

Pets & Elders: A Review of the Positive Effect of Pets on Mental Health

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Abstract: The improvement of mental health in older adults has become a significant area of research in response to the growth in the global population of older individuals. Thus, the paper evaluates the beneficial influence of pets on the mental well-being of older adults by synthesizing and analyzing data from over a dozen pertinent studies. Findings suggest that pets play a critical role in relieving stress, reducing loneliness and providing social support. In particular, the presence of pets has been linked to several benefits for human well-being, including the promotion of emotional stability, an increase in life satisfaction, as well as a strengthening of social support networks among older adults via increased social interaction and community involvement. However, despite the tremendous psychological benefits that pets bring to older adults, some challenges remain, such as the emotional impact of pet loss and potential health risks. This may affect the actual effectiveness of pet companionship and the overall well-being of older adults. As such, the paper recommends the inclusion of pets in geriatric care programs, and calls for long-term research to gain insights into the lasting effects of pets on the mental health of older adults and their potential for application. The paper aims to contribute to the development of more effective care strategies to boost the quality of life for older adults.

Keywords: Pets, Elders, Mental Health, Animal-Human Interaction, Therapeutic Pets.

1. Introduction

As the global aging trend intensifies, how to improve the quality of life of the elderly, especially their mental health, has become one of the central issues of social concern. According to statistics, the population of older people aged 65 and over in the United States has grown from about 3 million in 1900 to 6 million in 2022. In China, with the rapid development of the economy and society, the demand for quality of life is also increasing, encompassing not only material needs but also emotional needs. However, the psychological needs of the elderly are often overlooked. Especially in China, the role of pets in the lives of older adults has not yet been fully emphasized, whereas in the United States, pets have been shown to have a significant effect on rebuilding social connections, enhancing life goals, and even maintaining cognitive function in older adults. By integrating more than a dozen meta-analyses and research papers, this paper aims to reveal the positive contribution of pets to the mental health of older adults and advocate for the inclusion of pets in geriatric care programs. As pets are increasingly introduced into geriatric care programs, there is hope not only to improve the quality of life for older adults but also to provide emotional support and mental health promotion for other

age groups. This paper will explore the importance of pet companionship in the lives of older adults and its potential to improve mental health by analyzing the current state of research.

2. Overview of Mental Health and Pet Companionship in the Elderly

2.1. Current Mental Health Status of the Elderly

A 2023 review of advances in research on mental health problems and factors influencing anxiety and depression in older adults indicates that approximately 85% of older adults suffer from mental health problems [1]. As the global trend of aging continues to exist, the mental health of the elders requires more attention and concern. Statistics from the WHO indicate that in 2020, the population aged 60 and above was about 1 billion, and by 2030, this number is expected to rise to 1.4 billion. Those data determine the urgency to address the problems of mental health associated with the elders. There are several reasons that lead to the current status of the elders. Along with social and economic pressures, elders have to deal with physical weakness, deterioration in bodily functions, and other health problems. Also, the phenomenon of “left-behind elderly” is prevalent in China, resulting in many older adults experiencing loneliness and other negative emotions. A 2019 report indicated that depression and anxiety were the most prevalent mental health concerns among older adults aged 65 and above [2]. In addition, the outlook for the treatment of psychiatric problems is not encouraging. The relative lack of diagnosis and treatment of anxiety and depression in China greatly increases the difficulty for older persons to seek therapists and professional help. The complexity of addressing depressive symptoms in older adults is further compounded by unclear symptom mechanisms, atypical symptom presentation, low prescription adherence, and a paucity of medication feedback [3]. Therefore, diagnosing and treating older adults with anxiety or depression remains a major challenge.

2.2. Definition of Pet Companionship and Format

The importance of pet companionship has been recognized for quite some time. There have been studies where patients' anxiety levels were reduced by having them watch fish swimming in an aquarium [4]. In group therapy scenario, a therapeutic pet can keep the patients at a calmer level and remind the therapist to assist patients who are suffering [5]. For all kinds of patients diagnosed with mental disorders, the presence of animals is associated with an overall decrease in their stress levels [6]. In this way, the mere presence of pets seems to help people in many cases to get better in various aspects. Dogs, in particular, are often trained to help patients with illnesses that happen occasionally. For example, seizure patients. Because they suffer from huge amounts of anxiety from unknown attacks of seizures and pain, therapeutic dogs can help the patients to calm down and alert the patient before an attack of seizure [7]. In later studies, researchers also found that the happening of seizures can be predicted reliably, and the frequency of seizure attacks will decrease to 1/2 of before with the assistance of therapeutic dogs [8]. Moreover, even “virtual pet-keeping,” when people go online and interact with videos of pets everyday, is able to enhance individuals' positive emotions and life satisfaction, regulating negative emotions such as loneliness, anxiety, and depression [9]. The concept of “pet companionship” does not have a clear definition yet. However, from all those benefits listed above, what can be seen is that “pet companionship” is a practice that utilizes pets (both trained or untrained), in order to promote elders' mental health and physical health, better adapt to later stages of life, and regain life satisfaction. Pets can exist in various forms or ways. But in common, they can all provide benefits to people's mental health by easing people's negative feelings and increasing happiness in life.

3. Impact of Pet Companionship on Elders' Mental Health

3.1. Emotional Well-Being: Reducing Loneliness and Enhancing Emotional Stability

Social support is widely recognized as a key factor contributing to quality of life. Previous research has shown that certain elements of social support are not exclusive to human interaction, but that pets can also provide a sense of security, care, love and affection [10]. This is further supported by a growing number of recent studies. In a recent survey, pet owners made 15-20% fewer hospital visits per year than non-pet owners, suggesting that pet owners are psychologically healthier and have greater life satisfaction [11]. With the support of more analysis of statistics and discussion, what can be seen is that 2 groups of SF-36 index comparison (pet owners VS non-pet owners) have statistical significance: Energy ($\beta=0.123$, $P<0.05$), emotion capability ($\beta=0.212$, $P<0.01$), and social function ($\beta=0.158$, $P<0.01$). These results indicate that older adults who own pets enjoy better mental health and higher quality of life than those without pets [12].

3.2. Cognitive Function: Enhancing Cognitive Abilities through Pet Companionship

It has been found that in addition to the emotional benefits, pet ownership can have a positive impact on physical health. In the longitudinal study of 637 generally healthy community-dwelling older adults aged 50-100 years, over a period of 13 years, pet owners exhibited better maintenance of cognitive functions such as immediate recall, short-term recall, long-term recall, naming, and digit symbol substitution, compared to non-pet owners. Dog owners, in particular, seem to benefit more from the company of their pets, with dog walkers experiencing slower deterioration in cognitive functioning, particularly in Trails B (a test of attention and concentration) and short-term memory. However, the study found no significant relationship between pet ownership and working memory (as measured by the Forward Digits and Backward Digits tests). And several potential mechanisms for these findings are proposed. First, pets are known to reduce stress and anxiety. This reduction is helpful to lower cognitive decay as chronic stress is prevented. Second, caring for pets requires attention, problem-solving, and goal-directed behaviors (feeding food, adding water, etc.). These activities provide cognitive stimulation and engagement, maintaining or even promoting cognitive abilities. Third, tasks involving monitoring the dog's behavior during walks require and enhance executive functions such as processing speeds, potentially slowing cognitive deterioration through regular practice [13]. In this way, pet owners in general show less deterioration in similar cognitive measures, contributing to better cognitive functions than average elders.

3.3. Social Interaction: Strengthening Social Engagement and Support Networks

Social interaction plays a pivotal role in our lives. The social exchange theory posits that individuals ascertain their social standing through the resources, health, and attractiveness they possess. In comparison, elders lack those resources, making it difficult for them to engage in social interactions. In this way, pets allow them to own the unique opportunity to interact with people [14]. One study proposes the implementation of a senior program in which social workers and pets collaborate to enhance the quality of life and social connections of older adults. Social workers have set up a Pet Exchange Center for seniors with and without pets to interact with each other and strengthen social ties. Activities such as pet competitions and mating events can promote the social interactions of elders. Furthermore, to raise elders' sense of self-importance and gain, social workers also establish a "pet storage room", where experienced or trained elders can take care of pets of the young who are busy with work. In this way, elders can fully utilize their "resources" and portray their social values. In addition, by caring for a young person's pet, elders have the opportunity to strengthen their social ties with the young person, as the pet becomes a common topic they can discuss. As pets allow elders

to meet and interact with more people from the outside world, the aim is to build a support network [14]. Discussing pets, sharing experiences of caring for pets, and helping others to care for pets are all sources of social support for the elderly.

3.4. Physical Health: Promoting Physical Activity and Improving Physiological Indicators

In a study on the effects of pet ownership on older adults, it was found that older adults who cared for pets had significantly better physical health than those who did not own or walk pets. Based on an earlier study, the organic contents in the elders' bones gradually decrease, and muscle fibers gradually shrink, causing slower motions and decreased coordination capabilities [15]. However, walking pets helps slow the emergence of those issues. Elders who always take care of pets' daily lives have to feed the pets, buy food, and learn tending strategies, and these behaviors all decrease sedentary behaviors, promoting bone and joint health and enhancing blood flow. On average, elderly individuals who care for pets engage in an additional 20 minutes of moderate to vigorous physical activity, reducing their risk of cardiovascular disease by 11% and their risk of cancer by 17%, while also aiding homeostasis [16]. Moreover, pets are theorized to help humans decrease or prevent over-reaction to accidents. Prior research has employed a variety of physical and psychological stressors to assess and compare the static blood pressure and heart rate of pet owners and non-pet owners. One major finding is that when doing math calculations, the increase in heart rate is much slower when the participants are with their pets than when alone [17]. This further indicates that pets help minimize the effect of sudden stimulation, which can be harmful to elders who already have a weaker cardiovascular function. Owning a pet necessitates daily care and food buying, which lowers sitting time and increases physical activities. By continuously working out, elders are able to enhance bone health, increase blood flow, and control cholesterol levels.

4. Limitations of Pet Companionship

Pet companionship also has some limitations. Specifically, pets have the potential to carry diseases such as dermatophytes and toxoplasmosis in cats, hydrophobia in dogs, salmonellosis in rodents, and psittacosis in birds [18]. In individuals with compromised immune systems, these diseases may prove to be deleterious, potentially resulting in mortality. In terms of physical fitness, older people may have limited mobility and are more prone to balance problems. As a result, pets and their accompanying belongings may become an obstacle, leading to ties and injuries. Financial aspects may also be another issue, as the cost may be prohibitive for older adults, or they may choose to spend money on their pets at the expense of their own food or other items [19]. Furthermore, the relationship between pet companionship and mental/physical health remains controversial. It has also been shown that pets have little to no positive impact on people's mental health [20]. Even the opposite result has been reached. And some recent replicated studies have shown an inability to conclude that pet ownership reduces the risk of cardiovascular disease, lowers health care costs, or provides mental or physical benefits [21,22]. Further research is required, as the efficacy of pet companionship remains a topic of considerable debate. For example, the precise causal relationship between pet ownership and physical and mental health remains to be elucidated. The question of whether people acquire pets as a result of their own health status, or whether their health status is a consequence of pet ownership, remains unresolved. To achieve a consensus and further support the implementation of pet companionship in the care of the elderly, further research is required.

5. Conclusion

The synthesis of the current literature on the positive psychological impact of pets on the elderly reveals that companion animals are more than just pets, and they can serve as a source of support

when elders encounter loneliness, depression, and even cognitive decline that can accompany the later stages of life. The evidence presented in this paper demonstrates that pet ownership and interaction confer a multitude of benefits for older adults. The results indicate that loneliness can be effectively mitigated through the presence of a pet. And physiological benefits, such as lower blood pressure and stress hormone levels, complement the emotional support and companionship provided by pets. Moreover, pet ownership provides increased opportunities for community involvement and interaction with peers, thereby contributing to a more enriched, meaningful social life for the elderly. However, the integration of pets into eldercare programs is a complex process. It is also imperative to consider other factors, such as the liability associated with pet care, financial issues, and the potential for grief following the loss of a pet, as these aspects are of significant importance. The paper calls for a more deliberate incorporation of companion animals into geriatric care practices. Future research should focus on longitudinal studies to better understand the long-term effects of pet ownership on mental health and to investigate the specific mechanisms by which pets exert a positive influence.

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