Relationship Between Burnout Level and Mental Toughness in Basketball Athletes PORPROV Sinjai

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ABSTRACT

This study aims to analyze the relationship between burnout and mental toughness in basketball athletes participating in the Sinjai Regency Provincial Sports Week. Burnout is understood as a condition of prolonged physical and emotional exhaustion due to the pressure of training and competition, while mental toughness is the psychological capacity to persevere, focus, and bounce back in the face of sporting challenges. This study uses a quantitative approach with a correlational design. The sample consisted of 33 athletes, including 15 males and 18 females. The instruments used included standardized burnout and mental toughness questionnaires. Data analysis employed Pearson's correlation. The results indicated a significant negative correlation between burnout and mental toughness (r = -0.462, p < 0.05). The average burnout score among athletes was in the moderate category (M = 2.87), while the mental toughness score was in the fairly high category (M = 3.64). These findings indicate that the higher an athlete's mental toughness, the lower their burnout level, and vice versa. The results of this study support the theory that mental toughness acts as a protective factor in coping with competitive pressure. However, this study has limitations in terms of the relatively small sample size and the limited context of one sport and one region. The practical implication of this study is the need for psychological training programs based on improving mental toughness as a preventive measure against burnout in young athletes.

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AUTHORS' CONTRIBUTION

- A. Conception and design of the study;
- B. Acquisition of data;
- C. Analysis and interpretation of data;
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INTRODUCTION

In the world of competitive sports, the success of an athlete is not only determined by physical ability alone, but also by mental readiness in facing the pressure of the match (Pratama & Utami, 2024). Athletes at the provincial level such as the Provincial Sports Week (PORPROV) are expected to maintain optimal performance in a demanding competitive atmosphere. One phenomenon that has begun to be widely highlighted in the world of sports is burnout or psychological fatigue that can significantly impair athlete performance. Burnout is a condition of prolonged emotional and physical exhaustion, which generally occurs due to training demands, pressure from coaches and high



personal and social expectations (Greif & Bertino, 2022). Burnout not only demotivates athletes, but also has a direct impact on decreased achievement, feelings of alienation from sporting activities, and increased risk of injury due to lack of focus and decreased physiological condition (Brenner & Watson, 2024; Markati et al., 2019).

This burnout phenomenon is increasingly important to study considering that many young athletes experience tremendous pressure from a young age, especially in the context of regional competitions such as PORPROV. Basketball athletes, as part of a high-intensity team sport, are vulnerable to burnout because they must maintain individual performance while building solid teamwork. In the midst of such pressure, the ability to stay focused, control emotions, and persevere in difficult situations is needed (Goldstein, 2025). Burnout not only demotivates athletes, but also has a direct impact on decreased achievement, feelings of alienation from sporting activities, and increased risk of injury due to lack of focus and decreased physiological condition (Bédard Thom et al., 2021). Mental toughness is believed to be one of the important protectors in preventing and managing burnout in athletes (Gerber et al., 2018).

Several previous studies have highlighted the importance of mental toughness to performance in various sports (M. I. M. Aziz & Jahrir, 2025; Guszkowska & Wójcik, 2021; Soundara Pandian et al., 2023). Mental toughness consists of four main components, namely control, commitment, challenge, and confidence, all of which are directly related to mental endurance in the face of competitive pressure (Wibowo, 2023). Athletes who have high levels of mental toughness tend to show resilience to competitive pressures and have a lower risk of burnout (Haghighi & Gerber, 2019). Other research also reinforces these findings showing that mental toughness plays a role in reducing perceptions of stress and improving athletes' coping skills in the face of failure or reduced performance (Dziuba et al., 2025; Hudaniah & Nabila Masturah, 2024).

However, most previous studies have focused on national or international level athletes and not many have explored regional athlete populations such as PORPROV participants, particularly in the context of basketball. In addition, studies on the relationship between burnout and mental toughness rarely discuss gender differences in detail. In fact, a number of sport psychology studies have shown that men and women can respond differently to competitive pressure, both in emotional aspects and in coping strategies (Cahliková et al., 2020). Therefore, there is a relevant research gap to be explored, namely how the relationship between burnout and mental toughness in basketball athletes at the regional level by considering gender differences.

With a comparative approach between genders, this study not only describes the level of burnout and mental toughness, but also analyzes in detail the differences between genders in each variable dimension, as well as looking at the strength of the relationship between the two variables in each gender. With this approach, the study is expected to make a scientific contribution in understanding the psychological dynamics of regional athletes, which has not been systematically explored in the literature.

This study aims to determine the level of burnout and mental toughness in Sinjai Regency PORPROV basketball athletes based on gender, analyze differences between

genders in each variable dimension, and examine the relationship between burnout and mental toughness in each gender group. The results of this study are expected to be a scientific basis for coaches, sports psychologists, and policy makers in developing psychological development programs for athletes that are more effective and responsive to the needs of each gender. In addition, the results of this study are expected to enrich the sport psychology literature, especially those focusing on the regional athlete population.

METHODS

This study uses a quantitative approach with a correlational descriptive design, which aims to analyze the relationship between burnout levels and mental toughness in basketball athletes participating in the Porprov Sinjai.

The study sample consisted of 33 basketball athletes, including 15 male athletes and 18 female athletes. The sampling technique used was total sampling, as the population size was relatively small, and all members of the population meeting the inclusion criteria could be included in the study. The inclusion criteria included: (1) active athletes registered as participants in the Sinjai District Porprov, (2) aged 15–22 years, (3) regularly participating in training programs, and (4) willing to be respondents by signing an informed consent form.

Demographic data of the respondents were collected through a respondent identification form that included age, gender, education, playing position, and playing experience (years). The demographic characteristics of the subjects are displayed in tabular form to describe the participant profile in more detail.

Table 1.Demographics of Research Subjects

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Characteristics	Male (n=15)	Female (n=18)				
Age (average)	19,1 Year	18,7 Year				
Education	Senior High School: 13 (87%) University: 2 (13%)	Senior High School: 15 (83%) University: 3 (17%)				
Play experience	3,8 ± 1,2 Year	3,5 ± 1,1 Year				
	Guard: 6	Guard: 8				
Dominant position	Forward: 5	Forward: 6				
	Center: 4	Center: 4				

The instruments used in this study consisted of two main questionnaires. To measure the level of burnout, the Athlete Burnout Questionnaire (ABQ) was used, which consists of 15 statement items divided into three dimensions, namely: emotional exhaustion, decreased achievement, and depersonalization (Martinez-Alvarado et al., 2019). Each statement was answered using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The reliability of the ABQ in this study was pre-tested and showed a Cronbach's Alpha value of 0.83, indicating good internal consistency. To measure mental toughness, the Mental Toughness Questionnaire (MTQ-48) was used which consists of 48 items measuring four main dimensions, namely: control, commitment, challenge, and confidence (Greinert et al., 2024). Each item uses a 5-point Likert scale. The overall reliability value of the MTQ-48 in this study is $\alpha = 0.86$, which also shows a high level of reliability.

The validity and reliability of the instruments were tested prior to the main study through a pilot test involving 20 basketball players from different clubs who were not

included in the study sample. Item validity was analyzed using Pearson Product Moment correlation with a criterion of r > 0.30. The pilot test results showed that all burnout and mental toughness items met the validity criteria. Meanwhile, the reliability test using Cronbach's Alpha coefficient showed a value of 0.87 for the burnout instrument and 0.91 for the mental toughness instrument, indicating that both have high reliability.

RESULTS AND DISCUSSION

Result

Description of Burnout and Mental Toughness Levels

Table 2.

Average Burnout and Mental Toughness Scores by Gender

Variables	Dimensions	Male	Female
Burnout	Emotional Burnout	2.8 ± 0.6	3.4 ± 0.5
	Decreased Achievement	2.5 ± 0.7	3.2 ± 0.6
	Depersonalization	2.6 ± 0.5	3.3 ± 0.7
Mental Toughness	Control	4.0 ± 0.6	3.5 ± 0.5
	Commitment	4.2 ± 0.5	3.6 ± 0.6
	Challenge	4.1 ± 0.6	3.7 ± 0.6
	Confidence	4.3 ± 0.5	3.8 ± 0.6

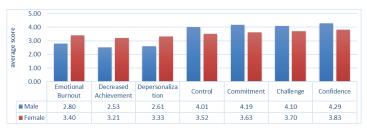


Figure 1.

Comparison of Burnout and Mental Toughness Based on Gender

On the burnout variable, the male group had a mean value of emotional exhaustion 2.8, decreased achievement 2.5, and depersonalization 2.6. The female group had mean scores of emotional burnout 3.4, decreased achievement 3.2, and depersonalization 3.3. On the mental toughness variable, the male group showed a mean score of control 4.0, commitment 4.2, challenge 4.1, and confidence 4.3. The female group had mean scores of control 3.5, commitment 3.6, challenge 3.7, and confidence 3.8.

Different Levels of Burnout and Mental Toughness Table 3.

Test of Differences in Burnout Levels and Mental Toughness Based on Gender (Independent T-Test)

Variables	Dimensions	t-value	df	Sig. (2-tailed)
Burnout	Emotional Burnout	-2.765	31	0.009
	Decreased Achievement	-3.197	31	0.003
	Depersonalization	-2.989	31	0.005
Mental Toughness	Control	2.616	31	0.013
	Commitment	2.869	31	0.007
	Challenge	2.095	31	0.045
	Confidence	2.522	31	0.017

Based on the results of the independent t-test, all dimensions on the burnout variable show a significance value below 0.05, namely emotional burnout (p = 0.009), decreased achievement (p = 0.003), and depersonalization (p = 0.005). This shows that there are significant differences in the three dimensions of burnout based on gender. In the mental toughness variable, all dimensions also showed a significance value below 0.05, namely control (p = 0.013), commitment (p = 0.007), challenge (p = 0.045), and confidence (p = 0.017). These results indicate that there are significant differences in all dimensions of mental toughness based on gender. Thus, the results of this analysis indicate that gender has a relationship with the level of burnout and mental toughness in each dimension, which is indicated by the significant differences between gender groups in this study.

Different Levels of Burnout and Mental Toughness Table 4.

Pearson Correlation between Burnout and Mental Toughness

Gender	r Pearson	Sig. (p-value)	Interpretation
Male	-0.551	0.035	Moderate negative correlation
Female	-0.684	0.004	Strong negative correlation

Based on the results of Pearson correlation analysis, the male group obtained a value of r = -0.551 with a significance value of 0.035. These results indicate a negative relationship with moderate strength between burnout and mental toughness in the male group, which means that the higher the level of mental toughness, the lower the level of burnout in this group. In the female group, the value of r = -0.684 was obtained with a significance value of 0.004. This result indicates a negative relationship with strong strength between burnout and mental toughness in the female group, which means that the higher the level of mental toughness, the lower the level of burnout in the female group in this study. Both have significance values below 0.05, so the negative relationship found can be declared statistically significant.

Discussion

The results of this study indicate that there is a tendency for differences in burnout and mental toughness levels between male and female athletes who take part in the PORPROV in Sinjai Regency. Female athletes tend to experience higher burnout compared to male athletes, while male athletes show a better level of mental toughness. These findings reflect how athletes' psychological characteristics can be influenced by gender factors and how responses to competitive pressure are not always uniform between groups of athletes. This reinforces the importance of a deeper understanding of psychological factors in the context of sports coaching, especially at the regional level, which has not been scientifically explored.

Burnout in the context of sport can be defined as a condition of emotional and physical exhaustion experienced by athletes as a result of repeated training and competition pressures, as well as high expectations of results (Daumiller et al., 2022; Eklund & DeFreese, 2020). This condition can lead to feelings of cynicism, low personal

achievement, and loss of interest in the sports activity itself (McNeill et al., 2018). Athletes who experience long-term burnout will not only show a decrease in performance, but also risk motivation and emotional disturbances (M. Z. Aziz & Azizah, 2024; Eklund & DeFreese, 2020). Other studies that have been conducted show that burnout has a close relationship with psychological factors such as emotional distress, poor stress management, and low social support (Prada-Ospina, 2019). In this context, female athletes are generally more prone to burnout due to various factors, such as perceptions of social expectations, differences in coping styles, and internal pressure to perform perfectly.

Meanwhile, mental toughness is a psychological characteristic that allows individuals to remain consistent and focused in stressful situations, and be able to bounce back from failure (Utami et al., 2024). (Gucciardi, 2020) Defining mental toughness through four main dimensions, namely control (the ability to manage emotions and the environment), commitment (consistency towards goals), challenge (tendency to see pressure as an opportunity to develop), and confidence (self-confidence both personally and socially). Mental toughness is considered a protective factor that can help athletes cope with internal and external pressures in a competitive environment (Liew et al., 2019).

Several previous studies support the importance of mental toughness in preventing burnout. Athletes with high levels of mental toughness tend to have more adaptive coping strategies and are less likely to experience emotional fatigue (Poulus et al., 2020). This is reinforced by other research that states that mental toughness significantly plays a role in lowering the risk of psychological disorders such as stress, anxiety, and burnout in young athletes (Gerber et al., 2018). In other words, mental toughness serves as a psychological shield that helps athletes stay resilient and solution-oriented despite the high pressure of a competitive environment.

The difference in mental toughness between men and women in this study is also in line with previous studies. Male athletes tend to have higher levels of mental toughness, especially in the control and confidence dimensions (Liew et al., 2019). This difference can be explained through social and cultural approaches, where men from an early age are often encouraged to appear more competitive, dare to take risks, and suppress emotional expression, which then develop into psychological capacities that are resistant to stress (Skinner & Wellborn, 2019). In contrast, female athletes tend to be more expressive to emotional stress and are more influenced by relational factors in their social environment (Pascoe et al., 2022). Therefore, as competitive demands increase, they are more susceptible to symptoms of emotional exhaustion and burnout if they do not have adequate coping mechanisms in place.

Another finding in this study that corroborates previous literature is the negative relationship between burnout and mental toughness. This means that the higher the level of mental toughness of an athlete, the lower his tendency to experience burnout. This is consistent with studies by (Haghighi & Gerber, 2019) which states that mental toughness acts as a buffer in dealing with sports stressors and lowers the perception of

psychological burden. Athletes who have high mental endurance are not only able to maintain performance, but are also more flexible in dealing with changes in strategy, pressure on results, and interpersonal conflicts that often arise in competitive situations (Kegelaers & Wylleman, 2019; Yusuf, 2024).

The implications of these findings are quite clear: sports coaches and coaches at the regional level need to pay balanced attention to the physical and mental development of athletes. Mental toughness is not an innate ability, but can also be developed through systematic psychological training, such as visualization training, goal-setting, emotion management, mindfulness, and match pressure simulation (Park & Jeon, 2023). Gender-responsive coaching programs also need to be considered, as the psychological needs and challenges of male and female athletes are not always the same. For example, in female athletes, it is necessary to emphasize the development of self-confidence, interpersonal coping skills, and strengthening social support, all of which are closely related to burnout prevention.

Overall, the results of this study reinforce the importance of psychological interventions in sports coaching, especially in creating athletes who are not only physically tough, but also able to manage pressure and challenges mentally. In the context of regional competitions such as PORPROV, which is often a stepping stone to higher levels of competition, mental readiness becomes a determining factor for the continuation of young athletes' careers. Therefore, the integration of a sports psychology approach into the regional athlete development curriculum is no longer an additional option, but an urgent need.

CONCLUSION

Based on the results of the study, it can be concluded that there are significant differences in the level of burnout and mental toughness between male and female athletes participating in PORPROV Sinjai Regency, where female athletes show higher levels of burnout and lower mental toughness than male athletes. In addition, a significant negative relationship was found between burnout and mental toughness in both genders, which indicates that the higher the level of mental toughness of an athlete, the lower the level of burnout they experience. These findings emphasize the importance of strengthening mental toughness aspects as a burnout prevention strategy, especially in female athletes who are more psychologically vulnerable to competitive pressures.

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