

Anxiety level of men's futsal players after experienced injury

Galih Pamungkas^{1*}, Muhamad Ichsan Sabillah², Faza Annasai¹, Muhammad Fatih Humam¹

¹Department Sports and Health, Faculty of Vocational Studies, Universitas Negeri Yogyakarta, Mandung Street, Pengasih, Kulonprogo, Special Region of Yogyakarta, Indonesia.

²Department of Sports Science, Faculty of Sports and Health Sciences, Universitas Negeri Yogyakarta, Colombo Street No. 1, Karangmalang, Depok, Sleman, Special Region of Yogyakarta, Indonesia.

*Corresponding Author. Email: galihpamungkas@uny.ac.id.

Abstract

This study aims to find out how high the anxiety level of Men's Futsal players is after experiencing an injury. This research is a descriptive research. The method used is a survey. The data collection technique uses a Google Form questionnaire. The population in this study was UNY's male Futsal players, totaling 33 people. Sampling in this research was carried out using purposive sampling. The criteria for determining this sample include: (1) willing to be a research sample, (2) willing to fill out the Google form happily, according to the existing reality, and (3) having experienced an injury. Based on these criteria, there were 26 players who met. The data analysis technique uses quantitative descriptive analysis presented in percentage form. The results of the study showed that the anxiety level of UNY Men's Futsal players after suffering an injury was in the "very low" category at 3.85% (1 person), "low" at 19.23% (5 people), "fair" at 46.15 % (12 people), "high" was 26.92% (7 people), and "very high" was 3.85% (1 person).

Keywords: anxiety level, futsal, son, injury.

INTRODUCTION

Sport is a physical activity that uses large muscles or joints, the energy system, in which there is a struggle to achieve the expected goals, such as: knowledge, social, emotional, fitness, health and recreation. Sport is an activity for the body to be fit and healthy. With sports activities we can gain physical freshness, health as a means of recreation, foster unity, and can make a good name (Majid, 2022). Sport makes an important contribution to physical, psychological and emotional well-being (Hughes et al., 2020). Sport is an intensive activity to develop and bring out the potential of athletes so that they achieve achievements (Wafiroh et al., 2022). Exercise is a force that acts on the body or a part of the body that exceeds the body's ability to handle it (Saputro & Juntara, 2022). Sports are usually done by many people, including parents, adults and children, to maintain body health, which can be done indoors or outdoors. One of the popular sports in Indonesia is futsal.

Futsal is a 2×20 minute game with high intensity and intermittent action that requires high physical, tactical and technical effort from the players. The field measures approximately 40 × 20 m with 3 x 2 m goals (Naser et al., 2017). Futsal is a sport that allows for physical contact. As the field used becomes smaller, the intensity of collisions between players becomes more frequent. Every player when defending or attacking sometimes has to face hard impacts (body contact), or has to move quickly/dodge when playing the ball (when kicking, dribbling, controlling, catching, throwing, etc.) thus forcing the muscles to work quickly and spontaneously. The sport of futsal really allows for physical contact with opposing players and sometimes with the players themselves, so the risk of injury is very high (Setyaningrum, 2019). The game of futsal is a large ball game played by two teams with five players in each team using a relatively smaller field and has strict and strict rules regarding physical contact (Saudini & Sulistyorini, 2017). Futsal is a type of sport with high physical activity and risk of injury. Accuracy in providing first aid is influenced by the behavior of the helper. Optimal and appropriate assistance can reduce the worsening of the injured area (Purwacaraka et al., 2022). Futsal is

a new sport in Indonesia and its presence is growing rapidly in big cities and regions throughout Indonesia (Windiartha, 2017).

Injuries are problems that arise in a person when carrying out daily activities, sports, or doing work that requires muscles, ligaments, bones and joints to work excessively, which can result in these organs becoming injured. According to previous research, the ankle is the position of futsal players most susceptible to injury, followed by the waist, knee joints, head and face, hips and thighs respectively. The waist is the most vulnerable goalkeeper position, followed by the hands, head and face, ankles and shoulders respectively. Unnatural body contact, inaccurate movement techniques, and poor physical strength preparation are the main causes of injuries, which have several similarities and differences with the causes of injuries in standard football games. Finally, different preventive measures are proposed for different injury positions (Wu et al., 2019). Sports injuries generally include bruises, ligament injuries, muscle and tendon injuries, bleeding on the skin and fainting. Factors that cause sports injuries are warm-up, physical fitness, nutrition, health, field and equipment (Jefri et al., 2018).

Sports injuries are all types of injuries that arise, either during training or during sports (matches) or after matches. Sports injuries usually affect the bones, muscles, tendons and ligaments. The RICE method is an injury management method, which aims to prevent further injury and reduce pain (Fredianto & Noor, 2021). Sports injuries are not only in the form of sudden damage that occurs during sports, for example strains and lacerations in the soft tissue of the musculoskeletal system, but also include overuse syndrome which is a long-term result of training sessions with monotonous and repetitive body movements or postures so that the manifestations appear. clinical. A sports injury experienced by a person will cause pain caused by damage to the structure or function of the body such as bones, joints, ligaments and muscles, either in the form of a closed injury or an open injury. Sports injuries in children can be acute and associated with macro trauma (fractures and sprains). Injuries can also arise gradually (chronically) through repeated microtrauma (stress fractures, OCD, apophysitis, tendinopathy). Boys more often experience traumatic injuries, especially those related to musculoskeletal (Ismunandar, 2020).

Based on the survey results, it was stated that in national and international sports competitions there were 87 people who suffered injuries out of a total of 1390 participants. The lowest incidence rate was in non-contact sports, namely mountain biking (3%) and the highest was in contact sports, namely karate (7.1%). Another sport that can cause injury besides this sport is futsal. For some people, injury is something that is very painful or even a disaster that is vital for the survival and career of a person or player. Sports injuries are injuries to the integumentary, muscular and skeletal systems caused by sports activities. Sport is a series of physical activities and technical skills not only for physical and spiritual health but also with the aim of winning a match. Even though the aim is to be physically healthy, sport also has a risk of sports injury (Puspitasari, 2019).

Sports injuries are not only in the form of sudden damage that occurs during sports, for example strains and lacerations in the soft tissue of the musculoskeletal system, but also include overuse syndrome which is a long-term result of training sessions with monotonous and repetitive body movements or postures resulting in manifestations. clinical. In the field of sports medicine, terminology has emerged such as functional overreaching or non-functional overreaching, which are terms related to the performance of sportsmen or athletes. (Setyaningrum, 2019). Injuries are common things that are often encountered in every activity, especially sports. Futsal itself is a type of body contact sport where it does not rule out the possibility of injury during a match. Anyone can suffer an injury during a match, but not everyone has an understanding of how to treat injuries (Oktavian & Roepajadi, 2021).

High-achieving athletes are at risk of financial hardship when they retire from sport. Athletes with a high risk of injury have a greater chance of experiencing financial difficulties due to the potential to retire early due to injury (Baihaqi et al., 2021). Futsal is included in the 10 sports that most frequently cause injuries, with an incidence rate of 55.2 injuries per 10,000 hours of sports participation. Ankle or ankle injuries are the most common injuries. Ankle injuries that are not treated properly can result in chronic ankle instability (Jason & Arieselia, 2020).

When a player or athlete experiences an injury, the attitude they develop is distress, denial, determined coping. Distress is related to emotional responses that arise such as feelings of shock, anxiety, anger, depression, guilt, withdrawal, shame, and feelings of helplessness. Denial is related to not believing in the failure received, which leads to denying the severity of the injury experienced. Determined coping is the demand phase of injury conditions and understanding the short-term impact

on a player's sporting career. Many aspects are affected after a player suffers an injury, including physical, emotional, mental and behavioral aspects of the player concerned. When viewed from an emotional aspect, players' responses to injuries are anxiety, anger, frustration, and so on. Anxiety in players who have a history of injury is different from players without a history of injury. Anxiety about serious injury is one of the problems experienced by athletes because it makes them lack self-confidence and reduces performance (Noverianto & Indrawati, 2018).

Feelings of anxiety are caused by thoughts before the match and during the match. This happens because there are psychological pressures when playing and the nature of sports competitions which are full of changes in game conditions or natural conditions which cause a decrease in self-confidence in performance. Anxiety is a condition that almost all players experience. Especially for outdoor sports that are contested, it makes the players tired all day and worry about the final result of the match being the same or different from other teams. Spectators and players from other teams often shout to outwit their opponents during the match, which makes players annoyed, tense and not confident before competing or during the match. Because of this, players feel tense and players rarely have confidence in a match, especially players who have experienced injuries. From the results of these observations, the researchers wanted to observe and research more deeply the Anxiety Level of Male Futsal Players After Suffering an Injury.

METHOD

The method used in this research is a survey. The data collection technique uses a Google Form questionnaire. The population in this study was UNY's male Futsal players, totaling 33 people. Sampling in this research was carried out using purposive sampling. The criteria for determining this sample include: (1) willing to be a research sample, (2) willing to fill out the Google form happily, according to the existing reality, and (3) having experienced an injury. Based on these criteria, there were 26 players who met. The data analysis technique uses quantitative descriptive analysis presented in percentage form.

RESULTS AND DISCUSSION

Results

The results of this study are intended to describe data regarding the level of anxiety of UNY Men's Futsal players after experiencing an injury, expressed in a questionnaire totaling 46 items, and divided into two factors, namely cognitive factors and somatic factors. Descriptive statistical data from research results regarding the anxiety level of UNY Men's Futsal players after suffering an injury obtained the lowest (minimum) score of 64, the highest (maximum) score of 120, the average (mean) of 95.65, the middle (median) of 94.50, the most frequent score. appears (mode) 100, standard deviation (SD) 12.893. Complete results can be seen in table 1 as follows:

Table 1. Descriptive Statistics of UNY Men's Futsal Players' Anxiety Levels After Suffering Injuries

Statistics	
<i>N</i>	26
<i>Mean</i>	95,65
<i>Median</i>	94,50
<i>Mode</i>	100
<i>Std, Deviation</i>	12,893
<i>Minimum</i>	64
<i>Maximum</i>	120

When displayed in the form of a frequency distribution, the anxiety level of UNY Men's Futsal players after experiencing an injury is presented in table 2 as follows:

Table 2. Frequency Distribution of Anxiety Levels for UNY Men's Futsal Players After Injury

No	Interval	Category	Frequency	%
1	$114,99 < X$	Very high	1	3,85%
2	$102,10 < X \leq 114,99$	Tall	7	26,92%
3	$89,20 < X \leq 1102,10$	Enough	12	46,15%
4	$76,31 < X \leq 89,20$	Low	5	19,23%
5	$X \leq 76,31$	Very low	1	3,85%
Amount			26	100%

Based on the frequency distribution in table 2, the anxiety level of male futsal players after experiencing an injury can be presented in figure 1 as follows:

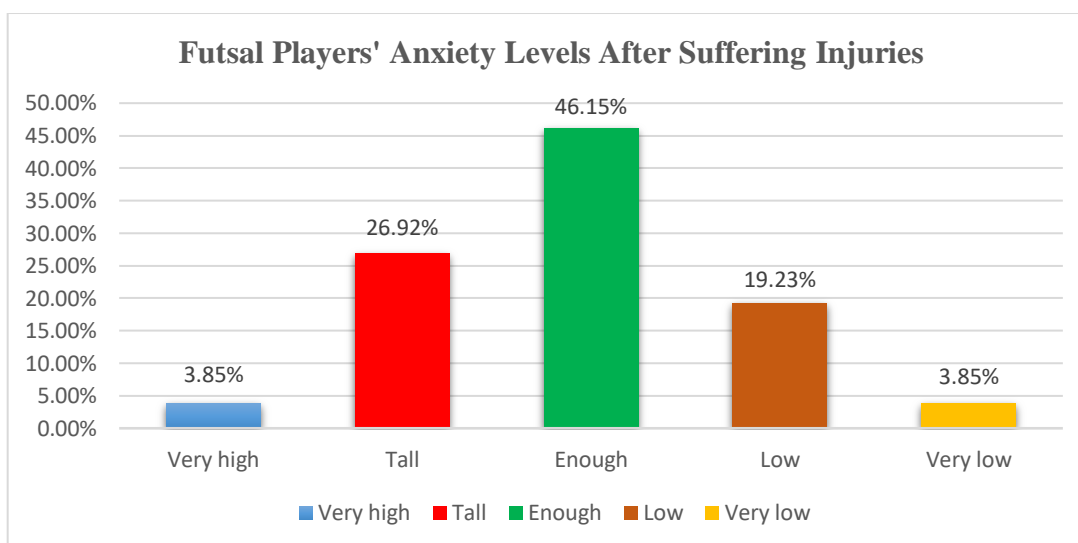


Figure 1. Futsal Players Anxiety Levels After Suffering Injuries

Based on the table above and the picture above, it shows that the anxiety level of UNY Men's Futsal players after suffering an injury is in the "very low" category at 3.85% (1 person), "low" at 19.23% (5 people), "fair" by 46.15% (12 people), "high" by 26.92% (7 people), and "very high" by 3.85% (1 person). Based on the average value, namely 95.65, the anxiety level of UNY Men's Futsal players after experiencing an injury is in the "fair" category.

Based on cognitive factors

Descriptive statistical data from research on the anxiety level of UNY Men's Futsal players after suffering an injury based on cognitive factors obtained the lowest score (minimum) 34, the highest score (maximum) 63, the average (mean) 51.04, the middle score (median) 51.50, frequently occurring values (mode) 47, standard deviation (SD) 8.067. Complete results can be seen in table 3 as follows:

Table 3. Descriptive Statistics of Cognitive Factors

Statistics	
<i>N</i>	26
<i>Mean</i>	51.04
<i>Median</i>	51.50
<i>Mode</i>	47 ^a
<i>Std. Deviation</i>	8.067
<i>Minimum</i>	34
<i>Maximum</i>	63

When displayed in the form of a frequency distribution, the anxiety level of UNY Men's Futsal players after experiencing an injury based on cognitive factors is presented in table 4 as follows:

Table 4. Frequency Distribution Based on Cognitive Factors

No	Interval	Category	Frequency	%
1	$63,14 < X$	Very high	0	0%
2	$55,07 < X \leq 63,14$	Tall	9	34,62%
3	$47,01 < X \leq 55,07$	Enough	8	30,77%
4	$38,94 < X \leq 47,01$	Low	6	23,08%
5	$X \leq 38,94$	Very low	3	11,54%
Amount			26	100%

Based on the frequency distribution in table 4 above, the anxiety level of UNY Men's Futsal players after experiencing an injury based on cognitive factors can be presented in figure 2 as follows:

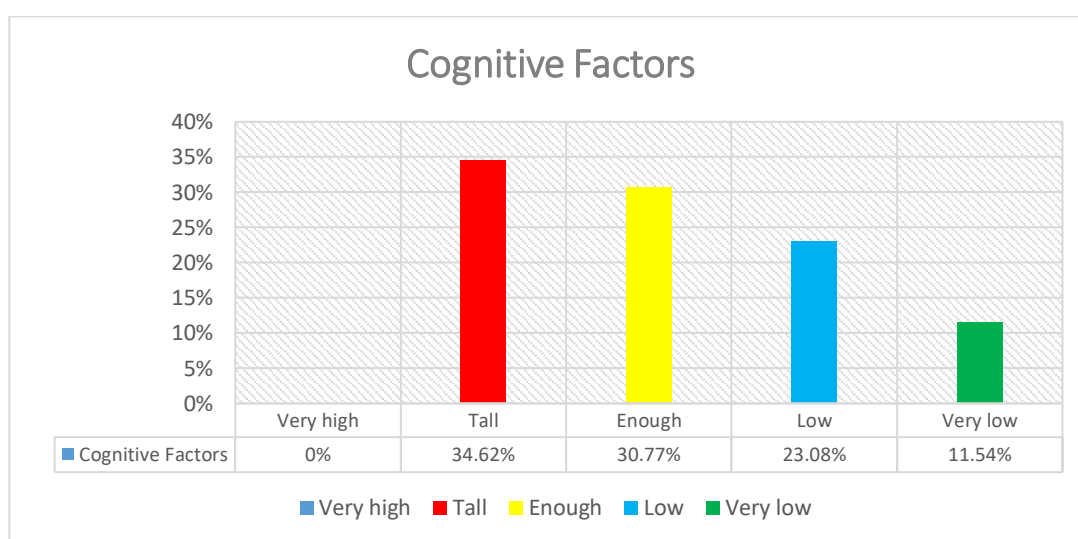


Figure 2. Cognitive Factors

Based on table 4 and figure 2 above, it shows that the anxiety level of UNY Men's Futsal players after experiencing an injury based on cognitive factors is in the "very low" category at 11.54% (3 people), "low" at 23.08% (6 people), "fair" at 30.77% (8 people), "high" at 34.62% (9 people), and "very high" at 0% (0 people). Based on the average value, namely 51.04, the anxiety level of UNY Men's Futsal players after experiencing an injury based on cognitive factors is in the "high" category.

Based on Somatic Factors

Descriptive statistical data from research results regarding the anxiety level of UNY Men's Futsal players after suffering an injury based on somatic factors obtained the lowest (minimum) score of 30.00, the highest (maximum) score of 57.00, the average (mean) of 44.62, the middle value (median) 45.00, frequently occurring value (mode) 39.00, standard deviation (SD) 5.987. Complete results can be seen in table 5 as follows.

Table 5. Descriptive Statistics of Somatic Factors

Statistics	
<i>N</i>	26
<i>Mean</i>	44.62
<i>Median</i>	45.00
<i>Mode</i>	39 ^a
<i>Std. Deviation</i>	5,987
<i>Minimum</i>	30
<i>Maximum</i>	57

When displayed in the form of a frequency distribution, the anxiety level of UNY Men's Futsal players after experiencing an injury based on somatic factors is presented in table 6 as follows:

Table 6. Frequency Distribution Based on Somatic Factors

No	Interval	Category	Frequency	%
1	$53,6 < X$	Very high	2	7,70%
2	$47,61 < X \leq 53,6$	Tall	5	19,23%
3	$41,63 < X \leq 47,61$	Enough	13	50%
4	$35,64 < X \leq 41,63$	Low	4	15,38%
5	$X \leq 35,64$	Very low	2	7,69%
Amount			26	100%

Based on the frequency distribution in table 6 above, the anxiety level of UNY Men's Futsal players after experiencing an injury based on somatic factors can be presented in figure 3 as follows:

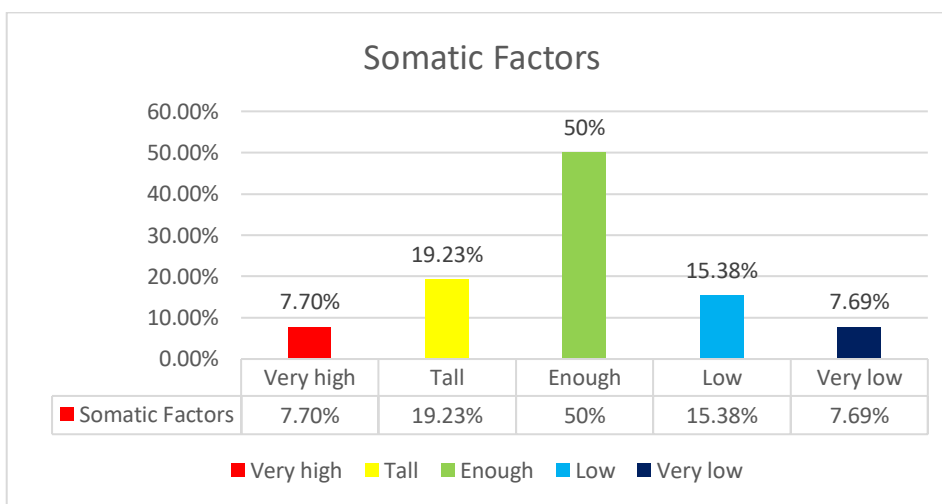


Figure 3. Somatic Factors

Based on table 6 and figure 3 above, it shows that the anxiety level of UNY Men's Futsal players after experiencing an injury is based on somatic factors, namely in the "very low" category at 7.69% (2 people), "low" at 15.38% (4 people), "fair" by 50% (13 people), "high" by 19.23% (5 people), and "very high" by 7.70% (2 people). Based on the average value, namely 44.62, the anxiety level of UNY Men's Futsal players after experiencing an injury based on somatic factors is in the "sufficient" category.

Discussion

This study aims to determine the anxiety level of UNY Men's Futsal players after experiencing an injury. Based on the research results, it shows that the anxiety level of UNY Men's Futsal players after suffering an injury is in the sufficient category. The highest frequency was in the sufficient category with 12 people or 46.15%, then in the low category, namely 5 people or 19.23%, and in the high category, namely 7 people or 26.92%. This shows that players still feel quite anxious after experiencing an injury. For some people, an injury is a very frightening event because it causes pain, soreness, and also creates a feeling of trauma that is difficult to forget. UNY Men's Futsal players generally perceive injuries as physically threatening and dangerous, and have different responses.

When an athlete has an injury, the attitude developed is predetermined distress, rejection, coping. Distress is related to emotional responses that arise such as feelings of shock, anxiety, anger, depression, guilt, withdrawal, shame, and feelings of helplessness. Denial is related to not believing in the failure received, thus leading to denying the severity of the injury experienced. Determined coping is the demand phase of injury conditions and understanding the short-term impact on an athlete's sports career. Many aspects are affected after an athlete experiences an injury, including physical, emotional,

mental and behavioral aspects of the athlete concerned. When viewed from an emotional aspect, athletes' responses to injury are anxiety, anger, frustration, and so on. Anxiety in athletes who have a history of injury is different from athletes without a history of injury. The physical condition of an athlete in the world of sports performance is something that is very important and fundamental, because to get good performance the athlete must have excellent physical condition. Physical condition is a fundamental foundation that must be fulfilled first of all the stages for an athlete to achieve perfect training quality achieve maximum performance when competing (Mansur et al., 2020).

The anxiety level of UNY Men's Futsal players after suffering an injury based on cognitive factors is in the high category. The highest frequency was in the high category, namely 9 people or 34.62%, followed by the moderate category, namely 8 people or 30.77%. The anxiety level of UNY Men's Futsal players after suffering an injury is based on five indicators based on cognitive factors, namely feelings of excessive worry, feelings of doubt, decreased concentration, feelings of pressure from the sound of screaming spectators, feelings of distrust of oneself. Cognitive anxiety is anxious thoughts that appear together with somatic anxiety. These anxious thoughts include: worry, doubt, images of defeat or feelings of shame. These thoughts make a person always feel anxious. These two types of anxiety occur simultaneously, meaning that when an athlete has doubts about competing, at the same time he will experience somatic anxiety, namely physiological changes.

Physical condition is an important element and is the basis or foundation for developing techniques, tactics, strategy and mental development. Good physical condition is one way to achieve maximum performance (Pratama & Imanudin, 2019). Physical condition has a very important role in all areas of sport (Hermawan et al., 2022). Football athletes must have excellent physical condition in all components, such as passing, dribbling, shooting, juggling and heading (Dahlan et al., 2020). To maintain good basic game techniques, they need to be supported by excellent physical condition, namely endurance, strength, agility, speed, and coordination (Hamdi et al., 2019). Physical development aims to form good body posture, including anatomy and physiology through health and physical abilities which include speed, agility, endurance, strength and flexibility (Suharto et al., 2022). Getting good physical condition definitely requires exercises that can improve and develop the physical condition and functional capabilities of the body system (Mansur et al., 2020). Exercise is a long and lengthy process so training must be carried out systematically (Mikail & Suharjana, 2019). Training is a systematic training process that is carried out repeatedly, and has the aim of increasing the training load from day to day (Clemente et al., 2021; Pamungkas, n.d.; Pamungkas & Sabillah, 2023; Tibana et al., n.d.).

The anxiety level of UNY Men's Futsal players after experiencing an injury based on somatic factors is in the sufficient category. The highest frequency was in the moderate category, namely 13 people or 50%, followed by the high category, namely 5 people or 19.23%. The anxiety level of UNY Men's Futsal players after experiencing an injury is based on five somatic factors, namely the body feels stiff, the stomach feels tense, the heart beats fast, changes in body temperature, the body feels uncomfortable. This discomfort is indicated by players feeling nervous and nervous so that the body shakes when facing a match, the mouth and throat feel dry when facing a match, and the quality of sleep is also disturbed. Somatic anxiety is physiological changes related to the emergence of feelings of anxiety. Somatic anxiety is a physical sign when someone experiences anxiety. These signs include: Stomach nausea, cold sweat, heavy head, vomiting, dilated pupils, tense muscles and so on. To measure this type of anxiety requires an athlete's in-depth understanding of their body condition. Athletes must always be aware of their physical condition. In general, anxiety arises from excessive perception. Because it involves perception which is a cognitive process, the treatment process that is most often carried out is to improve an athlete's cognitive process.

CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that the anxiety level of UNY Men's Futsal players after suffering an injury is in the "very low" category at 3.85% (1 person), "low" at 19.23% (5 people), "fair" was 46.15% (12 people), "high" was 26.92% (7 people), and "very high" was 3.85% (1 person).

REFERENCES

Baihaqi, A. B., Puspitasari, M., Zuraida, M., & Nurcholish, A. (2021). Perencanaan manajemen risiko atlet berprestasi Indonesia (Studi kasus atlet dengan risiko cedera tinggi). *Jurnal*

Keolahragaan, 9(1), 137–147. <https://doi.org/10.21831/jk.v9i1.33856>

- Clemente, F. M., Ramirez-campillo, R., Afonso, J., Sarmento, H., Rosemann, T., & Knechtle, B. (2021). *A Meta-Analytical Comparison of the Effects of Small-Sided Games vs . Running-Based High-Intensity Interval Training on Soccer Players ' Repeated-Sprint Ability*. 1–11.
- Dahlan, F., Hidayat, R., & Syahrudin, S. (2020). Pengaruh komponen fisik dan motivasi latihan terhadap keterampilan bermain sepakbola. *Jurnal Keolahragaan*, 8(2), 126–139.
- Fredianto, M., & Noor, H. Z. (2021). Penanganan Cedera Olahraga Dengan Metode Rice. *Prosiding Seminar Nasional Program Pengabdian Masyarakat*, 1267–1272. <https://doi.org/10.18196/ppm.36.316>
- Hamdi, A., Wahyudi, A. S. B. S. E., & Humaedi, H. (2019). Profil kemampuan teknik dasar sepakbola terhadap siswa SMP Negeri 2 Kasimbar. *Tadulako Journal Sport Sciences And Physical Education*, 7(1), 103–113.
- Hermawan, H. A., Nurcahyo, F., & Yudianto, Y. (2022). Pemantauan Profil Kondisi Fisik Kecabangan Sepakbola Pada Siswa Sekolah Menengah Pertama Kelas Khusus Olahraga Di Daerah Kabupaten Sleman Yogyakarta. *Jorpres (Jurnal Olahraga Prestasi)*, 18(3), 9–18.
- Hughes, D., Saw, R., Perera, N. K. P., Mooney, M., Wallett, A., Cooke, J., Coatsworth, N., & Broderick, C. (2020). The Australian Institute of Sport framework for rebooting sport in a COVID-19 environment. *Journal of Science and Medicine in Sport*, 23(7), 639–663. <https://doi.org/10.1016/j.jsams.2020.05.004>
- Ismunandar, H. (2020). Cedera Olahraga Pada Anak Dan Pencegahannya. *JK Unila*, 4(1), 34–44.
- Jason, Y., & Arieselia, Z. (2020). Hubungan Edukasi Kesehatan Tentang Cedera Ankle Dan Terapi Latihannya Terhadap Tingkat Pengetahuan Mahasiswa Kedokteran Pemain Futsal. *Damianus: Journal of Medicine*, 19(1), 37–43. <https://doi.org/10.25170/djm.v19i1.1164>
- Jefri, Candrawati, E., & Adi w., R. C. (2018). Analisis Faktor Risiko Sport Injury pada Atlet Bulutangkis. *Nursing News*, 3(1), 175–185.
- Majid, N. C. (2022). *Profile of Physical Condition of High School Athletes in Sports Special Classes in Sleman Regency*. 18(3), 46–56.
- Mansur, M., Kurniawan, F., Irianto, S., Herwin, H., & Nurfadhila, R. (2020). Analisis dan evaluasi kondisi fisik (kelincahan) atlet cabang olahraga unggulan Kabupaten Kebumen Provinsi Jawa Tengah. *Jorpres (Jurnal Olahraga Prestasi)*, 16(2), 72–77.
- Mikail, K., & Suharjana, S. (2019). Pengembangan model latihan teknik dasar sepakbola bagi anak usia 10-12 tahun di sekolah sepakbola. *Jorpres (Jurnal Olahraga Prestasi)*, 15(1), 14–27.
- Naser, N., Ali, A., & Macadam, P. (2017). Physical and physiological demands of futsal. *Journal of Exercise Science and Fitness*, 15(2), 76–80. <https://doi.org/10.1016/j.jesf.2017.09.001>
- NOVERIANTO, A., & Indrawati, E. S. (2018). Hubungan Antara Kecerdasan Spiritual Dengan Kecemasan Mengalami Cedera Berat Pada Pemain Bola Basket Di Universitas Diponegoro Semarang. *Jurnal EMPATI*, 6(4), 103–106. <https://doi.org/10.14710/empati.2017.19996>
- Oktavian, M., & Roepajadi, J. (2021). Tingkat Pemahaman Penanganan Cedera Akut Dengan

- Metode R.I.C.E Pada Pemain Futsal Yanitra FC Sidoarjo Usia 16-23 Tahun. *Indonesian Journal of Kinanthropology (IJOK)*, 1(1), 55–65. <https://doi.org/10.26740/ijok.v1n1.p55-65>
- Pamungkas, G. (n.d.). The influence of hurdle drill, ladder drill and agility training on women's football skills: English. *Retos*, 50, 127–133.
- Pamungkas, G., & Sabillah, M. I. (2023). *The relationship of agility with women's football playing skills*. 19(1), 1–5.
- Pratama, A., & Imanudin, I. (2019). Aerobic capacity (VO2Max) dan jarak tempuh pemain sepak bola. *JTIKOR (Jurnal Terapan Ilmu Keolahragaan)*, 3(2), 12–16.
- Purwacaraka, M., Islamy, A., Farida, F., Anggraini, R., & Lasman, L. (2022). The Effect of Health Education on The Behavior of Early Handling of Injuries With The Rice Method In Futsal Players. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 11(1), 33. <https://doi.org/10.33394/j-ps.v11i1.6720>
- Puspitasari, N. (2019). Faktor Kondisi Fisik Terhadap Resiko Cedera Olahraga Pada Permainan Sepakbola. *Jurnal Fisioterapi Dan Rehabilitasi*, 3(1), 54–71. <https://doi.org/10.33660/jfrwhs.v3i1.34>
- Saputro, Y. A., & Juntara, P. E. (2022). Pengenalan Cedera Olahraga Dan Penanganan Kasus Cedera Olahraga Akut Kepada Kelompok Karang Taruna Di Kabupaten Klaten. *Jurnal Pengabdian Olahraga Masyarakat (JPOM)*, 3(2), 89–95. <https://doi.org/10.26877/jpom.v3i2.13522>
- Saudini, A. F., & Sulistyorini, S. (2017). Pengaruh latihan squat terhadap peningkatan power otot tungkai. *Indonesia Performance Journal*, 1(2), 71–75.
- Setyaningrum, D. A. W. (2019). Cedera olahraga serta penyakit terkait olahraga. *Jurnal Biomedika Dan Kesehatan*, 2(1), 39–44. <https://doi.org/10.18051/jbiomedkes.2019.v2.39-44>
- Suharto, T. H., Rihatno, T., Hernawan, Widiastuti, Dlis, F., Aryadi, D., Sudirman, R., Rahmat, A., Taufik, M. S., Hanief, Y. N., & Setiakarnawijaya, Y. (2022). Impact of training methods and anxieties of students on their mastery of backstroke swimming skills. *Journal of Physical Education and Sport*, 22(12), 3135–3142. <https://doi.org/10.7752/jpes.2022.12397>
- Tibana, R. A., Manuel, N., Sousa, F. De, Prestes, J., & Feito, Y. (n.d.). *Variability , and Competitive Performance of a*. <https://doi.org/10.3390/sports7020035>
- Wafiiroh, A. N., Purnamasari, A. D., & Dwi Lestari, D. W. (2022). Literatur Review: Hubungan Emosi dan Motivasi Terhadap Prestasi Olahraga Beladiri. *Physical Activity Journal*, 3(2), 169. <https://doi.org/10.20884/1.paju.2022.3.2.5556>
- Windiartha, A. (2017). Pengembangan Media Berbasis Adobe Flash Player. *Jurnal Olahraga Prestasi*, 13(2), 68–88.
- Wu, J., Hu, X., Zhao, L., & Xia, S. (2019). Injuries of Futsal Players and Prevention in China. *International Journal of Sports and Exercise Medicine*, 5(9), 1–8. <https://doi.org/10.23937/2469-5718/1510145>