EFFECT OF PET OWNERSHIP ON MENTAL WELLBEING

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Abstract

Pet owners are believed to be less lonely compared to non-owners. This study aimed to investigate the potential impact of pet ownership on mental well-being among pet owners in Kathmandu Valley. Using a quantitative research approach, data were collected through an online survey that had the Warwick-Edinburgh Mental Well-being Scale (WEMWBS). Total of 100 participants were included. The study examined the relationship between pet ownership and mental health. The effect of other demographic variables such as age, gender, employment status, and family structure was also considered based on mean scores. Descriptive statistics and an independent sample t-test were conducted to compare well-being scores. Pet owners reported a higher mean mental well-being score (M = 47.5) than non-pet owners (M = 45.86), but the difference was not statistically significant ($t(98) = 0.46$, $p > 0.05$). Employment status and family structure appeared to have a stronger influence on mental well-being than pet ownership. Findings suggest that while pet ownership may offer minor psychological benefits, it may not determine mental well-being alone. Further research is recommended to explore the complex dynamics between pet companionship and psychological well-being in diverse socio-cultural contexts.

Keywords : Pet ownership, mental health, well-being, WEMWBS, Kathmandu

1. INTRODUCTION

Pets play a significant role in human life and health, enhancing physical, mental, psychological, and social well-being. Research has consistently shown that a strong human-animal bond contributes positively to mental health. According to Martins et al. (2023), pet ownership is associated with increased physical activity. Similarly, based on a recent American Psychiatric Association (APA) survey, 86% of pet owners said their pets mostly improve their mental health (APA, 2024). Regular responsibilities such as feeding, walking, and playing with pets can add structure to daily life, while companionship from animals is linked to reduced stress and anxiety levels.

Pets have also been described as critical sources of companionship, particularly during periods of isolation or psychological distress. Individuals with long-term mental health conditions frequently report that pets provide a sense of security and routine, helping to mitigate symptoms of anxiety and depression (Human Animal Bond Research Institute [HABRI], 2024; National Institutes of Health [NIH], 2018). Brooks et al. (2018) emphasized that pet companionship may reduce loneliness and offer emotional support where human social networks are insufficient. Similarly, Kurdek (2009) suggested that dogs can function as attachment figures, fulfilling relational roles similar to those typically occupied by close human connections.

Despite the growing consensus on the therapeutic benefits of pets, some scholars argue for a more nuanced understanding. Herzog (2011) posited that the benefits of pet ownership are not uniform and may be moderated by individual differences in personality, lifestyle, and expectations. McConnell et al. (2011) further noted that the psychological benefits of pet companionship are significantly enhanced when embedded within a broader, supportive human social network.

In Nepal, particularly in the Kathmandu Valley, the mental health landscape is shaped by unique socio-cultural and structural factors. According to a recent IPSOS global survey, mental health has emerged as a top public

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health concern, surpassing conditions such as cancer and infectious diseases (IPSOS, 2023). Kathmandu's residents face distinct urban stressors, including overcrowding, environmental pollution, intense academic and professional pressures, and limited access to mental health care. Mental health stigma remains prevalent, with psychological distress often interpreted as a moral or spiritual failure. In such a context, non-traditional sources of emotional support such as pet companionship may offer important, yet understudied, coping mechanisms.

While global literature highlights the potential mental health benefits of pet ownership, there remains a lack of empirical research examining these effects within the socio-cultural environment of Nepal. Given the variability in cultural attitudes toward animals, it is unclear whether the positive outcomes observed elsewhere can be generalized to this setting. The general objective of the research is to assess the impact of pet ownership on mental health and well-being in Kathmandu. The specific objective are:

- To determine the mental health benefits experienced by pet owners in Kathmandu.
- To analyze the influence of factors like age, gender, economic status, and family size on the relationship between animals and people in Kathmandu.

2. METHODOLOGY

This study adopted a comparative quantitative research design to explore the differences in mental well-being between pet owners and non-pet owners in Kathmandu Valley. The research was carried out across the Kathmandu, Lalitpur, and Bhaktapur districts, which together form the most urbanized region in Nepal. This area was selected due to its increasing prevalence of both mental health concerns and pet ownership trends.

Participants were surveyed using a structured online questionnaire administered via Google Forms. The survey incorporated demographic questions and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), a validated 14-item instrument designed to measure mental well-being on a five-point Likert scale. This scale was chosen for its reliability and ease of interpretation.

The total sample comprised 100 individuals, evenly split between pet owners and non-pet owners. Participants were selected using a convenience sampling method, with recruitment conducted through social networks and online platforms. To be eligible, respondents had to reside in Kathmandu Valley and be at least 16 years old. The study included a diverse group in terms of age, gender, education level, employment status, and family structure.

The data were collected directly from survey responses collected through an online form. Variables assessed in this study included age, gender, educational qualification, employment status, and type of family structure. Pet-related variables included type and number of pets, duration of ownership, and time spent daily with pets.

The statistical methods used for data analysis included descriptive statistics such as means, frequencies, and standard deviations, which helped summarize the demographic characteristics and well-being scores of participants. An independent sample t-test was used to compare WEMWBS scores between pet owners and non-pet owners, determining the significance of any observed differences. Additional subgroup analyses were conducted to examine the effects of demographic variables and specific pet-related characteristics.

The study was conducted in accordance with ethical research practices. Participants were provided with clear information about the purpose of the research, and informed consent was obtained electronically. The survey was anonymous, and all data were kept confidential. No personally identifying information was collected, ensuring the privacy and integrity of participant responses.

3. RESULTS

3.1 GENERAL FINDINGS

The analysis of overall WEMWBS scores revealed only marginal differences in mental well-being between pet owners and non-pet owners. Although a number of global studies have shown a correlation between pet ownership and improved mental health, the findings from this study do not support that relationship within the context of Kathmandu Valley. The mean WEMWBS score for pet owners was found to be 47.5, while non-pet owners had a slightly lower mean score of 45.86. This small difference of 1.64 points was not statistically significant, as confirmed by the results of an independent sample t-test ($t[98] = 0.46$, $p > 0.05$). These findings suggest that pet ownership alone does not significantly influence mental health outcomes in this sample group.

3.2 SOCIO-DEMOGRAPHICS OF PARTICIPANTS

Table 1: Socio-Demographics Of Participants

Demographic Variable	Category	Frequency	Percentage
Age	16-20	23	23%
	21-24	51	51%
	25-28	11	11%
	28+	15	15%
Gender	Male	48	48%
	Female	52	52%
Education	Higher Secondary (+2)	23	23%
	Bachelor's Degree	65	65%
	Master's Degree	12	12%

Employment Status	Employed	54	54%
	Unemployed	46	46%
Family Structure	Nuclear	65	65%
	Joint	22	22%
	Living Alone	13	13%

Age

The participant pool was predominantly composed of younger individuals. A majority of respondents (51%) were between the ages of 21–24, with 23% aged 16–20, 11% aged 25–28, and 15% over the age of 28. The predominance of young adults in the sample could potentially skew the results, especially since younger populations tend to exhibit different psychological stressors and lifestyle behaviors compared to older adults. These age-related dynamics may influence both the nature of pet ownership and mental health perceptions.

Gender

Participants were nearly evenly split between genders, with 52% identifying as female and 48% as male. There were no respondents identifying outside of the gender binary. Despite this balanced representation, no significant difference was found in the WEMWBS scores between male and female respondents. This indicates that gender, in this study, did not play a determining role in the relationship between pet ownership and mental well-being.

Education Level

The respondents were relatively well-educated, with 65% having attained a bachelor's degree, 23% having completed higher secondary education (+2), and 12% holding a master's degree. Despite variations in educational attainment, mental well-being scores remained relatively consistent across education levels, indicating that education did not strongly influence the observed relationship between pet ownership and mental health.

Employment Status

Among the 100 respondents, 54% reported being employed while 46% were unemployed. The higher proportion of unemployed participants can likely be attributed to the youthful demographic of the sample, many of whom were still pursuing their education. Employed individuals had significantly higher average well-being scores (49.33) compared to their unemployed counterparts (43.57), suggesting that employment status may be a more influential factor in shaping mental well-being than pet ownership.

Family Structure

A total of 65% of respondents reported living in nuclear families, 22% in joint family households, and 13% lived alone. Those residing in nuclear family settings exhibited the highest average WEMWBS scores (47.12), followed by individuals living alone (46.38). Respondents living in joint families reported the lowest well-being scores (45.55). These findings suggest that individuals in more independent or intimate living arrangements may experience slightly better mental health than those in larger, joint family settings.

3.3 Pet owner's perspective on mental wellbeing

Types of Pet

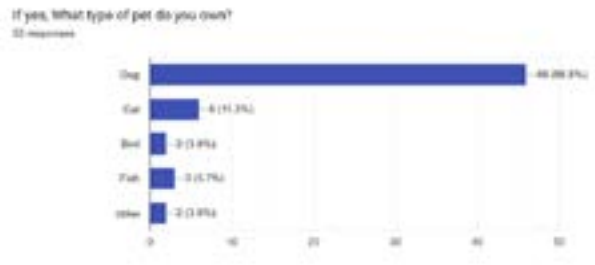

Figure 1: Pet Type

Among pet-owning participants, dogs were the most popular pets, owned by 92% of respondents. Other commonly owned pets included cats, birds, and fish, often owned in combination. Bird owners had the highest average well-being score (53), suggesting that bird ownership may provide calming or emotionally fulfilling experiences. On the other hand, cat owners had the lowest average score (39), which may be influenced by the typically more independent and less interactive nature of cats, or perhaps by the psychosocial profiles of cat owners themselves.

Number of Pets

Most pet owners (76.9%) reported having only one pet, 13.5% had two pets, 5.8% owned three pets, and just 3.8% had more than three. No consistent trend was observed between the number of pets and mental well-being scores, indicating that simply owning multiple pets does not equate to increased psychological benefits.

Duration of Pet Ownership

The duration of pet ownership varied among respondents, with 34.5% reporting ownership for over five years, 32.7% for one to three years, 12.7% for three to five years, and 20% for less than one year. Despite these variations, no significant correlation was found between the length of pet ownership and mental well-being, suggesting that long-term ownership alone may not yield enhanced psychological outcomes.

Time Spent with Pets

A notable finding emerged regarding the amount of time spent with pets daily. Approximately 40.7% of pet owners spent one to two hours per day with their pets, an equal percentage spent more than three hours, and 18.5% spent less than one hour. Surprisingly, those who spent less

than one hour with their pets had the highest average WEMWBS score (50.6), whereas those spending more than three hours scored the lowest (45.82). This may imply that excessive reliance on pets for companionship could be associated with lower overall well-being, possibly reflecting social isolation or other underlying stressors.

Activities with Pets

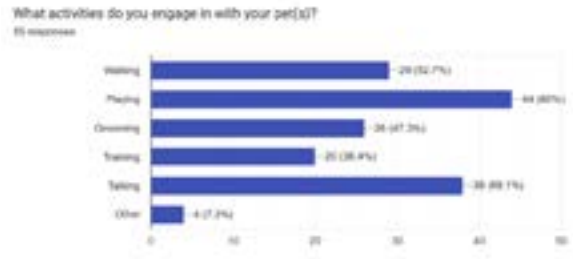

Figure 2: Activities done with Pets

Pet owners engaged in a variety of activities with their pets, the most common of which included playing, grooming, and walking. While these activities are typically perceived as emotionally rewarding, the data did not indicate any strong relationship between specific pet-related activities and higher WEMWBS scores.

Emotional Support

When asked whether they received emotional support from their pets, an overwhelming 89.1% of respondents answered affirmatively. Only 1.9% disagreed with this statement. However, despite the high level of perceived emotional support, there was no significant increase in mental well-being scores among those who reported such benefits, suggesting that subjective feelings of support do not always translate into measurable improvements in well-being.

Motivation for Pet Ownership

The most common reason for pet ownership among participants was companionship (56.5%). Other motivations included entertainment (16.1%), therapy (14.5%), and security (12.9%). These findings highlight that emotional and relational factors drive pet ownership more than utilitarian purposes in this urban context.

3.4 WEMWBS Scores and Mental Health

Age and Well-being

A deeper analysis of WEMWBS scores showed that 36 respondents had scores between 14 and 42, placing them in the lowest 15% of the well-being scale. The majority of these low-scoring respondents were in the 21–24 and 16–20 age groups, suggesting that younger individuals may be more susceptible to mental health challenges in this context. Additionally, 29 individuals had scores below 41, a threshold that suggests probable clinical depression. These findings reinforce the need for targeted mental health interventions among youth populations in Kathmandu.

Pet Ownership and Mental Health

Although pet owners had a slightly higher average WEMWBS score (47.5) compared to non-pet owners (45.86), the difference was not statistically significant. The results of an independent sample t-test ($t(98) = 0.46$, $p > 0.05$) confirmed that pet ownership alone does not significantly contribute to improved mental well-being among the sample population.

Well-being by Pet Type

Among all pet types, bird owners exhibited the highest average WEMWBS score (53), followed by dog owners (47.37), while cat owners had the lowest score (39). This disparity may reflect differences in the type and quality of interaction that different pets offer their owners, with birds and dogs potentially fostering more structured and engaging relationships.

Well-being by Time Spent with Pets

An inverse relationship was observed between time spent with pets and well-being. Those who spent less than one hour per day with their pets reported the highest mental well-being scores (50.6), while those spending more than three hours had the lowest (45.82). This counterintuitive finding may suggest that individuals who are emotionally dependent on their pets or spend extended periods with them may be compensating for other deficits in social interaction or emotional stability.

Well-being by Demographics

Demographic factors such as employment status, gender, and family structure were also found to influence well-being. Employed individuals scored significantly higher (49.33) than unemployed ones (43.57), underscoring the role of financial and professional stability in mental health. Gender differences were minimal, with females scoring 47 and males 46.33 on average. Family structure also showed variation, with nuclear family members having the highest average well-being (47.12), followed by individuals living alone (46.38), and joint family members scoring the lowest (45.55).

4. DISCUSSION

The results from the questionnaire showed that pet owners had a slightly higher average WEMWBS score (47.5) compared to non-pet owners (45.86). The independent samples t-test revealed that the difference in WEMWBS scores between pet owners (47.5) and non-pet owners (45.86) was not statistically significant. This result indicates that pet ownership does not have a meaningful impact on mental well-being within the sample. Consequently, the null hypothesis, which states that there is no significant difference in mental well-being between pet owners and non-pet owners, is supported. This finding suggests that while pet ownership may offer

some psychological benefits, these effects are not strong enough to produce a statistically significant difference in overall mental well-being.

When looking at the influence of different pet types, bird owners reported the highest well-being score (53), followed by dog owners (47.37), while cat owners had the lowest score (39). This challenges the common belief that all pets provide equal mental health benefits. The higher well-being among bird owners could be due to the minimal care required, allowing for companionship without added responsibilities. In contrast, cat owners reported lower well-being, which may be influenced by lifestyle factors or even pre-existing mental health conditions that led them to prefer cats as companions.

Gender differences in well-being were also observed, but the gap was small. Females had a slightly higher WEMWBS score (47) compared to males (46.33), suggesting that gender does not significantly influence the relationship between pet ownership and mental health. Interestingly, this finding contrasts with some global studies (Grajfoner et al., 2021; Waltham Book of Human-Animal Interaction, 2005; Lebid & Simonova, 2021). that suggest women benefit more from pet companionship, possibly due to stronger emotional connections with animals.

Among all the factors studied, employment status had one of the most significant impacts on mental well-being. Employed individuals had a notably higher WEMWBS score (49.33) compared to unemployed individuals (43.57), highlighting that job security, financial stability, and social engagement through work are crucial for mental well-being. While pets may provide emotional support, they do not appear to fully compensate for the stress and challenges associated with unemployment.

Family structure also played a role in mental well-being, though the differences were not substantial. Individuals from nuclear families had the highest well-being score (47.12), followed by those living alone (46.38), while individuals in joint families had the lowest score (45.55). The slightly lower score for joint family members could be due to increased family responsibilities, pressure, or interpersonal conflicts. However, when considering pet ownership, the findings suggest that people living alone might benefit the most from having pets, as they provide emotional companionship in the absence of family support.

The relationship between time spent with pets and mental well-being was not straightforward. Interestingly, individuals who spent less than an hour per day with their pets had the highest well-being score (50.6), while those who spent 1–2 hours had a moderate score (47.14), aligning with the overall pet owner average. However, individuals who spent more than 3 hours with their pets had the lowest well-being score (45.82). This suggests that moderation is key; excessive time with pets does not necessarily improve mental well-being and may indicate social isolation or emotional dependence on pets. Those who spent less time with pets may have more active social lives, jobs, and other sources of well-being, which could explain their higher scores.

One of the most unexpected findings of the study was the general low WEMWBS scores across all respondents, with an average hovering around 40, indicating mild depression in the sampled population. This suggests that mental well-being in Kathmandu may be lower than expected, regardless of pet ownership. Possible reasons could include stress from urban living, economic uncertainties, or social isolation, which should be further explored in future research.

One of the key assumptions of this study was that pet ownership would have a significant positive impact on mental well-being, leading to higher WEMWBS scores among pet owners compared to non-pet owners. However, the findings did not strongly support this hypothesis. While pet owners did have a slightly higher average score (47.5) than non-pet owners (45.86), the independent samples t-test revealed that the difference in WEMWBS scores between pet owners and non-pet owners was not statistically significant, $t(98) = 0.46$, $p > 0.05$. Hence, with the drawn results, Alternate Hypothesis (H1) is not accepted and Null Hypothesis (H0) is accepted as there is no significant difference in mental health and well-being between pet owners and non-pet owners in Kathmandu.

Overall, while pet ownership appears to have some positive influence on mental well-being, other factors like employment, family structure, and lifestyle choices play a more significant role. These findings highlight the complexity of mental health and suggest that while pets can provide companionship and emotional support, they are not a universal solution to mental well-being challenges.

5. CONCLUSION

This study set out to explore the relationship between pet ownership and mental health among residents of Kathmandu Valley using the Warwick-Edinburgh Mental Well-being Scale (WEMWBS). The results indicate that while pet owners had slightly higher well-being scores than non-pet owners, the difference was not statistically significant. This suggests that pet ownership, though often associated with emotional companionship and stress relief, may not be a decisive factor in improving mental health in this context. Instead, other variables such as employment status and family structure demonstrated a more substantial influence on psychological well-being.

A particularly noteworthy finding was that individuals who spent less time with their pets, specifically under one hour per day, reported higher well-being scores than those who spent more time. This counters the common perception that increased time spent with pets necessarily leads to better mental health. Additionally, bird owners

recorded the highest well-being scores, whereas cat owners had the lowest, implying that the type of pet may play a role in influencing psychological outcomes, potentially due to differences in interaction styles or emotional expectations.

Another significant insight was the generally low WEMWBS scores across the sample population, especially among younger respondents. Many participants fell within ranges indicative of mild to moderate depression, pointing to a broader mental health concern in urban Kathmandu that extends beyond the scope of pet ownership. These findings call for urgent, targeted interventions that address mental health at a systemic level.

Based on these conclusions, pet ownership should not be viewed as a one-size-fits-all solution to mental health challenges. While pets may provide emotional comfort and companionship, they should be complemented by broader support systems and mental health services. Public policies should prioritize employment opportunities, accessible healthcare, and mental health education to foster a healthier, more resilient population.

Future research should investigate why certain pets, like birds, appear to contribute more positively to well-being, and whether the nature of human-animal interaction differs significantly by pet type. Longitudinal studies may also help to understand how pet ownership affects mental health over time, including in times of crisis or transition.

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