

Comparative Study

Impact of Pets on Anxiety, Depression and Quality of Life: A Comparative Study

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ABSTRACT

Pets have been a part of human lives from centuries. From the time when people first started domesticating animals, pets have played an important role in our lives. They have been a constant source of joy, companionship, and love. They are also able to understand many of the words we use, but they are even better at interpreting our tone of voice, body language, and gestures. Pets, especially dogs and cats, can reduce stress, anxiety, and depression, ease loneliness, encourage exercise and playfulness, and even improve our cardiovascular health. The importance of pets in our lives is founded on the human-animal bond concept, which is the mutually beneficial and dynamic relationship that exists between people and other animals. Objective is to compare the difference between individuals having pets with individuals not having pets in terms of anxiety, depression and quality of life. A comparative study was conducted on 80 participants, (40) individuals having pets and (40) individuals not having pets. Purposive sampling technique was used. Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI-II) and Quality Of Life Scale (QOLS) were administered to collect data from the participants. Results indicated there is a significant difference between individuals having pets and individuals not having pets in terms of anxiety, depression and quality of life. Individuals with pets reported low anxiety, depression and better quality of life than the individuals not having pets. Thus, it can be concluded that there is a significant impact of pets on individuals in terms of anxiety, depression and quality of life.

Keywords: *Domesticating animal, Pets, Anxiety, Depression, Quality of life, Mental health*

A pet is regarded as any animal kept by human beings to act as a source of pleasure and companionship. Over the years, many studies have shown that pets can have a profound impact on human physical health and well-being. Anxiety is an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune. The body often mobilizes itself to meet the perceived threat: Muscles become tense, breathing is faster, and the heart beats more rapidly (APA Dictionary).

Studies have also shown that when pets are present, a person's anxiety and depression reduces. There are some impact on interacting with dogs, specifically regarding

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improvements in positive mood (Picard, et al, 2015). Pets are a big part of their owner's lives, since they can add structure and routine to their owner's day, which is essential to being stress-free. Most pets need to be walked, fed, taken out, or cleaned everyday. Pets can help remove the stress and chaos from a person's everyday life (Robinson, et al, 2017). Depression is extreme sadness or despair that lasts more than days. It interferes with the activities of daily life and can cause physical symptoms such as pain, weight loss or gain, sleeping pattern disruptions, or lack of energy. People with depression may also experience an inability to concentrate, feelings of worthlessness or excessive guilt, and recurrent thoughts of death or suicide (APA Dictionary). Research studies have shown lower rates of suicides under the influence of pets (Moretti, et al, 2011). Pets contribute to boost the moods of adults therefore minimizing the chances of them suffering from stress and depression (Wolen, et al, 2016). Quality of life is the extent to which a person obtains satisfaction from life. The following are important for a good quality of life: emotional, material, and physical well-being; engagement in interpersonal relations; opportunities for personal (e.g., skill) development; exercising rights and making self-determining lifestyle choices; and participation in society (APA Dictionary). Pets can play an important role in providing social support that can improve people's mental and physical health, and the processes underlying how animals can be included in people's most important ingroup shed light on the psychology underlying how group memberships affect perceptions of humanity (McConnell, et al, 2019). Owning a dog contributes to the well-being of pleasure and happiness in many ways including providing support and purpose to the owner during times of poor mental health (Merkouri, et al, 2022).

METHODOLOGY

Objective

The aim of the present study was-

- To find out whether there is any difference between individuals having pets with individuals not having pets in terms of anxiety.
- To find out whether there is any difference between individuals having pets with individuals not having pets in terms of depression.
- To find out whether there is any difference between individuals having pets with individuals not having pets in terms of quality of life.

Hypothesis

In the present study following hypothesis were used-

- **H1:** There is a significant mean difference between individuals having pets with individuals not having pets in terms of anxiety.
- **H2:** There is no significant mean difference between individuals having pets with individuals not having pets in terms of anxiety.
- **H3:** There is a significant mean difference between individuals having pets with individuals not having pets in terms of depression.
- **H4:** There is no significant mean difference between individuals having pets with individuals not having pets in terms of depression.
- **H5:** There is a significant mean difference between individuals having pets with individuals not having pets in terms of quality of life.
- **H6:** There is no significant mean difference between individuals having pets with individuals not having pets in terms of quality of life.

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Sample

The study was conducted in Kolkata. Purposive sampling techniques have been used for the present study. A total of 80 participants were approached and data were collected. The total sample was divided on the basis of participants having pets(n=40) and participants not having pets(n=40) category.

Research design

In this study independent variable was impact of pets and dependent variables were anxiety, depression and quality of life. In this study experimental group was participants with pets and control group was participants without pets.

Inclusion and exclusion criteria

Participants were selected on the basis of following inclusion and exclusion criteria.

Inclusion criteria

- Age group between 18 years- 30 years.
- Middle to upper socio economic status.
- Educational qualification must be 10th pass.

Exclusion criteria

- Presence of any physical and mental disorder.
- Low socio economic status.
- Education below 10th standard.
- Poor understanding of English language.
- Those who belongs from psychological field.

Instruments

1. **Demographic details-** An informational schedule was used to gather demographic details- name, gender, age, religion, educational qualification, occupation, marital status, residence, have children (yes/no), have pets (yes/no), kind of pet/pets and how long one is having pet/pets.
2. **Beck Anxiety Inventory (BAI)-** The Beck Anxiety Inventory (BAI) was created by Aaron T. Beck and other colleagues is a 21-question multiple-choice self-report inventory that is used for measuring the severity of anxiety. The questions used, measure the common symptoms of anxiety that the subject has had during the past month (such as numbness and tingling, sweating not due to heat, and fear of the worst happening). It is designed for individuals who are of 17 years of age or older and it takes 5 to 10 minutes to complete. It is a four-point scale ranging which ranges from 0 (symptom not present) to 3 (symptom very intense). The total score is calculated by finding the sum of the 21 items. The score between 0-21 denotes low anxiety, 22-35 denotes moderate anxiety and score of 36 and above denotes severe anxiety.
3. **Beck Depression Inventory (BDI-II)-** The Beck Depression Inventory BDIII) was created by Aaron T. Beck is a 21-question multiple-choice self-report inventory. It is one of the most widely used psychometric tests for measuring the severity of depression. The BDI-II is designed for individuals aged 13 and over, and is composed of items relating to symptoms of depression such as hopelessness and irritability, cognitions such as guilt or feelings of being punished, as well as physical symptoms such as fatigue, weight loss, and lack of interest in sex that the subject have had during the past two weeks. It is a four-point scale ranging which ranges from 0 (symptom not present) to 3 (symptom very intense) and it takes 5 to 10 minutes to

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complete. The total score is calculated by finding the sum of the 21 items. The score between 0-13 denotes minimal depression, 14-19 denotes mild depression, 20-28 denotes moderate depression and 29-63 denotes severe depression.

4. **Quality Of Life Scale (QOLS)**- The Quality of Life Scale (QOLS) was created originally by American psychologist John Flanagan in the 1970's. It has been adapted for use in chronic illness groups. The QOLS was originally a 15-item instrument that measures five conceptual domains of quality of life: material and physical well-being, relationships with other people, social, community and civic activities, personal development and fulfillment, and recreation. After descriptive research the instrument was expanded to include one more item: Independence, the ability to do for yourself. Thus, the QOLS in its present format contains 16 items. It is a 7 point scale and the seven responses are "delighted" (7), "pleased" (6), "mostly satisfied" (5), "mixed" (4), "mostly dissatisfied" (3), "unhappy" (2), "terrible" (1). It takes 5 to 10 minutes to complete the test. The total score is calculated by finding the sum of the 16 items.

Procedure

All the participants were contacted personally and rapport were established. They were given a briefing about the aim of the present study. Consent forms were signed. They were assured their information would be kept confidential and used only for research purpose, then they were instructed and after that scales were administered and data were collected. For the data analysis SPSS (Statistical Package for Social Sciences) was used. Descriptive statistics (mean and SD) and inferential statistics (t-test) were used to examine the significant mean difference concerning anxiety, depression and quality of life between individuals having pets and individuals not having pets.

RESULT

Table 1: Descriptive statistics (mean and standard deviation) and inferential statistics (independent large equal sample t-test) concerning anxiety, depression and quality of life between individuals having pets and individuals not having pets.

Variables	Individual having pets (N=40)		Individual not having pets (N=40)		t-value
	Mean	SD	Mean	SD	
Anxiety	11.30	8.829	19.53	9.554	3.999*
Depression	9.73	5.711	21.35	11.016	5.925*
Quality of life	90.93	11.474	70.10	15.834	6.736*

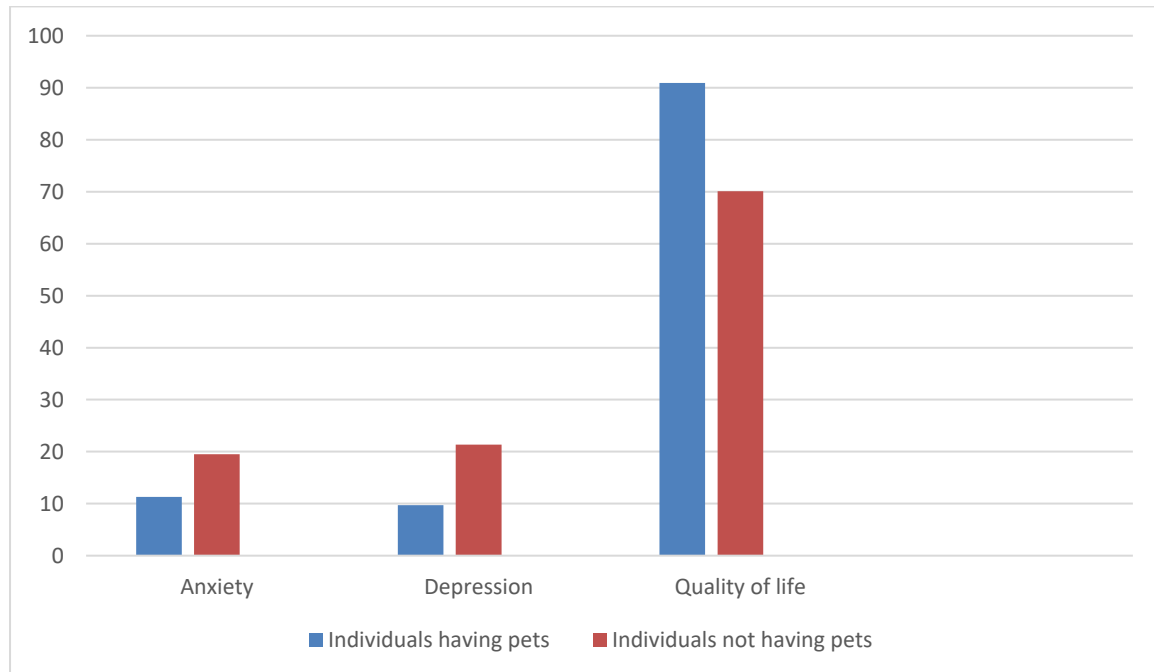
*significant at 0.01 level

It is evident from the above Table 1 that, there is a significant difference between individuals having pets and individuals not having pets in respect to anxiety, depression and quality of life. Thus alternate hypotheses (H1, H3, H5) are accepted. Higher mean indicates high anxiety level, depression level and better quality of life. Individuals having pets suffer from less anxiety, depression and have better quality of life than the individuals not having pets. There are some impact on interacting with dogs, specifically regarding improvements in positive mood (Picard, et al, 2015). Pet therapy is effective in improving depressive symptoms and cognitive function in long-term care residents with mental illness (Moretti, et al, 2011). Owning a dog contributes to the well-being of pleasure and happiness in many ways including providing support and purpose to the owner during times of poor mental health (Merkouri, et al, 2022)

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Graphical Representation

Graphical representation of mean differences of anxiety, depression and quality of life between individuals having pets and individuals not having pets.



DISCUSSION

To compare whether there is any difference between individuals having pets with individuals not having pets in terms of anxiety, depression and quality of life was the objective of the present study. The result indicated that there is a significant difference between individuals having pets and individuals not having pets in respect to anxiety, depression and quality of life. Anxiety level is lower among the individuals having pets because it may be due to petting and interacting with pets decrease cortisol level and increase the level of serotonin and dopamine, these are the hormones that calm and relax the nervous system. People with pets have a lower risk of depression and anxiety and a better quality of life (Erdoğan, et al, 2022). Pets are a big part of their owner's lives, since they can add structure and routine to their owner's day, which is essential to being stress-free. Most pets need to be walked, fed, taken out, or cleaned everyday. Pets can help remove the stress and chaos from a person's everyday life (Robinson, et al, 2017). Pet ownership is associated with fewer anxiety symptoms later in life above the impact of depressive symptoms (Bolstad, et al, 2021). From the result it can be seen that individuals having pets suffer from less depression than the individuals not having pets. Pet can be a source of unconditional love, which can help reduce feelings of loneliness and isolation. Pets also make individuals become more responsible and Pets help the individuals to be active and distracted from their negative thoughts and loneliness. Petting secretes happy hormones serotonin and dopamine that helps the individual to feel light and happy. Pet ownership and animal-assisted therapy are likely to continue because of the positive subjective feelings many people have toward animals (Cusack, et al, 2014). Pet therapy is effective in improving depressive symptoms and cognitive function in long-term care residents with mental illness (Moretti, et al, 2011). Regression analysis revealed that in Dhaka, pet owners were associated with lower levels of depression compared to non-pet owners (Chakma, et al, 2022). Quality of life is found to be better among individuals having pets. Pets improve the quality of life by maintaining both physical and

mental health of the person. Contact with animals has been increasingly recognized as being beneficial to mental health and wellbeing for their therapeutic function. Playing or walking with pets regularly allows physical exercise that reduces blood pressure and improves health. Mental health practitioners should be aware and considerate of the importance of pets in people's lives as well as individual differences in the potential capability of pets to reduce mental health symptomology and overall wellbeing (Hawkins, et al, 2021). Owning a dog contributes to the well-being of pleasure and happiness in many ways including providing support and purpose to the owner during times of poor mental health (Merkouri, et al, 2022). Research studies have shown participants reports of pet-related contributions to their well-being provide impetus to conduct more formal research on the mechanisms by which pets contribute to recovery and to develop pet-based interventions (Wisdom, et al, 2009). Pets can play an important role in providing social support that can improve people's mental and physical health, and the processes underlying how animals can be included in people's most important ingroup shed light on the psychology underlying how group memberships affect perceptions of humanity (McConnell, et al, 2019).

CONCLUSION

In the present study there exists a significant mean difference between individuals having pets with individuals not having pets in terms of anxiety, depression and quality of life. The stress and depression were found to be higher among individuals not having pets. The quality of life was found to be lower among individuals not having pets

Limitations

This study has certain limitations as no study is completely flawless. The following aspects may be regarded as the limitations of the study-

1. Due to the shortage of time compromise had to be made with the sample size.
2. Chance of biasness could not be controlled as self administered inventories were used for data collection.
3. Personal interview could not be held to understand the individual difference.
4. Data were collected from participants belonging to various educational background, so effect of different educational background could not be controlled, impact of children on mental health could not be studied.

Implications

The purpose of the present study was to compare the difference between individuals having pets with the individuals not having pets in terms of anxiety, depression and quality of life. From the result it is seen that individuals not having pets have higher anxiety and depression and low quality of life. Though several factors can be responsible for this like interpersonal relationship, lack of family support, conflicts, low self confidence, low income, career issues and many more. After investigating all the aspects it can be said that direct interaction and petting is effective in increasing positive mood. Interaction with dog is a low cost intervention that could have great benefits. Individuals not having pets can spend time with pets because they distract from the negative thoughts and give company. The daily feeding, exercising, affection and grooming helps the young ones know and understand the importance of consistency, obligation and appreciation for the rewards emerging from owning and keeping pets. This helps in teaching individuals life lessons such as becoming responsible which is an essential life skill. When one is low and doesn't feel like talking or meeting people and when they don't have the drive to do the routine activities, here the pets play a huge role by pushing the people to get up and engage in activities as when one is having pets, they need to take care like a child. Even if the people don't feel like getting up but they have to engage in

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activities like brushing, feeding the pets. It's a two way process where spending time with pets have an impact on human plus the pet itself. Animals get the shelter, food, love and care from the humans too. It enhances the human – animal bond from where both the animals and the humans are getting benefits. Beside this, there is a need to promote the fact that pets are an important part of healing process for people who experience mental or physical problems and also how the behaviours of both the animals and humans influence each others.

Suggestions for Further Research

Impacts of pets on anxiety, depression and quality of life are still not yet investigated adequately in Indian culture. So, there is enough opportunity for further research. Further research may take the following as a consideration-

1. Quality methods and quantitative methods both can be used to enhance the quality of work.
2. Impact of educational qualification on mental health can be investigated.
3. How children impact mental health can be studied.
4. Samples can be drawn from different areas of India to get a more clear understanding.
5. Planning and time management is important.
6. Personal interview sessions after the research study can be conducted to know about the individual differences.

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Conflict of Interest

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