Percentage of swimmer's coach needs for the development of applications for the physical conditions of swimming

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Abstract

Swimming is a great sport for keeping fit and fresh because it requires all parts of the body to remain actively moving in the water and because of the weight of the body's resistance to water. The trainer's inability to provide an understanding of physical exercise, design a training program, and comprehend the dosage of athlete training is the root cause of the athlete's diminished physical ability. The purpose of this research is to find out percentage of swimmer's coach needs for the development of applications for the physical conditions of swimming. A survey based quantitative descriptive approach is utilized in this study. The participants in this study were 5 Yogyakarta swimming club coaches. The total sampling method was used to select 5 club coaches for this study's sample. In this study, a questionnaire instrument with a Likert scale. The data in this study were analyzed using descriptive analysis with SPSS version 25. Based on the research results obtained data percentage of trainer needs regarding the application of the physical condition of swimming in the high category, obtaining a percentage of 80% with a total of 4 trainers and a moderate percentage of 20% consisting of 1 trainer. Therefore, it can be concluded that the swimmer's coach is highly dependent on the application of the swimming sport's physical condition.

Keywords: Applications, Physical Conditions, Swimming
INTRODUCTION

Sports and community activities are currently inseparable due to their effectiveness as a requirement for physical health maintenance (Sandh Akbar Ramadhorn, 2016). According to (Falalauudin & Sugiyanto, 2013) Sports are physical activities that can be interpreted as having the capacity to improve quality of life and good body fitness. A healthy personality that is able to adapt to change and is resilient and creative in solving complex problems will be developed through sport, which will strengthen the body and soul (Iwandana et al., 2022).

According to (W. A. Nugroho et al., 2020) sport teaches fair play, honesty, respect for friends and foes, and accepting defeat. Sports that begin at a young age and are developed in a planned, tier-based, and long-term manner are known as achievement sports (Falalauudin et al., 2021). According to (Ismoko & Sukoco, 2013), achievement is defined as a person's level of success attained through learning or experience. According to (Indrayana, 2012), success can be achieved by directly overcoming obstacles in life and relying on one's intellectual, emotional, and spiritual resources. According to (Wibowo & Hakim, 2019), achieving a goal necessitates serious effort and a strong commitment. Exercise is one method for maintaining physical fitness. Participating in any sport at any location whether for men or women can serve as the foundation for a happy and healthy life (S. Nugroho et al., 2021). Health sports aimed at healing or rehabilitation, as well as achievement sports aimed at achieving the highest levels of success (Tariagan et al., 2021). Achievement sports are sports that, with the assistance of sports science and technology, encourage and foster athletes (athletes) in a planned, tier-based, and long-term manner through competitions to achieve both national and international sports accomplishments (Pamungkas, 2021). Achievement sports include swimming (Allung et al., 2019).

According to (Wahyudi, 2015), swimming is a water-based sport that can be practiced by men and women of all ages. Swimming is considered safe for people of all ages due to its numerous benefits and low risk of injury. Some people also use swimming as a form of therapy, recreation, therapy, and achievement (Firdausi, 2018). Swimming is one of the sports that is frequently competed in both locally and internationally in terms of achievements (Paramita et al., 2020). Swimming has the potential to improve fitness as well as health (Putra & Witarasyah, 2019). To be able to carry out a variety of activities without becoming significantly exhausted, body fitness is essential (Palar et al., 2015). Speed and endurance are two characteristics that stand out in achievement swimming (Rizkiyansyah & Mulyana, 2019). Despite the fact that the correct style and technique of movement are also very important (Sungkowo, Kaswarganti Rahayu, 2015). According to (Klarita dewi et al., 2020), swimming is a time-based sport in which the fastest swimmer takes the title. According to (Rohman, 2019), swimming is a fun water activity for people of all ages. A suitable training program is required for swimmers to achieve success (W. A. Nugroho et al., 2020). The four competing swimming styles are crawl (freestyle), butterfly (butterfly), breaststroke (breaststroke), and backstroke (backstroke) (Budi et al., 2020). Swimming is affected by a lot of things. Internal factors include technique mastery, mental health, and physical fitness. External factors include things like nutrition, training programs, facilities and infrastructure, and the environment (Sukawati & Hartoto, 2015).

One of an athlete's fundamental abilities is physical fitness (Prayogo et al., 2021). Athletes' physical condition is the first thing coaches look at to determine whether they are ready to compete. An athlete's performance will undoubtedly be subpar if he is in poor physical condition, especially if he is competing (Iwandana et al., 2021). If athletes are in good physical shape, they can succeed (Suhalrjana, 2013). State of being assumes a significant part in progress in different games, including swimming. The trainer's inability to provide an understanding of physical exercise, design a training program, and comprehend the dosage of athlete training is the root cause of the athlete's diminished physical ability. On the other hand, structured training
programs for physical fitness cannot be implemented on an ongoing basis (Wani, 2018). In addition, there is a lack of coach expertise.

**METHOD**

A survey based quantitative descriptive approach is utilized in this study. (Sugiyono, 2016) defines the term "population" as "something or people with certain qualities and characteristics". The participants in this study were 5 Yogyakarta swimming club coaches. (Suharsimi, 2013) says that the sample is a segment of the population that is suited to the conditions or characteristics being studied. The total sampling method was used to select 5 club coaches for this study's sample. In this study, a questionnaire instrument with a Likert scale was used for data collection:

\[
P = \frac{\Sigma R}{N} \times 100
\]

Information:
\[
P = \text{Score}
\]
\[
\Sigma R = \text{Total score}
\]
\[
N = \text{Max Score}
\]

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>4</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td>Don't agree</td>
<td>2</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1. Questionnaire Score Table

The Likert scale, which has at least four inquiries and scores addressing individual qualities, is utilized in the evaluation of the poll (Much et al., 2016). The research instrument was a questionnaire. According to (Sugiyono, 2011), the questionnaire-based research instrument collects and records data on paper. Research instruments can be constructed from valid questionnaires (Ramadhani, 2021). The data in this study were analyzed using descriptive analysis with SPSS version 25.

**RESULT AND DISCUSSION**

Table 2. Descriptive Statistics Results

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>52,40</td>
<td>3,4933</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>4,278</td>
<td>.28519</td>
</tr>
<tr>
<td>Minimum</td>
<td>48</td>
<td>3,20</td>
</tr>
<tr>
<td>Maximum</td>
<td>57</td>
<td>3,80</td>
</tr>
</tbody>
</table>
From the analysis above it can be explained that from the 5 trainer respondents the results obtained were a minimum score of 48, a maximum of 57, a mean of 52.40, and a standard deviation of 4.278.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>P (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>Medium</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on the table above, it shows the percentage of trainer needs regarding the application of the physical condition of swimming in the high category, obtaining a percentage of 80% with a total of 4 trainers and a moderate percentage of 20% consisting of 1 trainer.

According to (Surahman, 2016), swimming requires the fastest time for an athlete to win a race in achievement sports. Start, turn, finish techniques, endurance, power, speed, and mentality are all factors that affect speed in order to achieve the fastest time. In order to maximize a swimmer's performance, the appropriate training program must be provided (Susanto, 2017). In addition, proper dietary planning and an exercise program that incorporates both technical and physical aspects require attention. The athlete's food or nutrition intake at the training camp must also be controlled so as to support the improvement of the athlete's physical condition during the preparatory, match, and recovery periods (Setiawan et al., 2017). According to (Baja & Rismayanthi, 2019), an athlete with a well-balanced and planned diet will have a good nutritional status. A better physical condition will be supported and maintained by a healthy diet (Rismayanthi, 2015). The body will get more energy from the food it eats, which can help it swim at a higher level of physical performance.

Naturally, systematic and measurable training methods must be provided in order to achieve good physical condition (Falaahudin & Sugiyanto, 2013). Athlete performance can be improved by using the right training techniques, taking the right amount of exercise, and eating the right food (Rohman, 2019). Repeated training is one factor that contributes to an athlete's improved performance and skills. According to (Rahima, Ahmad Atiq, 2013), the goal of repetitive training is for athletes to improve their mastery of movement techniques, resulting in more efficient movements and motion automation over time. The expansion of burden and force is likewise completed in a swimmer's preparation program by periodically and measurably increasing the amount of training load and intensity. The goal of training is to help athletes improve their psychological quality in addition to their physical and technical quality in order to improve their performance during competitions (Surahman, 2016).

**CONCLUSION**

Based on the research results obtained data percentage of trainer needs regarding the application of the physical condition of swimming in the high category, obtaining a percentage of 80% with a total of 4 trainers and a moderate percentage of 20% consisting of 1 trainer. Therefore, it can be concluded that the swimmer's coach is highly dependent on the application of the swimming sport's physical condition.
REFERENCES


