dogs with higher oxytocin levels. The study also revealed that owner personality traits like neuroticism and conscientiousness influenced hormonal responses. Dogs viewed by their owners as emotional companions showed lower cortisol levels in the morning. These findings suggest that the human-dog bond affects physiological states in both animals and humans, depending on personality and the nature of their interaction.

3. Methodology

3.1 Aim

This study aims to explore the role of dog relationships in perceived stress among adults.

3.2 Variables

Independent Variable (IV): The dog relationship refers to the emotional bond and companionship shared between an individual and their dog. This includes attachment, time spent together, and perceived support. It is the independent variable as it may influence stress levels.

Dependent Variable (DV): Perceived stress reflects how overwhelmed or in control an individual feels in their daily life. It is subjective and measured using tools like the Perceived Stress Scale (PSS). It's the dependent variable influenced by the quality of the dog relationship.

3.2 Research Objectives

- a) To investigate the relationship between the dog relationship and perceived stress levels among adult pet owners.
- b) To identify gender differences in the relationship between dog relationship and perceived stress.

3.4 Hypothesis

- 1) There will be a significant relationship between perceived stress and dog companionship among adults.
- 2) There is a significant gender difference in perceived stress among adult dog owners.
- 3) There is a significant gender difference in the quality of dog companionship among adult dog owners.

3.5 Data collection procedure

The data in this particular study will be obtained with the help of the scales named "Cat/Dog Ownership Relationship Scale and Perceived Stress Scale" as well as the demographic form.

Perceived Stress Scale (PSS)

Description of the Scale: Developed by Sheldon Cohen in 1983, the Perceived Stress Scale (PSS) is a widely recognized tool used to measure the extent to which individuals view their lives as stressful. It assesses perceptions of unpredictability, lack of control, and overwhelming demands, offering insight into how much stress individuals feel they are experiencing in their everyday lives.

The PSS is available in three versions: The Perceived Stress Scale is available in three versions consisting of 14, 10, and 4 items (PSS-14, PSS-10, and PSS-4, respectively). Respondents rate each item using a 5-point Likert scale ranging from "never" to "very often," reflecting how frequently they experienced specific thoughts or emotions over the past month. The scale includes a combination of positively and negatively phrased statements, and overall, higher total scores correspond to greater levels of perceived stress.

Reliability: The PSS has demonstrated strong internal consistency across various populations. Cronbach's alpha coefficients for the PSS-10 have ranged from 0.77 to 0.91, indicating good reliability. Test-retest reliability has also been assessed, with values ranging from 0.68 to 0.86, depending on the specific subscale and time interval between tests.

Validity: The PSS has established strong construct validity. Convergent validity is evidenced by significant correlations between PSS scores and related measures of psychological distress, such as the Depression Anxiety Stress Scales (DASS-21) and Generalized Anxiety Disorder 7 (GAD-7) scales. For example, in a study of Greek adults, PSS scores showed high correlations with DASS-21 subscales for stress ($r = 0.64$), depression ($r = 0.61$), and anxiety ($r = 0.54$). Additionally, the PSS has demonstrated predictive validity, with higher scores associated with various adverse health outcomes, including increased cortisol levels, higher incidence of depression, and greater physical symptoms.

Cat/Dog Owner Relationship Scale

Description of the Scale: The Cat/Dog Owner Relationship Scale (C/DORS), developed by Howell et al. (2017), is a psychometric tool designed to assess the quality of the human-animal bond, specifically between pet owners and their cats or dogs. The scale comprises three subscales: Perceived Emotional Closeness (PEC), Pet-Owner Interactions (POI), and Perceived Costs (PC).

Reliability: The C/DORS has demonstrated strong internal consistency across its subscales. For instance, in a study involving Italian dog owners, Cronbach's alpha values for the subscales were above acceptable levels, indicating good reliability. Specifically, the Cronbach's alpha for the PEC subscale was 0.86, for the POI subscale was 0.80, and for the PC subscale was 0.74, suggesting that each subscale consistently measures its intended construct.

Validity: The Cat/Dog Owner Relationship Scale (C/DORS) demonstrates strong construct and factorial validity. Both exploratory and confirmatory factor analyses have validated its three-factor model—emotional closeness, interaction, and perceived costs—as conceptually relevant and statistically reliable. Moreover, its construct validity is further

supported by significant correlations with the Lexington Attachment to Pets Scale (LAPS), reinforcing its credibility as a measure of human-animal bonding.

3.6 Data Analysis

IBM SPSS (Statistical Package for the Social Sciences) was employed to perform data analysis for this research. Recognized for its effectiveness in processing both descriptive and inferential statistics, SPSS is a common tool in psychological studies. Initially, descriptive statistics were calculated to provide a summary of the dataset, including values such as means, standard deviations, and frequency distributions. These metrics offered foundational insight into the patterns and tendencies within participant responses across key variables.

To assess the first hypothesis concerning the association between dog companionship and perceived stress, a Pearson correlation analysis was conducted. This method was selected for its suitability in evaluating the direction and magnitude of relationships between two continuous variables. Furthermore, Independent Samples t-tests were used to examine potential gender-based differences in mean scores related to stress levels and the quality of dog companionship. These statistical tests enabled the evaluation of whether gender had a significant impact on the variables of interest. Together, these analyses facilitated a systematic examination of the study's hypotheses and contributed to a clearer understanding of the interactions and group differences within the collected data.

4. Results

The primary objective of this study was to assess the link between dog companionship and perceived stress among adults, while also examining whether gender influences stress levels or the strength of the dog-owner relationship. Data were gathered from a sample of 160 adult dog owners and analysed using Pearson's Product-Moment Correlation and independent samples t-tests.

To evaluate the first hypothesis whether a significant association exists between dog companionship and perceived stress Pearson's correlation was computed using scores from the Perceived Stress Scale (PSS) and the Cat/Dog Owner Relationship Scale (CDORS). The analysis revealed a strong, statistically significant negative correlation between these variables ($r = -0.938$, $p < 0.001$). This suggests that individuals who reported higher-quality relationships with their dogs experienced noticeably lower levels of perceived stress. In essence, participants who described their dog relationships as affectionate, positive, and emotionally fulfilling were less likely to report high stress. These results lend support to the idea that meaningful

interactions with companion animals may help buffer against psychological stress and emphasize the potential mental health benefits of strong human-animal connections.

Table 1. *Pearson correlation between perceived stress and dog companionship*

Variables	N	r	p-value
PSS Score CDORS Score	160	-0.938	<0.001

The second hypothesis proposed that there would be a significant gender difference in perceived stress levels among dog owners. An independent sample t-test was conducted to compare the perceived stress scores of male and female participants. The results showed that male participants reported significantly higher levels of perceived stress ($M = 26.46$, $SD = 8.850$) than their female counterparts ($M = 23.66$, $SD = 8.995$), with the difference reaching statistical significance, $t(158) = 1.985$, $p = 0.049$. These findings support the second hypothesis, suggesting that stress levels are not uniformly experienced across genders, and that male dog owners in this sample may be more vulnerable to psychological stress, despite the shared experience of pet companionship.

Table 2. *Gender differences in perceived stress*

Gender	N	Mean	SD	t-value	p-value
Male	80	26.46	8.850	1.985	0.049
Female	80	23.66	8.995		

The third hypothesis assumed a significant gender difference in the quality of dog companionship. This was evaluated by comparing the CDORS scores of male and female participants through another independent sample t-test. Although female participants reported slightly higher companionship scores ($M = 66.00$, $SD = 9.297$) compared to male participants ($M = 63.64$, $SD = 9.024$), the difference was not statistically significant, $t(158) = -1.631$, $p = 0.105$. Therefore, this hypothesis was not supported by the data. The results suggest that the emotional bond between humans and their dogs does not significantly differ by gender, indicating that both male and female dog owners are equally capable of forming meaningful and emotionally fulfilling relationships with their pets.

Table 3 *Gender differences in dog companionship*

Gender	N	Mean	SD	t-value	p-value
Male	80	63.64	9.024	-1.631	0.105
Female	80	66.00	9.297		

Together, these findings provide empirical evidence for the role of dog companionship in reducing stress and highlight the nuanced role of gender in stress perception, while suggesting that the emotional benefits of pet ownership are broadly accessible across genders.

5. Conclusion

The findings of the present study provide strong evidence that dog companionship plays a meaningful role in reducing perceived stress among adults. A significant negative correlation between the quality of dog-owner relationships and stress levels suggests that individuals who share close, affectionate bonds with their dogs tend to report lower levels of stress. This highlights the potential value of companion animals as informal sources of emotional support in everyday life. The results contribute to existing literature emphasizing the psychological benefits of human-animal interactions and reinforce the idea that pets, especially dogs, can serve as important contributors to mental well-being.

In addition, the study identified a significant gender difference in perceived stress, with male participants reporting higher stress levels than female participants. This contrasts with some previous findings but may reflect changing patterns in stress perception, emotional expression, or coping behaviors. While men and women may experience stress differently, the study found no significant gender difference in the quality of dog companionship, suggesting that the emotional benefits of pet ownership are not limited by gender. Both male and female participants were equally capable of forming emotionally meaningful relationships with their dogs, which speaks to the universal appeal and therapeutic potential of these bonds.

Overall, the study underscores the importance of considering companion animals in conversations about stress management and mental health support. As stress continues to be a major concern in modern life, especially among adults, promoting healthy pet-owner relationships could serve as an effective, non-clinical approach to emotional regulation. These findings encourage the inclusion of pet-based interventions in broader wellness strategies and suggest that dog companionship offers a simple, accessible, and consistent form of psychological support across diverse populations.

References

- Antonacopoulos, N. M. D., & Pynchyl, T. A. (2010). An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoös*, 23(1), 37–54.
<https://doi.org/10.2752/175303710X12627079939143>

- Barcelos, A. M., Kargas, N., Assheton, P., Maltby, J., Hall, S., & Mills, D. S. (2023). Dog owner mental health is associated with dog behavioural problems, dog care and dog-facilitated social interaction: A prospective cohort study. *Scientific Reports*, 13(1), 21734. <https://doi.org/10.1038/s41598-023-48540-z>
- Barker, S. B., Knisely, J. S., McCain, N. L., & Best, A. M. (2005). Measuring stress and immune response in healthcare professionals following interaction with a therapy dog: A pilot study. *Psychological Reports*, 96(3), 713–729. <https://doi.org/10.2466/pr0.96.3.713-729>
- Barker, S. B., Knisely, J. S., McCain, N. L., & Best, A. M. (2010). Measuring stress and immune response in healthcare professionals following interaction with a therapy dog: A pilot study. *Psychological Reports*, 106(3), 935–942. <https://doi.org/10.2466/pr0.106.3.935-942>
- Beetz, A., Uvnäs-Moberg, K., Julius, H., & Kotrschal, K. (2012). Psychosocial and psychophysiological effects of human-animal interactions: The possible role of oxytocin. *Frontiers in Psychology*, 3, 234. <https://doi.org/10.3389/fpsyg.2012.00234>
- Beetz, A., Uvnäs-Moberg, K., Julius, H., & Kotrschal, K. (2017). The influence of pet dogs on human health: An updated review of the literature. *International Journal of Environmental Research and Public Health*, 14(4), 415. <https://doi.org/10.3390/ijerph14040415>
- Clark Cline, K. M. (2010). Psychological effects of dog ownership: Role strain, role enhancement, and depression. *The Journal of Social Psychology*, 150(2), 117–131. <https://doi.org/10.1080/00224540903366752>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.
- Dargan, S. (2020). A comparative study of dog owners & non-dog owners in relation with psychological well-being, stress and happiness. *International Journal of Indian Psychology*, 8(4), 1212–1217. <https://doi.org/10.25215/0804.132>
- Esposito, L., McCune, S., Griffin, J. A., & Maholmes, V. (2011). Directions in human–animal interaction research: Child development, health, and therapeutic interventions. *Child Development Perspectives*, 5(3), 205–211. <https://doi.org/10.1111/j.1750-8606.2011.00175.x>
- González-Ramírez, M. T., Landero-Hernández, R., & Vanegas-Farfano, M. (2018). The effects of dog-owner relationship on perceived stress and happiness. *Human-Animal Interaction Bulletin*, 6(1), 15–33.

Herwijnen, I. R. V., van der Borg, J. A., Naguib, M., & Beerda, B. (2018). Dog ownership satisfaction determinants in the owner-dog relationship and the dog's behaviour. *PLOS ONE*, 13(9), e0204592. <https://doi.org/10.1371/journal.pone.0204592>