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# THE RELATIONSHIP BETWEEN ANIMAL WELFARE AND BEHAVIORAL HEALTH IN DOMESTIC PETS

**Sana Afzal**
BS, Department of Computer Science, The Cosmic Degree College (For Women) ,University of Okara

## ABSTRACT

*Animal welfare and behavioral health are closely interconnected aspects of the physical, emotional, and psychological well-being of domestic companion animals. Dogs and cats depend on their owners and caregivers to provide suitable living environments, adequate nutrition, social interaction, healthcare, and opportunities to express natural behaviors. When these essential requirements are not adequately fulfilled, companion animals may experience stress, fear, anxiety, aggression, social withdrawal, destructive behavior, and other behavioral difficulties. Poor living conditions, inappropriate handling, insufficient environmental enrichment, lack of physical activity, social isolation, and inadequate veterinary attention can negatively influence animal welfare and behavioral stability. This study examines the relationship between animal welfare and behavioral health in domestic pets, with particular attention to environmental conditions, emotional well-being, human-animal interactions, social behavior, and responsible pet ownership. It also explores the importance of environmental enrichment, positive reinforcement, appropriate housing, regular exercise, veterinary care, and behavioral monitoring in improving the quality of life of companion animals. Recent research indicates that providing animals with opportunities for choice, exploration, social interaction, and species-appropriate activities may contribute to positive welfare outcomes and reduce behavioral stress. Furthermore, understanding behavioral indicators such as body posture, vocalization, avoidance, repetitive movements, and changes in appetite can help caregivers recognize potential welfare problems. The study emphasizes that animal welfare should extend beyond the prevention of disease and physical suffering to include positive emotional experiences and the ability to express natural behaviors. It concludes that an integrated approach involving responsible pet ownership, veterinary professionals, behavioral specialists, and animal welfare organizations is essential for promoting healthy behavior and improving the overall well-being of domestic companion animals.*

***KEYWORDS:****Animal welfare, behavioral health, domestic pets, companion animals, psychological well-being, animal behavior, emotional health, environmental enrichment, stress management, fear and anxiety, human-animal interaction, positive reinforcement, responsible pet ownership, quality of life, social behavior, and veterinary care.*

## INTRODUCTION

Animal welfare has become an important area of veterinary science and animal health research because of its direct relationship with the physical, emotional, and behavioral conditions of domestic companion animals. Dogs and cats are among the most common household pets and depend heavily on humans for food, shelter, healthcare, protection, and social interaction. Their well-being is influenced not only by physical health but also by the quality of their surroundings, daily experiences, emotional security, and opportunities to express natural behaviors. Animal welfare therefore represents a broader concept that includes freedom from unnecessary suffering, appropriate nutrition, good health, comfortable living conditions, and positive mental experiences. Antonino, G. V., Lovestain, D. D. C., de Castro Burle, M. M., & de Azevedo, C. S. (2025). found thatMaintaining these conditions is essential for supporting healthy behavior and improving the overall quality of life of companion animals.Behavioral health is an important component of animal welfare because animal behavior provides valuable information about emotional and psychological conditions. Dogs and cats communicate through body posture, facial expressions, vocalizations, movement, social interactions, and changes in daily activities. Positive behavioral indicators may include playfulness, exploration, relaxed body posture, social

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engagement, and normal feeding behavior. In contrast, excessive fear, aggression, repetitive movements, hiding, destructive activities, excessive vocalization, and social withdrawal may indicate stress or other behavioral difficulties. However, these signs must be interpreted according to the animal's species, individual temperament, environment, and medical condition. Understanding these behavioral patterns allows pet owners and veterinary professionals to recognize possible welfare problems and provide appropriate support.

Environmental conditions play a significant role in determining the behavioral health of domestic pets. Animals require living environments that provide adequate space, comfortable resting areas, appropriate temperature, cleanliness, physical activity, and opportunities for mental stimulation. Dogs generally benefit from regular walks, play, exploration, training, and positive social interaction. Batista, M. T., Lavrador, C., & da Graça-Pereira, G. (2025). Explained that Cats require opportunities for climbing, hiding, scratching, hunting-related play, exploration, and access to secure resting places. Environments that fail to satisfy these requirements may contribute to frustration, boredom, anxiety, and the development of undesirable behaviors. Recent research on environmental enrichment demonstrates that providing suitable physical and sensory stimulation can improve behavioral opportunities and support animal welfare.Psychological stress is another important factor connecting animal welfare with behavioral health. Domestic pets may experience stress because of loud noises, overcrowding, separation from caregivers, unfamiliar environments, inconsistent handling, punishment, and inadequate opportunities for rest. Short-term stress responses may help animals respond to immediate challenges, but prolonged or repeated stress can negatively influence emotional stability, health, and behavior. Dogs may develop separation-related problems, excessive barking, fearfulness, or destructive behavior, while cats may show hiding, inappropriate elimination, reduced social interaction, or changes in grooming and feeding patterns. Research by Tananaeva and Udell (2026) highlights how unmet physiological, social, safety, and cognitive needs may contribute to chronic stress in domestic dogs. This demonstrates the importance of identifying and addressing environmental and behavioral factors that influence emotional well-being.

Human-animal interaction is also an important element of companion animal welfare. Positive relationships between pets and their owners can provide opportunities for social engagement, emotional security, physical activity, and positive behavioral experiences. However, human interaction must respect the animal's individual preferences and communication signals. Forced handling, excessive physical contact, punishment, and failure to recognize signs of discomfort may create negative experiences. Recent research by Schirmer et al. (2026) indicates that the relationship between physical contact and perceived pet well-being depends on the type and context of interaction, as well as species-specific characteristics. Therefore, respectful interaction and recognition of animal choice are important for maintaining positive relationships and supporting behavioral health.Preventive healthcare and responsible pet ownership are essential for maintaining animal welfare and reducing behavioral problems. Regular veterinary examinations can help identify medical conditions that may influence behavior, including pain, hormonal disorders, neurological problems, and chronic illness. Appropriate nutrition, vaccination, parasite control, grooming, exercise, and suitable housing also contribute to maintaining physical and emotional health. Behavioral problems should not automatically be considered disobedience because they may reflect fear, discomfort, unmet needs, or underlying medical conditions. Positive reinforcement, structured routines, appropriate socialization, and individualized behavioral

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support can help address many difficulties without creating unnecessary stress. Veterinary professionals and qualified animal behavior specialists therefore play an important role in promoting welfare-oriented care.The present study examines the relationship between animal welfare and behavioral health in domestic companion animals, particularly dogs and cats. It focuses on the influence of environmental conditions, psychological stress, social interaction, human handling, physical activity, and preventive healthcare on animal behavior. It also explores how environmental enrichment, positive reinforcement, appropriate housing, and responsible ownership can contribute to positive emotional experiences and healthy behavioral development. By examining these factors, the study aims to highlight the importance of treating behavioral health as an essential component of animal welfare and promoting comprehensive care practices that support the long-term well-being of domestic pets.

## RESEARCH OBJECTIVE

1. To examine the relationship between animal welfare and behavioral health in domestic companion animals and identify the factors that influence their physical, emotional, and psychological well-being.

## RESEARCH QUESTION

1. How do animal welfare conditions influence the behavioral health, emotional stability, and overall quality of life of domestic companion animals?

## LITERATURE REVIEW

Animal welfare is a multidimensional concept that considers the physical health, emotional condition, and behavioral experiences of domestic companion animals. It involves ensuring that animals receive adequate nutrition, clean water, suitable shelter, veterinary attention, protection from unnecessary pain, and opportunities to express natural behaviors. Modern animal welfare research increasingly recognizes that preventing suffering alone is insufficient; animals should also experience positive emotional states, comfort, security, and opportunities for enjoyable activities. The Five Domains Model provides an important framework for evaluating animal welfare through nutrition, physical environment, health, behavioral interactions, and mental experiences. Batista, M. T., Lavrador, C., & da Graça-Pereira, G. (2025). Explains thatQuinn and Quain (2026) applied this model to the management of overweight and obese dogs and cats, demonstrating that physical health, behavioral opportunities, environmental conditions, and emotional experiences are interconnected. Their review highlights that welfare assessments should consider the complete living experience of companion animals rather than focusing exclusively on body weight or medical conditions. Therefore, animal welfare should be treated as a comprehensive responsibility involving both physical care and behavioral support. Behavioral health is closely connected with the welfare conditions experienced by domestic pets. Animals living in supportive environments are more likely to demonstrate normal social behavior, exploration, play, relaxation, and healthy responses to everyday situations. In contrast, inadequate living conditions, fear, chronic stress, physical discomfort, and limited opportunities for natural activities may contribute to behavioral difficulties. Such difficulties can include excessive vocalization, aggression, destructive behavior, repetitive movements,

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hiding, and social withdrawal. Cisneros, A., O'Hanley, K., Moody, C. M., & Stellato, A. C. (2026). Elaborated onBehavioral changes may also provide early indications of underlying physical illness or emotional distress. Hawkins et al. (2025) investigated relationships among pet attachment, perceived animal welfare, and behavioral issues. Their research demonstrated the importance of considering animal welfare and behavioral difficulties when examining relationships between companion animals and their caregivers. The findings support the view that behavioral health is an essential dimension of animal welfare and should be included in routine veterinary assessments.

Psychological stress is an important factor affecting the behavioral health and welfare of domestic companion animals. Dogs and cats may experience stress when exposed to unfamiliar surroundings, excessive noise, overcrowding, separation, inconsistent handling, inadequate social interaction, and insufficient opportunities for rest. While temporary stress can be a normal response to challenging situations, prolonged exposure to stressful conditions may negatively influence emotional stability, physical health, and behavior. Dogs experiencing chronic stress may display excessive alertness, fear, avoidance, repetitive behaviors, and difficulties adapting to their surroundings. Tananaeva and Udell (2026) examined chronic stress in domestic dogs through the perspective of unmet physiological, safety, social, and cognitive needs. Their review explains that prolonged stress-response activation may affect both health and behavioral functioning. The authors also emphasize the importance of recognizing individual needs and developing appropriate interventions to reduce stress. Breithaupt, A., & Jacobs, J. (2026). revealed thatThese findings suggest that identifying environmental stressors and ensuring that basic behavioral requirements are satisfied are essential for maintaining positive animal welfare. Environmental enrichment is an important strategy for improving the behavioral health and quality of life of domestic companion animals. It involves providing physical, sensory, social, and cognitive opportunities that encourage animals to engage in natural and meaningful activities. Dogs may benefit from regular walks, scent exploration, interactive toys, play sessions, training activities, and positive social contact. Cats generally require opportunities for climbing, hiding, scratching, stalking, hunting-related play, and exploring their surroundings. Parthasarathy (2025) discusses the environmental requirements of domestic cats and emphasizes the importance of providing appropriate enrichment within household environments. Research by Antonino et al. (2025) examined food-based and olfactory enrichment in shelter dogs. Their findings indicated that food enrichment increased foraging and activity, while olfactory enrichment reduced certain behaviors such as jumping and vocalizing.

These findings demonstrate that relatively simple enrichment activities can provide valuable behavioral opportunities. Environmental enrichment should therefore be selected according to species, age, individual preferences, and physical abilities. Human-animal interaction plays an important role in shaping the emotional experiences and behavioral health of domestic pets. Positive relationships with caregivers can provide companionship, social stimulation, predictable routines, and opportunities for secure interaction. However, the quality of these interactions is more important than the frequency of physical contact alone. Animals have individual preferences concerning touch, handling, proximity, and social engagement. Schirmer et al. (2026) investigated the relationship between human-pet touch and perceived animal well-being using responses from 443 pet caregivers. Their findings indicated that owner-initiated stroking was associated with higher perceived well-being in dogs, while the

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effects of physical contact differed between dogs and cats. The study highlights the importance of considering species-specific behavior and the animal's response to interaction. Similarly, Sarrafchi et al. (2025) investigated consensual and non-consensual human-dog touch and emphasized that choice and agency are important elements of canine welfare. These studies suggest that respectful handling and attention to animal communication signals are essential for maintaining positive human-animal relationships. Fear and anxiety are common behavioral concerns in domestic dogs and can significantly influence their welfare and relationships with caregivers. Dogs may develop fear responses because of inadequate early socialization, traumatic experiences, unfamiliar environments, loud noises, unpredictable handling, or genetic and individual temperament differences. Anxiety may appear through trembling, panting, pacing, excessive barking, hiding, destructive behavior, and avoidance. Separation-related problems are particularly important because some dogs experience considerable distress when separated from their owners or familiar caregivers.

Batista et al. (2025) examined separation-related problems in a sample of 730 dogs and identified fear and anxiety as particularly important predictors. Their study also considered caregiver-related characteristics and their association with behavioral difficulties. In another study, Batista et al. (2025) examined reactive and aggressive manifestations in dogs and highlighted the relationship between fear, anxiety, and caregiver-related factors. These findings demonstrate that behavioral problems should be assessed through a combination of animal characteristics, environmental experiences, and human management practices. Appropriate socialization, positive reinforcement, gradual behavior modification, and professional veterinary assessment may help improve outcomes. Domestic cats have specific environmental and behavioral requirements that influence their emotional stability and overall welfare. Unlike dogs, cats often prefer greater control over social contact and access to secure hiding places, elevated resting areas, and separate resources for feeding, drinking, and elimination. Environments that lack these opportunities may contribute to stress-related behaviors, including hiding, aggression, inappropriate elimination, excessive grooming, and reduced social interaction. A 2025 study examining environmental enrichment in domestic cats collected 3,083 caregiver responses and identified play interaction, protected balcony or window access, hiding places, and toys among the enrichment options commonly provided. Another study by Gestrich-Frank et al. (2025) investigated changes in the welfare, behavior, and body condition of domestic cats before, during, and after pandemic-related restrictions. The research identified behavioral changes associated with changes in household routines and owner presence. These findings suggest that environmental consistency, adequate enrichment, and appropriate social opportunities are important for supporting feline behavioral health.

Animal shelters present particular challenges for companion animal welfare because unfamiliar surroundings, limited space, noise, restricted social interaction, and changes in routine may contribute to psychological stress. Dogs and cats entering shelters may already have experienced abandonment, neglect, inadequate socialization, or previous traumatic events. Shelter environments can further influence their emotional and behavioral condition. Common stress-related behaviors include excessive barking, pacing, hiding, reduced appetite, repetitive movements, and difficulty interacting with unfamiliar people. Lamon et al. (2026) compared the Cat Stress Score with a psychological quality-of-life assessment tool in shelter cats. Their findings indicated relationships between stress scores, positive and negative emotional experiences, and overall psychological quality of life. Cisneros et al. (2026) also

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conducted a randomized controlled study involving 50 shelter dogs and found that enrichment and combined interventions could help reduce excessive arousal. These findings indicate that shelters should provide appropriate enrichment, secure resting areas, structured activities, and regular behavioral assessments to improve animal welfare and support successful adoption.

## METHODOLOGY

The present study adopts a descriptive and literature-based methodology to examine the relationship between animal welfare and behavioral health in domestic companion animals. The research primarily focuses on domestic dogs and cats because these species are among the most common household pets and demonstrate a wide range of behavioral and emotional responses to environmental and social conditions. Relevant scientific journal articles, veterinary publications, animal welfare studies, and recent research reviews published during 2025 and 2026 are considered for the investigation. Particular attention is given to psychological stress, fear and anxiety, environmental enrichment, human-animal interaction, social behavior, shelter conditions, and responsible pet ownership. The study also considers the importance of physical health, nutrition, and preventive veterinary care in maintaining positive behavioral outcomes.Secondary information is collected from scientific publications, veterinary journals, animal behavior research, and recognized animal welfare literature. The selected sources are examined to identify factors that influence behavioral health and emotional well-being in companion animals. Particular emphasis is placed on studies investigating environmental conditions, behavioral indicators, social relationships, positive reinforcement, and the effects of enrichment activities. Research findings are compared to understand how different welfare conditions may influence the occurrence of behavioral difficulties and the overall quality of life of domestic pets. The study also examines the importance of species-specific requirements because dogs and cats demonstrate different social preferences, environmental needs, and behavioral characteristics.The collected information is organized into major research themes and analyzed through qualitative interpretation. The analysis focuses on identifying relationships between physical welfare, psychological well-being, environmental conditions, and behavioral functioning. Particular attention is given to the role of responsible ownership, veterinary assessment, and welfare-oriented management practices. The methodology also considers limitations in existing literature, including differences in study populations, behavioral assessment methods, owner-reported information, and environmental conditions. Since this study relies on secondary sources, it does not involve direct animal experimentation, clinical examinations, or newly conducted owner surveys.

## RESEARCH DESIGN

The study employs a descriptive qualitative research design to investigate the relationship between animal welfare and behavioral health in domestic companion animals. This research design is appropriate because the study aims to explore existing scientific evidence concerning the physical, emotional, and behavioral conditions of domestic pets. The investigation focuses primarily on dogs and cats and considers how different welfare conditions influence their behavioral functioning. Important areas include environmental quality, psychological stress, social interaction, physical activity, nutrition, healthcare, and opportunities to express natural behaviors. The research also examines the influence of

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human handling and responsible ownership on the emotional stability and behavioral development of companion animals.A thematic research approach is used to classify the available literature into different areas of investigation. These themes include animal welfare concepts, behavioral health, stress and anxiety, environmental enrichment, human-animal relationships, shelter environments, positive reinforcement, and behavioral assessment. Each theme is examined through relevant scientific studies and recent veterinary literature. Comparative analysis is used to identify similarities and differences in the behavioral requirements of dogs and cats. This approach provides a structured understanding of the factors that contribute to positive welfare and the development of behavioral difficulties in domestic companion animals.The research design also incorporates an interpretive approach to examine how welfare-related factors influence behavioral outcomes. Findings from different scientific sources are compared to identify consistent conclusions, emerging research directions, and limitations in existing evidence. Particular consideration is given to the importance of individualized welfare assessment because animals may respond differently to similar environmental and social conditions. The study recognizes that behavioral changes may be associated with physical illness, pain, individual temperament, and previous experiences. Since the research is based on secondary information, no new experimental or survey findings are claimed. The design therefore provides a scientific overview of the relationship between animal welfare and behavioral health.

## DATA ANALYSIS

The data analysis is based on a thematic examination of published scientific literature concerning animal welfare and behavioral health in domestic companion animals. The collected information is classified into major categories, including psychological well-being, environmental conditions, social interaction, fear and anxiety, environmental enrichment, physical health, and responsible pet ownership. The reviewed literature indicates that animal welfare is influenced by several interconnected factors that affect the behavioral functioning of dogs and cats. Animals living in supportive environments with adequate nutrition, suitable housing, regular exercise, and positive social interaction are more likely to demonstrate normal behavioral patterns. In contrast, inadequate environmental conditions, social isolation, inconsistent handling, and prolonged stress may contribute to behavioral difficulties. The analysis therefore identifies environmental and psychological conditions as important factors in maintaining behavioral health.A major area of analysis concerns the relationship between psychological stress and behavioral problems. Research findings indicate that prolonged exposure to stressful environments may contribute to fear, anxiety, excessive vocalization, destructive behavior, social withdrawal, and other undesirable responses. Dogs may develop separation-related difficulties when they experience distress during periods of separation from caregivers, while cats may demonstrate stress through hiding, reduced social interaction, inappropriate elimination, and changes in grooming behavior. The analysis also highlights the importance of environmental enrichment in reducing behavioral difficulties. Activities such as interactive play, scent exploration, climbing structures, scratching facilities, and positive reinforcement provide opportunities for animals to express natural behaviors and maintain mental stimulation. These findings suggest that species-appropriate enrichment is an important component of effective animal welfare management.The analysis further identifies human-animal interaction and veterinary healthcare as important factors influencing behavioral health. Positive interaction, respectful handling, consistent routines, and

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recognition of animal communication signals may contribute to emotional security and healthy social behavior.

## FINDINGS

The findings of this study indicate that animal welfare is strongly associated with the behavioral health and emotional well-being of domestic companion animals. Appropriate nutrition, suitable housing, regular veterinary attention, physical activity, and opportunities for social interaction contribute to maintaining healthy behavioral patterns. The reviewed literature demonstrates that dogs and cats have different environmental and behavioral requirements, which should be considered when developing welfare management strategies. Animals whose individual needs are not adequately fulfilled may experience stress, fear, anxiety, frustration, and other behavioral difficulties. Therefore, providing appropriate living conditions and opportunities to express natural behaviors is essential for maintaining positive welfare outcomes.Another important finding is that environmental conditions and psychological stress play significant roles in behavioral development. Overcrowding, excessive noise, social isolation, inadequate stimulation, and inappropriate handling may negatively influence emotional stability and increase the possibility of behavioral problems. The reviewed research also indicates that environmental enrichment, interactive play, scent exploration, suitable resting spaces, and positive reinforcement can provide beneficial behavioral opportunities. Furthermore, respectful human-animal interaction and recognition of individual preferences are important for developing positive relationships between pets and their caregivers. These findings suggest that behavioral health can be improved through appropriate environmental management and welfare-oriented handling practices.The study also finds that behavioral assessment and preventive veterinary care are essential for identifying and addressing welfare problems. Changes in appetite, activity, social behavior, body posture, vocalization, and grooming patterns may provide important information about an animal's physical and emotional condition. Veterinary professionals should therefore consider behavioral observations alongside physical examinations when assessing companion animal health. The findings further suggest that responsible pet ownership, owner education, regular exercise, appropriate socialization, and timely professional intervention can contribute to reducing behavioral difficulties. Overall, the study establishes that animal welfare and behavioral health should be considered together to promote healthier, more emotionally stable, and better-adjusted domestic companion animals.

## CONCLUSION

Animal welfare and behavioral health are closely interconnected components of the overall well-being of domestic companion animals. This study highlights that the health and quality of life of dogs and cats depend not only on physical care but also on their emotional experiences, environmental conditions, social relationships, and opportunities to express natural behaviors. Appropriate nutrition, suitable housing, regular exercise, veterinary attention, and positive human-animal interaction contribute to maintaining healthy behavioral functioning. In contrast, inadequate living conditions, chronic stress, fear, inappropriate handling, and insufficient environmental stimulation may contribute to behavioral problems and reduced quality of life. Therefore, animal welfare should be understood as a comprehensive concept that includes physical health, psychological stability, and positive behavioral experiences.The study further concludes that environmental enrichment and

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responsible pet ownership are essential for improving behavioral health. Dogs and cats require different forms of physical, social, and mental stimulation according to their species-specific needs and individual characteristics. Interactive play, scent exploration, climbing facilities, secure resting areas, positive reinforcement, and predictable daily routines can provide valuable opportunities for healthy behavioral expression. Human-animal relationships should also be based on respect, appropriate handling, and recognition of animal communication signals. Veterinary professionals and behavioral specialists play an important role in identifying behavioral difficulties, evaluating underlying medical conditions, and recommending appropriate management strategies.In conclusion, maintaining positive animal welfare requires a continuous commitment to physical healthcare, emotional support, environmental management, and responsible ownership. Behavioral changes should be recognized as important indicators of an animal's condition and should receive appropriate attention rather than being treated simply as undesirable habits. Future research should investigate the long-term effects of environmental enrichment, chronic stress, human-animal interaction, and preventive behavioral healthcare on the quality of life of companion animals. Greater public awareness, improved veterinary services, and stronger cooperation between animal welfare organizations and pet owners can contribute to better living conditions and healthier behavioral outcomes. An integrated approach to animal welfare and behavioral health is therefore essential for ensuring the long-term well-being of domestic companion animals.

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