

**ANALISIS INTENSITAS GERAK DI BERBAGAI POSISI DAN FORMASI
SEPAK BOLA: MENGGUNAKAN GPS WATCH TRACKER**

TESIS

Diajukan untuk memenuhi sebagian dari syarat untuk memperoleh gelar
Magister Pendidikan Program Studi Pendidikan Olahraga



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2024

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Diajukan untuk memenuhi salah satu syarat untuk memperoleh gelar Magister
Pendidikan (M.Pd.) pada Program Studi Pendidikan Olahraga

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Universitas Pendidikan Indonesia
2024

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ABSTRAK

ANALISIS INTENSITAS GERAK DI BERBAGAI POSISI DAN FORMASI SEPAK BOLA: MENGGUNAKAN GPS WATCH TRACKER

Amtsals Firdaus, Mustika Fitri, Dikdik Zafar Sidik, Agus Rusdiana, Sucipto

Formasi sepak bola mengacu pada susunan pemain di lapangan selama pertandingan dapat bervariasi tergantung pada strategi tim, kekuatan dan kelemahan lawan, serta taktik pelatih. Dari berbagai formasi yang ada tentunya mendapatkan intensitas gerak yang berbeda juga terhadap setiap pemain yang mengisi di beberapa posisi. Penelitian ini bertujuan untuk menganalisis intensitas gerak di berbagai posisi dan formasi sepak bola: menggunakan GPS Watch Tracker. Penelitian ini menggunakan desain penelitian deskriptif kuantitatif yaitu memfokuskan pada mendeskripsikan dan memaparkan intensitas gerak pemain berdasarkan posisi dan formasi. Secara singkat penelitian ini akan mendeskripsikan 1) Jarak tempuh, 2) rata-rata maksimal denyut nadi, 3) kalori yang dikeluarkan di berbagai posisi sepak bola menggunakan teknologi GPS Watch Tracker pada formasi 4-4-2 dan 4-3-3. Populasi berjumlah 135 orang UKM Sepak bola UPI. Sampel yang digunakan 10 orang menggunakan teknik purposive sampling. Instrumen yang digunakan Polar GPS Watch Tracker Vantage M. Hasil uji dari independent t test daya jelajah menunjukkan bahwa tidak terdapat perbedaan daya jelajah antara formasi 4-4-2 dengan formasi 4-3-3. Tidak terdapat perbedaan denyut nadi antara formasi 4-4-2 dengan formasi 4-3-3. Tidak terdapat perbedaan kalori yang dikeluarkan antara formasi 4-4-2 dengan formasi 4-3-3. Tidak terdapat perbedaan daya jelajah, Denyut nadi dan kalori baik di babak pertama maupun di babak kedua diantara formasi 4-4-2 dengan formasi 4-3-3.

Kata kunci: intensitas gerak, formasi 4-4-2, formasi 4-3-3, *GPS Watch Tracker*

ABSTRACT

ANALYSIS OF MOVEMENT INTENSITY IN VARIOUS FOOTBALL POSITIONS AND FORMATIONS: USING GPS WATCH TRACKER

Amtsal Firdaus, Mustika Fitri, Dikdik Zafar Sidik, Agus Rusdiana, Sucipto

The placement of players on the pitch during a match is referred to as football formation. It is subject to change depending on the team's strategy, the opponent's strengths and weaknesses, and the coach's tactics. Of course, the degree of movement for each player who fills many roles varies depending on the existing formations. Using a GPS Watch Tracker, this study will examine the intensity of movement in various football positions and formations. This study employs a quantitative descriptive research approach, with the goal of defining and explaining the intensity of player movements in relation to position and formation. In summary, this study will describe 1) the distance traveled, 2) the average maximum heart rate, and 3) the calories burned in various soccer positions utilizing GPS Watch Tracker technology in a 4-4-2 and 4-4-3 formation. The population is 135 people from UKM UPI Football. The sample used was 10 people using purposive sampling technique. Instruments used Polar GPS Watch Tracker Vantage M. The results of the tests The independent t test for cruising power reveals no difference in cruising power between the 4-4-2 and 4-3-3 formations. The pulse of the 4-4-2 formation and the 4-3-3 formation is the same. The calories expended by the 4-4-2 configuration and the 4-3-3 formation are the same. There is no difference in cruising power, heart rate, or calories between the 4-4-2 configuration and the 4- 3-3 formation in the first and second halves.

Keywords: movement intensity, 4-4-2 formation, 4-3-3 formation, GPS Watch Tracker

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