

The Influence of Animal Phobia on Post-Traumatic Stress Disorder (PTSD)

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ABSTRACT

The apprehension over animals in urban settings has emerged as a significant concern, particularly in highly populated regions such as Bangkok. With the expansion of urbanization, interactions between humans and wildlife have increased, frequently eliciting extreme fear responses that may lead to mental health issues. This study seeks to investigate the correlation between animal phobia and symptoms of Post-Traumatic Stress Disorder (PTSD), along with its effects on daily activities among inhabitants of Bangkok. We employed a standardized questionnaire to gather responses from 360 participants, assessing the impact of PTSD on everyday activities in relation to fear of animals. Our findings indicate that interactions with animals may lead to psychological anguish, with women possibly being more impacted. A plausible explanation is that elevated estrogen levels in women may heighten sensitivity to stress and emotional recollection, while testosterone in men may stabilize stress responses. This underscores the necessity of comprehending human-animal interactions in urban environments, which could guide mental health support and associated policies. These findings necessitate the examination of gender and hormonal variations in comprehending stress reactions and psychological health during animal interactions to enhance mental well-being.

Keywords: Mental health, Post-Traumatic Stress Disorder (PTSD), Specific Phobia.

INTRODUCTION

Post-traumatic Stress Disorder (PTSD) is a psychological condition that may arise following the experience or observation of a terrible incident. The symptoms of PTSD, including flashbacks, nightmares, intense anxiety, and intrusive thoughts regarding the traumatic incident, can profoundly affect an individual's daily functioning, hindering concentration, sleep, and the ability to sustain good relationships. Individuals with PTSD may encounter intensified fear and anxiety, which can be aggravated by particular triggers, including intense phobias. These apprehensions may vary from slight unease to incapacitating anxiety, resulting in avoidance behaviors. One such dread, known as zoophobia or animal phobia, is a specialized phobia that can profoundly impact an individual's mental health and daily functioning. Although animal fear may not directly induce PTSD, it can intensify symptoms such as intrusive thoughts, increased anxiety, and hypervigilance, which substantially affect everyday functioning. A traumatic encounter with an animal can result in the onset of PTSD and animal phobia, as evidenced by research suggesting that such events increase the likelihood of developing particular phobias and associated psychological disorders [1]. The anxiety linked to animal phobia can lead to avoidance behaviors, including the evasion of public spaces or settings where animals may be present. This may constrain social contacts, curtail outdoor activities, and ultimately reduce an individual's quality of life. The elevated anxiety and hypervigilance frequently observed in patients with PTSD might be exacerbated by the presence of animals, resulting in heightened distress and difficulties in managing daily activities [2].

Recent research clarifies the complex relationship between traumatic experiences, fear reactions, and long-lasting psychological consequences. Research indicates that PTSD is a debilitating syndrome that manifests in a subset of persons following a traumatic event, such as a snakebite. Studies have shown that post-traumatic stress disorder (PTSD) is the most frequently examined mental health issue subsequent to snakebite incidents. discusses contemporary translational methodologies to connect human and animal PTSD research. Moreover, urban environments offer a distinct perspective on the fear of animals and its impact on mental health. Urban residents commonly experience infrequent contacts with wild or stray animals, which can exacerbate anxiety during these unusual interactions, especially for individuals with illnesses such as PTSD [3]. The rapid metropolitan environment contributes

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to stress, rendering unexpected interactions with animals much more intimidating. This may result in hypervigilance and avoidance behaviors that restrict social interactions and daily activities. These discoveries collectively motivated our research to investigate the manifestation of animal-related concerns in an urban environment, such as Bangkok, and their effects on daily functioning.

Previous research has investigated the psychological underpinnings behind fear responses to animals, providing significant insights for our study. Investigated the role of conditioning and cognitive biases in the formation and perpetuation of animal-related phobias. His findings suggest that individuals may develop severe fear responses either through direct unfavorable encounters with animals or by witnessing others' scared reactions. This is pertinent to our research on animal phobias and PTSD, as it underscores how these conditioned anxieties may precipitate PTSD symptoms and interfere with daily functioning. Davey's research indicates that frequent encounters with frightened animals may not only heighten phobic emotions but also amplify stress responses, especially in an urban setting such as Bangkok, where contacts with stray animals are prevalent. Research by the Department of Veterans Affairs indicates that PTSD symptoms may impact family and friends. Comprehending the distinct issues encountered by individuals with PTSD who also feel fear of animals is an advancing domain. PTSD complicates daily activities, sometimes resulting in unfulfilled familial obligations. Current research predominantly centers on animal models of fear and anxiety, which may not accurately reflect human experiences. Moreover, research examining the relationship between phobias and PTSD frequently lacks a concentrated emphasis on animal phobias. Moreover, although urban environments may appear inhospitable to human-wildlife interactions (HWI), swift alterations in land use can lead to increased contacts with wildlife due to habitat changes, as well as with species that flourish in urban contexts. In Asia, the fast transformation of land use starkly highlights the contrast between biodiversity hotspots and metropolitan areas [4]. Interactions between humans and animals in urban settings frequently present difficulties for both ecosystems and public health. Urban expansion sometimes leads to habitat destruction, forcing wildlife into urban environments and exacerbating competition for scarce resources. Moreover, these interactions elevate the hazards of illness transmission and possible property damage. The absence of focused research results in a deficiency in our understanding of the particular difficulties encountered by individuals

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with animal phobia and PTSD, especially in urban locales such as Bangkok, where interactions with animals are common and may differ from the urban context. Although there is current research on concerns associated with animals and sensitivity to disgust, there is a paucity of studies specifically addressing urban environments.

The study highlights the impact of conditioning and cognitive biases on the emergence of phobias within an adult UK demographic, offering insights into the formation of animal fears in cultural and urban environments like Bangkok. It posits that adverse experiences, cultural beliefs, and cognitive biases may intensify fear responses. This study seeks to investigate the impact of these factors on the experience of PTSD and daily life for individuals in such environments. However, the application of these findings to Southeast Asian populations, particularly concerning trauma-related neurological alterations and PTSD symptoms, presents a challenge. Contemporary animal PTSD models recognize neurological changes linked to trauma; however, additional investigation is required to relate these models to actual urban settings such as Bangkok. By concentrating on urban environments, your research can elucidate how animal phobias may affect mental health issues like PTSD, given that urban living conditions are known to influence mental well-being and stress levels. This research aims to examine the relationship between animal phobia and the severity of Post-Traumatic Stress Disorder (PTSD), along with its effects on daily activities, including social relationships, work performance, overall quality of life, and mental health. The research uses a questionnaire to assess a sample population. This study aims to evaluate the impact of animal phobia on the behavior and everyday activities of patients with PTSD. This study aims to investigate the correlation between fear of animals, PTSD, and daily activities. The concept asserts that fear of animals may lead to the onset of PTSD and thereafter affect daily activities. Research in animal models demonstrates that the fear of predators can induce enduring alterations in the brain circuitry of wild animals, leading to behaviors akin to PTSD. This indicates that the fear of animals can elicit significant and enduring psychological impacts in animals, perhaps applicable to people as well. This research may facilitate the advancement of novel treatment and preventative measures that could benefit humanity. These investigations enhance our comprehension of the impact of animal phobia on PTSD and associated daily activities, while also providing possible insights for improving therapy outcomes and aiding the daily lives of affected persons.

RESEARCH ELABORATIONS

The survey research sought to elucidate the relationship between the influence of animal-related fear on Post-Traumatic Stress Disorder (PTSD) and daily activities in Bangkok. The questionnaire consists of three sections: 1) General Information, 2) The Influence of Animal Phobia on Post-Traumatic Stress Disorder (PTSD), and 3) The Effect of Animal Phobia on Daily Activities. Responses were gathered by multiple-choice questions in section 1 and a 5-point Likert scale in parts 2 and 3, with the scale ranging from 1 (strongly disagree) to 5 (strongly agree). The poll utilized a convenience sample technique to gather data. The questionnaire was evaluated by two experts and achieved an Item-Objective Congruence (IOC) index score of 0.955. Cronbach's alpha was employed to assess the reliability of the questionnaires during pilot testing (N = 30). We sent questionnaires to a specific sample group, thereafter administering the official questionnaire, which resulted in a satisfactory score of 0.883, showing strong internal consistency. The survey was conducted using Google Forms using the Line and Instagram programs, yielding a total of 330 participants. Pearson's correlation was employed to determine the relationship between variables, while a one-way ANOVA (F-test) was utilized to assess differences among three or more groups.

RESULTS AND DISCUSSIONS

Presents the comprehensive data of 360 participants. The majority of participants are women, with 58.1%. The majority of respondents were aged 16-27 (35.0%), followed by those aged 44-59 (26.9%). 48.9% of respondents exhibit a fear of reptiles and amphibians, and 35.8% fear arachnids and insects, while the remaining individuals constitute a minority. Approximately 50.8% of respondents report negative experiences or traumatic recollections concerning animals. Ultimately, hardly 30 responders have undergone therapy for psychiatric disorders (8.3%).

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Table 1 Descriptive statistics

	N	Mean	Std. Deviation
Fearing animals with Post-Traumatic Stress Disorder (PTSD)	360	2.60	0.956
Fearing animals with daily activit	360	2.47	0.990

The responses range from 1 to 5, where 1 signifies strong disagreement and 5 signifies strong agreement. The mean response for fear of animals among the 360 participants with Post-Traumatic Stress Disorder (PTSD) is 2.60, suggesting a diminished propensity for PTSD-like reactions when confronted with feared animals. The average effect of fear of animals on the daily activities of all 360 participants is 2.468, suggesting a reduced probability of interference with daily routines when confronted with feared animals.

Table 2 One-way ANOVA

	SS	df	MS	F	P
Between group	8.754	2	4.377	4.893**	0.008
Within group	319.352	357	0.895		
Total	328.10	359			

The r-value of 0.778 between PTSD responses and daily activity related to fear of animals signifies a substantial correlation between the two variables: fear of animals associated with PTSD and fear of animals affecting daily activity.

Post-Traumatic Stress Disorder (PTSD) is a multifaceted mental health disorder that profoundly affects an individual's capacity to execute routine everyday activities. Individuals with PTSD may encounter flashbacks, anxiety, and concentration difficulties, which can disrupt occupational performance, interpersonal relationships, and daily activities. In urban environments, anxieties concerning animals, such as feral dogs and city-dwelling wildlife, might exacerbate these symptoms, prompting individuals to evade specific locales or circumstances and restricting their regular activities. While extensive research exists on PTSD triggers, limited studies focus explicitly on the impact of animal phobia on daily functioning. This study, conducted in Bangkok, intends to investigate the correlation between fear of animals and PTSD symptoms, as well as their impact on persons' daily lives. The average score for fear of animals among individuals with post-traumatic stress disorder (PTSD) is 2.60, which is below the midpoint of the rating scale of 3, indicating that most respondents exhibit a fear

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of animals insufficient to fulfill PTSD criteria. To receive a diagnosis of PTSD, an individual must have encountered a traumatic event, such as a life-threatening circumstance or significant injury. Secondly, they must have at least one intrusive symptom, such as evading reminders of the event. Thirdly, this frequently coincides with negative self-perceptions or pessimistic views of the world, as well as increased arousal symptoms such as insomnia. Finally, these symptoms must last for more than a month, result in considerable distress, or disrupt everyday functioning and should not be attributable to substance use or other medical conditions. According to this criterion, fear of animals can only be classified within the first or third categories, perhaps resulting in a mean score that falls below the midpoint.

A potential explanation for this gender disparity may be biological causes. Women are generally more predisposed to developing PTSD after trauma due to hormonal fluctuations, particularly alterations in estrogen and progesterone, which can amplify their reactions to distressing experiences. This indicates that fluctuations in hormones, especially estrogen and progesterone, contribute to heightened sensitivity in women regarding trauma and terror responses. Additionally, it examines both psychosocial and biological aspects that may account for this disparity, including variations in trauma exposure, stress response, and the influence of oxytocin. It is determined that women possess a 2-3 times elevated chance of having PTSD compared to men. Consequently, both our survey results and the findings by Shansky and Olff corroborate the notion that gender influences PTSD, indicating that women exhibit a greater propensity to develop the disorder overall. Nonetheless, their findings do not suggest that this is explicitly attributable to the fear of animals. The fear of animals considerably affects daily tasks in women, perhaps due to the interaction between cortisol, the principal stress hormone, and estrogen. Estrogen varies throughout the menstrual cycle, affecting cortisol levels and intensifying stress reactions. During ovulation, estrogen levels increase, resulting in a deceleration of cortisol clearance and exacerbating stress responses, which in turn heightens fear and avoidance behaviors. Demonstrating that elevated estrogen levels heighten sensitivity to stress and the emotional recollection of adverse experiences, hence disrupting daily activities that may involve possible animal interactions. In males, hormonal dynamics vary. Testosterone, the principal male sex hormone, seems to modulate cortisol's actions, leading to a more stable and often diminished stress response to fear-inducing stimuli. This buffering effect diminishes fear-related disruptions in men, who experience fewer hormonal changes than

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women. These data indicate that estrogen and testosterone influence cortisol differently in women and men, resulting in gender-specific variations in animal-related fear. This result underscores the potential of hormone-based therapies to mitigate fear-related disturbances, particularly for individuals exhibiting increased sensitivity attributable to hormonal factors.

The correlation between animals with Post-Traumatic Stress Disorder (PTSD) and those with daily activity is significant ($r = 0.778$, $p < 0.001$). This indicates that individuals with animal-related fear stemming from PTSD are far more prone to have their regular activities interrupted by this dread. Furthermore, Table 2 reveals that the average dread of animals in patients with PTSD (mean = 2.60) is below the midpoint of the rating scale, suggesting that animal-related anxieties significantly contribute to their overall misery yet do not reach the severity required for PTSD diagnosis. This association can be elucidated by the notion that PTSD frequently exacerbates anxiety responses, and fear of animals, especially in urban environments, may provoke hypervigilance and avoidance behaviors that disrupt everyday functioning. This theory corresponds with the findings, which indicate that patients with PTSD exhibit increased fear and avoidance, particularly when confronted with triggering cues, such as animals in densely populated metropolitan settings. Moreover, it has been emphasized that in urban environments such as Bangkok, where stray animals are prevalent, these anxieties might intensify PTSD symptoms, causing sufferers to evade specific locations and endure increased isolation. This research substantiates the notion that environmental influences can significantly exacerbate PTSD symptoms and influence everyday functioning. Consequently, both our survey findings and the research conducted by Kessler and Lindberg substantiate the notion that a correlation exists between fearing animals with daily activity and fearing animals associated with post-traumatic stress disorder (PTSD). This relationship underscores the significance of managing environmental stimuli to enhance the daily functioning of individuals with PTSD.

CONCLUSIONS

This study identified gender disparities in animal-related fear, with women exhibiting more pronounced fear reactions indicative of potential PTSD symptoms. The subsequent debate revealed numerous studies indicating that increased fear is associated with physiological

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and psychological factors that exacerbate stress and anxiety. Animal phobia interferes with daily activities via avoidance behaviors, such as evading specific routes or locations, and emotional turmoil, characterized by increased anxiety and hypervigilance. These disturbances can impede daily routines, occupational or academic performance, and social relationships. The research indicated that animal phobia is significantly associated with challenges in everyday functioning, which diminish opportunities for typical social and outdoor engagements, hence adversely affecting quality of life.

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