Psychological Distress and Anxiety: A Case Study on Student-Athletes at University

Falah Tri Nur Afifah[1], Komarudin[2], Mochamad Yamin Saputra[3], Geraldi Novian[4]

Study Program of Sport Coaching Education, Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia[123]
Study Program of Sport Physical Coaching, Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia[4]

Abstract

Student-athletes often find themselves juggling the demands of schoolwork and sports, which can create much pressure and lead to feelings of stress and anxiety. These difficulties do not just make it harder for them to do their best in class or on the field-they can also have a long-term impact on their mental health. This research seeks to explore how psychological distress is connected to anxiety among student-athletes. This study used a descriptive correlational quantitative method involving 61 student-athletes of the Faculty of Sport and Health Education, Universitas Pendidikan Indonesia. Data were collected using the Depression Anxiety Stress Scale (DASS-21) to measure psychological distress and the Sport Anxiety Scale (SAS-2) to measure sports anxiety through Google Forms. Data analysis used a normality test, Pearson correlation, and descriptive statistics with SPSS version 29. The results showed a strong and significant positive relationship between psychological distress and anxiety in student-athletes. Data showed 56.3% of student-athletes experienced psychological distress, and 50.6% experienced anxiety, indicating a relatively high prevalence of psychological disorders in this population. This study indicated that student-athletes who experience psychological distress are also more likely to feel worried, revealing exactly how impossible it can be to reconcile school and athletics. The findings underscore the particular mental health issues these students confront as they strive to keep up with both their academic and sports commitments. We therefore recommend the importance of integrated psychological interventions and tailored mental health support for student-athletes to help them manage stress and anxiety, as well as improve their academic and athletic performance.

How to Cite

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✉ Correspondence Author:
E-mail: geraldi.novian@upi.edu

INTRODUCTION

The dual role of student and athlete is common in international higher education, where student-athletes not only face competitive pressures to excel academically and athletically but must also adapt to the complex psychosocial demands of both roles (Cutler et al., 2020; Linnér et al., 2022). According to Sullivan et al. (2019), student-athletes often feel more psychological stress because they have to manage competing roles, meet high-performance expectations, and sometimes deal with feeling isolated from others. These pressures can take a toll on their mental health. However, more research is needed to find out exactly how common issues like trouble sleeping and low motivation are among this group. Anxiety as a general indicator of psychological distress was experienced more by individual athletes than team athletes, although variations in intensity over the academic year require further research (Widya Pranoto et al., 2024). Research by Aloui et al. (2017) states that intensive physical exercise has been shown to trigger hormonal fluctuations and oxidative stress. When combined with the disruption of circadian rhythms due to a busy schedule, the impact can extend to increasing vulnerability to psychological stress, especially in the double-loaded student-athlete population (Nobari et al., 2023; Sullivan et al., 2019).

Rice et al. (2016) suggested that student-athletes experience a double burden that triggers multidimensional anxiety, both from academic demands and sporting pressures. Thus, the convergence of these two domains creates a unique stress profile. Systematic studies reveal high comorbidity between Performance anxiety, depressive symptoms and stress in elite athletes (Gouttebarge et al., 2019). These conditions can trigger impaired concentration that negatively impacts academic-athletic Performance. Despite experiencing significant anxiety, student-athletes are often reluctant to seek professional help due to the stigma of sports culture, fears of team discrimination, and internalization of distress as a normative part of athletic identity (Castaldelli-Maia et al., 2019; Schinke et al., 2024). To address these challenges, integrated care models that bring together mental health services with campus athletic programs have shown effectiveness in improving access to care (Sudano et al., 2017). There is a dearth of knowledge on how anxiety and psychological distress relate to the lives of Indonesian student-athletes, given that most of the research conducted by Schinke et al. (2018)

and the athlete development model Kuettel et al. (2020) has been conducted in Western countries with different cultural and educational systems. Existing studies on the adaptation of sports psychology services across cultures further underscore the importance of a contextualized approach (Gandhi & Schneider, 2020). Camire et al. (2020 and Schinke et al. (2024) suggested a culturally sensitive approach to athlete mental health, supported by evidence that structured programs such as life skills training need to be adapted to the local context. The prevalence of mental health problems among athletes is growing in China›s more professionalized sports, according to (Xi et al., 2024). Athletes› ethnic backgrounds and the larger contexts in which they compete should be taken into account when designing support systems. Addressing these difficulties necessitates consideration of not only the competitive pressures but also the institutional and cultural factors influencing athletes› availability.

The present work finds great relevance in several spheres. Academic and athletic pressures combined in the dual career syndrome experienced by student-athletes have been identified as a worldwide phenomenon (Lopes Dos Santos et al., 2020). Still, studies on how it affects psychological well-being in Indonesia are few, particularly with contextualized stress management. Second, the methodical results of Gouttebarge et al. (2019) on the relationship between psychological stress and anxiety in elite athletes underline the need for treatments aiming at certain sources of stress to enhance student-athlete well-being. Storm & Larsen. (2020) mphasized that without in-depth context analysis, sports psychology interventions will only be cosmetic solutions that only address surface symptoms but ignore systemic and cultural root causes. Moreover, student-athletes are valuable assets in the context of national sports systems. The study by Aditya et al. (2024) revealed that the stigma in team dynamics often prevents them from seeking psychological help. As such, their psychological well-being should be prioritized through approaches that change cultural norms in sports environments in order to promote sustainable success in Indonesia. According to Donohue & Phrathep. (2020), ignoring mental health issues in student-athletes not only reduces their engagement in sports but also impairs cognitive functioning, which seriously impacts Academic Performance. Research by Reardon et al. (2019) suggests that prolonged mental health problems in young athletes can negatively impact

their professional sporting careers as well as overall quality of life.

The originality of this study is expressed in three important points. First, this study integrates educational and sports psychology findings through a holistic approach to explain the complex lives of student-athletes, a tradition that has not been prevalent in Indonesian research (Tanujaya & Safitri, 2023; Wylleman & Rosier, 2016). Secondly, as Gustafsson et al. (2017) State›s, in the context of adolescent athletes, this approach not only examines relationships between variables but also uncovers psychological mechanisms that can be targeted for intervention. Third, this study utilized a tool specifically validated for sport environments in a version that has been validated for Indonesian athletes SAS; (Putra et al., 2021) and combined with a psychological distress instrument DASS-21; (Sugara et al., 2020) to distinguish sport-specific anxiety symptoms from general psychological distress (Zhang et al., 2018). This approach follows experts› recommendations to use context-specific tools in the evaluation of athletes› mental health (Purcell et al., 2019). Research by Arnold et al. (2017) also confirmed the applicability of a multi-dimensional model in accounting for the relationship between stress, anxiety and sports Performance, which identified a range of interacting organizational and psychological factors.

Student-athletes experience special demands in how to deal with their academic responsibilities and sport commitments simultaneously, and therefore endure considerable psychological stress. The literature indicates that student-athletes are more likely to experience psychological disorders than non-athletes. Still, the particular link between psychological distress and anxiety within the Indonesian student-athlete population has not yet been sufficiently examined. The educational system and cultural context of Indonesia, unlike Western societies, require more contextual studies to comprehend this phenomenon as a whole. Moreover, the stigma within the sporting community, which holds psychological suffering as a marker of frailty, inclines student-athletes against approaching professional assistance. In the wake of the above, the research question to be investigated herein is: «What is the correlation between psychological distress and anxiety among Faculty of Sports and Health athlete-students at the Indonesia University of Education?»

This study aims to analyze the relationship between psychological distress and anxiety in student-athletes at the Faculty of Sports and Health, Indonesian Education University. This research seeks mainly to: (1) determine the extent of psychological distress among student-athletes through the Depression Anxiety Stress Scale (DASS-21), (2) assess the extent of sports anxiety among student-athletes through the Sport Anxiety Scale-2 (SAS-2), (3) determine the relationship between the extent of psychological distress and the level of anxiety among student-athletes, and (4) make recommendations for the creation of comprehensive psychological intervention programs and mental health facilities intended to address the unique needs of student-athletes. The outcome of this study is anticipated to deepen insight into the mental health processes of Indonesian student-athletes and to provide a basis for formulating appropriate intervention strategies.

The originality of this study rests on several important factors that distinguish it from the existing literature. Firstly, this study is among the earliest to directly integrate educational psychology and sports psychology frameworks in the context of Indonesian student-athletes, with instruments that have been thoroughly validated for the Indonesian population, specifically the DASS-21 and SAS-2 measures. Second, this study takes an expansive approach that not only assesses the interrelations between variables but also determines the psychological processes open to intervention, as suggested by recent guidelines in sport psychology for young players. Third, this study uses a research design that integrates descriptive and correlational analyses to give a comprehensive picture of the prevalence and relationship between anxiety and psychological distress in student-athletes. Fourth, this research contributes to the development of culturally sensitive intervention models to address stigma in the sports environment of Indonesia. Fifth, this research serves as an empirical foundation for the development of integrated mental health support programs between higher education systems and athletic programs, which have still been rarely implemented in Indonesia.

METHOD

This study used a quantitative method with a descriptive correlational design to analyze the relationship between psychological distress and anxiety in 61 student-athletes from various sports at the Faculty of Sport and Health Education, Universitas Pendidikan, Indonesia. Data collection was conducted online through Google Forms,

which contained two instruments: the Depression Anxiety Stress Scale (DASS-21), which has been validated by (Sugara et al., 2020) to measure psychological distress, and the Sport Anxiety Scale-2 (SAS-2), which was validated by (Putra et al., 2021) to measure sports anxiety with three dimensions: somatic anxiety, cognitive worry, and concentration disorder. Data were analyzed using descriptive statistics for variable characteristics, the Shapiro-Wilk normality test with Lilliefors correction to ensure data normality distribution, and Pearson correlation analysis to test the relationship between variables with a significance level of $\alpha = 0.01$. The analysis procedure refers to the criteria (Mertler et al., 2021) to ensure the validity of statistical assumptions and interpretation of results.

The research subjects were 61 student-athletes who were registered as active students at the Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, consisting of 33 men and 28 women; the subjects came from various sports, including team sports (basketball, handball, volleyball, futsal, cricket, rugby, soccer, softball) as many as 27 people 44% and individual sports (aquatics, fencing, athletics, cycling, badminton, karate, pencak silat, water polo, swimming, diving, taekwondo, fighting, table tennis, wrestling) as many as 34 people 56%.

The instrument used in this study was the Depression Anxiety Stress Scale (DASS-21), which is used to measure the level of psychological distress in individuals. This scale is a shortened version of the original DASS-42 and consists of 21 items divided into three subscales: depression, anxiety, and stress. Each item is rated on a 4-point scale, from 0 (not at all applicable to me) to 3 (completely applicable to me). The total score, as well as the score on each subscale, is calculated as an average to represent the level of psychological distress. Validity and reliability studies of the DASS-21 have been conducted in diverse adult populations with satisfactory results (Arjanto, 2022; Lan et al., 2020; Sugara et al., 2020).

The Sport Anxiety Scale-2 (SAS-2) is a measure of anxiety designed for sporting situations. The 15-item scale assesses three aspects of sport-related anxiety: somatic anxiety, cognitive apprehension, and impaired concentration. Items are rated on a four-point Likert scale ranging from 1 (not at all) to 4 (very much) (Putra et al., 2021).

Respondents completed both instruments online through Google Forms, making completion and data collection easier. Completing both instruments at the same time took about 15 to 20 minutes. Before participating in this activity, respondents were given a brief introduction to the purpose of the study and asked to fill in their consent forms.

RESULTS AND DISCUSSION

This study uses a quantitative approach with a correlational design to analyze the relationship between psychological distress and anxiety in student-athletes. Data collected from 61 respondents through Google Forms were analyzed using descriptive statistics to describe the characteristics of the research variables, including minimum, maximum, total, average, and standard deviation values. A Shapiro-Wilk normality test with Lilliefors correction was conducted to ensure a normal data distribution before conducting Pearson correlation analysis with a significance level of $\alpha=0.01$ (Mertler et al., 2021).

The statistical description of the study, which includes the minimum value, maximum value, total value, mean value, and standard deviation value of both variables. The data shows that psychological distress has a range of values from 8 to 84, with a total score of 2165 and an average of 35.49 (SD = 13.435) from 61 respondents. Meanwhile, the anxiety variable has a range of values from 18 to 45, with a total score of 1853 and an average of 30.38 (SD=5.823). These results indicate that, on average, student-athletes experience moderate levels of psychological distress and anxiety, with greater variation in psychological distress scores compared to anxiety scores.

The results of the normality test using the Lilliefors Significance Correction method. The test results show that the psychological distress score has a significance value of 0.093, and the anxiety score has a significance value of 0.818. Both significance values are greater than 0.05, which means that both datasets are normally distributed.

The results of the Pearson correlation analysis between psychological distress and anxiety in student-athletes. The test results yielded a correlation coefficient of 0.670 with a significance level of 0.000 (p<0.01). This indicates a strong and significant positive relationship between psychological distress and anxiety in student-athletes. In other words, the higher the level of psychological distress in student-athletes, the higher the level of anxiety they experience. Based on the criteria, the correlation coefficient of 0.670 is included in the strong correlation category.
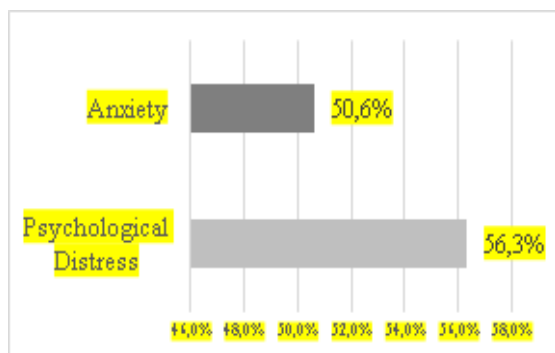
Figure 1. University Student-Athlete Psychological Distress and Anxiety Level

Figure 1 shows the University student-athlete psychological distress and anxiety percentage levels. According to the statistics, 50.6% of student-athletes felt anxious, and 56.3% felt psychologically distressed. This finding indicates that more than half of the student-athlete population studied experienced psychological distress, with a slightly higher percentage of psychological distress than anxiety. This percentage difference suggests that although the two constructs are strongly correlated, they remain different psychological phenomena with varying manifestations in student-athletes.

This study revealed a significant relationship between psychological distress measured by DASS-21 (Sugara et al., 2020) and anxiety measured by the SAS-2 (Putra et al., 2021) in student-athletes, corroborating previous findings on the mental vulnerability of athletes (Gouttebarge et al., 2019) and supported by local evidence on the impact of psychological distress on Performance (Purnamasari & Novian, 2021). Pearson correlation analysis showed a strong positive correlation between variables with a correlation coefficient of 0.670, significant at the 0.01 level, which, according to the criteria Tabachnick & Fidel. (2015), falls into the category of strong and statistically significant correlation. This finding confirms the complexity of the student-athlete experience in managing academic and sporting demands (Lopes Dos Santos et al., 2020), as reflected in the high anxiety levels of athletes who also face competitive pressures (Purnamasari et al., 2022). Findings by Cutler et al. (2020) showing that student-athletes face higher levels of stress than non-athlete students are in line with Tod et al. (2023) theoretical framework about the chronic stress response in athletes. This is reinforced by the research of (Komarudin et al., 2024), who found that mastery of psychological skills in University athletes helped them adapt to multiple stresses.

The complexity of psychological distress in student-athletes can be understood through a variety of multidimensional factors, including the interaction between academic and athletic demands (Novan et al., 2024), as well as psychosocial stressors also found in elite athletes (Purcell et al., 2019). The anxiety experienced includes somatic, cognitive, and concentration disorders, which have an impact on academic-athletic Performance (Ford et al., 2017). According to Musyarofah et al. (2024), these symptoms can be overcome through emotional regulation such as self-talk, but if protracted, it risks causing burnout, especially in athletes with a fear of failure (Gustafsson et al., 2017). Some studies identify that around 30-40% of student-athletes experience increased psychological distress, manifested through sleep disturbances and difficulty concentrating (Sullivan et al., 2019). The data from this study indicated a significant prevalence of psychological distress in 56.3% of the student-athlete sample, with 50.6% meeting criteria for clinical anxiety symptoms.

Internal and external factors significantly contribute to student-athlete psychological distress. Arnold et al. (2017) proved that external demands and the ineffectiveness of internal strategies statistically increased distress in competitive athletes. These findings were reinforced in the student-athlete context by Lopes Dos Santos et al. (2020), who identified the academic-athletic double burden as a unique external stressor where low self-regulatory capacity exacerbates its impact. As evidenced in Nikander. (2022), the interaction between personal expectations and academic and coaching demands creates a complex psychological burden on student-athletes. A similar phenomenon in young athletes is also seen in the context of specific training (Sarmidi et al., 2024). Research by Hackney & Lane. (2015) showed that intensive training causes hormonal fluctuations, such as a chronic increase in cortisol, which increases vulnerability to psychological stress through HPA axis dysregulation. This finding contrasts with the effects of moderate exercise, such as calisthenics, which has been shown to benefit mental health (Novian et al., 2024), suggesting a U-shaped curve in the relationship between exercise intensity and stress response.

The practical implications of this study are significant for education and sport systems. A holistic approach to student-athlete mental health should integrate life skills development (Gross, 2024) with a culturally sensitive systemic framework (Schinke et al., 2022). The relevance of this

approach is reflected in the study of Nugraha et al. (2021), where West Javanese athletes who experienced disrupted training routines during the pandemic showed increased symptoms of depression (34%) and anxiety (41%), confirming the importance of adaptive strategies for dual identity student-athletes in the face of disruption. Standardized instruments such as the DASS-21, which has been validated for the Indonesian population by (Sugara et al., 2020), and SAS-2, which proved to be reliable for Indonesian athletes in the study of (Putra et al., 2021), can be an effective tool for early identification of student-athletes in need of psychological intervention. The use of this instrument is in line with the early intervention framework recommended by (Purcell et al., 2019) to meet the mental health needs of athletes.

This study has limits that must be addressed, even if it offers insightful analysis. The sample consisted of one University, lacked a detailed distinction between team and individual sports, and neglected certain contextual elements. Future research should expand the sample across institutions, conduct comparative analyses between team and individual sports, and develop evidence-based interventions.

CONCLUSION

This study concluded that there is a strong and significant positive relationship between psychological distress and anxiety in student-athletes at the Faculty of Sport and Health Education, Universitas Pendidikan Indonesia. The findings confirm that student-athletes experience complex psychological challenges due to the dual demands of managing their academic and athletic roles. Indicating a somewhat high frequency of psychological problems in this cohort, the data revealed that 56.3% of student-athletes reported psychological discomfort and 50.6% reported worry. The complexity of psychological distress in student-athletes is reflected in various psychological manifestations, including somatic, cognitive, and concentration disorders, which can directly affect their academic and athletic Performance.

The findings emphasize the importance of developing integrated psychological intervention programs and mental health support tailored to the specific needs of student-athletes. With practical consequences for higher education and sports organizations to create successful ways to assist student-athlete psychological well-being, this study significantly contributes to the knowledge of student-athlete mental health dynamics. Future studies should be advised to investigate protective elements that might improve student-athletes psychological resilience in the face of several pressures and do a longitudinal study to grasp the variations of psychological stress and anxiety over the academic and competitive cycles.

REFERENCES

Aditya, R. S., Yusuf, A., ALMutairi, R. I., Rahmatika, Q. T., Solikhah, F. K., Toyibah, A., Kotijah, S., & Al Razeeni, D. M. (2024). Exploring the impact of social identity and team dynamics on mental health help-seeking behavior among collegiate athletes: a qualitative study. Retos: Nuevas Tendencias En Educación Física, Deporte y Recreación, 58, 426–434.

Aloui, K., Abedelmalek, S., Chtourou, H., Wong, D. P., Boussetta, N., & Souissi, N. (2017). Effects of time-of-day on oxidative stress, cardiovascular parameters, biochemical markers, and hormonal response following level-1 Yo-Yo intermittent recovery test. Physiology International, 104(1), 77–90. https://doi.org/10.1556/2060.104.2017.1.6

Arjanto, P. (2022). Uji Reliabilitas dan Validitas Depression Anxiety Stress Scales 21 (DASS-21) pada Mahasiswa. Jurnal Psikologi Perseptual, 7(1), 60–80.

Arnold, R., Fletcher, D., & Daniels, K. (2017). Organisational stressors, coping, and outcomes in competitive sport. Journal of Sports Sciences, 35(7), 694–703.

Camire, M., Kendellen, K., Rathwell, S., & Turgeon, S. (2020). Evaluating the coaching for life skills online training program: a randomised controlled trial. Psychology of Sport and Exercise, 48, 101649.

Castaldelli-Maia, J. M., e Gallinaro, J. G. de M., Falcão, R. S., Gouttebarge, V., Hitchcock, M. E., Hainline, B., Reardon, C. L., & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. British Journal of Sports Medicine, 53(11), 707–721.

Cutler, B. A. C., Programs, W., Dwyer, B., & Cutler, B. A. (2020). Student-Athlete Perceptions of Stress, Support, and Seeking Mental Health Services. In Journal of Issues in Intercollegiate Athletics (Vol. 13, Issue 1).

Donohue, B., & Phrathep, D. (2020). Mental health in sport. In Routledge handbook of athlete welfare (pp. 141–152). Routledge.

Ford, J. L., Ildefonso, K., Jones, M. L., & Arvinen-Barrow, M. (2017). Sport-related anxiety: current insights. Open Access Journal of Sports Medicine, 205–212.

Gandhi, J., & Schneider, P. (2020). Understanding the role of environment and culture when delivering sport psychology services in elite women's

international soccer. In The psychology of soccer (pp. 220–233). Routledge.

Gouttebarge, V., Castaldelli-Maia, J. M., Gorczynski, P., Hainline, B., Hitchcock, M. E., Kerkhoffs, G. M., Rice, S. M., & Reardon, C. L. (2019). Occurrence of mental health symptoms and disorders in current and former elite athletes: a systematic review and meta-analysis. British Journal of Sports Medicine, 53(11), 700–706.

Gross, L. (2024). The Life Skills Mental Healt Connection in Sport.

Gustafsson, H., Sagar, S. S., & Stenling, A. (2017). Fear of failure, psychological stress, and burnout among adolescent athletes competing in high level sport. Scandinavian Journal of Medicine & Science in Sports, 27(12), 2091–2102.

Hackney, A. C., & Lane, A. R. (2015). Exercise and the regulation of endocrine hormones. Progress in Molecular Biology and Translational Science, 135, 293–311.

Komarudin, K., Rismayadi, A., Saputra, M. Y., Novian, G., Lai, X. Q., Juliantine, T., & Tajri, A. A. (2024). Psychological Skill of University Basketball Athletes in Each Playing Position in Indonesia. International Journal of Disabilities Sports and Health Sciences, 7(5), 1098–1105.

Kuettel, A., Christensen, M. K., Zysko, J., & Hansen, J. (2020). A cross-cultural comparison of dual career environments for elite athletes in Switzerland, Denmark, and Poland. International Journal of Sport and Exercise Psychology, 18(4), 454–471. https://doi.org/10.1080/1612197X.2018.1553889

Lan, H. T. Q., Long, N. T., & Hanh, N. Van. (2020). Validation of depression, anxiety and stress scales (Dass-21): Immediate psychological responses of students in the e-learning environment. International Journal of Higher Education, 9(5), 125–133.

Linnér, L., Stambulova, N., & Henriksen, K. (2022). Facilitating student-athletes' dual career transition: A Scandinavian university case study. Sport, Exercise, and Performance Psychology, 11(2), 107.

Lopes Dos Santos, M., Uftring, M., Stahl, C. A., Lockie, R. G., Alvar, B., Mann, J. B., & Dawes, J. J. (2020). Stress in academic and athletic performance in collegiate athletes: A narrative review of sources and monitoring strategies. Frontiers in Sports and Active Living, 2, 42.

Mertler, C. A., Vannatta, R. A., & LaVenia, K. N. (2021). Advanced and multivariate statistical methods: Practical application and interpretation. Routledge.

Musyarofah, A., Komarudin, K., Saputra, M. Y., & Novian, G. (2024). Correlation between Self-Talk and Emotional Regulation Among Student Volleyball Athletes. Indonesian Journal of Physical Education and Sport Science, 4(2), 212–219.

Nikander, A. (2022). Adolescent student-athletes' dual career adaptability: The role individual and environmental factors. JYU Dissertations.

Nobari, H., Azarian, S., Saedmocheshi, S., Valdés-Badilla, P., & García Calvo, T. (2023). Narrative review: The role of circadian rhythm on sports performance, hormonal regulation, immune system function, and injury prevention in athletes. In Heliyon (Vol. 9, Issue 9). Elsevier Ltd. https://doi.org/10.1016/j.heliyon.2023.e19636

Novan, N. A., Mulyana, R. B., Syihab, S. F., Kumalasari, I., Nuryadi, N., Saputra, M. Y., Mulyana, M., Gumilar, A., & Purnomo, E. (2024). Multivariate analysis of academic and sport performance among Indonesian university student-athletes. Retos: Nuevas Tendencias En Educación Física, Deporte y Recreación, 61, 1298–1305.

Novian, G., Paramitha, S. T., Ramadha, M. G., Rismayadi, A., Saputra, M. Y., Febrianty, M. F., & Awwaludin, P. N. (2024). COVID-19 Gymnastics: An Exercise used for Adult Mental Health. Journal of Physical Education Health and Sport, 11(1), 30–33.

Nugraha, M. I., Berliana, B., & Saputra, M. Y. (2021). Hubungan Latihan Mandiri Selama Pandemi Covid 19 Dengan Kecemasan Dan Depresi Atlet Bola Tangan Pelatda Jawa Barat. Jurnal Kepelatihan Olahraga, 13(2), 67–71.

Purcell, R., Gwyther, K., & Rice, S. M. (2019). Mental health in elite athletes: increased awareness requires an early intervention framework to respond to athlete needs. Sports Medicine-Open, 5(1), 46.

Purnamasari, I., Febrianty, M. F., & Novian, G. (2022). Kepercayaan Diri dan Kecemasan Atlet Judo Pada Masa Pandemik COVID-19. Jurnal Patriot, 4(1), 95–104.

Purnamasari, I., & Novian, G. (2021). Tingkat kepercayaan diri dan kecemasan atlet pplp jawa barat selama menjalani training from home (TFH) pada masa adaptasi kebiasaan baru (AKB). Jurnal Patriot, 3(2), 203–213.

Putra, M. F. P., Guntoro, T. S., Wandik, Y., Ita, S., Sinaga, E., Hidayat, R. R., Sinaga, E., Muhammad, J., Sinaga, F. S. G., & Kmurawak, R. M. B. (2021). Psychometric properties at Indonesian version of the Sport Anxiety Scale-2: Testing on elite athletes of Papua, Indonesian. International Journal of Human Movement and Sports Sciences, 9(6), 1477–1485.

Reardon, C. L., Hainline, B., Aron, C. M., Baron, D., Baum, A. L., Bindra, A., Budgett, R., Campriani, N., Castaldelli-Maia, J. M., Currie, A., Derevensky, J. L., Glick, I. D., Gorczynski, P., Gouttebarge, V., Grandner, M. A., Han, D. H., McDuff, D., Mountjoy, M., Polat, A., … Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement (2019). British Journal of Sports Medicine, 53(11), 667–699. https://doi.org/10.1136/bjsports-2019-100715

Rice, S. M., Purcell, R., De Silva, S., Mawren, D.,

McGorry, P. D., & Parker, A. G. (2016). The Mental Health of Elite Athletes: A Narrative Systematic Review. In Sports Medicine (Vol. 46, Issue 9, pp. 1333–1353). Springer International Publishing. https://doi.org/10.1007/s40279-016-0492-2

Sarmidi, F. B., Komarudin, K., Saputra, M. Y., & Novian, G. (2024). Motivation And Commitment Young Children's Swimming Training. Gladi: Jurnal Ilmu Keolahragaan, 15(02), 258–264.

Schinke, R. J., Giffin, C., Cosh, S., Douglas, K., Rhind, D., Harwood, C., Si, G., & Papaiounnou, A. (2022). International society of sport psychology position stand: Mental health through occupational health and safety in high performance sport. International Journal of Sport and Exercise Psychology, 20(6), 1711–1733.

Schinke, R. J., Henriksen, K., Moore, Z. E., Stambulova, N., Bartley, J., Cosh, S., Wagstaff, C. R. D., Quartiroli, A., Wylleman, P., & Maher, C. A. (2024). International society of sport psychology position stand: elite athlete mental health revisited. International Journal of Sport and Exercise Psychology, 22(4), 775–801.

Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International society of sport psychology position stand: Athletes' mental health, performance, and development. International Journal of Sport and Exercise Psychology, 16(6), 622–639. https://doi.org/10.1080/1612197X.2017.1295557

Storm, L. K., & Larsen, C. H. (2020). Context-driven sport psychology: A cultural lens. In The Routledge international encyclopedia of sport and exercise psychology (pp. 73–83). Routledge.

Sudano, L. E., Collins, G., & Miles, C. M. (2017). Reducing barriers to mental health care for student-athletes: An integrated care model. Families, Systems, & Health, 35(1), 77.

Sugara, G. S., Syahputra, Y., Fadli, R. P., Zola, N., Putri, Y. E., Amalianita, B., Rangka, I. B., Suranta, K., Zatrahadi, M. F., & Situmorang, D. D. B. (2020). The depression anxiety stress scales (DASS-21): an Indonesian validation measure of the depression anxiety stress. The International Journal of Counseling and Education, 5(5), 205–215.

Sullivan, P., Blacker, M., Murphy, J., & Cairney, J. (2019). Levels of Psychological Distress of Canadian University Student-Athletes. Canadian Journal of Higher Education, 49(1), 47–59. https://doi.org/10.7202/1060823ar

Tabachnick, B. G., & Fidel, L. S. (2015). Using Multivariate Statistics.,(Baloğlu, M., Çev. Ed.). Ankara: Nobel Yayıncılık.

Tanujaya, B. C., & Safitri, S. (2023). Choices Student-Athlete Made in Education & Future Career Aspiration: A Qualitative Study in Indonesia. The Asian Conference on Education 2022: Official Conference Proceedings.

Tod, D., Hodge, K., & Krane, V. (2023). Routledge handbook of applied sport psychology. Taylor and Francis. Retrieved from https://www.routledge. com/Routledge ….

Widya Pranoto, N., fauziah, varhatun, Ockta, Y., Zarya, F., Iswanto, A., Ardiyanto Hermawan, H., Fitriady, G., Adrian Geantă, V., Erhan Orhan, B., Karaçam, A., & Sıdkı Adıgüzel, N. (2024). Comparison of anxiety levels of individual and group athletes Comparación de los niveles de ansiedad de deportistas individuales y grupales. In Retos (Vol. 60). https://recyt.fecyt.es/index.php/retos/index

Wylleman, P., & Rosier, N. (2016). Holistic perspective on the development of elite athletes. In Sport and exercise psychology research (pp. 269–288). Elsevier.

Xi, Y., Liu, F., & Yang, J. (2024). Changes in mental health levels among Chinese athletes from 1995 to 2023. Frontiers in Psychology, 15, 1343522.

Zhang, S., Woodman, T., & Roberts, R. (2018). Anxiety and fear in sport and performance. In Oxford research encyclopedia of psychology.