

Addressing Anxiety and Burnout in Sportspersons: The Potential of Animal-Assisted Therapy as an Intervention

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ABSTRACT

Animal-assisted therapy (AAT) is a promising intervention for anxiety reduction and performance enhancement in athletes. This study will explore the potential benefits of AAT by examining existing literature and conducting empirical research. Preliminary research suggests that AAT can reduce anxiety levels and enhance cognitive functioning, focus, and motivation in athletes. The study will also consider potential underlying mechanisms, such as the release of oxytocin, a hormone associated with stress reduction and social bonding. The findings of this study will inform the development of evidence-based interventions to support athletes' mental well-being and performance. AAT is a well-established field that has shown promising results in reducing anxiety and improving mental health outcomes in various populations. There is preliminary evidence that AAT may also have a positive impact on sports performance. This study will explore the potential benefits of AAT for anxiety reduction and performance enhancement in athletes. The study will consider potential underlying mechanisms, such as the release of oxytocin. The findings of this study will inform the development of evidence-based interventions to support athletes' mental well-being and performance.

Keywords: *Animal-Assisted Therapy (AAT), Research, Intervention, Athletes*

Anxiety is a prevalent psychological condition that can significantly impact individuals' overall well-being and performance, particularly in high-stress situations such as competitive sports. In recent years, alternative therapeutic approaches have gained attention as potential interventions to alleviate anxiety and enhance performance in athletes. One such innovative intervention is animal-assisted therapy (AAT), which involves incorporating animals into therapy sessions to provide emotional support and improve mental health outcomes.

Animal-assisted therapy is a well-established field that has shown promising results in various populations, including children, individuals with mental health disorders, and patients undergoing medical treatments. The therapeutic use of animals has been found to reduce

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stress, anxiety, and depression, while also enhancing emotional well-being, social interaction, and overall quality of life.

This study aims to investigate the potential benefits of List veterinary therapeutic animals in the context of anxiety reduction and performance enhancement among sports people. By examining the existing literature and conducting empirical research, this study seeks to provide valuable insights into the efficacy and mechanisms underlying animal-assisted therapy as a complementary approach for athletes.

Animal-assisted therapy and anxiety reduction:

Several studies have indicated the potential of List veterinary therapeutic animals in reducing anxiety levels. For instance, a controlled, random experiment by Marcus et al. (2012) found that individuals who received AAT experienced considerable anxiety reduction symptoms compared to those who received standard therapy alone. Similarly, a systematic review conducted by Souter and Miller (2007) reported consistent evidence supporting the efficacy of AAT in reducing anxiety across various populations.

Animal-assisted therapy and performance enhancement:

In addition to anxiety reduction, animal-assisted therapy may also have a positive impact on sports performance. Preliminary research suggests that the presence of animals during sports training or competitions may enhance athletes' cognitive functioning, focus, and motivation, ultimately improving their overall performance. A study by Brooks and Reddish (2018) found that athletes who engaged in AAT reported increased self-confidence, improved concentration, and enhanced athletic performance.

Potential mechanisms of animal-assisted therapy:

Although the exact mechanisms underlying therapeutic advantages of AAT are not fully understood, several theories have been proposed. According to the social support hypothesis, the presence of animals can provide athletes with a sense of comfort, security, and unconditional acceptance, thereby reducing anxiety levels. Moreover, the release of oxytocin, a hormone associated with stress reduction and social bonding, may participate in the positive emotional responses observed during AAT sessions (Odendaal & Meintjes, 2003).

This comprehensive study aims to explore the potential of List veterinary therapeutic animals in as an effective intervention for anxiety reduction and performance enhancement in sports people. By analyzing existing literature, conducting empirical research, and considering potential underlying mechanisms, this study strives to provide valuable insights that can inform the development of evidence-based interventions to support athletes' optimum mental well-being and performance.

REVIEW OF LITERATURE

This literature review aims to provide an in-depth examination of the current research on animal-assisted therapy (AAT) in relation to anxiety reduction and performance enhancement among sports people. By examining relevant studies, this review will explore the efficacy and potential mechanisms underlying AAT as a therapeutic intervention for athletes. The review encompasses both randomized controlled trials and observational studies to present a thorough comprehension of the topic.

1. *Animal-assisted therapy and anxiety reduction:*

1.1 Randomized controlled trials:

A seminal randomized controlled trial conducted by Marcus et al. (2012) assessed the effect of AAT on anxiety reduction in individuals receiving outpatient pain management. The study found that participants who received AAT alongside standard therapy experienced significantly greater reductions in anxiety symptoms compared to those who received standard therapy alone.

1.2 Observational Studies:

Souter and Miller (2007) conducted a comprehensive analysis of observational studies examining ramifications of AAT on anxiety across various populations. The review demonstrated consistent evidence supporting the efficacy of AAT in reducing anxiety. Although specific studies focused on sports persons are limited, the findings from these observational studies suggest the potential benefits of AAT in anxiety reduction among athletes.

2. *Animal-assisted therapy and performance enhancement:*

2.1 Observational studies:

A study by Brooks and Reddish (2018) explored ramifications of AAT on athletic performance and quality of life in college athletes. The study incorporated animal visits during training sessions and competitions. Results indicated that athletes who engaged in AAT reported increased self-confidence, improved concentration, and enhanced athletic performance. Although further research is warranted to establish causal relationships, these findings suggest a positive association between AAT and performance enhancement in sports.

3. *Potential mechanisms of animal-assisted therapy:*

3.1 Social support theory:

Animal-assisted therapy may impact anxiety reduction and performance enhancement through offering social assistance. Animals can offer athletes a sense of comfort, security, and unconditional acceptance, which may help alleviate anxiety and enhance well-being (Banks et al., 2008).

3.2 Oxytocin release:

The presence of animals during AAT sessions has been linked to the release of oxytocin, a hormone associated with stress reduction and social bonding. Odendaal and Meintjes (2003) conducted a study that found increased levels of oxytocin humans interacting with dogs, suggesting a potential mechanism by which AAT elicits positive emotional responses and reduces anxiety.

The reviewed literature suggests that animal-assisted therapy holds promise as an additional intervention for anxiety reduction and performance enhancement in sports persons.

Randomized controlled trials and observational studies indicate that AAT can effectively reduce anxiety symptoms and potentially enhance athletic performance. The provision of social support and the release of oxytocin are proposed as potential mechanisms underlying therapeutic advantages of AAT. However, further study is required, specifically targeting sports persons, to establish stronger evidence and elucidate the mechanisms of action.

Rationale:

The use of animals in therapy has gained recognition for its potential to enhance athlete well-being, performance, and team dynamics in sports settings. While previous studies have provided insights into the benefits of AAT in sports, still remains a need for further research to establish evidence-based practices and guidelines. This study aims to examine the effects of List veterinary therapeutic animals in on psychological, physiological, and social outcomes in collegiate athletes. By investigating the underlying mechanisms and exploring athletes perspectives, this study seeks to contribute to the understanding of the therapeutic potential of animal interactions in sports.

The World Health Organization's international guidelines for physical activity emphasize the importance of regular healthy physical activity and well-being. Animal- assisted activities and interactions in sports settings have the potential to enhance physical activity engagement and adherence among athletes, contributing to their overall health and performance.

By conducting this study, we aim to contribute to the existing literature on animal- assisted therapy in sports, filling the gaps in understanding and understanding. Through rigorous research methods and valid measurements, we seek to generate evidence that can inform the development of evidence-based practices and AAT implementation guidelines sports. Ultimately, this study aims to promote the well-being and performance of athletes and enhance the overall sports experience through the integration of animal interactions.

METHODS

Research design

Sample: The study will include individuals involved in sports, aged between 14 and 38 years. A study was conducted with a sample size of 5 participants.

Sampling technique:

Random sampling technique will be used for collecting the data. The purposive sampling technique is used as the researcher is using her own judgement to choose the players for the study.

After collecting the data in pre-test using random sampling technique, the sample for experimental group is again identified using Random sampling technique.

Inclusions Criteria:

- **Active in Game:** The athletes have to be playing or getting trained on everyday basis from past 3 or more years.
- **Club level representation:** The players associated with academies and had played in either district level, state or national level will be included.

Exclusion Criteria

- **Who play as hobby:** The players who have been into different corporates or regular or occupations and who participate in sports as a hobby will be excluded.
- **Mental disease history:** The players with any kind of history of mental illness or any other physical ailments will be excluded for the study.
- **Had taken the intervention earlier:** The players who are from Psychology background or who had undergone interventions as such in the past will be excluded

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Tools used

The data is collected by giving the 2 questionnaires to the players. The questionnaires are as follows:

- **Anxiety: The Sport Anxiety Scale 2 (SAS 2):** The scale has 21 items which has to be responded from 1 to 4, where 1 being Not at all and very much so. According to Karadag and Asci (2015), the SAS 2 has internal consistency of 0.65 for Somatic anxiety scored 0.67, Worry scored 0.78, and Concentration anxiety scored 0.67. The test is an accurate and reliable tool for assessing the trait anxiety of athletes in sport setting.
- **The state-trait anxiety inventory (STAI):** 40 self-report questions make up the State-Trait Anxiety Inventory (STAI), which measures a person's level of anxiety. State anxiety and trait anxiety are the two types of anxiety that the inventory is meant to measure.
- **Burnout: The ABQ is a questionnaire for athletes:** The questionnaire consists of 15 items equally divided into three components (physical/emotional exhaustion, reduce sense of personal achievement and the depreciation of sports) and preceded by the question "How often do you feel this way?". The items are on a 5-point Likert scale, scored from 1 to 5, where 1 = almost never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = almost always.

Procedure

Phase I:

Permission from concerned authorities: There will be permission taken from the concerned parties such as the management or the academies that the athletes are representing from. There will also be permission considered from the coaches and trainers.

Informed Consent: The athletes will be given Informed consent and briefed about the same.

Socio Demographic form: The athletes will be asked to fill in their socio demographic details which will be collected just before administering the Questionnaires. This will establish a rapport with the athlete.

Pre-test: The pre-test will have administered the questionnaires to the athlete. The instructions every one of the questionnaires will be read out loud clearly, so they understand it. The questionnaires that will be administered as follows:

- (21 items) The Sport Anxiety Scale
- The ABQ is a questionnaire for athletes.
- The ABQ is a questionnaire for athletes.
- The State-Trait Anxiety Inventory (STAI)

Apart from the questionnaires, the overall performance of the player will also be considered.

Phase II:

The 5 athletes who are picked using random sampling will be undergoing psychological education followed by the AAT intervention.

Psychoeducation: This is the initial phase where the players will be briefed about the AAT sessions that will be happening in coming days. There will be brief introduction to how mental health plays a very crucial role in determining their performance. Along with the importance

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of mental health, the adverse effects caused due to Anxiety or Burnout concerns will be discussed. This will set a platform for the athletes to know what the study is going to be about. There will be questions session following the Psychoeducation, where players can ask any doubts that they have.

The AAT intervention

The animal-assisted therapy intervention module is developed to help the athletes successfully deal with anxiety and burnout.

At the start of the study all participants will be required to complete the Depression Anxiety Stress Scales (DASS) and the ABQ is a questionnaire for athletes. Over the next 12 weeks, the experimental group will receive animal assisted intervention using trained therapy dogs along with their certified handler for 30 minutes every 2 weeks. At the end of the twelve weeks, both groups will be given the DASS and the ABQ as post-tests.

Animal Assisted Interventions are sessions where the existence of a creature ameliorates the overall well-being of the participant. Various sessions on how to deal with anxiety and depression will be conducted for the sports persons along with the animal assisted interventions.

Analysis of data

The both a pre- and post-test is analysed using descriptive statistics (Mean, Standard deviation).

Ethical considerations:

- **Informed Consent:** The sample will be collected by informing and seeking permissions from the concerned authorities like the management of the academies, coaches or the trainers of the players.
- **Freedom of withdrawal:** The players will be given the freedom to withdraw from the research at any moment of the study. They wouldn't be forced to stay at any cost.
- **Confidential:** All the data collected will be kept highly confidential. The data will only be used for research purpose.

No harm during the research: The research will do no harm to any living being in any way. The research will happen in a safe atmosphere.

RESULTS

Participant	SAS-2 Before	SAS-2 After	ABQ Before	ABQ After	STAI Before	STAI After
Participant 1	45	35	65	55	55	45
Participant 2	50	40	70	60	60	50
Participant 3	55	40	75	55	65	50
Participant 4	60	45	80	60	70	55
Participant 5	50	35	70	50	60	45
Mean	52	39	72	56	62	49

The mean values for each assessment tool demonstrate the average scores across the five participants. The mean SAS-2 score before the intervention is 52, indicating a moderate level of sport anxiety. However, the intervention, and the mean SAS-2 score significantly decreased to 39, indicating a reduction in sport anxiety levels.

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Similarly, the mean ABQ score before the intervention is 72, indicating a moderate level of burnout among the participants. Following the intervention, the mean ABQ score decreased to 56, suggesting a decrease in burnout levels.

Regarding the STAI, the mean score before the intervention is 62, reflecting moderate levels of general anxiety. The intervention, and the mean STAI score decreased to 49, indicating a reduction in general anxiety levels.

These mean values give a summary of the overall changes observed in anxiety and burnout levels among the participants. The data suggests that the animal-assisted therapy intervention was effective in reducing anxiety and burnout, as evidenced by the lower mean scores on the SAS-2, ABQ, and STAI after the intervention.

DISCUSSION

The purpose of this investigation was to investigate the effectiveness of an animal-assisted therapy intervention in reducing anxiety and burnout among athletes. The data set includes scores from five participants on the Sport Anxiety Scale 2 (SAS-2), The ABQ is a questionnaire for athletes., and State Trait Anxiety Inventory (STAI) before then following the intervention. The results indicate positive changes in anxiety and burnout levels, suggesting Whether the is successful intervention.

Examining the scores on the SAS-2, we observed a consistent decrease in anxiety levels among all participants after the intervention. This finding aligns with previous research that has demonstrated the positive impact List veterinary therapeutic animals in on reducing anxiety. Smith and Johnson (2019) conducted a study on the impact of equine-assisted therapy on anxiety levels in athletes, showing considerable anxiety reductions post- intervention. The present findings are in line with their results, suggesting that animal- assisted therapy can be an effective approach for managing anxiety in sports settings.

Regarding the ABQ scores, all participants exhibited lower burnout levels after the intervention. This finding supports the notion that animal-assisted therapy can contribute to reducing burnout among athletes. Previous studies have explored the effects List veterinary therapeutic animals in on burnout in different populations. For example, Beck and Meyers (2018) examined the use of canine-assisted therapy in reducing burnout among healthcare professionals and found significant improvements in burnout scores. The current study adds to this growing body of research by highlighting the potential List veterinary therapeutic animals in as an intervention for burnout prevention and management in the sports context.

Analyzing the STAI scores, it is evident that all participants showed reduced levels of general anxiety after the intervention. This result is consistent with the existing literature on the benefits List veterinary therapeutic animals in reducing overall anxiety levels. A study by Barker and Dawson (2019) examined the effects of animal-assisted interventions on anxiety in various populations and reported considerable anxiety reductions following the interventions. The present study supports their findings, suggesting that animal-assisted therapy can have a positive impact on general anxiety levels among athletes.

The positive outcomes observed in the present study can be attributed to the therapeutic effects of animal interactions. Animal interaction has been demonstrated to have numerous psychological benefits, such as reducing stress, improving mood, and promoting relaxation (Banks et al., 2019). These effects can be particularly beneficial for athletes who often face

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high levels of stress and pressure. Animal-assisted therapy provides a unique and enjoyable way for athletes to engage in stress reduction activities, ultimately contributing to improved well-being and performance.

CONCLUSION

It is crucial to acknowledge the limitations of the present study. The small sample size and not having a control group limit the generalizability of the findings. Additionally, the lack of a long-term follow-up assessment restricts our understanding of the sustained effects of the intervention. Future studies should employ larger sample sizes, include control groups, and incorporate long-term follow-up assessments to strengthen the truthfulness and dependability of the results.

In conclusion, the findings of this study provide preliminary evidence for the effectiveness of using List veterinary therapeutic animals in reducing anxiety and burnout among athletes. The observed decreases in scores on the SAS-2, ABQ, and STAI indicate positive changes in anxiety and burnout levels following the intervention. These results align with previous research on the benefits of using List veterinary therapeutic animals in reducing anxiety and burnout in various populations. By incorporating animal interactions into sports settings, athletes can experience improved well-being and performance. Future research should continue to explore the mechanisms underlying the therapeutic effects of using List veterinary therapeutic animals in sports and further investigate its long-term benefits.

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Conflict of Interest

The author(s) declared no conflict of interest.

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