MIKI 13 (1) (2023): 44-51 Media Ilmu Keolahragaan Indonesia

Type of Paper (Article, Review, Communication, etc)

# The Relation of Anxiety and Blood Pressure Pre-Match in U-19 Youth Futsal Athletes

## Dyan Surya Firmansyah & Sri Sumartiningsih\*

Sports Science, Universitas Negeri Semarang, Indonesia

\*Corresponding Author: sri.sumartiningsih@mail.unnes.ac.id

Received: 2023-02-11. Accepted: 2023-04-25. Published: 2023-06-30.

**Abstract.** Anxiety during competition is a problem that is often faced by athletes. The anxiety factor in competition greatly influences athlete performance because a high level of anxiety can have a negative impact on athlete performance. The athlete's focus will be disturbed, and his performance will not match what he learned during training. The purpose of this study was to determine the relationship between anxiety and blood pressure in the U-19 Semarang Youth Jatidiri athlete team. The research subjects were 14 futsal athletes under the age of 19 years. The study used a quantitative descriptive research type regarding the level of anxiety (anxiety) in facing a match in the futsal athlete of the U-19 Semarang Youth Jatidiri team. The data collection technique used was a closed questionnaire and a digital sphygmomanometer. The results of this study indicated that most of the U-19 Semarang youth athletes showed an increase in blood pressure in both systolic and diastolic by 35.8% and 42.8%, respectively. Based on the hypothesis testing conducted with the product-moment correlation test, it was concluded that the two variables (competition anxiety and blood pressure) were correlated with a strong relationship between the two variables. The study conclude that anxiety had a positive correlation with blood pressure pre-match of U-19 futsal athletes.

**Key words:** body contact sports, physiology, psychology.

Abstract in Indonesia. Kecemasan saat pertandingan merupakan permasalahan yang sering dihadapi atlet. Faktor kecemasan dalam pertandingan sangat berpengaruh terhadap prestasi atlet karena tingkat kecemasan yang tinggi dapat berakibat buruk pada performa atlet. Fokus atlet akan terganggu dan penampilannya tidak sesuai dengan apa yang dipelajari ketika latihan. Tujuan penelitian ini yaitu untuk mengetahui hubungan antara kecemasan dengan tekanan darah pada atlet tim Jatidiri Muda U-19 Semarang. Subyek penelitian yaitu 14 atlet futsal di bawah usia 19 tahun. Penelitian menggunakan jenis penelitian deskriptif kuantitatif mengenai Tingkat Kecemasan (Anxiety) dalam menghadapi pertandingan pada atlet futsal tim Jatidiri Muda Semarang U-19. Teknik pengumpulan data yang digunakan adalah angket yang bersifat tertutup dan alat ukur tensimeter digital. Hasil penelitian ini menunjukkan bahwa sebagian besar atlet jatidiri muda Semarang U-19 menunjukan adanya peningkatan pada tekanan darah baik sistolik maupun diatolik masing-masing sebesar 35,8% dan 42,8%. Berdasarkan pengujian hipotesis yang dilakukan dengan uji korelasi product moment disimpulkan bahwa kedua variable (kecemasan bertanding dan tekanan darah) tersebut berkorelasi dengan tingkat hubungan kedua variable yang cukup kuat. Simpulan penelitian ini kecemasan berpengaruh terhadap pengukuran tekanan darah pada atlet dalam pertandingan. Hal ini dibuktikan pada pengumpulan data berupa angket untuk variabel kecemasan bertanding dan pengukuran tekanan darah menggunakan tensimeter untuk variabel tekanan darah.

Kata Kunci: olahraga kontak tubuh, fisiologi, psikologi.

**How to Cite:** Firmansyah, D. S. & Sumartiningsih, S. (2023). The Relation of Anxiety and Blood Pressure Pre-Match in U-19 Youth Futsal Athletes. *MIKI: Media Ilmu Keolahragaan Indonesia 13* (1),44-51.

**DOI:** http://dx.doi.org/10.15294/miki.v13i1.44872

#### **INTRODUCTION**

Anxiety is a psychological symptom characterised by worry, nervousness, anxiety and fear experienced by a person. Generally, anxiety will appear when athletes experience pressure both from outside and from within their personalities. Excessive anxiety in athletes causes unpleasant feelings, so that the athlete's focus of attention becomes divided at the same time. In some athletes, anxiety in the face of competition is a normal psychological reaction, but athlete anxiety usually lasts for a short time so that individuals can continue to provide adaptive responses.

Research conducted by Effendi, H., (2017), Anxiety can result in decreased performance. This is caused by disruption of athlete performance due to excessive anxiety. In line with that Prajogo, S.L., (2021) states that people with generalised anxiety disorder (GAD) usually often experience anxiety, difficulty concentrating, difficulty sleeping, muscle tension, feelings of fear and feelings of 'on-edge', and often irritability. Anxiety in athletes usually arises because almost all athletes focus on thinking

about the impact of the defeat they will experience. Lack of mental preparation and emotional control skills will result in disruption of the athlete's ability to bring out his best performance. Kurniawan, AW, et al (2021) in his book state that the psychological symptoms that occur can vary, such as muscle spasms, increased pulse, sweating, and so on.

Based on the opinions of several experts above, it can be concluded that anxiety is an emotion that arises both from outside oneself and from within the individual which is characterised by feelings of anxiety, worry, fear, and insecurity from the individual due to things that want to be achieved getting obstacles so that if expectations are not achieved, it will haunt the individual's mind. Excessive thoughts in ourselves we usually call overthingking. This condition is of course both directly and indirectly detrimental to oneself to the individual's mentality.

In relation to sports, there are not a few cases of athletes who experience anxiety when facing a match. The factors that cause anxiety in competing greatly affect the achievements that will be achieved by athletes because high levels of anxiety can have a negative impact on athlete performance. Until now there are still many athletes who have not succeeded in realising their abilities optimally due to excessive anxiety and fear of failure resulting in defeat and harm to themselves and others (Intani, AD, 2020). This opinion is also supported by Prasetyo, Y. (2016) which states that the condition of anxiety or anxiety in facing a match is an important factor that must be given more attention in athlete development.

Some athletes who experience negative conditions, namely anxiety in the face of competition, are normal psychological reactions, but athlete anxiety usually lasts a short duration so that individuals can continue to provide adaptive responses. Effendi, H., (2017) Anxiety can result in decreased achievement. This is caused by disruption of athlete performance due to excessive anxiety.

Athletes often experience anxiety when facing a match. The anxiety factor in competing greatly affects athlete performance because high levels of anxiety can have a negative impact on athlete performance. Many athletes do not succeed in realising their optimal abilities due to excessive anxiety and fear of failure, resulting in losses and harm to themselves and others (Intani, AD, 2020). Prasetyo, Y. (2016) also states that anxiety in the face of competition is an important factor that must be given more attention in athlete development.

Based on the research above, it can be concluded that anxiety when facing a match can affect the athlete's performance in competition, so that athletes who experience anxiety cannot perform at their best. Factors that affect athletes when anxious are generally due to pressure from within themselves or from outside supported by lack of confidence and lack of processing their emotions. The athlete's focus will be disturbed and his performance is not in accordance with what he has learned during training, what is on his mind is disappointment with himself and the people around him when he fails or loses a match. This should be an important concern for coaches in coaching athletes.

The impact of competition anxiety is quite detrimental to athletes and teams. Based on the results of interviews with the Semarang youth identity team futsal coach, it is known that anxiety in matches must exist, especially for U-19 team athletes who are classified as teenagers with unstable emotions. Anxiety is usually influenced by the strength of the opponent and the number of spectators. When experiencing anxiety, athletes will be confused about determining their position and directing or passing the ball. Anxiety in athletes can be seen from changes in facial expressions, passive heating, and athlete focus when spoken to. So that the coach must always remind them to stay focused and concentrated and motivate athletes to stay calm. According to Afriani, Y. et al., (2017) Exercise brings benefits to improve athlete performance, but rigorous physical exercise can cause higher levels of anxiety in athletes.

The subjects of this study were adolescent futsal athletes. Subjects with these conditions were chosen because adolescence is a period of change both physically and psychologically (Suparman, et al., 2017). Research conducted by Jobson, (2020) revealed that 74% of adolescents have a high level of emotional immaturity. Adolescents who have not reached emotional maturity are potentially unable to control their emotions effectively.

From the description above, it can be concluded that futsal is an activity that requires a strong physique. Apart from being physically strong, futsal is also influenced by psychological conditions, one of which is anxiety in competing. Competition anxiety will be part of determining an athlete's best performance in the match later. When feeling excessive anxiety, the body has difficulty concentrating so that it is difficult to perform at its best in the match.

This research is important to do because it will provide benefits to the community, especially athletes of the U-19 Semarang youth identity team in overcoming anxiety problems during competition. This

research is also able to provide solutions in the fields of sports, health and psychology about anxiety. This is in accordance with the research conducted by researchers, namely knowing the relationship between anxiety and blood pressure in athletes of the Jatidiri Muda Semarang U-19 team.

#### **METHODS**

This research is a quantitative descriptive study of the relationship between anxiety before competing and blood pressure in futsal athletes from the Jatidiri Muda Semarang U19 team. The purpose of this study is to explain this relationship with the support of literature. The research method used is quantitative with correlation analysis.

This research was conducted at the Manunggal Jati Futsal Sports Hall, Semarang, Central Java. The population in this study were futsal athletes from the U19 Jatidiri Muda Semarang team, and the sampling technique used was non-probability sampling with all samples of futsal athletes from the Jatidiri Muda Semarang team who met the age criteria under 19 years. The instruments used in this study were the SCAT (Sport Competition Anxiety Test) questionnaire and digital tensimeter. This research begins with the literature study stage and ends with conclusions in the form of processed results of researchers during the research process.

The pre-field stage begins after the researcher obtains permission for observation, then the researcher prepares the framework used in the research. The researcher collects literature review material that can be used as the basis for this qualitative research. After obtaining sufficient information, the researcher formulates the problem, the purpose of the problem formulation is so that the researcher is more focused and easier to research and report research findings. Then the researcher prepared research instruments, in the form of research tools and equipment.

The field work stage was carried out by researchers by measuring anxiety using questionnaires and blood pressure using a digital tensimeter on respondents before the game. The questionnaire in this study consisted of questions that were distributed to respondents and used to obtain information or answers from respondents , after which blood pressure was measured by placing a cuff around the upper arm, the bottom of the cuff 1-2 cm above the elbow. The end of the cuff tube is in the middle of the arm. Measurements were taken 30 minutes before the athletes competed.

Data analysis stage, data analysis is used to answer the research problems. Categorization of score criteria using the Mean and Standard Deviation with Norm Reference Assessment. In this study the normality test used was the Shapiro Wilk test because the sample in the study was less than 50 samples (N<50).

If the significance level is > 0.05 then the data is declared to be normally distributed and if the significance level is < 0.05 then it is declared not normally distributed. The hypothesis test used is the correlation hypothesis test "Pearson Product Moment". To find out the results of testing this hypothesis, testing the results of the hypothesis can be done by comparing the level of significance (p-value) with the error. If the significance value of p> 0.05 then Ho is accepted, meaning that there is no significant relationship between pre-competition anxiety and blood pressure. Conversely, if the significance value of p < 0.05 then Ho is rejected, it means that there is a significant relationship between pre-match anxiety and blood pressure.

The final stage is report writing. Researchers make reports on research results that actually occur in the field based on data obtained through the results of questionnaires and blood pressure results . The results of the analysis of the data obtained are then described in a research report.

#### RESULTS AND DISCUSSION

The Manunggal Jatidiri Sports Hall in Semarang is one of the places used for training and competitions for U-19 young Jatidiri futsal athletes. The implementation of matches conducted by U-19 futsal athletes often experiences obstacles including anxiety. Anxiety experienced by athletes can be seen in the blood pressure of each athlete who wants to take part in the competition. Athletes who want to take part in the competition will have their blood pressure checked using a tensimeter to see how deep the athlete's anxiety is which can later affect the competition process. This involved 14 young Jatidiri U-19 futsal athletes to measure blood pressure in athletes before the match to find out the results of blood pressure variables.

The anxiety level of Semarang U-19 young futsal athletes is relatively high. The data obtained shows an average number of 76.4 in the high category with a standard deviation of 3.6. The highest frequency is in the high category with 7 athletes or 50%.

**Table 1.** Characteristics of Competitive Anxiety

Category	Formula	Athlets	Percentage
Very high	> M + 1 Std. Dev	2	14.3%
Tall	M to $(M + 1 Std. Dev)$	7	50%
Low	(M - 1 Std. Dev) to M	4	28.6%
Very Low	< M - 1 Std. Dev	1	7.1%

Source: Research 2023

Based on the data in Table 1 above, it can be seen that the anxiety of competing in Semarang U-19 young athletes has a very low category of 7.1 %, a low category of 28.6 %, and a high category of 50 %. and with a very high category of 14.3 %. So it can be concluded that anxiety in facing futsal matches in Semarang U-19 young athletes is relatively high.

This shows that players still feel anxious when they are going to play a match. Similar to Khan's research, Muhammad Khushdil, et al., (2017) discussed the effects of anxiety using a questionnaire with 120 athletes as respondents, it was found that there was a significant effect of anxiety on physiological, psychological, and behavioral performance as felt by the players which was high because the average agreement was 30.16%.

Meanwhile on the blood pressure variable in the results of the study, it was found that most of the Semarang U-19 young athletes showed an increase in blood pressure both systolic and diastolic by 35.8% and 42.8%, respectively. Systolic blood pressure data shows an average number of 128 which is in the high category with a standard deviation of 16.6. Diastolic blood pressure data has an average of 73.4 in the high category with a standard deviation of 9.8. This can be seen in the following table.

**Table 2.** Characteristics of Blood Pressure (Systolic)

_ ****** = * * * * * * * * * * * * * * *			
Category	Formula	Athlets	Percentage
Very high	> M + 1 Std. Dev	2	14.3%
Tall	M to $(M + 1 Std. Dev)$	7	50%
Low	(M - 1 Std. Dev) to M	4	28.6%
Very Low	< M - 1 Std. Dev	1	7.1%

Source: Research 2023

**Table 3.** Characteristics of Blood Pressure (Diastolic)

Category	Formula	Athlets	Percentage
Very high	> M + 1 Std. Dev	3	23%
Tall	M to $(M + 1 Std. Dev)$	6	46%
Low	(M - 1 Std. Dev) to M	3	23%
Very Low	< M - 1 Std. Dev	1	8%

Source: Research 2023

Based on the testing hypothesis that is done with the product-moment correlation test concluded that both variables (anxiety fight and pressure the blood). correlated with the level connection, both variables are sufficiently strong.

H o : There is no significant relationship between anxiety and blood pressure in the Semarang U-19 Youth Team Futsal Match.

H a : There is a significant relationship between anxiety and blood pressure in the Semarang U-19 Youth Team Futsal Match.

The basis for decision-making is based on a comparison of the significance value as follows:

- a. If the significance value is <0.05, then it is correlated.
- b. If the significance value is > 0.05, then it is not correlated.

Based on the guidelines for the degree of relationship, the Pearson correlation is classified as follows:

**Table 4.** Classification of Pearson Correlation

Mark	Category
0.00 to 0.20	No Correlation
0.21 to 0.40	Correlation Weak
0.41 to 0.60	Correlation Enough Strong
0.61 to 0.80	Correlation Strong
0.81 to 1.00	Correlation Perfect

Source: Research 2023

This is reinforced by Soekarjo, RPDM (2016) explaining that psychological stress can affect the increase in blood pressure. For people who experience psychological stress, pumping blood to the heart becomes faster, the lungs work faster, causing symptoms in the bloodstream, and eventually blood pressure increases.

The calculation above obtained the value of blood pressure (systolic) showing that out of 14 respondents with an average of 35.8% had a systolic blood pressure of 118-129 mmHg. And the value of blood pressure (diastolic) shows that out of 14 respondents with an average of 42.8% have a diastolic blood pressure of 79-85 mmHg. Thus, based on table 4.5 of the classification of systolic and diastolic blood pressure, it can be concluded that blood pressure in Semarang U-19 youth futsal athletes is in the increased blood pressure category.

Based on the picture they can be concluded that the taller number level worries competing athletes, then the more the pressure also increases blood systolic and diastolic. With thereby can be concluded that worry fights and pressure blood own enough relationship-strong, that is the taller number level of worry competing athletes, increasingly the pressure also increases blood systolic and diastolic athlete identity Semarang youth U-19 before the match. This is in line with the study by Zahara F., (2017) which states that worry when is at a high level so will endanger health, for one be marked with increasing pressure blood or hypertension.

Based on correlation test results *pearson the product* of *the moment* done on so can conclude that Ho is the sound No there is connection significant between worry with pressure blood in a team futsal match identity Semarang U-19 youth declared is rejected, then Ha reads there is connection significant between worry with pressure blood in a team futsal match identity Semarang U-19 youth declared accepted.

With thereby so can be concluded that there is a connection significant between worry with pressure blood in a team futsal match identity Semarang youth U-19 with correlation or enough relationshipstrong between anxiety variables fight and pressure blood in athletes.

**Table 5**. Correlation Test Anxiety and Systolic Blood Pressure

Variable	p value	α	Interpretation
Systolic Blood Pressure with Worry compete	0.047	0.05	correlated

Source: Research 2023

From Table 5 correlation test *Pearson product-moment* with using SPSS version 25 was obtained mark significance of 0.047, then can is known that mark significance of 0.047 < 0.50 then can concluded that these two variables correlated. Temporarily it's on value *Pearson* known *correlation* results of 0.539. It means the level of connection between both variables are sufficiently strong.

**Table 6.** Correlation Test Anxiety and Diastolic Blood Pressure

Variable	p value	α	Interpretation
Diastolic Blood Pressure with Worry	0.023	0.05	correlated
compete	0.023	0.03	

Source: Research 2023

From Table 6 correlation test *Pearson product-moment* with using SPSS version 25 was obtained mark significance of 0.023, then can is known that mark significance of 0.023 < 0.50 then can concluded that these two variables correlated. Temporarily it's on value *Pearson* known *correlation* results of 0.600. It means the level of connection between both variables is sufficiently strong.

The match facing anxiety experienced by athletes generally changes before, during, and before the match ends. Ahead of the match, anxiety arises due to the shadow and heavy burden of the match task he will face. From the results of Dharmawan's survey, (2016) about worries before the match as many as 200 futsal athletes stated that 52.5% experienced stress, faster heart rate with a percentage of 45.5% and nervousness with a percentage of 45.5%.

Based on the description above, it can be concluded that worry before the match is strongly related to increased blood pressure in athletes caused by several factors including the athlete's mind related to the burden of the match task he will face. To control emotions when the match is needed, the coach must first know the source and cause of the athlete's tension or anxiety. The coach must provide special treatment or treatment. To overcome these problems so that the match runs smoothly and brings victory to the team.

### **CONCLUSION**

The results showed that the relationship between anxiety and blood pressure in U-19 Jatidiri Muda Semarang futsal team athletes was in the strong enough category. The higher the level of anxiety competing in athletes, the higher the blood pressure in athletes of the U-19 Semarang youth futsal team. Based on the discussion of the results of descriptive analysis on the anxiety variable before competing is high, this is evidenced by the data in the very low category of 7.1%, with a low category of 28.6%, a high category of 50% and with a very high category of 14.3%. Systolic and diastolic blood pressure before competing in Jatidiri Muda Semarang U-19 athletes has a high category of 50% and 46%. It is concluded that blood pressure in the face of futsal matches in athletes Jatidiri Muda Semarang U-19 is high. Data analysis shows that the hypothesis that there is a significant relationship between anxiety and blood pressure in the Jatidiri Muda Semarang U-19 team futsal match is accepted because the correlation analysis of the two variables shows a positive correlation value with a fairly strong category, it can be concluded that there is a positive relationship between anxiety before competing with blood pressure in Jatidiri Muda Semarang U-19 team futsal athletes with a fairly strong category.

#### **ACKNOWLEDGEMENT**

The researcher realizes that the writing and preparation of this manuscript cannot be separated from the guidance, support and assistance from various visible parties. Therefore, the researcher would like to thank the management of the Youth Futsal Athletes Jatidiri Semarang City team who has allowed researchers to collect data to complete this manuscript and U-19 Youth Futsal Athletes Jatidiri Semarang City who have become the subject of this research, so that the research can take place.

#### **REFERENCES**

- Abi Permana, D., Suryanto, S., & Priambodo, A. (2022). Anxiety and Confidence in Athletic Athletes Before the Game. Journal of Perceptual Psychology, 7(1), 4-12.
- Afriani, Y., Puspaningtyas, D. E., Mahfida, S. L., Kushartanti, W., & Farmawati, A. (2017). Fluid and Vitamin C Intake with Anxiety Level in Football Athletes in Yogyakarta. Indonesian Sports Science Media, 7(2), 52-55.
- Azwar, S. (2016). Research methods. Yogyakarta: Student Libraries.
- Dahlan, AA, Nugroho, U., & Rumpoko, SS (2022). The Influence of Drill Groundstrokes and Fixed Targets on Increasing Forehand Groundstrokes in Men's Field Tennis Aged 12-18 Years At Club Gomes Klaten in 2021. Journal of Penjas Scientific (Research, Education and Teaching), 8(1), 50-62.
- Darisman, EK, Prasetiyo, R., & Bayu, WI (2021). Learning Sports Psychology A Theory and Applications in Sports. Jakad Media Publishing.
- Darisman, EK, & Muhyi, M. (2020). The Effect of Self-Confidence on Reducing Anxiety Levels in Facing the Unipa Surabaya Women's Basketball Team Match. Journal of Kejaora (Physical Health and Sports),

- 5(1), 20-24.
- Dharmawan, DC (2016). Anxiety in facing a match in futsal athletes (Doctoral dissertation, Muhammadiyah University of Surakarta).
- Dongoran, MF, & Kalalo, CN (2020). Psychological Profile of Papuan National Sports Week (Pon) Athletes Towards 2020 XX Pond. Journal Sport Area, 5(1), 13–21.
- Effendi, H. (2016). The Role of Sports Psychology in Improving Athlete Achievement. NUSANTARA: Journal of Social Sciences, 1(1).
- Effendi, H. (2017). Overcoming Anxiety In Athletes Pre-Games Through A Cognitive Approach. Menssana Journal, 2(1).
- Firmansyah, G., & Hariyanto, D. (2019). Organization and System of Sports Matches. Malang: Media Nusa Creative.
- Hasanah, F. (2020). The Concept of a Basketball Game During the Covid-19 Pandemic. Academia. Edu.
- Intani, AD, & Mulyadi, R. (2020). Anxiety Analysis of Futsal Athletes Before Competing Extracurricular Students at SMPIT Thariq Bin Ziyad Boarding School Cikarang. Journal of Olympia, 2(1).
- Islamic, MA (2016). Solo International Futsal Academy (Doctoral dissertation, University of Muhammadiyah Surakarta).
- Jobson, MC (2020). Emotional Maturity among adolescents and its importance. Indian Journal of Mental Health, 7(1), 35. https://doi.org/10.30877/ijmh.7.1.2020.35-41.
- Indonesian Ministry of Health. 2017. Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/4613/2021 concerning National Guidelines for Medical Services for the Management of Hypertension in Children.
- Khan, MK, Khan, A., Khan, SU, & Khan, S. (2017). Effects of anxiety on athletic performance. Res Inves Sports Med, 1(1), 1-5.
- Kumbara, H., Metra, Y., & Ilham, Z. (2018). Analysis of the level of anxiety (anxiety) in dealing with football athletes in Banyuasin Regency at Porprov 2017. Journal of Sports Science, 17(2), 28-35.
- Kurniawan, AW, et al. (2021). Sports Psychology. Tulungagung: Library Academics.
- Lestari, EI (2020). The Anxiety Level of NPS Surabaya Women's Futsal Players In Facing Futsal Matches That Have Been Followed. Sports Achievement.
- Lubis, FE (2018). Teacher Quality and Physical Education Learning Health Sports Based on Research on Local Wisdom Values to Support National Sports Achievements, P., & Sports Science, (2018). Proceedings of the 2018 FIK Unimed National Seminar on Sports Education
- Muhdiana, D., et al. (2020) Module entitled "Elderly Health with Hypertension". Jakarta: Fik-UMJ Community Service Team.
- Mao, Y., Zhu, Y., Jia, C., Sun, F., Chen, S., & Liu, B. (2022). Anxiety Status Of Female Chinese Ph. D. Candidates And Its Association With Sports. In Healthcare (Vol. 10, No. 7, P. 1203). MDPI.
- Maulana, A., & Rusdiana, A. (2020). Differences in Anxiety Levels of Pre-Porda Players in Bandung Regency in Football. JTIKOR (Journal of Applied Sports Science), 4(1), 29-34.
- Melani, IA (2023). The Relationship between Anxiety Level and Blood Pressure in Adolescents at SMAN 1 Ngrayun Ponorogo (Doctoral dissertation, Muhammadiyah University Ponorogo).
- Novitayanti, E. (2020). Relationship between Anxiety and Blood Pressure in the Elderly. Stethoscope Journal, 1(1).
- Pane, BS (2015). The Role Of Sport In Improving Health. Journal of Community Service, 21(79), 1-4.
- Pattinama, VS, & Souisa, M. (2021). Identification of Futsal Referee Confidence in Several Events in Bekasi City. Jargaria Sprint: Journal Science Of Sport And Health, 2(1), 9-16.
- Prajogo, SL, & Yudiarso, A. (2021). Meta-analysis of the Effectiveness of Acceptance and Commitment Therapy for Treating General Anxiety Disorder. PSYCHOLOGY, 26(1), 85-100.
- Pramana DK 2016. The Relationship between Anxiety Level and Hypertension in the Tresna Werdha Senjarawi Social Institution, Bandung. Journal of Nursing Science, Vol. IV, No. 2, September 2016.
- Prasetyo, Y. (2016). The Effect of Depp Breathing Exercise on Increasing the Total Score of National Round Archery Distance in UNY Archery UKM. Achievement sports journal. Volume 22:(1). pp. 27-35.
- Prasojo, D., Junaidi, S., & Hidayah, T. (2014). Physical Fitness Profile of Futsal Players for SMA Bagimu Negeriku Semarang in 2014. Journal Of Sport Science And Fitness, 4(1).
- Rahayu, E. (2015). Relationship Between Goal-Setting And Achievement Motivation With Athlete Achievement in Swimming. Character: Journal of Psychological Research., 3(3).
- Rohmansyah, NA (2017). Anxiety In Sports. Penjas Scientific Journal (Research, Education and Teaching),

3(1).

- Romadhan, AN, Ariska, F., & Rafitasari, R. (2019). Student Competing Anxiety. Proceedings Of The URECOL, 135-142.
- Saputra, FT (2014). The Relationship between Confidence and Anxiety in Facing Competitions in SKOI Students in Samarinda. Psikoborneo: Scientific Journal of Psychology, 2(4).
- Sitepu, ID (2016). The impact of anxiety on basketball athletes before starting the match. Journal of Counseling Psychology Vol, 8(1).
- Suparman, et al. (2020). Dynamics of Islamic Educational Psychology. Ponorogo: CV Wade Group.
- Suyudi, A. (2019). Survey of Physical Freshness Levels in Futsal Extracurricular Students at SMK Negeri 2 Makassar. (Doctoral dissertation, Makassar State University).
- Sugiyono (2014). Quantitative, Qualitative and R and D Research Methods. Alfabeta Bandung
- Sugivono (2017). Quantitative Research Methods. New York: Alphabet
- Soekarjo, RPDM (2016) The Relationship between Anxiety Level and Increased Blood Pressure in Preoperative Benignaprostatic Hyperplasia (Bph) Patients.
- Soliha, H., & Jannah, M. (2021). The Effect of Music Intervention on Mother's Anxiety from Early Childhood During the Covid-19 Pandemic. Journal of Psychology, 8(5), 239-248.
- Soleh, B., & Hakim, AA (2019). Analysis of Anxiety Levels, Confidence and Motivation of Childroom Futsal Athletes in Bangkalan Before the Match. Journal of Sports Health, 7(2).
- Syafaruddin, S. (2018). Overview of Futsal Sports. Journal of Sports and Health Sciences, 7(2).
- Main, Aji. (2015). The Relationship between Anxiety and Peak Performance of UGM Futsal Championship National Championship Athletes. Thesis. Faculty of Social Sciences and Humanities, UIN Syarif Hidayatullah.
- Wiyanto, A., Rohmansyah, N., & Zhannisa, UH (2016). Analysis of the Development of Futsal Sports in the City of Semarang. Sports Window, 1(July 1).
- Zahara, F. (2019). The relationship between anxiety and blood pressure in hypertensive patients at PKU Muhammadiyah Yogyakarta General Hospital. Journal of Cognitive Psychology, 2(1), 42-53