



RESEARCH PAPER

Pet-Keeping and its Role on the Psychological Well-Being of Adolescents in Khyber Pakhtoon Khwah (KP)

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ABSTRACT

This research aimed to explore the influence of pet keeping on the psychological well-being of adolescents. Pet keeping can also have some effect on human psychology. Animals as companions are an important part of human life. This exploratory study is being developed to contribute to a better understanding of the role of pet keeping in the Psychological well-being of adolescents. It will compare the levels of Psychological well-being in pet-keeper and non-pet-keeper adolescents of Khyber Pakhtunkhwa (KPS). The sample size consisted of 100 individuals who were pet keepers, and they were selected using convenience sampling. For the control group, 100 individuals who did not own pets were approached. To gather a wide range of age groups, participants aged between 15 to 60 years were included in both groups. The combination of online and offline data collection methods and the inclusion of participants from various age groups aimed to enhance the overall validity and generalizability of the research findings. The Ryff Psychological Well-Being Scale, created by Carol Ryff, is a widely utilized questionnaire in psychological research and clinical assessments. The short form of the Ryff inventory which consists of 18 items was used. The study's key conclusion highlights a notable distinction between individuals who keep pets and those who do not.

KEYWORDS Human-being, Pet-keeping, Psychological well-being, Resilience

Introduction

The relationship between pets and human beings has gained lots of attention in the last few years. Pet keeping can also have some effect on human psychology. Animals as companions are an important part of human life. They are present in over half of the families in the Western world, for example, American Veterinary Medical Foundation, (2012) reported that in the United States, 65% of families have animals (pets) whereas in the Netherlands 59% of the families have pets. Moreover, they are often considered to be family members and owners report profound affection to them (Allen & Herzog, 2011), It is therefore not surprising that the relationship between companion animal, ownership and psychological health has received a considerable amount of attention. The general hypothesis is that individuals benefit from the presence of companion animals. Recent evidence recommends that the nature of this association is diverse and complex (Herzog, 2011; Wells, 2009) and that many of the studies performed so far are subject to operational limitations (Gilbey & Tani, 2015; Herzog, 2011; Wells, 2009).

The ownership of pets (or 'companion animals') and its latent effect on human physical and mental health is one area of HAI research that has been progressively popular (Brooks & Rushton, 2018), Many, frequent observational studies suggest that interactions and relationships with companion animals may be valuable for human health and wellbeing, through hypothesized mechanisms involving attachment to or companionship provided by the animal (Brooks & Rushton, 2018). Despite an increasingly popular belief that living with companion animals may benefit owners, for example in terms of reduced feelings of

loneliness and stress through having access to a perceived source of unconditional support, love, comfort, security, and stability there is also evidence to the contrary.

Ratschen and Shahab (2020) showed us Human-animal relationships and interactions during the COVID-19 lockdown phase in the UK: Studying links with mental health and loneliness. Human-animal interactions (HAI) describe a wide range of interactions and relationships between animals and humans (Serpell J. 1996), and are of growing interest to researchers, the general public, and the media (Ratschen & Sheldon, 2019). The concept that owning a companion animal can improve human health has been termed “the pet effect” (Allen, 2003), This idea became widespread in the early 1980s when an association was described between companion animal ownership and survival rates from myocardial infarction (Friedmann, Katcher, Lynch, & Thomas, 1980), Meanwhile much research has been conducted on the effects that companion animals have on the health of their owners (Herzog, 2011; Wells, 2009). Today incompatible evidence exists concerning this pet effect. When focusing on emotional wellbeing a considerable amount of research suggests a positive effect of companion animals. Companion animals have for example been reported to improve loneliness (Pikhartova, Bowling, & Victor, 2014), and increase self-esteem (McConnell et al., 2011), Also, keeping a companion animal has been reported to reduce depression (George, 2010) and to enhance life satisfaction (Bao & Schreer, 2016).

Peplau and Perlman (1982) reported loneliness in later life, its prevalence, and risk factors, have long been a focus of research. According to cognitive discrepancy theory, loneliness is defined as an unwanted discrepancy between desired and achieved levels of social contact. Some studies show that strong reported bonds with or ‘attachment’ to companion animals are associated with increased depression and loneliness and can predict vulnerability (Martinez-Caja, et al., 2022), and improved levels of emotional distress in owners.

Studies examining the link between the human-animal bond and human health are often focused on selected companion animal species, especially dogs and cats, commonly with little or no attention paid to other species. However, these studies tend to be conducted in specific human sub-populations (i.e. bereaved individuals; and the elderly and usually differ in the way they conceptualize and measure the human-animal bond (Ratschen et al., 2020), generally, there is a consensus that substantial scope for further investigation to explore the likely compound role of HAIs and the human-animal bond in health and wellbeing (Ratschen et al., 2020), The potential importance of HAIs that involve non-companion animals, for example, farm animals or wildlife, for human health and wellbeing, has also been highlighted. This constitutes another area of emerging research in the field.

In North America, Australasia, and Western Europe research has consistently reported the prevalence of severe loneliness of approximately 10% for those aged 65 years and older with a further 30% classified as moderately lonely whilst countries in Central and Eastern Europe report prevalence rates of severe loneliness of between 15% and 20%. (Pikhartova, Bowling & Victor, 2014), Loneliness has been shown to be associated with a range of negative health outcomes and health behaviors (which vary between different age groups) (Stanley & Conwell, 2014).

Several studies have documented the usefulness of animal-assisted therapy in the treatment of depression. In a study by Holcomb et al., (1997), increased social interaction secondary to the use of an aviary was significantly associated with reduced depression levels among elderly men. Pet-facilitated psychotherapy was shown to be effective as an adjunctive treatment for depression among elderly male residents of a nursing home (Brickel, 1986), Significant reductions in depression were observed among subjects given access to a pet during therapy sessions, compared to therapy sessions with no pet. During the session, pets served as a social catalyst facilitating conversations between the subject and the therapist.

In a study by Antonioli and Reveley (2005), animal-facilitated therapy with dolphins was more effective than water therapy in the treatment of patients with mild to moderate depression. In this randomized, single-blind, controlled trial of 25 patients with mild to moderate depression, the treatment group played, swam, and took care of the dolphins, while the control group participated in an outdoor nature program that used the same water activities as the treatment group but in the absence of the dolphins. After two weeks of treatment, improvements in depressive symptoms were significantly greater in the treatment group than in the control group. The authors hypothesized the echolocation system, the aesthetic value, and the emotions produced by the interactions with the dolphins were responsible for the health improvements observed in the treatment group. Although this was a small study, it provided additional evidence for the efficacy of animal-assisted therapy in the treatment of depression.

The objectives of the present study comprised of the following objectives; to find out the role of pet keeping in the psychological well-being of adolescence, to study the prevalence of pet keeping among different age groups, and to investigate gender differences in the level of psychological well-being among pet-keepers. The hypotheses constructed were; the psychological well-being of pet keepers will be higher as compared to non-pet-keepers. The Psychological well-being of female pet-keepers will be higher as compared to male pet-keepers.

Literature Review

Branson and Turner (2017) studied Depression, loneliness, and pet attachment in homebound older adult cat and dog owners. He discovered that Companion animals may decrease depression and loneliness in socially isolated homebound older adults. However, whether keeping a cat or dog is more helpful in this population remains unknown. Pet attachment and the levels of depressive symptoms and loneliness were observed in 39 homebound older adults who exclusively owned a cat(s) or a dog(s).

Chaudhary and Shrivasta (2017) found that Pets seem like perfect companions providing unconditional love without any expectation from the owner. Pets can be seen as stress reducers companions and members of the family. The aim of this study was to observe the effect of pet ownership on happiness and, psychological well-being in pet owners and non-pet owners. Results of the study showed that there was a significant difference in intensities of happiness and psychological well-being experienced by pet owners and non-pet owners.

The evidence base to support the use of such pet-based interventions is weak. There are a number of studies focusing on pet ownership or on animal-assisted therapy (AAT) for older adults, adults with serious mental health problems, cardiovascular disease (Herrald and Tomaka, 2002), or living in care-homes (Banks and Banks, 2002), which demonstrate positive outcomes (Garrity and Stallones, 1998).

Several studies have explored how, and to what extent, the feeling of loneliness and social exclusion can be remediated (or prevented) by pet ownership based on the premise that this reduces the impact of stressors in everyday live and consequently symptoms of depression or anxiety (Tamura and Yonemitsu, 2004). It is also hypothesized that pets may substitute for missing attachment figure(s). However, those who are highly attached to their pet report higher levels of loneliness compared to those who do not have such a close relationship with their pet.

Gilbey and Tani (2015) reported that the evidence is mixed and extremely limited, about the effectiveness of the presence of home pets on the prevention of loneliness and social isolation. Furthermore, rather than pet ownership mediated against loneliness, it has been proposed that the true nature of the relationship is, in fact, reversed i.e. pet ownership

is a response to loneliness. However, there are few longitudinal studies assessing the relationship between loneliness and pet ownership in both directions (pet ownership as a response to loneliness or pet ownership as a protection against loneliness). The aim of this paper is to contribute to the evidence examining the relationship between pet ownership and loneliness.

This exploratory study is being developed to contribute to a better understanding of the role of pet keeping in the Psychological well-being of adolescents. It will compare the levels of Psychological well-being in pet-keeper and non-pet-keeper adolescents of Khyber Pakhtunkhwa (KPS). No such study has been conducted in our region, this will add new information to the existing body of knowledge. If the difference is confirmed, the results may play a role in motivating the youth to practice pet keeping which would prove to be beneficial for their psychological well-being. The study would be beneficial for future researchers.

Material and Methods

Research Procedure

The research conducted was of a quantitative nature, specifically utilizing a descriptive approach. The primary method employed for data collection was through surveys. To investigate the impact of animal keeping on Psychological well-being, a comprehensive survey questionnaire was developed based on an extensive review of existing literature. Data collection was carried out using two main strategies. Firstly, an online Google form was created and shared among various peer groups on social media platforms to gather responses from interested participants. Additionally, purposive sampling was used by distributing hard-copy questionnaires among university fellows to ensure a diverse range of participants.

The sample size consisted of 100 individuals who were pet keepers, and they were selected using convenience sampling. For the control group, 100 individuals who did not own pets were approached. To gather a wide range of age groups, participants aged between 15 to 60 years were included in both groups. The combination of online and offline data collection methods and the inclusion of participants from various age groups aimed to enhance the overall validity and generalizability of the research findings.

Research Instrument

The Ryff Psychological Well-Being Scale, created by Carol Ryff, is a widely utilized questionnaire in psychological research and clinical assessments. Its comprehensive nature, consisting of 84 items, allows researchers and practitioners to gain a deep understanding of an individual's well-being across various domains. Through this scale, six key dimensions of well-being, including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance, are measured and analyzed to assess an individual's psychological well-being comprehensively.

The short form of the Ryff inventory which consists of 18 items was used. The inventory consists of a series of statements reflecting the six dimensions. Respondents rate statements on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. Internal consistencies varied between 0.87 and 0.93 and the test-retest reliability coefficient ranged between 0.81 and 0.85 (Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J Personal Soc Psychol* 1989; 57(6):1069-80.)

Table 1
Reliability of questionnaire

S.No	Scale	Number of Items	Cronbach's Alpha
1	PWB (Autonomy, Environmental Mastery, Personal growth, Positive Relations with others, Purpose in life, Self-acceptance)	18	.712

Note: PWB: Psychological Well-being Questionnaire

Data Collection and Analysis

Data is being collected via an online Google form which is being circulated among peer groups on social media for data collection. In addition to that, data is also being collected by purposive sampling by distributing questionnaires in hard form among university fellows. The sample of 100 pet keepers was taken via convenience sampling while 100 non-pet keepers were approached as a control group. The age limit for both groups was 15 to 60 years.

Data Analysis

Data were analyzed using both descriptive and inferential statistical methods. Detailed analysis is as follows.

Results and Discussion

Table 2
Frequency distribution of Pet keepers and Non-Pet keepers Information

		Age of Respondents					Total
	Gender	15-20	21-30	31-40	41-50	51-60	
Pet Keepers	Male	7	23	3	0	4	41
	Female	13	52	3	1	0	69
	Total	20	75	6	1	4	106
Non-Pet keepers	Male	0	11	4	0	1	16
	Females	14	56	7	1	0	78
	Total	14	67	11	1	1	94

Table 2 showed that out of 200, 106 participants were pet-keepers, whereas 94 were non-pet-keepers. In pet-keepers percentage, 41% of the population was male whereas 69% of them were female. On the contrary, the non-pet keeper's ratio was 16% of male and 78% female. The age range of participants who keep pets was between 21 to 30 years.

Table 3
Mean Difference SD, t-value of pet-keeper and non-pet-keeper on psychological well-being Scale (N=200)

	Pet-keeper (n=100)		Non-pet-keeper (n=100)		t	p	CI (95%)		Cohen's d
	M	SD	M	SD			LL	UL	
	PWB	91.14	11.35	86.82			15.94	2.226	

Note: df =2, *=p<.05, **=p<.01&***=p<.001, PBW: Psychological well-being scale

Table 3 shows the mean difference between pet-keepers and non-pet-keepers of adolescents on psychological well-being. The mean was 91.14 and the standard deviation was 11.35 for pet-keeper subjects. Similarly mean and standard deviation for non-pet-keepers subjects was 86.8 and 15.94 respectively. The mean difference is 4.322. The t value is 2.266. Cohen's d value was .312. There was a significant difference in Psychological well-being among pet-keepers and non-pet-keepers.

Table 4

Mean Difference SD, t-value of Male and Female pet-keepers on psychological well-being Scale (N=200)

	Male		Female		t	p	CI (95%)		Cohen's d
	(n=36)		(n=69)				LL	UL	
	M	SD	M	SD					
PBW	90.41	12.12	91.50	11.09	.463	.544	-5.76	3.58	.081

Note: df =2, *=p<.05, **=p<.01&***=p<.001

Table 4 shows the mean difference between male and female pet keepers. The mean was 90.41 and the standard deviation was 12.12 for male subjects. Similarly mean and standard deviation for female subjects were 91.50 and 11.09 respectively. The mean difference was -1.090. The t value was .463. The Cohen's d value was -.457. There was no significant difference in the psychological well-being of male and female pet keepers. It depicts that males and females were equally interested in pet keeping.

Findings

Based on the analysis of the data, the major findings of the study were discussed as follows

1. On the basis of the gender specifications, there was no such difference observed in males and females regarding pet keeping.
2. A significant psychological well-being difference was observed between the pet-keepers and non-pet-keepers.
3. Non-pet-keepers had lower mean value than pet keepers depicting how pets serve as resilience against loneliness.

Discussion

The findings of the current study revealed a significant difference in the psychological well-being of individuals who keep pets compared to those who do not own pets. The research showed that pet keepers tend to have higher levels of psychological well-being than non-pet keepers, aligning with the results of a study conducted by Chaudhary and Srivastava (2017), which also reported that pet owners experience enhanced psychological well-being compared to individuals without pets.

The second research question aimed to explore the prevalence of pet keeping among different age groups. The findings indicated that pet ownership is particularly high among individuals aged 20-30 years compared to other age groups. This observation aligns with the existing study which highlighted that the 18- to 34-year-old age group demonstrates the highest likelihood of owning a pet. Moreover, within this age cohort, around 43% of those who currently do not own a pet expressed their desire to have one in the future.

Furthermore, the analysis also examined the potential gender differences in pet ownership. While the results showed a minor mean difference in pet-keeping between the two genders, this difference was not statistically significant. This finding corresponds with a study conducted by Philips et al., (2011), which emphasized that female students often exhibit greater concern for animal welfare and rights compared to males, particularly in societies where women have a lower dependence on men. This increased concern for animals may contribute to a greater tendency to avoid meat consumption, especially red meat. Additionally, the longer association of females with pets compared to males may play a significant role in shaping their attitudes toward animals. The research findings indicate that pet ownership is more prevalent among individuals in the 20-30 age group, and while there may be some gender differences in attitudes towards animals, they do not significantly impact pet-keeping behavior.

The results of the present study are consistent with existing literature. Previous research has indicated that pets can have a positive impact on people's health and overall well-being. For instance, studies have shown that having pets may lead to reduced blood pressure, improved survival rates for heart attack victims, and decreased general health issues, leading to lower annual medical needs. This suggests that the presence of pets can play a beneficial role in promoting overall psychological and physical well-being in individuals. In summary, the current study's results corroborate with existing research, indicating that pet ownership is associated with higher levels of psychological well-being, and pets can potentially contribute to improved overall health and well-being for their owners.

Conclusion

The study's key conclusion highlights a notable distinction between individuals who keep pets and those who do not. One of the practical contributions of this research is its examination of the varying levels of psychological well-being between pet keepers and non-pet keepers. The findings suggest that participants who have pets reported higher psychological well-being, which can be attributed to the positive effects of pet companionship in mitigating feelings of loneliness and depression.

Recommendations

On the basis of the present research, the following recommendations are made:

One potential limitation of the study pertains to the use of convenient sampling, which may raise questions about the generalizability of the findings. To enhance the broader applicability of the results, it is advisable to replicate the research in various cities across Pakistan. Conducting similar studies in different regions would offer valuable insights, particularly exploring the impact of pet types on psychological well-being. Additionally, a comparative investigation between current pet keepers and non-pet keepers residing in other provinces of Pakistan could provide further intriguing perspectives. However, due to the constraints imposed by the ongoing pandemic, such comparative studies may not be feasible at the moment. Nevertheless, if other researchers have the necessary resources and time, conducting research on pet keepers and non-pet keepers in different provinces would be a valuable contribution to the existing literature.

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