

PalArch's Journal of Archaeology of Egypt / Egyptology

Sport Massage In The Contribution To The Preparation Of A Branch Of Pencak Silat Sports

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**Galih priyambada, Sugiharto, Tjetjep Rohendi Rohidi, Sulaiman: Sport Massage In The
Contribution To The Preparation Of A Branch Of Pencak Silat Sports -- Palarch's Journal
Of Archaeology Of Egypt/Egyptology 17(6). ISSN 1567-214x**

Keywords: Sport Massage, contributions, athletes, Pencak Silat, East Kalimantan

ABSTRACT

The purpose of this study is to know the extent to which sports massage contributes to the preparation of athletes facing a branch of Pencak Silat Sports. The method used is quantitative deskriptif with categorial. All Pencak Silat athletes in East Kalimantan Province are selected to be the population in this research, while the research samples using purposive sampling techniques with the criteria of Pencak Silat athletes in East Kalimantan province which are under the construction of East Kalimantan province, among them athletes who are prepared for the Pekan Olahraga Nasional or PON year 2021, athletes who are in the construction of sekolah khusus olahragawan internasional or SKOI , and athletes at the pusat pendidikan latihan pelajar or PPLP Pencak Silat East Kalimantan Province, the overall sample amounted to 30 athletes. Instruments and data collection techniques in this research using a poll or questionnaire in the form of a statement about sports massage in contributing to the preparation of Pencak Silat athletes before competing. The analysis of data on this study uses descriptive analysis in the form of percentages. The results of this study are in the category very low with a percentage of 3%, the category is low 23%, the category is fair 54%, high category 13%, and the category is very high 7%. Conclusion in this research is sports massage in the contribution to the preparation of the match athletes Pencak Silat province of East Kalimantan is included in the category quite contributing to the percentage of 54%.

1. Introduction

Massage is a form of treatment of special complaints on the part of the body, usually occurs in large muscle parts and does not close the possibility of occurring in the joints and tendons. *Massage* is not only done in case of special complaints or injuries. However, the form of *massage* treatment is usually done through typical symptoms such as tired muscles due to previous physical activity. The form of treatment of *massage* like this is a type of *massage* with the intention to anticipate or prepare conditions before physical activity. *Massage* with direction and purpose as anticipation is a form of treatment that is often done in physical activity in sports. Sportsmen often do or visit the clinic *massage* with a view to relaxation and pampering the body. Because they think the task ahead is a training program that has been prepared with high intensity and consistency. On the other hand, the benefits and purposes of *massage* is that it can be used for various purposes to be applied to the baby *massage neonates* and premature. It aims to increase the growth of newborn babies with premature conditions. (Field, T. 2019:136). *Massage* is also effective for infant growth and development, reducing motor problems and enhancing immunity. (Field, T. 2014:224). *Massage* in infants is a structural touch of the skin and is believed to provide good benefits for mothers and children. (Midtsund, A., Litland, A., & Hjälmhult, E. 2019). *Massage* when viewed from various angles has many benefits and objectives, come back again on where the *Massage* was practiced and who did. Because different experts will different way of handling and purpose.

Treatment using this form of *massage* treatment often gets a lot of questions, what is it for? how is the pattern of treatment? And how did it go? To answer all that, it is necessary to conduct a more in-depth investigation. *Massage* in the world of sports is often used as a mandatory treatment, many sports players or sportsmen consider *massage* as an alternative to healing outside of medicine, in another sense through complementary medicine for the purpose of healing various symptoms such as injuries to certain body parts and muscles. In the research of Kinkead, B., Schettler, PJ, Larson, ER, Carroll, D., Sharenko, M., Nettles, J., & Rakofsky, JJ (2018: 8) states that one type of *massage*, namely Swedish *massage* is useful for improving quality of life is based on the effects of fatigue due to one disease, and could make a clinically significant contribution. *Massage* can also be done for the purpose of reducing depression and depressed mood or anxiety factors (Rapaport, MH, Schettler, PJ, Larson, ER, Carroll, D., Sharenko, M., Nettles, J., & Kinkead, B. 2018 : 29). Hand *massage* therapy is believed to reduce anxiety and increase comfort in the elderly. (Yücel, Ş. Ç., Arslan, G., & Bağci, H. 2020: 362). On the other hand, *massage* is not only intended for healing therapy, but can also be used as an alternative in the relaxation or recovery process with a calming purpose. *Massage* can also be done for the purpose of preparing the physical condition for the next task, if this is an athlete then the next task is an exercise program.

The importance of understanding a *massage* for society in general and especially for sportsmen is important. Need to be given understanding and additional insight in the application of various forms of *massage* can be

appropriately practiced. The handling of tired muscles and physical injury conditions involving muscles or joints leads to the treatment of massage, *massage* therapy is usually used during the process of muscle rehabilitation, to relieve pain and recovery from injuries, (Crane, J. D., Ogborn, D. I., Cupido, C., Melov, S., Hubbard, A., Bourgeois, J. M., & Tarnopolsky, M. A. 2012). *Massage* Therapy is performed for the healing or recovery of special patients after conducting cardiovascular surgery, (Bauer, B. A., Cutshall, S. M., Wentworth, L. J., Engen, D., Messner, P. K., Wood, C. M., & SUNDT III, T. M. 2010). Massage is advised to better consider the pressure and level of pain and is given gradually according to the patient's condition, this applies to special symptoms or on certain complaints such as *fibromyalgia*. (Kalichman, L. 2010). *Massage* is performed for various forms of recovery after undergoing a variety of previous processes, as described above is usually done after undergoing the operation process or after experiencing various forms of other physical or muscular injury.

Prevention and recovery from injuries is usually done with several processes and stages in *massage*, *massage* is also often done for the purpose of anticipating the anticipation of risk, but also aims to help the healing process, this applies to a variety of conditions, *massage* with the purpose of anticipating special risks such as muscle injury is very important because it aims to provide relaxation in muscles and prepared for subsequent activities. *Massage* before and after undergoing training program for sportsmen is a very important aspect to be considered. Both are a form of effort against the anticipation of muscle injury. Many studies have produced several opinions related to *massage* for the purpose of before and after exercise, as expressed by (Arroyo-Morales, M., Fernández-Lao, C., Ariza-García, A., Toro-Velasco, C., Winters, M., Díaz-Rodríguez, L.,... & Fernández-De-las-Peñas, C. 2011:481) A *massage* given before the activity negatively affects the performance of muscles, but has a role in psychological influence and is largely seen in vulnerable sportsmen with high levels of stress. Massage is also very effective for the prevention of pain after doing sports, massage in this regard compared to vibration therapy and has the same effectiveness, (Imtiyaz, S., Veqar, Z., & Shareef, M. Y. 2014:133).

Massage before and after undergoing sports training or undergoing physical activity has various meanings in terms of benefits. Based on several studies conducted previously, the arguments vary and of course all can be justified for an existing problem. Massage benefits and goals tend to have positive sides and it is important to note that the treating therapist and the patient should be of the same sex to prevent inappropriate actions in this context of matters that touch sexuality. Massage in terms of benefits is very clear to make the body comfortable. Massage that is done repeatedly is believed to be able to grow and develop new blood vessel networks that are already in the muscle tissue this happens during the training period, (Andrzejewski, W., Kassolik, K., Kobierzycki, C., Grzegorzolka, J., Ratajczak -Wielgomas, K., Jablonska, K., ... & Podhorska-Okolow, M, 2015: 145). Massage in the context of the world of sports plays an important role, and better known as sports massage, it tends to

have the goal of anticipating and preparing sportsmen for training and competition tasks as well as providing benefits in assisting recovery after injury. used to improve performance, as written by Cè, E., Limonta, E., Maggioni, M. A., Rampichini, S., Veicsteinas, A., & Esposito, F. (2013: 857). Sports massage aims to relieve fatigue and facilitate recovery.

Sports massage is a form of treatment by putting forward strategies to anticipate and prepare for the next task, of course, in this case, sports training, sports massage is more emphasized as a form of massage with the aim of minimizing the risk of injury, through techniques with various terms, in practice differentiated into various types and techniques, returning to its goal. Giving sports massage is often encountered during preparation and after sports activities. The application of the massage method to sportsmen has many impacts that can be felt directly, such as the massage given to sportsmen before performing tasks, both training and competition, of course, will have special effects both physically and psychologically. As well as research conducted by Shuiabu, A. K., & Bello, B. (2019: 46). Massages before world cup matches alleviate anxiety among Nigerian national team soccer players. This certainly provides an explanation that the role of massage in this case is able to make a positive contribution to preparation before carrying out tasks in sports. And is able to provide effects that are not only felt physically but have an effect psychologically and control stress levels. (Naruse, S. M., & Moss, M. 2019: 343). Explain that massage is not only given as a form of therapy, but is given to healthy people with the aim of improving health and controlling stress levels.

Massage in its application to the sport if described in detail provides many results and benefits related to motion in sports. The individual method of massage using a therapeutic ball is able to provide increased range of dorsoflexion movements in the ankle. (Capobianco, R. A., Mazzo, M. M., & Enoka, R. M. 2019:7). Massage with a variety of methods that are often done by Terai give a special effect that is able to hypnotize a person so that the feeling of comfort grows and becomes increased. In the world of sports through a sport massage approach is often an unabandoned alternative and even a form of handling that is often done both before and after carrying out tasks in the sport. In the application of sports massage viability using oil as a lubricant so that the massage process becomes more comfortable and comfortable, lubricating oils used are often given additional aroma as an effort to influence calmness and relaxation, the Terai aroma given in addition to lubricating oils is also often administered in other forms, the oil aromatherapy is believed to affect anxiety (Farner, J., Reed, M., Abbas, J., Shmina, K., & Bielawski, D. 2019:229). Exercise is an activity that requires concentration and tranquility to achieve victory or success in training so that supporting factors should be observed to support achievement.

Increasing sports performance is not limited to high exercise intensity, other supporting factors are also supposed to be considered. Seeing some sense of the importance of massage above gives the idea that the role of sports massage in the process of achieving success in sporting achievement is very significant.

Sport massage both before and after carrying out good duty exercises and competition in sports should be more noticed, not only a role in the process of healing therapy but the psychology factor has a close connection to sport Massage, motivation and sports achievements. The sport of martial arts that tends to have a high level of competition, in a day athletes can compete more than once, for example Pencak Silat is a distinctive or traditional sport of Indonesian martial arts, Pencak Silat is part of other martial arts but Pencak Silat and have a special management container in Indonesia that is better known as IPSI or Pencak Silat Association of Indonesia. Pencak Silat develops with various elements or colleges scattered throughout the region of Indonesia. Pencak Silat Art includes three parts: martial Arts exhibition, recreational arts Pencak Silat and Pencak Silat as an achievement (Ediyono, S. 2017). Pencak Silat is expanding and shows its achievements in national and international events.

This type of Pencak Silat sports is a type of sport with the combination of martial and artistic movements in it. Even the associated categories are comparable and art, with their own appraisal components. Pencak Silat in its application has various benefits and objectives such as a tool to protect themselves or defend themselves in a time of emergency such as a robbery in a person (Kartomi, M. 2011:65). In addition to the model of training for Pencak Silat achievement should also be understood that Pencak Silat also included in the study of physical education, especially in the curriculum of Physical Education undergraduate program. Where the learning approach uses a variety of styles and models of learning and adapted to the students ' characteristics and teaching materials (Muktiani, N. R., Rachman, H. A., & Rahayu, S. 2020:44). The multimedia-based learning Model is also able to make a positive impact on Pencak Silat learning process especially on mastering skills and techniques for teachers and students (Lanos, M. E. C., Dlis, F., & Widiastuti, W. 2020:16) based on the description can be explained that Pencak Silat in its application requires a variety of techniques and methods, both from Pencak Silat as a goal achievement and Pencak Silat as an educational or learning destination.

Pencak Silat has been mentioned earlier is a form of traditional sports and usually leads to ancestral traditions as a form of self-protection and art area that developed into a modern martial arts sport. The development of traditional Pencak Silat sports area usually develops through oral to the next generation or hereditary spread (Djunaid, I. S. 2020:68). Based on the explanation proves that Pencak Silat in the presence of not suddenly emerged as part of the sport martial or Pencak Silat is not merely a sport of new modifications, but Pencak Silat is a traditional sport of the area that is packaged become more modern and is hosted in the management of Pencak Silat Indonesia or IPSI. Until Pencak Silat become a unique Indonesian sport and become known and played in various national and international events. As the development of Pencak Silat Sports in Indonesia attracted a lot of attention and began to design a variety of strategies to continuously improve the achievement of national athletes, many aspects that influence achievement among the aspects of psychology where it is

a positive contribution to the achievement and success of achievement (Dimiyati., Irianto, D. P., & Lumintuarso, R. 2020:14). The development of Pencak Silat brings a lot of potential to be developed more from physical components, strategies to the realm of psychology.

Pencak silat is a sport that has high competing intensity because athletes are able to compete more than once in a day, if in a match they win, the athlete has the potential to continue the match and fight with other opponents. In addition to training intensity, it is necessary to pay attention to the athlete's training volume that has been designed by the coach through the training program as well as a measure of the athlete's physical activity. Judging from this, it is common to find various conditions and special symptoms ranging from muscle fatigue and other physical conditions, for example experiencing injuries in certain parts as a result of training or competing. The implementation of prevention and handling of sports injuries here is very much needed, such as massage. It was explained that manual therapy that is carried out to stimulate the tissue healing process can be done immediately to build muscle forces in patients with muscle weakness (Kivlan, B. R., Carcia, C. R., Clemente, F. R., Phelps, A. L., & Martin, R. L. 2015: 332). Based on the long explanation described above regarding sports massage, it is considered to have a very strong correlation with preparation and care before and after a match or training, it is intended to minimize the occurrence of injuries. In addition to preventing and treating injuries, the application of sports massage also greatly affects the psychological aspects, can increase self-confidence, mental and other things that can affect achievement. This can be formed from various aspects including the surrounding environment that is able to provide positive facilities, this can be created by a trainer who is able to design the best possible training environment (O'Connor, D., Gardner, L., Larkin, P., Pope, A., & Williams, AM 2020: 13405).

Feelings of confidence, confidence and other aspects that can improve the potential of success in achievement other than arising from the training environment could also be given a special stimulant through approach and attention to physical condition, for example injury or fatigue factors and given action massage with special Penrlakuan so it is hoped to give an optimistic and confident feeling for athletes to become champions. Confidence is able to give a feeling of calm and belief it is correlated with the benefits and objectives of massage that has the benefit of giving a feeling of calm and comfortable through touch. So that a stable personality is interpreted as a confident person able to provide benefits to the sport e.g. in the decision-making (Siekanska, M., & Wojtowicz, A. 2020:627). The role of sports massage in this case very clearly provides benefits from various factors ranging from physical to psychological condition of athletes. The frequent feelings of fatigue make athletes unconfident and often arise as a result of fear of the practice and competition. The sport massage approach is certainly through various mediation and athlete readiness so that the treatment provided does not result in a fatal error. Sport Massage In fact provides positive benefits depending on step and method done.

The feeling of fatigue often felt by athletes after undergoing exercise is often a less pleasant thing and even cause pain symptoms in certain parts of the muscles, so need attention and form of treatment that is able to relieve the symptoms such as massage or that is known as sports massage that is devoted to massaging sportsmen. The sport massage approach provides a comfortable sensation for the athlete so that it is believed to reduce feelings of fatigue after training or playing. Based on the preliminary study that has been done in the sportsmen in East Kalimantan especially on the Pencak Silat sports, it can be explained that Pencak Silat athletes during training in the treatment to face the game often undergo various symptoms due to high intensity exercises. The exercise Program is in the morning and afternoon so that it demands athletes to have optimal or prime level of fitness. Athletes undergoing massage programs are usually scheduled once a week so that on weekends athletes take the time to go to the clinic massage. There are many effects and benefits given by the massage program for athletes one of them makes the athlete more confident and recovered from the origin. Based on the explanation above the appeal of the attraction to dig deeper into the sport massage in its application to the recovery of feelings of fatigue or recovered condition of origin for the Pencak Silat athletes both before and after undergoing the training program.

2. Method

Types of research

A quantitative descriptive approach was chosen to describe the sport massage in its contribution to the Pencak Silat athletes in preparation for a special match for the Pencak Silat athletes in the province of East Kalimantan. This type of research is to expose or describe something, such as circumstances, conditions, situations, activities. The method used is the survey, the data retrieval technique using a poll, the score obtained is analyzed using a quantitative descriptive analysis that is poured in the form of a percentage.

Population and samples

The population in this study is all Pencak silat athletes in East Kalimantan province. Sampling techniques used are purposive sampling with the determination of samples or criteria of population members in this case Pencak Silat athletes in East Kalimantan province that are prepared to face the Pekan Olahraga Nasional or PON and athletes who are in the construction of East Kalimantan Province namely Sekolah Khusus Olahragawan Internasional (SKOI) and Pusat Pendidikan Latihan Pelajar (PPLP) east Kalimantan province which amounted to 30 athletes both men and women.

Time and place of research

This research was conducted in East Kalimantan province. Data retrieval is held on February 2020 – May 2020.

Research instruments

This research uses a poll instrument or questionnaire to collect data. Data collection using a poll of athletes preparation and motivation in the face of the match through optimizing the use of sports massage in East Kalimantan province. A poll is compiled using a likerts scale. To provide a score of any statement answered by the respondent:

SS (very concur)	= 5
S (Agree)	= 4
KS (less concur)	= 3
TS (Disagree)	= 2
STS (very disagree)	= 1

Data Analysis Techniques

The research uses the descriptive statistical data analysis Teknk which is poured in the form of percentages,

$$P = P = \frac{f}{N} \times 100\%$$

Description:

P = Percentage

f = the frequency being searched

N = total number of frequencies

(Sudijono, 2012:43).

Raw score conversion becomes the result of a standard value using the *Mean* (M) and standard deviation (SD) standard, following the Student Perception assessment table:

Table 1. Norm assessment of perception and interest

Score Interval	Category
$> M + 1.5 SD \leq X$	Very high
$M + 0.5 SD \leq X < M + 1.5 SD$	High
$M - 0.5 SD \leq X < M + 0.5 SD$	Fair
$M - 1.5 SD \leq X < M - 0.5 SD$	Low
$X < M - 1.5 SD$	Very Low

Description:

M = *Mean*/Average

SD = Standard deviation

3. Result And Discussion

Data on Sports Massage results in contributions to the preparation of the sport matches Pencak Silat is presented in a categorial calculation. For more details can be seen on the results of table two:

Table 2. Calculation of categoritorial Sports Massage in contributing to the preparation for the match

Category	Interval	F	%
Very high	$156 \leq X$	1	3
High	$146 \leq X < 156$	7	23
Fair	$136 \leq X < 146$	16	54
Low	$125 \leq X < 136$	4	13
Very Low	$X < 125$	2	7
Amount		32	100

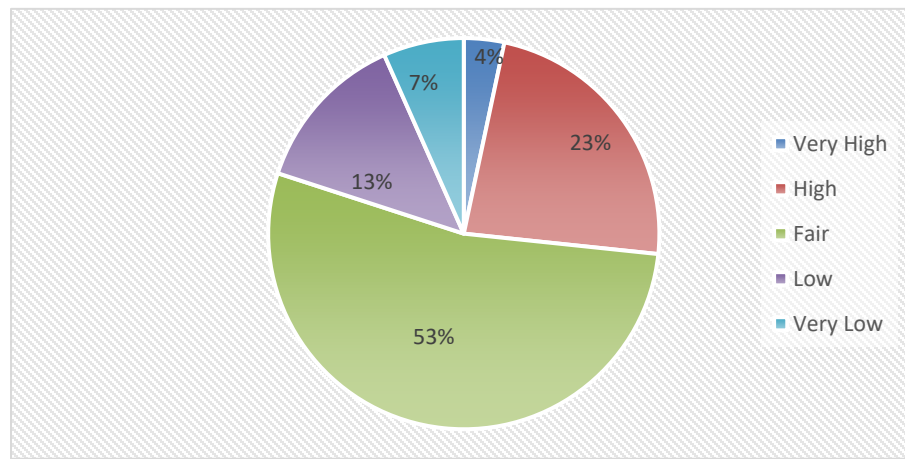
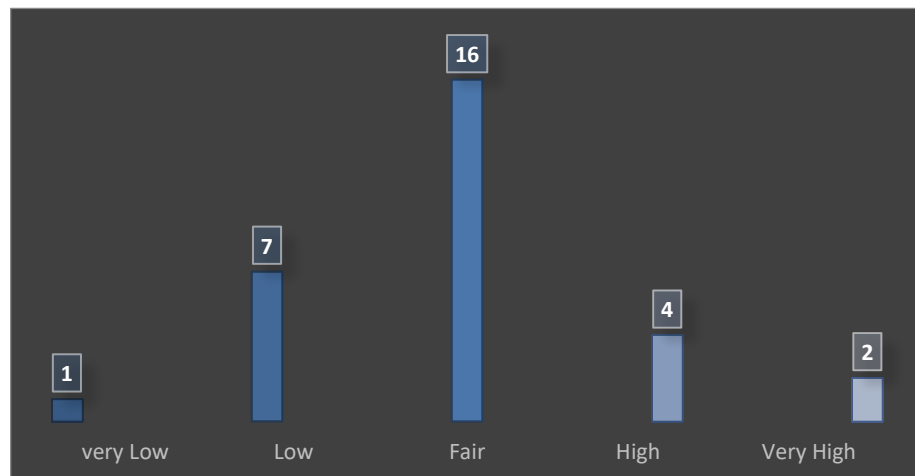


Figure 1. The percentage of sports massage based on categories contributed to the preparation of athletes before competing



Picture 2. Sport Massage's contribution bar Diagram in preparation for athletes facing the match

Sport massage in contributing to the Pencak Silat athletes while preparation for the match in the category of very low 1 athlete or 3.3%, the category of low 7 athletes or 23.3%, category fair 16 people athletes or 53.5%, High Category 4 athletes or 13.3%, and very high Category 2 athletes or 6.7%. Based on the

results that have been displayed then the handling of the preparation before competing athletes Pencak Silat use the approach of sports massage including into the category enough where athletes if seen from the data spread trend leads to a good outcome, in other words Sports massage is able to give encouragement both in the condition of recovering from Origin and in psychology including the recovery of feelings of fatigue and others. *Massage* is a manipulation or technique manually with movements such as rubbing, massaging, pressing, scrolling, slapping, and tapping (Park, J., Shim, J., Kim, S., Namgung, S., Ku, I., Cho, M.,... Spirit, H., 2017:789). Massage is a tool for muscle relaxation and increase the range of motion and performance of muscles (Bradbury-Squires, D. J., Nofall, J. C., Sullivan, K. M., Behm, D. G., Power, K. E., & Button, D. C., 2015:133). Through the treatment using a distinctive touch with the aim of providing a comfortable and psychological effect is able to improve the confidence and of course readiness in the face of the match.

Based on the results of the research that has been presented above described in the discussion, sports Massage is a form of special treatment given to sportsmen with various special purposes such as providing a comfortable feeling, provide treatment after injury, and minimize the risk to injury. The movement of the massage is believed to be able to provide special effects such as relaxes certain muscles so that the lactic acid deposits become degraded so that the blood flow becomes more Lancer. More specifically able to contribute to the efforts of decreasing specific physical symptoms such as muscle injury and muscle stiffness. But from the other side there are also athletes who do not like to be massaged, for some reason. Based on the study of the literature we did find it in the research of Davis, H. L., Alabed, S., & Chico, T. J. A. (2020:8). Explaining that massage is not found in effect on the enhancement of certain conditions such as strength, jumping, fast running and so on, but the massage is associated with an increase in flexibility. If further understood in sports massage has a lot of influence on the physical condition of various previous studies, but from some research is able to explain the lack of sports massage in the application of a sport activity.

The management of sport massage for Pencak silat athletes should be adjusted to the needs specifically based on the type of movement performed in accordance with the analysis of movements in the Pencak Silat. Obviously if the application of sport massage technique is done by adjusting the condition and characteristics of the sport branch then certainly will be able to provide effective effect. Sport Massage provides many benefits but in this research we do not find optimally based on interviews and data-diskette using poll data or the athletes have not understood the benefits of sports massage more fully. There are only 30 Pencak Silat athletes which are used as samples in this study most argue that the sport massage is limited enough to give positive effect to certain physical conditions, especially in the condition of muscle fatigue and feelings of discomfort resulting from exercise and other activities. If it is seen from the understanding and benefits of sports massage in general This can be a boost to further develop an understanding of sports massage can be by doing

research with a wider generalization then using people who are then given a sport massage treatment.

The benefits of sports massage as a form rather than recovering from origin are an important aspect that must be emphasized to athletes so that there is no doubt in undergoing training and optimizing injury prevention through the application of sports massage. In the research of Schilz, M., & Leach, L. (2020: 18). Suggests that athletes have positive perceptions and attitudes towards therapy using sports massage, especially in conditions of muscle problems. Based on this, it is clear that in addition to physical aspects that require touch through sports massage, psychological aspects such as perceptions and attitudes need to be developed to be able to encourage the optimization and utilization of sports massage to be more optimal and effective. Optimizing the role of sports massage in preventing injuries as a form of preparation for athletes before undergoing a competition is an important thing that must be considered, especially other elements that support this, such as coaches and other components that are members of the management of the sport of pencak silat in East Kalimantan. It is hoped that through socialization efforts and approaches to athletes regarding the benefits of sports massage, athletes will be more motivated to be able to use sports massage as a form of positive encouragement as a supporting factor for achieving success, both from physical factors, namely prevention of injury through optimization of sports massage, and further encouragement. psychology through suppressing self-confidence and the belief that the body will be better prepared for the next task after undergoing various kinds of therapy, including sports massage.

4. Conclusion

Based on the results of the research and discussion previously described in this study, it can be concluded that sports massage is sufficient to directly influence or contribute to the preparation for martial arts athletes in East Kalimantan Province. This statement is evidenced by the results of research that show sufficient category in research conducted on pencak silat athletes in East Kalimantan Province..

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