# INFLUENCE OF THE AMBIENT TEMPERATURE OVER THE TACTIC, TECHNICAL AND PHYSICAL PERFORMANCES OF NATIONAL TEAMS

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Soccer is a sport practiced in an open environment and is under the interference of the local environmental conditions of the game. Different environmental conditions, such as heat, relative humidity, cold and altitude can cause changes in the players' body homeostasis.

**This study aimed to verify the effect of different ambient temperature on the tactical, technical and physical performances of national teams in World Cup.**

The sample was composed by FIFA World Cup games played in Brazil/2014 (n=64; 24.98±4.51 °C), and South Africa/2010 (n=61; 14.69±4.70 °C).

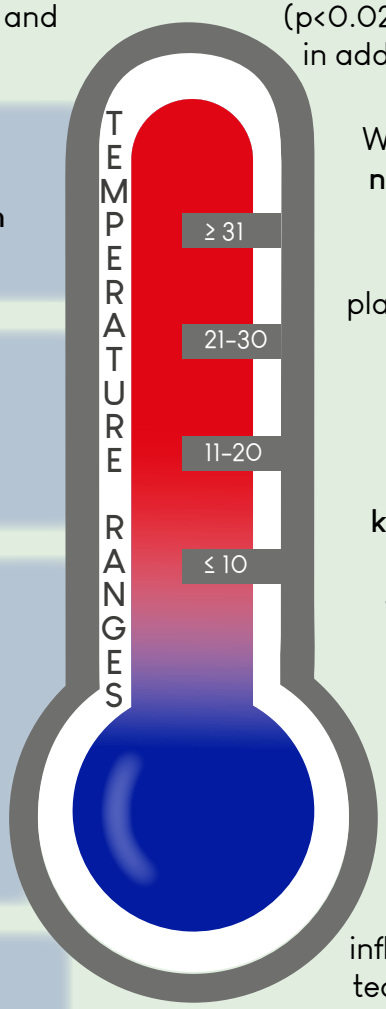
Performances

**Tactical:** % ball possession time in each sector of the field

**Technical:** % successful conclusions, % successful short, medium, long and total passes

**Physical:** distance covered

Results showed that the **ambient temperature had an influence on** the **time of possession of the ball** in the defensive (p<0.001), midfield (p<0.004) and offensive (p <0.001).




In relation to **technical performance**, warmer temperatures **positively influenced the percentage of correct passes** for short (p<0.028), medium (p <0.014), long (p<0.001) and total (p<0.001), in addition to the **percentage of correct shots** on goal (p<0.001).

With regard to physical performance, warmer **temperatures negatively influenced** the total **distance covered** (p<0.001).

The **ambient temperature** of the place where the match is played **affects the sports performance** of the national teams, **especially** in places **where the temperatures are higher.**

In **warmer environmental conditions**, the national teams tend to adopt **more secure behavior**, presenting an improvement in the technical fundaments of **passing and keeping ball possession** longer in the **defensive and middle sectors**.

This standard of technical and tactical performance can be interpreted as an attempt to compensate for the **reduction in physical performance**, by reducing the need to move a lot and granting greater efficiency.

## CONCLUSIONS

The ambient temperature influenced the tactical, technical and physical performance of the national teams.

In the World Cup, in matches played in warmer temperature ranges, the teams suffered a change in tactical performance, showed improvement in technical performance, and lost in relation to physical performance.



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