Analysis of The Causes of Factors and Types of Injuries In Football Game and Its Impact On The Psychic Condition of Athletes

Satni Ginting, Noortje Anita Kumaat
Universitas Negeri Surabaya, Indonesia
* *Correspondent Author:* satni19008@mhs.unesa.ac.id

ABSTRACT
This study aims to determine (1) the factors that cause injury in soccer games, (2) the most dominant types of injuries experienced by football players and (3) the psychological impact that is most often felt by football players. This type of research is a type of survey research that takes a sample from one population an uses a questionnaire as the main data collection tool. The independent variable in this study is sports injury, while the dependent variable is psychological impact. The subjects in this study were 41, using puposive sampling technique as a way of sampling, which consisted of 33 male athletes and 8 female athletes of the UNESA soccer UKM. The analysis used in this study is multiple regression. The results showed 1) there are two factors causing injury in soccer games, namely internal and external. However, from these two factors internal factors are the main causes of injuries suffered by football atheles. The factors that cause internal injury in question are the wrong technique performed by the athlete. As for the second factor, namely external causes due to the facilities used by athletes. 2) the types of injuries that occur most frequently in this study are the first hip injury, the second knee injury, the third wrist injury, the fourth ankle injury, the fifth elbow injury and the last one is the shoulder injury. 3) the psychological impact most often felt by athletes when experiencing an injury is the first is the psychlogical impact of feeling sad (grief), the second is the symptoms of depression and irritability and last is the psychological impact of separation.

Keywords: Injury Causing Factors, Types Of Sport Injuries, Psychological Impact

BACKGROUND

Football is a popular sport in the world, one of which is the state of Indonesia, this is in accordance with the statement (Efendi, 2016: 91) which states that football is a sport that is very popular with all levels of society in Indonesia, both in cities and in villages, both young and old.

This sport is included in the category of games that are carried out with high intensity and in a long duration of play, besides that in the category of games that require explosive and agile movements such as jumping when there is a tackle from an opponent. Therefore, according to (Puspitasari, 2019: 55) football is also a type of game that involves various structures or tissues in the human body, namely joints, muscles, meniscus or discus, ligaments and bones to perform complex body movements during soccer games. Of course this requires maximum performance from every member of the body that we move, so that in completing every good movement, components of physical fitness are needed so that players and athletes are able to complete each set or game in a match and avoid unwanted things in terms of sports injuries.

According to Komaini, (2012: 1) states that in the sport of football, there will be many injuries that will occur. It cannot be denied that this will cause several kinds of injuries in sports considering that Football is a type of sport that is in direct physical contact with the body during the game. The following illustrative example is taken from the book preventing and treating sports injuries by Paul and Diane (2002): "Bill had gotten used to doing 30 miles of running every day, until he finally tripped and sprained his ankle. From the doctor's examination, it was found that Bill had minor sprains. Bill was only allowed to run again after 3 weeks. The last few days Bill became irritable and irritable, impatient with the people around him and nobody knows why. After all that was over, he started running again in a few weeks. Even though Bill himself didn't know why his condition had deteriorated so badly. She was in a bad mental state, until finally she felt a strong depression and was finally able to start running again ".

Based on the illustration above, the researcher has the initiative in terms of attracting a problem or title that will be appointed as research material later by starting from the background of the problem above and several journal references that the researcher reads, so in this case the researcher wants to conduct a research on "the factors causes of injury in the game of football and its impact on the psychological condition of athletes.

METHODS

The instrument used was a questionnaire. According to Kasiram (2010) a questionnaire is a list of written questions offered to respondents. So the distribution of questionnaires in this study aims to obtain each research variable data, with reference to the indicators of each variable X1 (injury factor), X2 (type of injury), and Y (psychological impact). The form of the questionnaire used in this study is the Likert scale. In the Indonesian Wikipedia, the free encyclopedia states the Likert scale is a biopolar scale method that measures both positive and negative responses to a statement. According to Azwar, (2009) states that four choice scales are also sometimes used for Likert scale questionnaires which force people to choose one pole because the "neutral" option is not available. In making this questionnaire consisted of 38 question items made in the form of a statement by the researcher, with an answer interval. Very often (4), often (3), rarely (2), never (1). In accordance with Azwar's opinion, (2009) which states in this example, the item is also a statement but is responded to with four choices. The questionnaire used in this study consisted of 38 question questionnaires. The composition of a questionnaire with 4 answer

categories was carried out according to the Likert scale, namely very often (SS), often (S), rarely (J), never (TD).

RESULTS

1. The results of the correlation analysis for variable X1 (factors causing injury)

   From the results of the analysis carried out, the highest score of Pearson correlation was obtained on the factors causing internal and external injuries, where the internal factor score obtained was 0.966 or (internal factor = 0.966) and for external factors the correlation figure was obtained for 0.946 or (external factor = 0.946). So this indicates that internal factors are the main cause of injury experienced by athletes when experiencing an injury.

   From the analysis that has been obtained, the factors that cause injury that most often cause an athlete to experience injury are internal factors. Where the internal factor that causes injury is internal 5, the item states "When I suffered an injury, the causative factor was the technique I did wrong". While the lowest item is Internal 3, the item states that "Some of the injuries I experienced were due to direct contact with friends while playing".

   External factors themselves have the highest correlation on external items 2 (0.298). The item states the injury I sustained due to the facilities I used ". Meanwhile, the lowest item is an external cedere 6 or (-0.206) which states "I got injured due to being hit by the ball while practicing and competing".

2. Interpretation of the results of the X2 variable correlation analysis (types of injury)

   Based on the results of the analysis in Chapter 4 with the technique of finding the highest level of correlation for each item in the questionnaire, the most dominant types of injuries found in athletes who have been injured are (1) waist injury, where in this first injury the highest correlation number is 0.651. or (shoulder injury = 0.651), so it indicates that the most frequent injury experienced by a football athlete, both male and female simultaneously or together is the type of waist injury. Then continued, (2) namely knee injury = 0.642, (3) wrist injury = 0.624, (4) ankle injury = 0.618, (5) elbow injury = 0.540 while for the lowest correlation was shoulder injury with a correlation level of 0.527.

3. Interpretation of the results of the correlation analysis variable Y (psychological impact)

   The psychological impact that is most often felt is based on the results of the analysis in chapter 4 with the highest correlation number for the psychological impact item is for the sad item at 0.780. The item states "When I was injured there was a feeling of sadness within me". While the second highest item is the psychological stress item of 0.660, the item states "I feel a psychological condition such as depressive symptoms, irritability when I have an injury." For the third item is the psychological impact of separation of 0.427, the item states "When I experienced an injury I feel separation and loneliness in a team ".

   The above results are confirmed by Klenk's (2006) research, entitled "Psychological Response To Injury, Recovery, And Social Support: A Survey Of Athletes At An NCAA Division I University", which states that "emotional response to injury varies greatly between athletes. While it is clear that some injured athletes struggle to maintain their emotional state, not all athletes observed are emotionally disturbed, and some athletes are able to cope with their injuries calmly and not tense up ". Several

researchers have attempted to generalize the emotional response to injury experienced by an athlete. However, the athlete's post-injury reactions were more complex and varied than originally thought.

4. Results of regression analysis for variable X1 (factors causing injury)

Based on the results obtained in Chapter 4 on the first variable, namely the factors that cause injury, the results of the difference in beta values for each factor are internal, namely 0.966 or (Beta = 0.966), external factors obtained Beta of 0.946 or (Beta = 0.946). So the factor that most often causes athletes to experience injury is the intrinsic factor, while the second factor is extrinsic. Where the two factors obtained different results.

From the results that have been obtained, the intrinsic factor is the cause of a soccer athlete to experience an injury, where in these factors there are seven items (intrinsic), such as: (1) The causative factor for my injury is because of myself (intrinsic factor). , (2) When I get injured while playing or competing, one of the causes is physical fatigue, (3) Some of the injuries I experienced due to direct contact with friends while playing, (4) One of the causes of injury that I experienced when I was not Warming up or stretching while training or competing, (5) When I got injured, the factor was the technique I did wrong, (6) I got injured while training, (7) When I got injured it happened during a match. While the second factor is extrinsic factors, where the factors that cause injury are also found, such as: (1) The injury factor I experienced was due to outside factors myself (extrinsic factor) myself, (2) The injury I experienced was due to facilities I use, (3) The injury factor that I experienced was due to poor field conditions, (4) The intensity of the rest (recovery) was short / a little because the heavy training load caused me to be injured, (5) Some of the factors that caused my injury were when the equipment I use is not good when I play, (6) Some of the factors that cause my injury are when the equipment I use is not good when I play.

The occurrence of these two factors can be caused by the lack of facilities used when practicing or competing. Or the condition of the body that is too tired because of the continuous training load so that the body experiences significant fatigue. Lack of coordination of muscles or joints that are less than perfect, causing wrong movements and causing an athlete to experience injury. This can also occur because the body is not ready to face too heavy a load due to a lack of warm-up before practicing or during a match.

5. Results of the regression analysis for variable X2 (types of injury)

The results of the SPSS for windows analysis for the types of sports injuries or X2 found that the injuries that most often occur in soccer games are as follows:

a. The first injury to the waist

The fisRt type of injury found in this study was an injury to the lumbar apparatus. With R square of 0, 423 or (R Square = 0, 423), with F counting 28, 620 or (F counting = 28, 620), sig of 000 or (sig = 000), beta of 0, 651 or (Beta = 0.651), a constant of 21.838 or (constant = 21, 701). So this indicates that the injury to the shoulder in this study is the most common with the results of the analysis described as above briefly.

b. Second injury to the knee

The second most common injury is the knee locomotion. With R Square of 0.412 or (R Square = 0.412), Fcount of 27.355 or (Fcount = 27.355), sig of 000 or

(sig = 000), Beta of 0.642 or (Beta = 0.642), a constant of 21, 216 or (constant = 21,216).

c. Third injury to the wrist

The third most common injury in football is a wrist injury. With R Square = 0, 390 or (R Square = 0, 390), Fcount of 24, 923 or (Fcount = 24,923) sig of 000 or (sig = 000), Beta of 0, 624 or (Beta = 0.624), a constant of 20, 875 or (constant = 20,875).

d. Fourth injury to the ankle

The fourth most common injury is the ankle. With R Square of 0.381 or (R Square = 0.381), Fcount of 24, 054 or (Fcount = 24, 054), Sig of 000 or (Sig = 000), Beta of 0.618 or (Beta = 0.618), a constant of 18 , 185 or (constant (18,185).

e. Injury to fifth to the elbow

The fifth most common injury is the elbow apparatus. With R Square of 0.292 or (R Square = 0.292), Fcount of 16.091 or (Fcount = 16.091), Sig of 000 or (Sig = 000), Beta of 0.540 or (Beta = 0.540), a constant of 21.526 or (constant = 21, 526).

f. Sixth injury to the shoulder

The last injury that is most often found in soccer is the shoulder. With R Square of 0.278 or (R Square = 0.278), Fcount of 15.025 or (Fcount = 15.025), Sig of 000 or (Sig = 000), Beta of 0.527 or (Beta = 0.527), a constant of 24 , 312 or (constant = 24,312).

6. Results of regression analysis for variable Y (psychological impact)

a. The psychological impact of stress

From the calculation of regression analysis using SPSS For Windows, the results obtained with R Square of 0.810 or (R Square = 0.810), Fcount of 166, 386 or (Fcount = 166.386), Sig of 000 or (Sig = 000) , Beta is 0, 900 or (Beta = 0.900), the constant is 3.879.

Based on the results of calculations from SPSS For Windows, the Beta results on the SPSS output are 0.900, meaning that around 90.0% of these symptoms arise when the athlete is injured, so it concludes that in general the psychological impact that is most often felt by athletes when or after an injury is the psychological stress in the team during or after an injury.

This impact is basically very likely to be felt by athletes when they experience an injury. Generally, these symptoms have clinical symptoms such as: loss of interest, withdrawal from daily activities, gloomy, fatigue, difficulty concentrating. Generally, sufferers are irritable and irritable, have decreased or excessive appetite.

According to Budianto (2008) states that stress in sports can occur because dreamed expectations are not achieved or because of a defeat which causes psychological trauma to the sportsman. Symptoms of retardant stress are classic stress that appears as a person who is depressed, loses enthusiasm, loss of passion, loss of appetite accompanied by various other physical complaints. Meanwhile, Agitative stress will show the opposite symptoms of stress retardation, so that people will think not stress, because what appears is agitation, or anger and even aggressiveness with irritable behavior, irritability and overeating, only the symptoms of insomnia / insomnia may be the same. .

b. Psychic Impact Feelings of sadness

Based on the results of the calculation of regression analysis using SPSS For Windows, it is found that R Square is 0, 628 or (R Square = 0.628), Fcount is 83.657

or (Fcount = 83.657), Sig is 000 (Sig = 000), Beta is 0, 826 or (Beta = 0.826), the constant is 1.575 (constant = 1, 575).

The second psychological impact is the post-injury sadness experienced by an athlete. The second one can be said that the effect felt by athletes when experiencing injuries is quite a lot, it is possible that external effects such as coaches, family, and training friends still provide encouragement so that these effects can still be overcome by the athletes themselves when they experience an injury. Usually, the way to overcome this sad effect can be done by the athlete himself, and it could also be with the help of coaches, friends, and family as the athlete's closest person. From the Indonesian Wikipedia, the sadness-free encyclopedia is an emotion characterized by feelings of unlucky, loss, and helplessness. When people are sad, they often become more silent, less excited and withdrawn. Sadness can also be viewed as a temporary decrease in mood, while stress is often characterized by a decrease in mood which is sometimes accompanied by disruption to a person's ability to carry out his daily activities.

c. The Psychic Impact of Separation

From the results of the calculation of regression analysis using SPSS For Windows, it is found that R Square is 0.592 or (R Square = 0, 592), Fcount is 56.619 or (Fcount = 56.619), Sig is 000 or (Sig = 000), Beta equal to 0.770 or (Beta = 0.770), a constant of 5, 532 or (constant = 5, 532).

In general, every athlete who suffers an injury will be separated from their daily routine, both in training and in the preparations that have been made to face matches that have been scheduled by the coach or team manager. This separation will be felt by the athlete during the injury recovery program or rehabilitation programs for the injured injury. As long as the rehabilitation program is running, the athlete is indirectly separated from the training activities that have been programmed by the coach, and indirectly this separation will be felt by the athlete with his training partner or team as long as the injury is still in the healing stage.

DISCUSSION

1. Factors Causing Injury

Based on the results of each respondent's answers about the factors causing the injury through distributing questionnaires, the maximum average score on item 7 is 2.95122, namely the question item which states "one of the causes of injury that I experienced when I did not warm up or stretch at the time practicing or competing ", the lowest average score was questionnaire item number 13 which was 1.97561 which was a questionnaire item stating that" when I suffered an injury it occurred during a competition".

Based on the results of the average questionnaire score for the causes of injury, the score was 2.95122, if it refers to the categorization of variable item scores so that it can be seen that the respondents on average experienced injuries due to factors that exist within themselves (the influence of intrinsic factors). The number 2.95122 in the category of items is high, referring to the categorization of questions made in table 4.1 (chapter 4) which is categorized as "frequent", meaning that it is often experienced by the athletes themselves.

2. Types of Injuries

From the question items types of injury, the highest average respondent's response frequency was 2.512195, namely the question item stating "I have an injury to the ankle".

The number 2.512195 is categorized as "frequent" by referring to the questionnaire item categorization. while the lowest score is item number 22 with a score of 1.04878, which is the question item which states that "I have an injury to the elbow". The number 1.04878 is categorized as "never".

3. Psychic Impact

The questionnaire for the psychological impact item consisted of 5 question items, and the highest average score for this question was item number 34 with a score of 2.926829 or (frequent category), which is a question item that states "when I suffered an injury there was a feeling of sadness in me". While the lowest psychologcal impact is item numbers 37 and 38 with a score of 2.146341 or (rare category), which is a question item that states "I feel a psychological condition such as depression symptoms, irritability when I experience an injury and when I experience an injury I experience separation and loneliness in my life. team ".

CONSLUSION

Based on the results of multiple regression analysis in chapter 4 of the title raised, namely "the causes and types of injuries in soccer games and their impact on the psychological condition of athletes", a conclusion can be drawn from the formulations and objectives proposed in this study.

There are two factors for injury in a soccer game, namely internal and external. However, from these two factors, internal factors are the main cause of injuries suffered by football athletes. The factors that cause internal injury in question are the wrong technique performed by the athlete. As for the second factor, namely external causes due to the facilities used by athletes.

The types of injuries that most often occur in this study are: (1) waist injury, (2) knee injury, (3) wrist injury, (4) ankle injury, (5) elbow injury, and the last one is (6) shoulder injury.

The psychological impact most often felt by athletes when experiencing an injury is (1) the psychological impact of feeling sad (grief), (2) stress and irritability, (3) the psychological impact of separation.

REFERENCES
Ackerman, N.,Ilana. 2018. *Likelihood of knee replacement surgery up to 15 years after sports injury: A population-level data linkage study. Journal of science and medicine of sport.* Australia.

Adiguna, Taufik. 2015. *Persepsi Para Lansia Usia 60-74 Tahun Terhadap Masase Ekstremitas Bawah.Tidak Diterbitkan*.Surabaya. Universitas Negeri Surabaya.

Anam Khoirul. 2013. *Pengembangan Latihan Ketetapan Tendangan Dalam Sepakbola Untuk Anak Kelompok Umur 13-14 Tahun*.Jurnal Media Ilmu Keolahragaan Indonesia. Semarang.

Astur, C., Diego. 2016. *Journal Of Anterior Cruciate Ligament And Meniscal Injuries In Sport: Incidence, Time Of Practice Until Injury, And Limitations Caused After Trauma. Universidade Federal De Sao Paulo (UNIVESP)*.Brazil.

Baker Charlotte.Dkk. 2018. *Factors Related To Return To Play After Knee Injury In High School Football Athletes.*

Budianto, D. *Akupuntur pada cedera psikis dalam olahraga. Meridian volume XV Nomor 3. Desember 2008*. http://jurnal.pdii.lipi.go.id/admin/jurnal/15208125129.pdf, diunduh Tanggal 26 Oktober 2020.

Efendi, R. 2016. *Pengaruh Metode Latihan Practice Session, Test Session Dan Motivasi Berprestasi Terhadap Ketrampilan Menendang Dalam Sepakbola*. Jurnal Prndidikan UNSIKA. Karawang.

Fadlilah Siti. 2019. *Faktor-faktor yang berhubungan dengan perilaku pencegahan cidera musculoskeletal pada pemain futsal*. Jurnal keperawatan BSI, Vol. VII. 1 April 2019. Yogyakarta.

Fahmi R. Rahmat. 2015. *Prevalensi Penanganan Cedera Pada Pemain Sepakbola Persidi. Banda Aceh*. Jurnal Ilmiah Mahasiswa Pendidikan Jasmani, Kesehatan Dan Rekreasi Fakultas Keguruan Dan Ilmu Pendidikan Unsyah.

Ihsan Miftahul. 2017. Survei *Cedera Olahraga Pada Atlet Cabang Olahraga Bola Basket Di Club XYZ Junior Medan Labuhan*. Jurnal Ilmu Keolahragaan. Medan.

Kasiram., M. 2010. *Metodologi Penelitian Kualitatif-Kuantitatif*. Maliki Press. Yogyakarta.

Klenk, A. 2006. Psychological *Factor As predictors of injuries among senior soccer players A prospective study. University of rhode island.* Http://www.jssm.org/vo19/n2/26/v9n2-26pdf.pdf, di unduh tanggal 15 agustus 2020.

Kumaidi. A. 2012. *Usaha Penceghan Dan Penatalaksanaan Cedera Dalam Cabang Olahraga Sepakbola*. Jurnal Ilmu Keolahragaan Dan Pendidikan Jasmani vol. 18.No. 23.Juli 2012. Padang.

Maksum, Ali. 2009. *Metodologi Penelitian Dalam Olahraga*. Universitas Negeri Surabaya. Surabaya.

Maksum, Ali. 2018. *Metodologi penelitian dalam olahraga*. Universitas Negeri Surabaya. Surabaya.

Noerbai. 2000. *Filsafat Pendidikan Jasmani dan Olahraga*. UNESA University Press. Surabaya.

Nurcahyo Fathan. 2010. *Pencegahan Cedera Dalam Sepak Bola*.Jurnal Jurusan Pendidikan Olahraga FIK-UNY. Yogyakarta.

Puspitasari, N. 2019.*Faktor Kondisi Fisik Terhadap Resiko Cedera Olahraga Pada Permainan Sepakbola. Jurnal Fisioterapi Dan Rehabilitasi* (JFR) Vol.3, No. 1, Tahun 2019, ISSN 2548-8716. Yogyakarta.

Raharjo, B. 1992.*Pencegahan Cedera Dan Pertolongan Pertama Pada Kecelakaan*. Departemen Pendidikan Dan Kebudayaan. Deroktorat Jenderal Pendidikan Tinggi. Proyek Pembinaan Tenaga Kependidikan.

Rahayu W. Purna. 2013. *Identifikasi Cedera Dan Faktor Penyebabnya Dalam Proses Pembelajaran Penjas Disekolah Dasar Negeri Pada Kecamatan Banyurip Kabupaten Purworejo*.Yogyakarta.Jurnal Prodi Pendidikan Guru Sekolah Dasar Penjas Jurusan Pendidikan Olahraga Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta.

Ridwan & Akdon.2009. *Rumus Dan Data Dalam Analisis Statistika*.Alfabeta. Bandung.

Ronkin, S. W. & Meyer Gerard, 2002.*Total Body Management*. Mengoptimalkan Kondisi Dan Fungsi Tubuh .PT. Buana Ilmu Populer. Jakarta.

Rotella, R. J. & S. R. 1986. *Stress, Injury, And The Pschological Rehabilitation Of Athletes*. In J. M. William (Ed), Applied Sport Psycology: Personal Growth To Peak Performance (Pp. 343-364). Palo Alto, CA: Mayfield.

Santoso, S., 2010. *Statistika Parametrik: Konsep dan Aplikasi Dengan SPSS*. Elek Media Komputindo. Jakarta.

Setiadarma, M. P. 2000. *Dasar-Dasar Psikologi Olahraga*.PT. Primacon Jaya Dinamika. Jakarta.

Setiani F. E. Agri & Priyonoadi Bambang.*Identifikasi Pemahaman Guru Penjas Dalam Pengetahuan, Penyebab, Klasifikasi Dan Jenis Cedera Olahraga*. Yogyakrta. MEDIKORA Vol.XIV No.1April 2015.

Simatupang Nurhayati. 2016. *Pengetahuan Cedera Olahraga Pada Mahasiswa Fakultas Ilmu Keolahragaan UNIMED*. Medan. Jurnal Pedegogi Keolahragaan Volume 02, Nomor 01.

Sudijandoko, A. 2000.*Perawatan Dan Pencegahan Cedera*. Departemen Pendidikan Dan Kebudayaan.jurnal Direktorat Jenderal Pendidikan Dasar Dan Menengah. Bagian Proyek Penataran Guru SLTP Setara D III Tahun 1999/2000.

Sugiono. 2007. *Penelitian Pendidikan*. Pendekatan Kuantitatif, Kualitatif, Dan R & D. Alfabeta Bandung. Bandung.

Wibowo, H.2007. *Pencegahan Dan Penatalaksanaan Cedera Olahraga Edisi 2*. Buku Kedokteran EGC. Jakarta.