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Competitive anxiety, fear of failure, and decision-making styles in university athletes

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ABSTRACT

Appropriate and quick decision-making is crucial to the success of athletes, so this study aims to explore the effect competitive anxiety and fear of failure on the decision-making style of university athletes by observing differences based on the level of competition, namely national, regional, and local. This study used a descriptive quantitative method involving 27 university athletes aged 19-24 years from various sports and competition levels (local, regional, national). Data were collected using the CSAI-2R, PFAI, and Decision Style Questionnaire, then analyzed using descriptive statistics, normality test, and multiple linear regression. The results showed that competitive anxiety and fear of failure did not significantly affect the decision-making style of university athletes. However, there are differences in competitive anxiety, fear of failure, and decision-making style patterns based on competition level. National athletes have a higher percentage of decision-making style, while regional athletes have competitive anxiety and fear of failure higher than national and regional athletes. Then local athletes have a lower percentage of competitive anxiety, fear of failure, and decision-making style.

Keywords: *university athletes, competitive anxiety, decision-making style, fear of failure.*

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INTRODUCTION

Athletes are often faced with situations that require quick and accurate decision-making, both during training and in competition. They must make decisions under pressure and within a limited amount of time. When the athletes are unable to manage this pressure, their ability to make sound decisions may be compromised (Komarudin & Novian, 2021). University athletes, in particular, frequently experience considerable psychological pressure due to the demands of both academics and athletic competition (Sutcliffe & Greenberger, 2020). These psychological pressures can make it difficult for athletes to make optimal decisions in high pressure moments, especially when dealing with internal barriers such as anxiety and fear of failure. These psychological barriers may negatively influence athletes performance, particularly during decisive moments in competition (Dehghansai et al., 2020). Studies have shown that athletes who experience psychological stress, such as anxiety and fear of failure, are more likely to make poor or impulsive decisions, which can ultimately affect their performance outcomes (Zhang, 2023).

Athletes who experience high anxiety tend to make more impulsive and less planned decisions (Zhu et al., 2023). Another study found that athletes who had good psychological support from coaches and teams showed better decision-making abilities in stressful situations (Bühren & Träger, 2022). Then, according to a literature study, competitive anxiety and fear of failure have been identified as significant psychological factors that affect athlete performance. Competitive anxiety prevents athletes from doing their best and can interfere with their performance (Sofyan et al., 2024), while a study by (Junuthula, 2022) found that fear of failure can lead to avoidance of challenges and decreased motivation. Based on previous research highlighting the role of psychological factors in athletic performance, it can be concluded that these factors may also influence athletes' decision-making abilities. However, only a limited number of studies have specifically examined how psychological barriers, such as anxiety and fear of failure, affect decision-making styles in college athletes.

This study is important to conduct because effective decision-making is a key factor in achieving success in sports competition. If left unaddressed, college athletes may continue to face challenges in managing psychological stress, which can negatively impact both their performance and long-term mental health (Dehghansai et al., 2020). In addition, understanding how competitive anxiety and fear of failure affect decision-making can contribute to the development of more effective mental training programs, thereby improving the overall quality of college athletes both on and off the field. Without such efforts, college sports institutions may overlook the need for proper psychological support for their athletes. The novelty of this study lies in its comprehensive examination of the decision-making patterns of college athletes across various competition levels, revealing meaningful psychological differences, even though competitive anxiety and fear of failure did not show significant effects. This research is among the first to integrate the concept of psychological barriers such as competitive anxiety and fear of failure with decision-making styles in the context of college athletes, combining sport psychology and decision-making theory to offer a fresh perspective on the psychological dynamics of athletes (Voigt et al., 2023).

METHODS

This study uses a descriptive method with a quantitative approach to examine competitive anxiety and fear of failure towards decision-making styles in university athletes. The subjects of this study were 27 university athletes age 19-24 years from various sports, including both male and female participants. These athletes were selected from several universities located in Bandung, Indonesia. All participants had diverse competition experience, ranging from local, regional, to national levels. The sampling technique used was purposive sampling, as the researcher had determined specific characteristics in advance, including age range, gender inclusion, and active competition experience. The selection procedure involved identifying eligible athletes who met these criteria and distributing the questionnaires using Google Forms. Participation was voluntary, and data collection was completed after respondents submitted their answers online. All collected data met the predetermined criteria and were verified to ensure compliance with the research objectives. This diversity provides a rich variation in analyzing decision-making styles across different levels of competition.

The instruments used in this study were the Competitive State Anxiety Inventory–2R (CSAI-2R), the Performance Failure Appraisal Inventory (PFAI), and the Decision Style Questionnaire (DSQ). The Indonesian version of CSAI-2R (CSAI-2Rid), which had previously been adapted and validated by Putra & Guntoro (2022), was used. The PFAI instrument was translated into Bahasa Indonesia from the original version. All instruments have demonstrated high reliability in prior studies ($\alpha > 0.75$), and no retesting of validity or reliability was conducted in this study. All instruments used Likert-type scales and were given in a one-time administration. Data were collected online using Google Forms, and participants completed the instruments independently within the given submission period. The questionnaire was distributed and kept open for several days to allow participants to respond at their convenience. After that, the data was processed and analyzed using the SPSS Version 26 regression test, the data analysis techniques included descriptive statistics to describe demographic and variable characteristics, normality testing using the Shapiro-Wilk test, and multiple linear regression analysis to test the research hypotheses.

RESULTS AND DISCUSSION

Results

The following are the results of the data analysis presented in the form of tables and images to make it easier to understand. Subject demographic data can be seen in the table.

Table 1. Demographic Data

Competition Level	*Frequency (athletes)*	*Percent (%)*
Local	9	33.3
Regional	7	25.9
National	11	40.7

Table 1 shows the distribution of respondents based on competition level. As many as 40.7% of athletes came from the national level (the highest frequency), followed by local (33.3%) and regional (25.9%). The data indicates that the study sample is dominated by athletes with national-level competition experience.

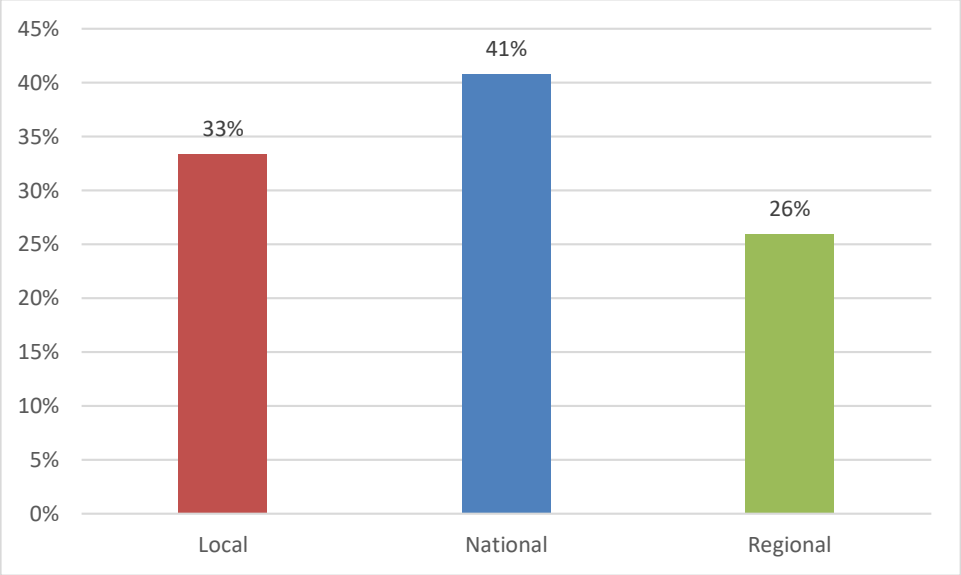

Figure 1. Percentage distribution of subjects by competition level

Figure 1 shows the distribution of subjects by competition level. It can be seen that the subjects consisted of university athletes who had participated in competitions at the local (33%), national (41%), and regional (26%) levels. Furthermore, the author presents a statistical description which can be seen in Table 2.

Table 2. Descriptive Statistics

Variable	*Minimum*	*Maximum*	*Sum*	*Mean*	*Std. Deviation*
Competitive Anxiety	24	51	1083	40.11	6.247
Fear of Failure	29	98	1684	62.37	22.037
Decision-Making Style	106	177	4000	148.15	16.078

Based on Table 2, the data obtained has a minimum value for Competitive Anxiety of 24, then Fear of Failure of 29, and Decision-Making Style of 106, and then a maximum value of 51 for Competitive Anxiety, 98 for Fear of Failure, and 177 for Decision-Making Style. The number of data used in this study is 1083 for competitive anxiety, 1684 for fear of failure, and 4000 for decision-making style, with standard deviations of 62.37 for competitive anxiety,

22.037 for fear of failure, and 16.078 for decision-making style. Next, normality test can be seen in Table 3.

Table 3. Normality Tests

Variabel	*Statistic*	*df*	*Sig.*
Competitive Anxiety	.975	27	.738
Fear of Failure	.927	27	.058
Decision-Making Style	.967	27	.531

Based on Table 3, the researcher conducted a normality test on the three variable data, namely the independent variables Competitive Anxiety and Fear of Failure, and then the dependent variable, namely Decision-Making Style, using Shapiro-Wilk so that it was found that the three variable data were normally distributed because they had results ($p > .05$), namely .738 for Competitive Anxiety, .058 for Fear of Failure, and .531 for Decision-Making Style. Next, hypothesis testing can be seen in Table 4.

Table 4. Hypothesis Testing

Variable	*R Square*	*Sig.*	*Information*
Competitive Anxiety to Decision-Making Style	.080	.153	H_0 accepted
Fear of Failure to Decision-Making Style	.006	.705	H_0 accepted
Competitive Anxiety and Fear of Failure to Decision-Making Style	.098	.288	H_0 accepted

Based on the results of the hypothesis test presented in Table 4, it can be seen that both partially and simultaneously, the independent variables (competitive anxiety and fear of failure) do not significantly affect the dependent variable (decision-making style). The Effect of Competitive Anxiety on Decision-Making Style: The R-square value of .080 indicates that competitive anxiety only explains 8% of the variation in decision-making style, with a significance value (Sig.) of .153, which is greater than the alpha level of .05. This indicates that H0 is accepted, meaning that there is no significant effect between competitive anxiety and decision-making style. This finding may suggest that competitive anxiety does not directly affect individual decision-making styles in the context of this study.

The Effect of Fear of Failure on Decision-Making Style: The fear of failure variable makes a minimal contribution to decision-making style, with an R-squared value of .006 and a significance value of .705. Because the Sig. If the value is > .05, H0 is accepted, meaning that fear of failure does not significantly affect decision-making style. This result indicates that fear of failure may not be the dominant factor that shapes the decision-making style in the sample studied. The Combined Effect of Competitive Anxiety and Fear of Failure on Decision-Making Style Simultaneously, both independent variables only explain 9.8% of the variation in

decision-making style (R Square = .098), with a significance value of .288. Because Sig. > .05, H0 is accepted, indicating that competitive anxiety and fear of failure do not significantly affect decision-making style. This finding implies that other factors outside these two variables may play a greater role in determining decision-making style.

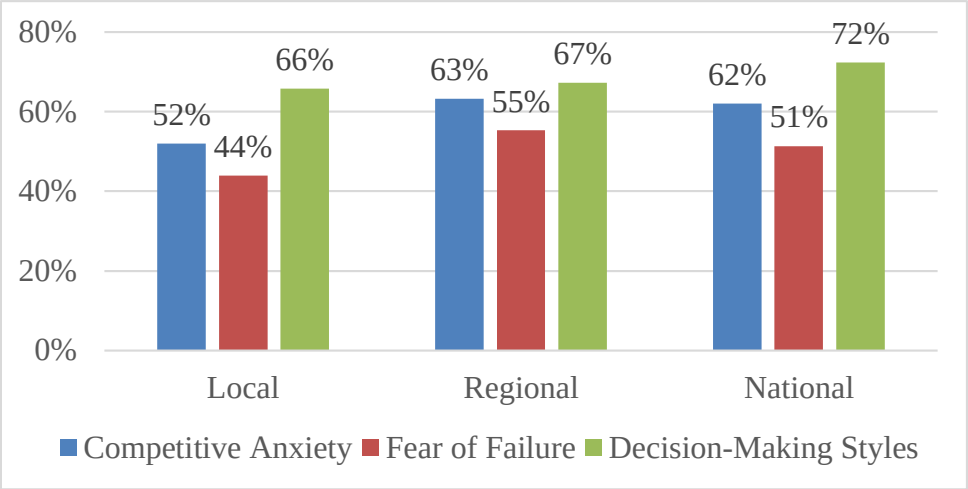

Figure 2. Percentage of variables based on competition level

In Figure 2, percentage of variables based on competition level visualizes the percentage of competitive anxiety, fear of failure, and decision-making styles at three levels of local, regional, and national competition. At the national level, competitive anxiety recorded the highest percentage (72%), followed by regional (66%) and local (52%). This shows that the higher the level of competition, the greater the anxiety experienced by athletes. This finding is in line with the theory of competitive stress, where pressure and expectations increase with the scale of the competition. Then in Fear of Failure, the highest percentage is at the national level (67%), then regional (63%), and the lowest at local (44%). This indicates that athletes tend to be more afraid of failing in big competitions, perhaps because of more serious social or professional consequences. Then in Decision-Making Styles, the national level again dominates (65%), followed by regional (62%) and local (51%). The high percentage at the national level may reflect a more structured or careful decision-making style due to the complexity of the competition.

Discussion

Competitive anxiety and fear of failure faced by college athletes in the context of decision-making, by reviewing various sports that are grouped into three levels of competition (local, regional, and national). Competitive pressure on athletes often triggers anxiety that can affect cognitive processes, including decision-making (Gumiandari & Setiani, 2023). Controlling negative emotions such as fear of failure is essential for competitive success

(Gómez-López et al., 2020). The focus of this study is relevant considering the lack of studies linking psychological factors to decision-making styles in college athletes at various levels of competition (Wang & Li, 2022).

The sample in this study consisted predominantly of national-level athletes (40.7%), followed by local (33.3%) and regional (25.9%) athletes. This composition provides a stronger representation of psychological dynamics at the national level, while still offering comparative insight into different competition levels. According to (Harrison et al., 2022), athletes at different competition levels often face distinct psychological challenges, which supports the value of sample diversity in capturing a broader perspective. The analysis showed that competitive anxiety (CA) and fear of failure (FoF) did not significantly affect decision-making style (DMS). This finding contrasts with (Brezicha et al., 2020), who reported a positive relationship between FoF and more cautious decision-making. The absence of a significant effect in this study may be explained by the limited sample size (N=27), which may reduce statistical power, or by the influence of unmeasured moderator variables such as coach support or prior competition experience.

Qualitative patterns revealed meaningful differences in competitive anxiety, fear of failure, and decision-making styles across competition levels. National-level athletes demonstrated the highest percentage of effective decision-making (72%), which may reflect their capacity to respond quickly and accurately under pressure. This finding aligns with the view of (Xu et al., 2020), which states that past emotional experiences form somatic markers that help the decision-making process in complex situations. The experience of competing at a high level provides national athletes with more references to manage pressure effectively and sharpens decision-making intuition, who suggest that previous emotional experiences form somatic markers that facilitate decision-making in complex situations. Similary, (Aminovich, 2025) emphasized that athletes with more high-level competitive experience are better equipped to regulate emotional responses and apply intuitive judgment under stress. These results support the notion that decision-making competence develops through exposure to intense competition, allowing athletes to internalize strategies for managing performance pressure more effectively.

Regional-level athletes appeared to exhibit the highest levels of competitive anxiety and fear of failure, with response distributions indicating elevated tendencies in both variables. This finding may be attributed to the nature of regional competition, where athletes are often in a transitional phase and under pressure to perform in order to qualify for national-level events. As (Barros et al., 2022) noted, anxiety consists of both cognitive and somatic

components, which may manifest more strongly when athletes are striving to prove themselves. In contrast, local-level athletes showed lower levels of anxiety and fear, possibly due to the relatively lower stakes and reduced external expectations. This is reflected in their lower psychological response patterns and more moderate decision-making tendencies (Peng et al., 2023). Perception of control over the competitive situation also plays an important role; athletes who have high control over the situation will see anxiety as facilitating performance, while those who feel they have no control will interpret it as a hindrance (Kemarat et al., 2022). This explains why national athletes with high experience and self-confidence are able to manage anxiety more positively than athletes at the regional or local level. This also reflects complex adaptations to high competitive pressure (Bayani et al., 2024; Komarudin et al., 2021), so that cognitive training based on physical activity, such as Life Kinetik, can improve athletes' intelligence in dealing with competitive pressure.

Cultural factors and institutional environments also need to be considered in understanding athletes' decision-making patterns. As shown by research (Kuettel et al., 2020) in the Indonesian context, collective values in local cultures often influence athletes' tendencies to consult with coaches or teams before making important decisions (Komarudin et al., 2024). This finding is in line with what was expressed by (Brandão et al., 2024) about how the social environment of university athletes, including relationships with coaches and teammates, shapes their cognitive framework in dealing with competitive situations. These findings enrich the sport psychology literature by showing that (1) the influence of psychological factors on DMS may not be linear and (2) the level of competition is an important predictor of athletes' competitive anxiety, fear of failure, and decision-making style. As argued (Araújo et al., 2020), this complexity demands a more holistic theoretical approach in understanding athletes' cognition. For practical applications, it is recommended: (1) different mental training programs for each level of competition and (2) integration of sport psychology services that emphasize CA and FoF management, especially for regional athletes. Further research needs to expand the sample and consider mediator variables such as mental toughness, as well as explore differences between branches and sports, as suggested (Gumiandari & Setiani, 2023).

This study has several limitations that need to be acknowledged, as stated in the context of sport psychology research methodology (Skinner et al., 2024). First, the relatively small sample size (N=27) may reduce statistical power in detecting true effects. Second, this study did not control for potential variables such as total competitive experience or annual competition frequency. For future research, as suggested by (Kahiji et al., 2024), it is important

to conduct longitudinal studies with larger and more diverse samples and consider objective measures (such as physiological records) in addition to self-reports. An approach that combines quantitative data with in-depth interviews would also provide a more holistic understanding of the psychological dynamics of college athletes at different levels of competition (Henriksen et al., 2020; Thompson et al., 2024).

CONCLUSION

This study concluded that competitive anxiety and fear of failure did not have a significant effect on the decision-making style of university athletes. However, notable differences were found in the psychological patterns of athletes across competition levels, with national-level athletes demonstrating more stable decision-making patterns, and regional-level athletes showing higher levels of anxiety and fear of failure. Based on these findings, it is suggested that sport psychologists and coaches develop tailored mental training strategies according to the athlete's competition level. Particular attention should be given to regional-level athletes who may face psychological challenges while transitioning to higher competition levels. This study has several limitations, including a relatively small sample size (N=27), which may limit the generalizability of the results. Additionally, this research did not account for other influencing factors such as coaching style, years of experience, or type of sport, which could affect the relationship between psychological variables and decision-making.

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