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Research Paper

Exploring Levels of Depression Among Pet Owners

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ABSTRACT

Pets and animals provide a wide range of psychological benefits, contributing to improved well-being and mental health. These benefits are recognized and utilized in various healthcare settings, enhancing the overall therapeutic experience and outcomes for individuals. The main objective of conducting this research is to identify the level of depression among pet owners by understanding their level of attachment with their pets. The Pet Attitude Scale and Beck's Depression Inventory - II is used to measure the variables. This study uses Correlation Research Design. It seeks to understand how changes in one variable are connected to changes in the other variable. It does not determine causation but helps identify patterns and connections between variables. Convenience sampling method is used. 126 participants, out of which 70 females (55.5%) and 56 males (44.5%) were part of the study. The data collection was done online using Google Forms for the two scales. IBM SPSS Statistical software was employed for data analysis.

Keywords: *Pets, Mental Health, Depression, Attachment*

The field of mental health encompasses a range of psychological conditions affecting individuals worldwide. It includes various aspects of emotional, cognitive, and social wellbeing. Mental health influences how individuals think, feel, and act, shaping their ability to cope with stress, relate to others, and make decisions. The evolution of pet ownership can be traced back to ancient times, where humans formed mutually beneficial relationships with animals. Initially, early humans likely began domesticating animals for practical purposes such as hunting, protection, and companionship. Over time, these utilitarian relationships transformed into more complex emotional bonds, giving rise to the concept of pets. Studies have consistently shown that the presence of animals can have positive effects on human emotional well-being. The human-animal bond has been associated with reduced stress, increased happiness, and enhanced overall mental health. Interacting with animals can elevate levels of oxytocin, a hormone known to promote bonding and reduce stress, fostering feelings of relaxation and contentment.

Understanding the significance of investigating the correlation between pet ownership and depression holds immense value in the realm of mental health research. By exploring this relationship, researchers aim to shed light on the potential benefits that pets may offer in mitigating or preventing depression symptoms. This area of study carries implications for

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developing innovative interventions and therapeutic approaches that incorporate the healing power of human-animal interactions. Furthermore, unraveling the mechanisms behind the positive effects of pet ownership on mental well-being can contribute to the holistic understanding of depression management and inform the development of tailored treatment strategies.

The significance of studying the relationship between pet ownership and depression lies in its potential to contribute to a holistic approach to depression management. Research indicates that while pets cannot replace professional treatment, they can complement existing interventions by providing additional support and emotional well-being. Incorporating pets into therapy or treatment plans may enhance treatment outcomes and improve overall quality of life for individuals with depression.

REVIEW OF LITERATURE

Rhoades, H et al. (2014) in their work Pet Ownership Among Homeless Youth: Associations with Mental Health, Service Utilization and Housing Status argued that their research looked at the pet ownership of 398 homeless kids who visited two drop-in facilities in Los Angeles. A pet was owned by 23% of homeless teenagers. The majority of pet owners said their pets provided them companionship and made them feel appreciated, while almost half said their pets made being in a shelter more difficult. Pet owners reported lower levels of despair and loneliness than non-pet owners.

Brooks, H et al. (2016) in their study Ontological Security and Connectivity Provided by Pets: A Study in the Self-Management of the Everyday Lives of People Diagnosed with a Long-Term Mental Health Condition aimed to study the role of pets in managing day-to-day activities of people who have chronic mental health issues. Semi-structured interviews were conducted in England having 54 subjects with a chronic mental health condition. It was found that pets were a valuable source of their lives and provided an intimate relationship. They encouraged and distracted people from illnesses when it was difficult to gain emotional support from other people.

Brooks et al. (2018) in their study The Power of Support from Companion Animals for People Living with Mental Health Problems: A Systematic Review and Narrative Synthesis of the Evidence aimed to evaluate the extent and the nature of evidence of roles of pets in the owners' mental health condition. 17 studies were used for the review, till the year 2017. Both qualitative and quantitative data was synthesized into the review study. The qualitative studies indicated that people reported a connection with animals and how they helped during the times of crisis, in their mental health improvement. Some negative aspects were also noticed such as the burden of pet ownership and the mental impact on loss of a pet. It was concluded that pets are indeed beneficial for our mental health.

Grajfoner et al. (2021) in their research The Effect of Pets on Human Mental Health and Wellbeing during COVID-19 Lockdown in Malaysia aimed to address the gap between research of impact of pets on humans in Western nations and Southeast Asia, particularly Malaysia to study how pets impacted human health during COVID-19 lockdown. A cross-sectional study was conducted which consisted of 448 Malaysian subjects. They completed an online assessment form of various psychological attributes, i.e., psychological outcomes, psychological wellbeing, positive and negative outcomes, resilience, and self-efficacy. The findings depicted that people who had animals showed a higher level of mental wellbeing compared to non-pet owners. They coped better during adverse circumstances and

experienced more positive emotions during the lockdown period. However, there was no difference in the level of depression, stress, resilience, anxiety and negative emotions between pet and non-pet owners. This proved that pets have a positive impact on some aspects of human mental wellbeing. It was also observed that cat owners showed more positive emotions and well-being than dog owners.

METHODOLOGY

Aim
To identify the level of depression among pet owners by understanding their level of attachment with their pets.

Research Questions
1. What is the relationship between the level of pet attachment and the level of depression among pet owners in India?
2. Does gender play a role in determining levels of depression among pet owners?
3. Does the designation (student/employed/unemployed) play a role in determining depression levels in pet owners?

Hypotheses
1. There is an association between an individual's level of pet attachment and their reported depressive symptoms.
2. There is no significance between gender of pet owners and their levels of depression
3. There is a significance between designation of the pet owners and depression.

Variables
1. Pet attachment/ownership
2. Depression of pet owners
3. Gender of pet owners
4. Designation of pet owners

Research Design
This study uses Correlation Research Design. It seeks to understand how changes in one variable are connected to changes in the other variable. It does not determine causation but helps identify patterns and connections between variables.

Sampling Method
The sampling technique used is convenience sampling. It is a non-probability sampling type.

Sample Size
Initially 134 was the sample size. After removing the non-pet owners, the sample size consisted of 126 participants, out of which 70 females (55.5%) and 56 males (44.5%) were the part of the study. The age range was taken from 18 to 70 years (young to late adulthood), with maximum respondents falling between 20-25 years.

Instruments
Two scales were used in this study.
1. **Pet Attitude Scale:** The Pet Attitude Scale is an assessment tool used to measure individuals' attitudes and beliefs towards pets. This scale provides a structured framework for understanding and quantifying people's perceptions, emotions, and behaviors related to pets. The scale consists of a series of 18 items or statements that

participants are asked to respond to. The options have a 7-point Likert rating ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). These items are designed to capture various dimensions of pet attitudes, such as the degree of affection, attachment, and perceived benefits associated with owning a pet. Participants typically rate each item on a scale, indicating their level of agreement or disagreement.

2. **Beck's Depression Inventory:** It is a widely used psychological assessment tool designed to measure the severity of depressive symptoms in individuals. This inventory offers a systematic and standardized approach to assess various aspects of depression and provides valuable insights into an individual's emotional well-being. Beck's Depression Inventory – II consists of a series of 21 sets of questions or statements that individuals are asked to respond to based on their experiences over a specified period. These statements cover a range of symptoms commonly associated with depression, such as feelings of sadness, guilt, loss of interest, and changes in appetite or sleep patterns. Participants typically rate each statement according to the extent to which it applies to them.

Procedure

The data collection process for this study was conducted through an online approach using Google Forms. A comprehensive survey was created, encompassing various components such as a consent form to ensure ethical considerations, questions to gather demographic information, and two specific questionnaires: The Pet Attitude Scale and Beck's Depression Inventory. Participants were invited to voluntarily complete the survey, utilizing a self-reporting method. By providing their responses to the questions and scales included in the survey, participants contributed their valuable insights and experiences related to pet attitudes and depression. Once the data collection phase concluded, the collected data underwent a meticulous analysis and interpretation stage. The IBM SPSS Statistical Software was employed, leveraging its robust capabilities for data analysis. Through this statistical tool, the collected data was processed, transformed, and subjected to various analytical techniques and tests. The analysis aimed to uncover patterns, relationships, and associations within the data, allowing for a comprehensive understanding of the research objectives. By applying statistical methods, the researcher was able to explore the interplay between pet attitudes and depression, as well as identify potential correlations and trends.

Analysis of Results

After getting the responses of the respondents in the Google Forms, the data was transferred to Microsoft Excel, in which the nominal data like gender and designation was coded to numbers (males = 1, females = 2; student = 1, employed = 2, unemployed = 3). Reverse scoring was done for the Pet Attachment Scale for items 4, 6, 9, 12, 13, 15, and 17. Higher the score, higher is the attachment to pets in the PAS Scale. Similarly, higher the scores in the Beck's Depression Inventory, higher are the levels of depression.

Descriptive: The means of the groups were computed and analysed using descriptive statistics and shown in the tabular form.

Inferential: Non-parametric statistics was used for correlation, Independent-Samples Kruskal-Wallis Test, and Independent-Samples Mann-Whitney U Test was used to draw conclusions.
It was depicted both in tabular and graphical way.

Inclusion Criteria
1. Currently a pet owner
2. Indian Nationality
3. 18-70 years
4. Both males and females
5. Student/Employed/Unemployed

Exclusion Criteria
1. People who do not currently own pets
2. People who are not Indian or reside in India
3. Those who does not fall in the targeted age range

RESULTS
Below shows the analysis of results derived from using the IBM SPSS Statistical Software.

Table No. 1 – Showing the Means and Standard Deviations between Pet Attachment and Depression
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	126	1	2	1.56	.499
PAS score	126	28	124	108.71	12.526
BDI score	126	0	57	11.21	10.423
Valid N (listwise)	126				

Table No. 2 – Showing the Correlation using Non-Parametric Tests: Spearman's Rho
Nonparametric Correlations

		Correlations	Rank of PAS Score	Rank of BDI Score
Spearman's rho	Rank of PAS Score	Correlation Coefficient	1.000	.071
		Sig. (2-tailed)	.	.433
		N	126	126
	Rank of BDI Score	Correlation Coefficient	.071	1.000
		Sig. (2-tailed)	.433	.
		N	126	126

Table No. 3 – Results of Pet Attachment and Depression across Designations
Hypothesis Test Summary

Sr	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of PAS Score is the same across categories of designation.	Independent-Samples Kruskal-Wallis Test	.538	Retain the null hypothesis.
2	The distribution of BDI Score is the same across categories of designation.	Independent-Samples Kruskal-Wallis Test	.028	Reject the null hypothesis.

a. The significance level is .050.
b. Asymptotic significance is displayed.

Graph No. 1 – Plots of Depression and Pet Attitude vs Designation
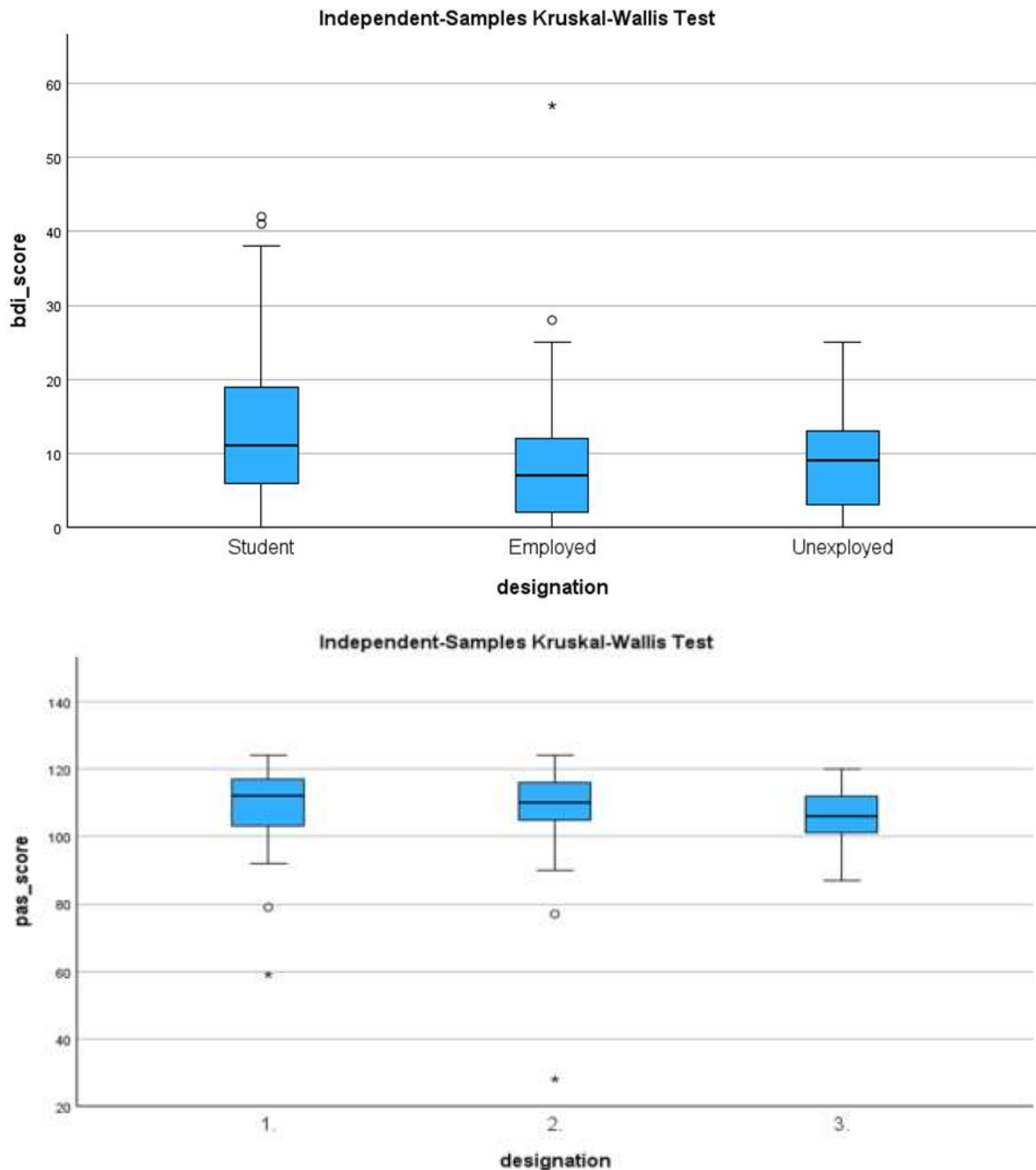

Table No. 4 – Results of Pet Attachment and Depression across Genders

Hypothesis Test Summary

Sr	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of PAS Score is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.081	Retain the null hypothesis.
2	The distribution of BDI Score is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.137	Retain the null hypothesis.

DISCUSSION

According to table 1 which shows the Means and Standard Deviations between Pet Attachment and Depression, it can be observed that the mean of the participants in pet attitude is 108.71 and mean of participants in depression is 11.21. This implies that there is a high level of attachment towards pets and the sample under study show mild mood disturbance. According to table 2 that shows correlation between pet attachment and depression using non-parametric test, it can be observed that there is no significance between level of attachment to pet with the level of depression of the individuals. There is a very weak positive linear correlation that can be seen between the 2 variables. Table 3 shows the results of pet attachment and depression across the 3 designations used, namely, student, employed and unemployed. The same has been graphically represented in Graph 1. It can be observed that there is no significant difference in the level of pet attachment across the 3 designations. On the contrary, it can be observed from the graph that the distribution of levels of depression among the participants is not same across the 3 designations. The null hypothesis has been rejected at 98% confidence level. From Graph 1, it can be seen that students are more depressed than employed and unemployed participants. Table 4 indicates the results of pet attachment and depression levels across the 2 genders the sample reported, i.e., man and woman. It was observed that pet attachment and depression levels are same across both the genders, hence there was no significance between the 2 groups.

CONCLUSION

The objective of the study was to identify the level of depression among pet owners by understanding their level of attachment with their pets.

The study's hypotheses produced distinct outcomes: firstly, the proposed link between an individual's level of pet attachment and reported depressive symptoms was not supported. Secondly, no significant correlation between pet owners' gender and depression levels was found. Thirdly, a meaningful relationship between pet owners' occupational designations and depressive symptoms was established. However, these findings need to be considered within the context of certain methodological limitations. The use of convenience sampling raises concerns about result generalization, and imbalances in participant demographics further underline the need for cautious interpretation. The absence of qualitative interviews limits comprehensive insights, while the scarcity of research on depression among Indian pet owners highlights the need for further exploration. Notably, the lack of a non-pet owner group for comparative analysis hinders the determination of whether observed mental health effects stem from pet ownership.

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