

Analysis of the impact of massage, physiotherapy, and nutrition provision of recommended dietary allowances on the confidence of road race cycling athlete

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Abstrak

The purpose of this study is to analyze the effect of massage, physiotherapy, and nutrition provision of recommended dietary allowances on the confidence of road race cycling athletes. This study's design employs a mixed methods approach, specifically a qualitative approach with a case study method and a quantitative one with an ex post facto method. The subjects in this study included ten athletes who received massage, physiotherapy, and recommended dietary allowances. Measurement of athlete self-confidence improvement following data collection via survey, massage, physiotherapy, and nutrition administration, followed by interviews with athletes. The data came from the results of in-depth interviews with individuals, specifically between interviewers and research respondents. In this study, researchers used a semi-structured interview method. This research analysis technique goes through the process of data reduction, data display, and verification. Data processing techniques use coding, data classification, categorization, analyzing units of meaning in categories, looking for relationships between categories, and making reports where the results of the analysis are suppressed in the form of draft research reports. The result of this study shows that the provision of massage manipulation has a confident effect on road race cycling athletes. Before being given a massage the athlete feels stiffness in the muscles and after being given the massage the athlete feels fitter. Physiotherapy can increase athletes' confidence through Exercise therapy and Thermo therapy (Heat therapy). Providing nutritional needs based on recommended dietary allowances increases the confidence of Road Race Cycling Athletes.

Keywords: Massage, Physiotherapy, Nutrition Provision, Confidence, Road Race Cycling

INTRODUCTION

Self-confidence is a very relevant psychological factor in achieving optimal performance in sports (Grace, 2016; Kent, 2017). Confident athletes tend to be more motivated, can handle the pressures of competition better, and have the ability to deal with physical challenges that may arise in the sport of cycling (Adom-Aboagye, 2015; Lemke, 2015). Self-confidence can also influence an athlete's behavior, such as the race strategy chosen and the level of endurance in the face of unexpected situations on track (Abuzeni & Obodnikovs, 2022; Patil & Tamboli, 2023). Furthermore, self-confidence plays a pivotal role in an athlete's decision-making process, impacting their race strategy choices and enabling them to exhibit higher levels of endurance and resilience when confronted with unforeseen obstacles and challenges during cycling competitions (Smith, 2018).

In addition, the research is also relevant in the context of further understanding of how physical care and nutrition can contribute to athletes' well-being. this research is relevant because it explores the role of physical care, such as massage and physiotherapy, as well as nutrition in enhancing the confidence of road race cycling athletes. A deeper understanding of how proper physical care and nutrition can impact an athlete's self-confidence can assist coaches and sports doctors in designing more effective training programs to improve athlete performance and well-being. Furthermore, this research

can provide broader insights into the relationship between physical and psychological factors in the realm of sports, serving as a foundation for further research in this field.

Bicycle racing is a highly physical sport, which relies on muscle strength, endurance, and endurance (Edge-Hughes, 2016; Salamon, 2021). Therefore, physical treatments such as massage and physiotherapy can have an important impact on an athlete's recovery and health. Similarly, proper nutritional intake is a key component in ensuring that athletes have sufficient energy and nutrients to support intense training and matches (Mujika et al., 2018; Schilz, 2023). By understanding how physical care and nutrition can affect athletes' confidence, this research can provide valuable insights for coaches and athlete support staff to improve the performance and well-being of cycling athletes (Beauchamp et al., 2021; Forsyth et al., 2019). In this context, a deeper understanding of how physical care and nutrition can impact an athlete's confidence can help create a more holistic approach to supporting the well-being and performance of cycling athletes.

Bicycles, dating back to the early 1800s, have evolved from mere transportation into a versatile tool, now employed extensively for exercise and sports. In the context of this study, it's crucial to note that cycling serves as an excellent avenue for enhancing health and fitness. As previously mentioned, cycling is an aerobic sport that demands increased oxygen consumption during its execution. Consequently, this sport offers significant potential for positively impacting the physical well-being of road race cycling athletes, including improvements in heart and lung health, enhanced blood circulation, muscle development, and the maintenance of strong bones and joints, all of which contribute to their overall confidence and performance on the race track. (Hopkins, 2021; Stasiuk, 2022).

Cycling is recommended for people who have excess fat or who have medical problems with bones or joints of the lower limbs such as hips, knees, and ankles because cyclists sit and do not carry any weights (Giam & The, 2013). Bicycle racing, a sport featured in the second PON (National Sports Week), has a rich history in Indonesia. The Indonesian Bicycle Sports Association, known as the Ikatan Sport Sepeda Indonesia (ISSI), was established in Semarang on May 20, 1956, coinciding with the 20th anniversary of the National Awakening. Before 1951, various regions in Indonesia, including Yogyakarta, Solo, Surabaya, Semarang, Jakarta, Medan, Manado, and Bandung, already had active bicycle racing associations. This historical context highlights the significance of cycling as a sport in Indonesia, which is relevant to the focus of this research on the factors impacting the confidence of road race cycling athletes (Seoroso, 2009).

Cycling is indeed one of the healthy sports until it finally enters one of the sports in the second PON, but cycling also carries risks, both externally in the form of accidents in competition and internally in the form of fatigue overuse and posture errors that do not match the shape of the bicycle. Furthermore, physical condition is a whole unit of components that cannot be casually separated, both in improvement and maintenance. This means that to improve physical condition, all of these components must be developed, although many do with a priority system according to the state or status of each component and for what purpose, state, or status is needed. This will become clearer when we come to the issue of physical condition status. Physical condition exercises need serious attention to be carefully and systematically planned so that the level of physical freshness and functional ability of body tools is better (Sajoto, 2003).

Cycling differs from other sports in several ways. Cycling requires athletes to be able to pedal the bike as quickly as possible over a predetermined distance while also mastering good techniques for passing obstacles to create maximum acceleration (Harsono, 2015). This is influenced by the athlete's motivation. Athletes' motivation does not come from within, it is motivated by their confidence. They believe that the physical training has been optimal, and that when training athletes show high motivation to achieve the expected results, but before the game athletes become anxious, difficult to concentrate, and less confident (Rini, 2015).

Massage is one factor that influences athletes' confidence when competing. Massage induces relaxation, which can alleviate muscle tension caused by the stress response (Herinawati et al., 2019; NENGSAARI, 2018). Furthermore, relaxation can help relieve anxiety, reduce muscle spasms, and alleviate pain (Mok & C.P., 2004). Massage has been shown in studies to help with issues such as anxiety, stress, depressive pain, and insomnia by reducing muscle tension (Richards et al., 2000). A review of 22 studies on the effects of massage relaxation, comfort, and sleep, emphasizes that the most well-known effects of massage are to provide psychological relaxation and reduce anxiety and pain. The findings discussed above highlight that massage therapy can play a crucial role in addressing psychological

factors such as anxiety, stress, and pain, which are relevant to the research inquiry in this study regarding its impact on the confidence of road race cycling athletes.

In the context of this research, recognizing the significant role of physiotherapy, particularly its impact on athletes' physical well-being and performance enhancement, is crucial for understanding how it contributes to the overall confidence of road race cycling athletes. Aside from massage, the importance of physiotherapy in athletes should not be overlooked. Physiotherapy is a type of health service aimed at individuals or groups to develop, maintain, and restore movement and body function throughout the life span through manual handling, increased motion, equipment, and communication (Joseph, 2017). The World Confederation of Physical Therapy (WCPT) has determined the position of physiotherapist as an expert in the field of sports. In it, there are training techniques that include strength training and ability training consisting of speed, power, and dexterity of exercise. With this exercise, it is hoped that sports physiotherapy can be further developed and known by the wider community.

Understanding and meeting the specific nutritional requirements of athletes, including the adequate intake of essential minerals, not only contributes to their physical performance but also bolsters their confidence by ensuring they have the necessary energy and resources to excel in training and competitions (Irawan, 2017). The achievements of Indonesian cyclists can be counted in the international world, including gold and bronze medals in the Asian Games in 2018, and the third team champion of the Tour de Indonesia, which passed from Jogjakarta to the island of Bali in 2020. However, to improve athletes' health and stamina before, during, and after competition, health checks and treatments such as massage, nutritional needs based on recommended dietary allowances, and physiotherapy checks are required (Floor, 2020).

According to the findings of researchers' interviews with Road Race Cycling Athletes, athletes frequently experience fatigue after competing. In addition, cyclists frequently experience lower back pain disorders and acute trauma such as severe injuries that occur suddenly, such as ligament tears, muscles, tendons or sprains, or even fractures. Furthermore, injuries cause the body to respond with inflammatory signs such as *rubors* (red), *tumours* (swollen), heat, *dolor* (pain), and *functiolaesa* (decreased function). In light of the injuries that athletes frequently encounter, which can lead to psychological distress and hinder sports performance, it is imperative to explore the role of first aid interventions, physical well-being maintenance, and proper nutrition in bolstering the self-esteem of athletes both during and after competitions. This holistic approach aims to enhance overall athlete performance, aligning with the research focus (Hagan Asamoah, 2021; Rabbitte, 2019).

The discomfort experienced by athletes during competition can significantly erode their confidence, with some athletes even failing to complete races due to common issues like knee cramps. Considering the health issues that athletes commonly encounter, such as feelings of discouragement, lethargy, and low confidence, it becomes imperative for researchers to investigate the effects of massages and physiotherapies on racing athletes to address and potentially alleviate these concerns during competitions. (Aase, 2022; Asamoah, 2021).

The psychology of athlete self-confidence is important in improving an athlete's abilities. All of this is inextricably linked to emotional intelligence, of which self-confidence is one component. An athlete with high self-confidence and achievement motivation will always be optimistic, believing that he can match his abilities and capacities. Self-assurance supports its role and participates in performance. It is hoped that this research will allow us to determine the level of confidence of cycling athletes by providing massage, physiotherapy, and nutrition provision of recommended dietary allowances to athletes' health can improve their performance and confidence to compete. Based on the background and previous research that has been presented above, researchers are interested in researching the "Analysis of the Impact of Giving Massage, Physiotherapy, and Nutrition Provision of Recommended Dietary Allowances on The Confidence of Road Race Cycling Athlete " (Musrifin & Bausad, 2021; Putra, 2022).

The novelty and primary contribution of this study lie in its unique integration of three crucial elements: massage, physiotherapy, and the provision of nutrition aligned with recommended daily requirements, all targeted at specifically enhancing the confidence of road race cycling athletes. While previous research has explored the effects of physical care and nutrition on athletes' physical well-being, this study addresses a significant knowledge gap by placing a distinct emphasis on the psychological aspect, notably self-confidence, which is a pivotal factor in achieving peak performance. Employing a mixed-methods approach that encompasses qualitative and quantitative analysis, along with the

utilization of case study methods and ex post facto techniques, this research promises to offer profound insights and robust empirical evidence regarding how the combined application of physical care and nutrition can positively influence the psychology of cyclists, aligning closely with the research problem at hand (Brennan, 2015; Gojanovic et al., 2022). As such, the study aims to provide a better understanding of how to optimize athletes' physical and mental preparation, with the ultimate goal of improving their achievements on the bike race track (Islam et al., 2022).

Within the realm of research exploring the impact of physical care and nutrition on athletes' self-confidence, numerous studies have delved into the interplay of these factors across various sports. Prior investigations in this area have illuminated the connection between these aspects and the athlete's self-confidence, demonstrating that the incorporation of massage and physiotherapy can yield notable physical advantages, including enhanced muscle strength and expedited recovery after injuries. Furthermore, existing research has underscored the significance of maintaining appropriate nutritional practices in enhancing both sports performance and the overall well-being of athletes. Nevertheless, the investigation that focuses specifically on evaluating the impact of physical care and nutrition on the self-confidence of athletes, particularly within the domain of cycling, remains relatively sparse. Consequently, this study aims to make a substantial contribution by filling this research gap, thereby enriching our comprehension of how these factors interplay and influence the psychological dimensions and performance levels of road race cycling athletes.

METHOD

1. Research Design:

This study's design employs a mixed methods approach, namely a qualitative approach with case study methods and a quantitative one with ex post facto methods.

2. Location and Time of Research:

This research was conducted at the PGN national training camp which will become a Road Cycling Athlete located at Kaliurang Street, Yogyakarta City, Yogyakarta DIY Province.

3. Research Informant:

Informants in this research are people who know and master the problem, as well as being directly involved with the research problem. The informants in this study were 10 cyclists of the PGN's Road Cycling Team.

4. Data Collection Method:

Data sources are obtained from the result of in-depth interviews with individuals, specifically between the interviewer and the research respondents. Researchers interviewed 10 athletes who had received massage, physiotherapy, and recommended dietary allowances during the data collection process, and asked about their satisfaction with massage, physiotherapy, and dietary allowances recommendation, so that athletes have confidence during the game because they have been given massage treatments, physiotherapy, and recommended dietary allowance.

5. Data Analysis Techniques:

Coding researchers read the interview transcripts and identify key topics. Coding is classified by examining the degree to which units of meaning are related. The previously classified data is then classified as follows. Analyze meaning units in categories. Looking for connections between categories. Create a report in the form of a draught research report that conceals the results of the analysis.

RESULTS AND DISCUSSION

Result

Table 1. Interview Guidelines Grid

Variable	Indicators	Question
Analysis of the Impact of Massage and Physiotherapy on the Self-Confidence of Cycling Athletes	Massage	<ol style="list-style-type: none"> 1. Athletes have suffered injuries 2. Training place is available for massage program 3. Feelings after giving a massage 4. Athletes have health problems before giving massage 5. Body parts that are felt in the provision of massage that are deeply felt 6. Athletes feel fitter and relaxed after giving massage 7. The impact you feel after getting a massage 8. Relationship of increased self-confidence before and after massage
	Physiotherapy	<ol style="list-style-type: none"> 1. Feelings after the administration of physiotherapy 2. Health problems you felt before giving physiotherapy 3. The stage carried out by experts when you get physiotherapy treatment 4. The feeling of the athlete being fit and relaxed after administering physiotherapy? 5. The impact you feel after receiving physiotherapy services 6. The relationship of increased self-confidence before and after physiotherapy
	Massage and Physiotherapy	<ol style="list-style-type: none"> 1. Provision of massage and physiotherapy together to increase athletes' confidence 2. Your hopes as athletes regarding massage and physiotherapy in the future

Semi-Structured Interview Guidelines

List of questions for informants of cyclists General Data

1. Name
2. Age
3. Gender
4. Recent Education

Special data questions for cyclists

Regarding Bicycle Racing Athletes, after competing athletes often experience fatigue, besides that the problem of back pain is something that is often experienced by bicycle racers, bicycle racers

often experience lower back pain disorders and acute trauma such as severe injuries that occur suddenly) and as a result of injuries athletes experience psychological trauma that will reduce sports performance and affect individual performance, regional and national, Therefore, the need for first aid for athletes to maintain physical freshness to stay fit and confident before and after the competition can also improve the prime of the bicycle racing athlete, to be able to reveal clearly and in detail and to be taken into consideration in designing athletes' confidence even better in the future, the following researchers will conduct in-depth interviews with bicycle racing athletes as follows:

1. Have you ever had an injury?
2. Is there a massage program at your training site?
3. How do you feel after giving the massage?
4. Did you have any health problems before giving the massage?
5. Where is the part of the body that is felt in giving a massage that is strongly felt?
6. Do you feel fitter and more relaxed after giving the massage?
7. How did you feel the impact after getting a massage?
8. What is the relationship between increased self-confidence before and after massage?

Physiotherapy:

1. How do you feel after physiotherapy?
2. What health problems did you feel before giving physiotherapy?
3. What are the steps taken by experts when you get physiotherapy treatment?
4. Do you feel fitter and more relaxed after physiotherapy?
5. How did you feel the impact after receiving physiotherapy services?
6. What is the relationship between increased self-confidence before and after massage?

Giving massage and physio edge to increase self-confidence:

1. What is felt after giving massage and physiotherapy together
2. What are your hopes as an athlete regarding massage and physiotherapy in the future?

Research on the analysis of the impact of massage and physiotherapy on the confidence of cycling athletes was carried out because the phenomenon of athletes with minor injuries such as ankle, sprain, and hamstring causes more fear and worry. The discomfort of athletes makes them not confident when competing on the field, especially for PGN-Road Cycling Team (PRCT) athletes. To find out the impact of giving massage and physiotherapy explained through interviews with the following 10 athletes:

a. Impact of Massage on Athletes' Self-Confidence

1. Athletes have injuries and frequent injuries

Based on the results of interviews that researchers have conducted with 10 athletes about injuries experienced by athletes during matches, athletes said that they suffered injuries to parts of the legs, muscles, and back caused by imperfect and not serious warm-ups, and there are other things also in the form of climbs and very long and steep match routes.

2. Massage program at PGN Road Cycling

Based on the results of interviews that have been conducted by researchers with 10 athletes regarding the presence or absence of a massage implementation program at PGN Road Cycling, it can be concluded that there is a massage implementation program at PGN Road Cycling for each athlete where this program is carried out 2x a week, which has the aim of providing recovery, refreshment, and healing to athletes who experience muscle and limb stiffness in the body. Difficult to move, the program applied to athletes can be in the form of massage support or even come to the hospital to restore the structure of stiff muscles and even injuries, to recover.

3. Changes after giving a massage.

The next interview discussed whether there were changes after the massage that had been done to athletes. Based on the interview above regarding whether there are changes after giving a massage that has been done, it can be concluded that from 10 athletes who have been interviewed can feel a very extraordinary effect after giving a massage, generally athletes feel changes in their bodies which feel more relaxed, enjoyable, and not stiff, and this can also increase the sense of comfort of athletes in competing or training and this is very helpful for athletes.

4. Health problems that occur before giving a massage.

The next interview will discuss health problems that occur before giving massages to athletes. Based on the interview above, it can be concluded that the body parts that experience health problems

before giving a massage are injuries to the limbs, namely the legs, and injuries to other body parts, namely the back due to improper body position, causing pain and even stiffness in injured athletes.

5. The part of the body point that gives this massage is very much felt by the changes by the athletes.

The next interview will discuss which parts of the body are given this massage is a very felt change" in athletes. Based on the interview above, it can be concluded that the body parts that are given massage and therapy are usually done on the injured body parts, namely the legs, and back and after giving massage and therapy, athletes usually feel more confident to do matches or train.

6. Giving massage.

Based on interviews with the 10 athletes, it can be concluded that if the athletes can feel fitter and more relaxed after giving a massage, things that can be felt by the athletes include a sense of fitness, comfort, and increased confidence both when training and competing.

7. How much impact does the athlete feel after getting massage services?

Based on interviews with the 10 athletes above, it can be concluded that there is an impact felt after getting massage services in the form of a sense of comfort, enjoyment, and muscles that were previously stiff to be calmer and fit when training.

8. Is there a relationship between increased self-confidence and before and after massage?

Based on interviews with 10 athletes who have been interviewed about whether there is a relationship between increasing self-confidence and before and after giving a massage, it can be concluded that many athletes feel the impact because this is very influential, especially for athletes who have competed or even after training, the effect can be in the form of a fit and better body condition.

b. Impact of physiotherapy on athletes' confidence

1. Health problems that athletes feel before physiotherapy.

Based on the interview above, whether there are health problems felt before giving physiotherapy to athletes" it can be concluded from the 10 athletes who have been interviewed that there are health problems in athletes such as cramps, pain, stiffness, and pain in the legs or members of motion in the body, which can cause pain, difficulty when moving or when training.

2. Are there any changes after the administration of physiotherapy?

The next interview discussed whether any changes after physiotherapy had been given to athletes. Based on the interview above regarding whether there are changes after the provision of physiotherapy that has been done, it can be concluded that 10 athletes who have been interviewed can feel a very extraordinary effect after giving physiotherapy, generally, athletes feel changes in their bodies which feel more relaxed, enjoyed, and not stiff, and this can also increase the sense of comfort of athletes in competing or training and this is very helpful for athletes.

3. Health problems that occur before the administration of physiotherapy.

The next interview will discuss health problems that occurred before the administration of physiotherapy to athletes. Based on the interview above, it can be concluded that the body parts that experience health problems before giving a massage are injuries to the limbs, namely the legs and injuries to other body parts, namely the back due to improper body position, causing pain and even stiffness in injured athletes.

4. Steps carried out by experts when you get physiotherapy treatment.

Based on interviews with the 10 athletes, it can be concluded that the stages carried out by experts during treatment are asking where complaints are and asking how long they have not done physiotherapy, and after knowing the complaints experienced by athletes, experts immediately give their actions to the athletes.

5. Effects of Physiotherapy.

Based on interviews with the 10 athletes, it can be concluded that if the athletes can feel fitter and more relaxed after physiotherapy, things that can be felt by the athletes include a sense of fitness, comfort, and increased confidence both when training and competing.

6. How much impact does the athlete feel after receiving physiotherapy services?

Based on interviews with the 10 athletes above, it can be concluded that there is an impact felt after receiving physiotherapy services in the form of a sense of comfort, and enjoyment, and muscles that were previously stiff become calmer and fitness when training.

7. Is there a relationship between increased self-confidence and before and after physiotherapy?

Based on interviews with 10 athletes who have been interviewed about whether there is a relationship between increasing self-confidence and before and after physiotherapy, it can be concluded

that many athletes feel the impact because this is very influential, especially for athletes who have competed or even after training, the effect can be in the form of a fit and better body condition.

c. Giving Massage and Physiotherapy to Athletes' Self-Confidence

1. Changes after massage and physiotherapy.

Based on the interview above regarding whether there are changes after giving massage that has been done, it can be concluded that from 10 athletes who have been interviewed can feel a very extraordinary effect after giving massage and physiotherapy, generally athletes feel changes in their bodies which feel more relaxed, enjoyable, and not stiff, and this can also increase the sense of comfort of athletes in competing or training and this is very helpful for athletes.

2. Athletes' expectations regarding massage and physiotherapy in the future.

Based on interviews with the 10 athletes above, it can be concluded that the expectations of athletes regarding massage and physiotherapy in the future are that each club must have or have experts because in every match or training, there can be events that can cause injury to athletes, therefore many athletes want the existence of therapists/experts in their respective clubs.

The fact that researchers get on the field after athletes feel happy because they are given physiotherapy in the team, in addition to keeping the body fit and muscle strength stable, athletes are also relaxed and comfortable in the next stage. Mileage, athlete routes, and many uphill routes can be passed by athletes smoothly and confidently to pass each subsequent stage. This is due to proper physio handling and massage that has been done before the game. In addition, before the match athletes are given muscle relaxants to start the match and given massage, and physiotherapy. So that the athlete's confidence is very high to carry out the competition.

Giving massage to athletes aims to prepare athletes physically and mentally before participating in the competition, maximize the potential of athletes' achievements, speed up the recovery process (recovery), and reduce the risk of injuries and other disorders due to high-intensity physical activity. Massage in athletes is done before the game (prevent), during the match (intra-event), and after the match (post-event). Massage before a game has the main purpose of optimizing the physical performance of athletes.

Masase during the match is done to improve the stability of the athlete's physical performance while the masase after the match serves to speed up the recovery process. In its implementation, researchers gave a massage in the competition accommodating Swedish massage techniques such as Effleurage, Petrissage, vibration, and tapotement. The selection of the type of manipulation technique carried out must be adjusted to the purpose of the mass. In the end, the use of appropriate mass techniques will be able to contribute to efforts to improve athletes' sports achievements. In Physiotherapy performed by athletes, there is a decrease in motion pain, an increase in the scope of motion of the joints, an increase in muscle strength, and a decrease in edema. So that in the end athletes feel relaxed and confident and ready to hold the competition.



Figure 1. Mula Cycling Team 2022



Figure 2. Tour de Langkawi 2022



Figure 3. International Tour De Langkawi Cycling Event

Discussion

1. Massage

Massage is given before and after the athlete performs the exercise, which begins with the face-down position of the treatment on the upper limbs of the back and sides. Massage the lower hind limbs (calves), the heel and footprint area, the waist and back area, the buttocks area, and the nape and shoulders. The position is then changed to face down, with massage on the upper, front, and side limb areas, massage on the lower limb area, front and side, and massage on the back area of the foot tread and footprint. Massage techniques include acupressure point pressing and friction (grinding), stroking effleurage, traction, and effleurage.

After giving massages to PGN Road Cycling cyclists, athletes reported feeling more primed and light, with the legs and back being the most felt points. Athletes feel more enthusiastic and confident after and before the game when their confidence is increased, and their body condition improves. Athletes must maintain a high level of self-confidence. The athlete must examine his abilities objectively. Athletes with high self-esteem are usually able to handle difficult situations well. They will develop a rational attitude, are willing to work hard, make adequate preparations, and have many options for dealing with problems that arise (Dosil, 2016). Self-confidence is often interpreted as a picture of personal abilities related to a particular goal.

Massage to all limbs and specific parts of the body will help the body's work system. Massage on the lower extremities of Road Race Cycling Athletes after physical activity or training is one example. After training, providing sports massage to Road Race Cycling Athletes' lower extremities will have an effect on smoothing the process of absorbing combustion residues in the muscle tissue, which can cause fatigue, so it is good to help speed up the recovery process. Massage will increase blood flow, relax muscles, and stimulate the body's work system, resulting in decreased muscle tension and muscle return to normal (Johnson, 2017).



Figure 4. Giving Massage

Providing physiotherapy to athletes can affect the increase in confidence of road race athletes. Physiotherapy techniques Exercise therapy and Thermotherapy (Heat therapy) obtained results that the administration of physiotherapy with exercise therapy techniques is more dominant than the administration of Thermotherapy (Heat therapy).

2. Physiotherapy

Athletes are happy because they receive physiotherapy, and in addition to keeping the body primed and muscle strength stable, athletes are also relaxed and comfortable in the next stage. The mileage, athlete route, and climb route that many athletes can walk confidently and smoothly through each subsequent stage. This is because proper physio taping and massage were performed before the game. In addition, before the game, the athlete is given muscle relaxants, and massage and physiotherapy are administered. As a result, athletes have a high level of confidence in their ability to play the game.

Physiotherapy has been shown to lower heart rate, raise blood pressure, improve blood and lymph circulation, reduce muscle tension, expand joint space, and alleviate pain. Providing exercise therapy techniques such as isometric, isotonic, aerobic, and aquatic exercises. These exercises typically aim to improve range of motion, strength, coordination, endurance, balance, and posture. Exercises can be done actively, where the patient controls his movements without the assistance of others, or passively, where the movements are carried out with the assistance of a physiotherapist. Exercise therapy can be used during the rehabilitation phase of a variety of disorders, including stroke, joint replacement, and aging.

3. Nutrition Provision of Recommended Dietary Allowances

The provision of nutrition adequacy figures in the control group with 900 kcal morning meal calories, 500 kcal snacks, 1200 kcal lunch, 1000 kcal dinner, and 600 kcal snacks was then compared to the experimental group's menu with 1050 kcal breakfast, 700 kcal light meal, 1350 kcal lunch, 1150 kcal dinner, and 750 kcal snacks were more effective for increasing the muscle power of the limbs and heart of P The experimental group's average score was 8.20, while the control group's average score was 8.00.



Figure 5. Nutrition Provision of Recommended Dietary Allowances

According to the findings of a sports nutritionist study, optimal food can provide enough energy to improve workability and recovery time. Because reserve nutrients can be used to return to a homeostatic state, fatigue can be overcome more effectively. Athlete nutrition is intended to achieve optimal nutritional adequacy.

Athlete food should contain a high concentration of the substances required for daily activities. A certain amount of energy-producing nutrients must be present in food. Food must also be able to replace gizi in the body, which is depleted as a result of sports participation. Muscle contraction can cause body movements during sports. Both aerobic and anaerobic exercise require energy consumption. However,

precisely determining energy requirements is a difficult and time-consuming task. Science's advancement can now only calculate energy needs based on energy expended (Anggela & Damayanti, 2016).

Sports nutrition science is the application of nutrition to athletes to achieve peak performance. Sports nutrition science is the study of the relationship between food management and physical performance that is beneficial for health, fitness, child development, and sports achievement coaching. Athletes' nutrition arrangements are not significantly different from those of non-athletes (Syafrizar. & Welis, 2017). It can be concluded that meeting nutritional needs based on nutritional adequacy figures in athletes affects their self-confidence, with the average experimental group outperforming the control group.

An in-depth interpretation of the study's findings suggests that combining physical care (massage and physiotherapy) as well as the provision of nutritional intake by daily requirements recommendations can significantly increase the confidence of cyclists (Aase, 2022; Asamoah, 2021). The results of interviews and surveys show that the use of massage helps reduce muscle stiffness, which in turn makes athletes feel fitter and ready for training or matches. Massage can also have a profound relaxing effect, which can help reduce stress levels and boost athletes' confidence (Hagan Asamoah, 2021; Rabbitte, 2019).

In addition, physiotherapy also has a significant contribution to increasing the confidence of athletes. Exercise therapy specifically directed at improving muscle strength and endurance, as well as heat therapy (thermotherapy) that helps in the recovery process, positively affects the athlete's physique and mentality. Athletes who feel stronger and physically prepared have higher self-confidence in facing competition and challenges in cycling (FLOOR, 2020).

The provision of proper nutritional intake by the recommended daily needs has also proven important in increasing the confidence of athletes. Adequate nutrition supports good energy and recovery, so athletes feel fitter and ready to compete (Setyanto, 2017; Sholihah, 2019). These findings reinforce the understanding that physical, mental, and nutritional aspects are interrelated and must be addressed holistically in athlete coaching and care. Overall, the study reveals the importance of an integrated approach to boosting the confidence of cycling athletes, with physical care and nutrition playing a key role in achieving positive outcomes (Adetya, 2020; Wijayanto, 2023).

In comparing the results of this study with other relevant studies, it appears that our findings make significant additional contributions related to the effect of physical care and nutrition on the confidence of cyclists (Zarya & Welis, 2021). Several previous studies have highlighted the benefits of physical care and nutritional intake on athletes' physical well-being, but confidence often hasn't been the main focus. Our results show that physical treatments, such as massage and physiotherapy, not only provide tangible physical benefits but also have a positive impact on athletes' psychology, with a significant increase in self-confidence (Melyana et al., 2021).

In addition, our study combined the three components of treatment (massage, physiotherapy, and nutritional intake) holistically, while many previous studies tended to focus on one aspect only (Rohendi & Rustiawan, 2020). Anggriawan, (2015); Yanti et al., (2022) This holistic approach results in a deeper understanding of how physical care and nutrition can complement each other to maximize athletes' confidence and performance. Thus, this research makes a valuable contribution in understanding the comprehensive role of physical care and nutrition in the world of cycling, which can be the foundation for the development of more effective training programs in the future.

In addition, previous studies have often been limited to smaller samples or involved only one type of treatment. Our study involved ten athletes and combined different types of treatments, providing a stronger foundation for more general and reliable conclusions. Although this study still requires further validation through larger, ongoing research, these results provide a promising direction in the understanding of the importance of physical care and nutrition in improving the confidence and performance of cyclists.

CONCLUSIONS

A very strong conclusion from this study is that the merging of physical treatments, such as massage and physiotherapy, with the provision of nutritional intake in accordance with the recommendations of daily needs significantly and positively affects the self-confidence of cyclist racing athletes. The results of this study provide strong evidence that comprehensive physical care can play a

key role in preparing athletes not only physically, but also mentally. Athletes who feel fitter, free from physical strain, and get proper nutrition, have higher confidence in facing competition and challenges in cycling. As such, these findings provide significant impetus for coaches, fitness advisors, and athlete support staff to consider a holistic approach in coaching cyclists. It also makes an important contribution to the scientific understanding of the integrative role of physical care and nutrition in the world of sport and motivates further research in the wider context of the effect of physical care and nutrition on athlete performance across a range of sports.

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