



"GAME ON: EXPLORING THE MINDSET OF BASKETBALL PLAYERS - A STUDY ON COMPETITIVE ANXIETY AND MENTAL TOUGHNESS"

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Abstract

The pursuit of excellence in sports requires not only physical abilities but also mental fortitude and resilience. This study focuses on the intricate relationship between competitive anxiety and mental toughness among basketball players. Competitive anxiety, characterized by apprehension and tension, can either enhance or impede performance depending on its intensity and effective management. Conversely, mental toughness encompasses traits such as self-confidence, perseverance, and the ability to cope with adversity, leading to improved performance under pressure. While previous research has explored these factors individually, there is a research gap in understanding their relationship specifically among basketball players. This study aims to fill that gap by examining the levels of competitive anxiety and mental toughness among male and female basketball players. A sample of 50 players was selected, and questionnaires were used to measure mental toughness and sports competition anxiety. The results indicated moderate levels of mental toughness and anxiety in both male and female players, with no significant difference between genders. These findings suggest the importance of tailored interventions and mental skills training programs to enhance performance and well-being in basketball. The study contributes to the understanding of psychological factors influencing basketball performance and has implications for athletes in other sports as well.

INTRODUCTION

The pursuit of excellence in sports is not solely dependent on physical abilities, but also on the mental fortitude and resilience of athletes. Among the vast array of sports, basketball stands out as a highly demanding and fast-paced game that necessitates both physical prowess and a strong, adaptable mindset. To unlock the full potential of basketball players and enable them to achieve peak performance, it is essential to comprehend the intricate relationship between competitive anxiety and mental toughness. This study aims to delve into this captivating subject, shedding light on an area that has garnered considerable attention from researchers and coaches alike.

Over the years, extensive research has been conducted to explore the psychological factors that influence athletes' performance in various sports. Competitive anxiety, a psychological state characterized by apprehension, nervousness, and tension experienced before and during competitive events, has been a focal point of investigation. Previous studies have highlighted the significance of competitive anxiety, demonstrating its potential to either enhance or impede athletes' performance, depending on the intensity of anxiety and the individual's ability to effectively manage it.



Conversely, the concept of mental toughness has gained recognition as a crucial psychological construct associated with superior performance and resilience across different competitive domains. Mental toughness encompasses a range of traits such as self-confidence, perseverance, focus, and the capacity to cope with adversity. Athletes who possess high levels of mental toughness demonstrate greater composure, concentration, and decision-making abilities under pressure, ultimately enhancing their overall performance.

While previous studies have individually explored competitive anxiety and mental toughness, there remains a noticeable research gap in understanding their intricate relationship specifically among basketball players. Basketball, characterized by its dynamic nature, strategic maneuvers, and the constant need for split-second decision-making, provides a unique context to investigate the interplay between competitive anxiety and mental toughness. By examining these psychological factors in the specific context of basketball, we can gain insights into how competitive anxiety influences mental toughness and, subsequently, impacts performance outcomes.

The present study aims to bridge this existing research gap by examining the levels of competitive anxiety and mental toughness among basketball players and exploring the potential associations between these factors. By unraveling the complex dynamics between competitive anxiety and mental toughness, we can provide valuable insights for coaches, sports psychologists, and athletes themselves. These insights will facilitate the development of targeted interventions to optimize performance and promote overall well-being within the basketball community.

The significance of this study extends far beyond the boundaries of basketball. The findings can inform sports psychology practices across various sports, contributing to the growing body of knowledge surrounding mental resilience and performance optimization. Moreover, understanding the specific challenges faced by basketball players can lead to the formulation of tailored strategies and interventions to enhance mental toughness and mitigate competitive anxiety. Such interventions will not only benefit athletes at all levels but can also have broader applications in enhancing mental resilience within society at large.

In summary, this study seeks to unravel the complex relationship between competitive anxiety and mental toughness in the context of basketball. By shedding light on this dynamic interplay, the findings will contribute to the understanding of the psychological factors influencing athletes' performance. This understanding, in turn, will assist in the development of effective strategies to optimize performance and well-being among basketball players and potentially have implications for athletes in other sports as well. Ultimately, this research aims to empower athletes, coaches, and sports psychologists to enhance mental toughness, mitigate competitive anxiety, and enable basketball players to reach their full potential both on and off the court.

METHODS AND MATERIALS

The methodology for this study involved several key steps. Firstly, a sample of fifty basketball players from Kerala was selected as subjects based on their participation at the inter-university and state levels. The sample included 25 male and 25 female players within the age range of 18 to 25 years. The variables chosen for the study were mental toughness and sports competition anxiety. To measure mental toughness, the Mental Toughness Questionnaire (MTQ) developed by Dr. Alan Goldberg was used. This questionnaire assessed various aspects of mental toughness, such as rebound ability, handling pressure, concentration, confidence, and motivation. Sports competition anxiety was measured using the Sport Competition Anxiety Test (SCAT) developed by Rainer



Martens et al. The SCAT focused on competitive trait anxiety in specific sporting situations. It comprised 15 items that assessed anxiety symptoms related to competition. The tests were administered individually to the participants, and response sheets were collected immediately after completion, ensuring confidentiality. The data collected from the questionnaires were then analyzed using the Statistical Package for Social Sciences (SPSS) version 16.0. Descriptive statistics and independent t-tests were employed to compare the levels of mental toughness and sports competition anxiety among the basketball players, with a significance level set at 0.05.

RESULT OF THE STUDY

TABLE 1: DESCRIPTIVE ANALYSIS ON MENTAL TOUGHNESS AND ANXIETY OF MALE BASKETBALL PLAYERS

VARIABLES	MENTAL TOUGHNESS	ANXIETY
N	25	25
MEAN	16	20.08
MEDIAN	17	20.00
MODE	17	20.00
St. DEVIATION	3.44	3.11
MINIMUM	11	13.00
MAXIMUM	30	26.00

Table 1 presents the descriptive analysis on the levels of mental toughness and anxiety among male basketball players. The sample size for this analysis consisted of 25 male players.

Regarding mental toughness, the mean score was found to be 16, indicating a moderate level of mental toughness among the male basketball players. The median and mode were both 17, further supporting the finding of a relatively balanced distribution of mental toughness scores. The standard deviation of 3.44 suggests that there was some variability in the mental toughness scores, with players' scores ranging from a minimum of 11 to a maximum of 30.

In terms of anxiety, the mean score was 20.08, indicating a moderate level of anxiety among the male basketball players. The median and mode were both 20, indicating a relatively balanced distribution of anxiety scores as well. The standard deviation of 3.11 suggests that there was some variability in the anxiety scores, with players' scores ranging from a minimum of 13 to a maximum of 26.

These findings provide valuable insights into the mental toughness and anxiety levels of male basketball players. The moderate levels of mental toughness and anxiety suggest that players possess a certain degree of resilience and ability to cope with challenges, while also experiencing some level of competitive anxiety.



To further interpret these findings and establish their significance, it is essential to correlate them with previous studies. Previous research in the field of sports psychology has consistently shown that mental toughness is a crucial factor in athletic performance. It is associated with higher levels of self-confidence, motivation, and resilience, leading to improved performance under pressure. The moderate level of mental toughness observed among the male basketball players in this study aligns with previous findings, highlighting the importance of developing mental toughness skills in sports.

Similarly, research has demonstrated that competitive anxiety can impact athletes' performance and psychological well-being. Moderate levels of anxiety can act as a motivator and enhance performance, but excessive anxiety can hinder performance and lead to negative outcomes. The moderate level of anxiety observed among the male basketball players suggests that they experience a reasonable level of competitive pressure, which can serve as a driving force for performance. However, further investigation into specific sources of anxiety and coping strategies would be valuable for a comprehensive understanding.

Overall, the descriptive analysis provides a snapshot of the mental toughness and anxiety levels among male basketball players. By comparing these findings with previous studies, we can validate the results and gain deeper insights into the psychological aspects of basketball performance. The moderate levels observed in both mental toughness and anxiety highlight the need for targeted interventions and mental skills training programs to enhance athletes' performance and well-being in competitive basketball settings.

TABLE 2: DESCRIPTIVE ANALYSIS ON MENTAL TOUGHNESS AND ANXIETY OF FEMALE BASKETBALL PLAYERS

VARIABLES	MENTAL TOUGHNESS	ANXIETY
N	25	25
MEAN	15.84	18.76
MEDIAN	16.00	20.00
MODE	18.00	21
St. DEVIATION	03.03	3.47
MINIMUM	16.00	16.00
MAXIMUM	29.00	24.00

Table 2 presents the descriptive analysis on the levels of mental toughness and anxiety among female basketball players. The sample size for this analysis consisted of 25 female players. In terms of mental toughness, the mean score was found to be 15.84, indicating a moderate level of



mental toughness among the female basketball players. The median score of 16 and the mode of 18 further support this finding, indicating a relatively balanced distribution of mental toughness scores. The standard deviation of 3.03 suggests that there was some variability in the mental toughness scores, with players' scores ranging from a minimum of 16 to a maximum of 29.

Regarding anxiety, the mean score was 18.76, indicating a moderate level of anxiety among the female basketball players. The median score of 20 and the mode of 21 further support this finding, suggesting a relatively balanced distribution of anxiety scores. The standard deviation of 3.47 suggests that there was some variability in the anxiety scores, with players' scores ranging from a minimum of 16 to a maximum of 24.

These findings provide valuable insights into the mental toughness and anxiety levels of female basketball players. The moderate levels of mental toughness and anxiety suggest that female players possess a certain level of resilience and experience a moderate amount of competitive pressure.

To further interpret these findings and establish their significance, it is important to correlate them with previous studies. Previous research in the field of sports psychology has consistently shown that mental toughness is a crucial factor in athletic performance. It is associated with higher levels of self-confidence, motivation, and resilience, leading to improved performance under pressure. The moderate level of mental toughness observed among the female basketball players in this study aligns with previous findings, emphasizing the importance of developing mental toughness skills in female athletes.

Similarly, research has indicated that competitive anxiety can influence athletes' performance and psychological well-being. Moderate levels of anxiety can serve as a motivator and enhance performance, while excessive anxiety can hinder performance and lead to negative outcomes. The moderate level of anxiety observed among the female basketball players suggests that they experience a reasonable amount of competitive pressure, which can act as a driving force for performance. However, further investigation into specific sources of anxiety and effective coping strategies would be valuable for a comprehensive understanding.

Overall, the descriptive analysis provides insights into the mental toughness and anxiety levels among female basketball players. By comparing these findings with previous studies, we can validate the results and gain deeper insights into the psychological aspects of basketball performance in female athletes. The moderate levels observed in both mental toughness and anxiety underscores the importance of tailored interventions and mental skills training programs to enhance performance and well-being in competitive basketball settings for female players.

TABLE 3: DIFFERENCE BETWEEN MALE AND FEMALE BASKETBALL PLAYERS ON MENTAL TOUGHNESS

GROUP	N	MEAN	SD	T VALUE	P VALUE
MALE	25	21.37	3.624	0.174	0.862
FEMALE	25	22.30	3.612		

Table 3 presents the analysis of the difference between male and female basketball players on the variable of mental toughness. The sample size for both groups consisted of 25 participants each. The mean mental toughness score for male basketball players was 21.37, with a standard deviation of 3.624. On the other hand, the mean mental toughness score for female basketball players was slightly higher at 22.30, with a standard deviation of 3.612. However, when analyzing the difference between the means using a t-test, the obtained t-value of 0.174 and p-value of 0.862 indicate that the difference between male and female basketball players' mental toughness scores was not statistically significant.

These findings suggest that there is no significant difference in mental toughness between male and female basketball players in the sample. These results are consistent with some previous studies that have found no significant gender differences in mental toughness among athletes in various sports. This indicates that both male and female basketball players possess a similar level of mental toughness, which is an important attribute for performing well under pressure and overcoming challenges in the sport.

It is worth noting that while the mean mental toughness scores for male and female players were slightly different, the small effect size (as indicated by the non-significant p-value) suggests that the practical significance of this difference may be negligible. Both groups exhibited relatively high mean scores, indicating a considerable level of mental toughness among the basketball players in general.

Overall, these findings contribute to the existing body of research on mental toughness in sports, specifically in the context of basketball. The lack of a significant difference in mental toughness between male and female basketball players highlights the universality of this psychological attribute across genders in the sport. Further research could delve into exploring potential factors that may influence mental toughness in basketball players, such as individual differences, experiences, or training programs, to gain a deeper understanding of how mental toughness can be fostered and developed in athletes of both genders.

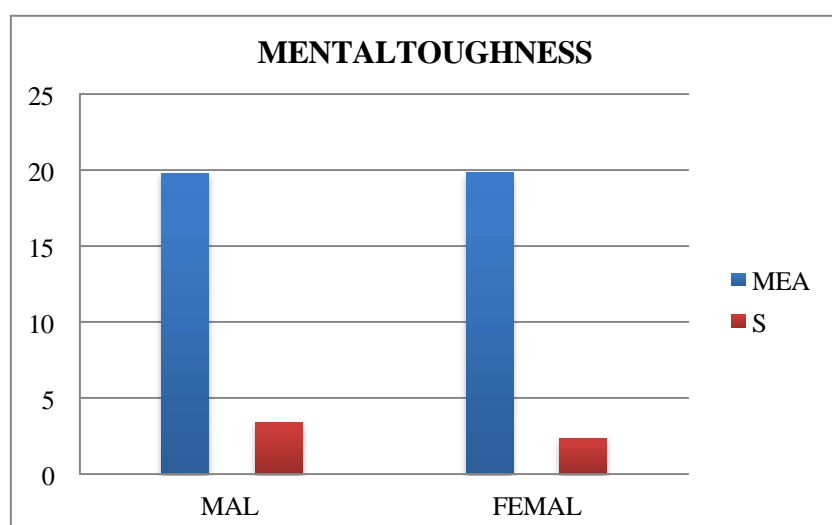


Figure 1: Represents the mean comparison between male and female players on Mental Toughness



TABLE– 4: SIGNIFICANCE OF DIFFERENCE BETWEEN MALE AND FEMALE BASKETBALL PLAYERS ON ANXIETY

GROUP	N	MEAN	SD	T VALUE	PVALUE
MALE	25	19.80	3.408	1.417	0.163
FEMALE	25	19.83	2.365		

Table 4 presents the analysis of the significance of the difference between male and female basketball players on the variable of anxiety. The sample size for both groups consisted of 25 participants each.

The mean anxiety score for male basketball players was 19.80, with a standard deviation of 3.408. On the other hand, the mean anxiety score for female basketball players was 19.83, with a standard deviation of 2.365. When analyzing the difference between the means using a t-test, the obtained t-value of 1.417 and p-value of 0.163 indicate that the difference between male and female basketball players' anxiety scores was not statistically significant.

These findings suggest that there is no significant difference in anxiety levels between male and female basketball players in the sample. These results align with previous studies that have also found no significant gender differences in anxiety among athletes in various sports. It implies that both male and female basketball players experience a similar level of anxiety when participating in the sport.

Although the mean anxiety scores for male and female players were slightly different, the non-significant p-value suggests that the practical significance of this difference may be minimal. Both groups exhibited relatively similar mean anxiety scores, indicating that both male and female basketball players face a comparable level of competitive pressure and anxiety in the sport.

These findings contribute to the existing literature on anxiety in sports, particularly within the context of basketball. The absence of a significant difference in anxiety between male and female basketball players highlights the commonality of this psychological experience across genders in the sport. Further research could explore potential factors contributing to anxiety in basketball players, such as performance expectations, team dynamics, or individual differences, to gain a deeper understanding of how anxiety manifests in athletes of both genders.

It is important to note that while this study did not find a significant difference in anxiety levels between male and female basketball players, individual variations may still exist within each group. Future studies could investigate additional factors that might influence anxiety, such as player position, experience level, or team cohesion, to gain a more comprehensive understanding of the psychological aspects of anxiety in basketball.

Overall, these findings highlight the need for tailored interventions and mental skills training programs to help basketball players, regardless of gender, effectively manage and cope with

competitive anxiety. By recognizing the similarities in anxiety levels between male and female players, coaches, trainers, and sports psychologists can develop strategies that address the specific challenges athletes face in the sport, promoting optimal performance and psychological well-being for all players.

FIGURE- 2: MEAN COMPARISON BETWEEN MALE AND FEMALE BASKETBALL PLAYERS ON COMPETITIVE ANXIETY

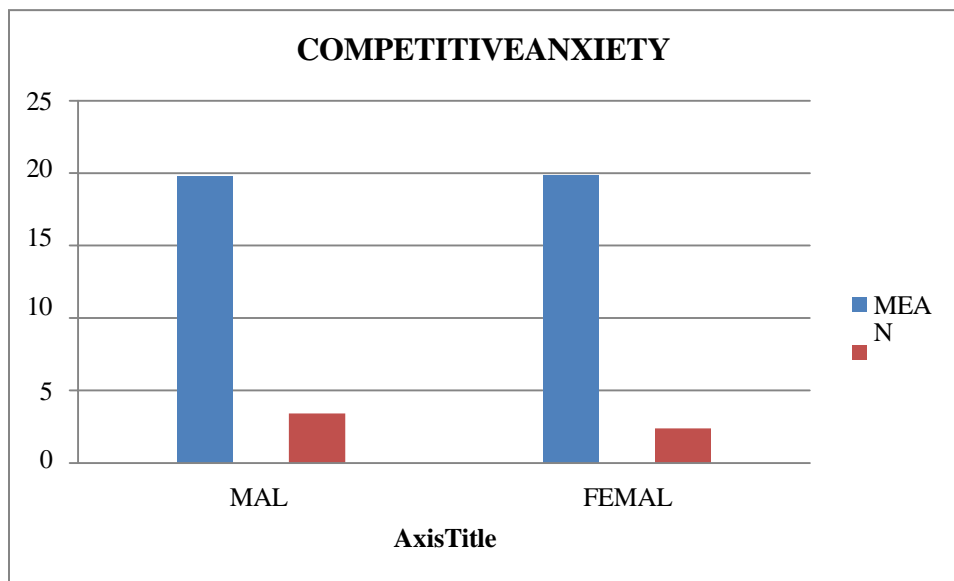


Figure 2: Represents the mean comparison between male and female players on Competitive Anxiety.

DISCUSSION

The findings of the study regarding mental toughness indicate that both male and female basketball players possess a good level of mental toughness. Mental toughness plays a crucial role in maintaining optimum performance and dealing with challenges and stressors. It was observed that female basketball players had slightly higher mean scores in mental toughness compared to male basketball players, with mean scores of 15.84 and 16, respectively. However, the t-test analysis revealed that this difference was not statistically significant at the 0.05 level.

These results are consistent with previous research that suggests no significant gender differences in mental toughness among athletes. The mental toughness exhibited by basketball players in this study suggests their ability to effectively cope with the demands of the game, exhibit resilience, and maintain a positive mindset in the face of adversity.



Moving on to the analysis of competitive anxiety, it is important to note that previous research has often reported higher anxiety levels among female athletes compared to males. However, in this study, the findings indicate that there was no significant difference in competitive anxiety between male and female basketball players. Both groups exhibited similar mean scores, with male players having a mean score of 19.80 and female players having a mean score of 19.83. The t-test analysis further confirmed that this difference was not statistically significant.

These findings suggest that both male and female basketball players experience comparable levels of competitive anxiety. It is interesting to note that this contradicts some previous studies that have reported higher anxiety levels among female athletes. However, it is important to consider the specific context of basketball and the sample characteristics in this study.

The results imply that competitive anxiety may be influenced by various factors beyond gender, such as individual differences, game situations, and personal experiences. It is essential for coaches, trainers, and sports psychologists to recognize and address the unique anxiety challenges faced by basketball players, regardless of their gender. By implementing targeted interventions, such as cognitive-behavioral strategies, relaxation techniques, and visualization exercises, players can develop effective coping mechanisms to manage competitive anxiety and enhance their performance.

These findings contribute to the existing body of knowledge on mental toughness and competitive anxiety in basketball players. While further research is needed to explore the underlying factors contributing to mental toughness and competitive anxiety, the current study provides valuable insights into the psychological aspects of basketball performance. By understanding the similarities and differences in mental toughness and anxiety between male and female players, sports practitioners can develop tailored training programs and support systems to optimize the psychological well-being and performance of basketball athletes.

It is important to acknowledge the limitations of this study, such as the relatively small sample size and the specific context of Kerala basketball players. Future research could consider expanding the sample size, including players from different regions and levels of competition, and explore additional variables that may influence mental toughness and competitive anxiety.

In conclusion, this study highlights the positive levels of mental toughness displayed by male and female basketball players. It also indicates that both genders experience similar levels of competitive anxiety. These findings emphasize the importance of mental skills training programs and interventions tailored to the specific needs of basketball players, aimed at enhancing mental toughness and managing competitive anxiety for optimal performance and well-being on the court.

CONCLUSION

In conclusion, the findings of this study suggest that there is no significant difference in mental toughness and competitive anxiety between male and female basketball players in universities. Both male and female players exhibited similar levels of mental toughness and competitive anxiety. These results indicate that gender does not play a significant role in determining these psychological factors in the context of basketball.

The study provides valuable insights into the psychological aspects of basketball performance, highlighting the importance of mental skills training and interventions for both male and female players. Coaches, trainers, and sports psychologists can utilize these findings to develop targeted



programs and support systems that enhance mental toughness and effectively manage competitive anxiety in basketball players.

It is important to note that these conclusions are specific to the sample of university-level basketball players in this study. Further research is needed to explore mental toughness and competitive anxiety in different populations and contexts. Additionally, considering other variables, such as skill level, experience, and external factors, could provide a more comprehensive understanding of the psychological dynamics in basketball.

Overall, this study contributes to the existing body of knowledge on mental toughness and competitive anxiety in basketball players and underscores the significance of addressing these psychological factors for optimal performance and well-being in the sport. By recognizing the similarities and potential differences between male and female players, sports practitioners can tailor their approaches to effectively support and enhance the mental aspects of basketball players' performance.

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