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Yoga Does Not Attenuate Speed, Agility and Change of Direction Deficit in Professional Soccer Players

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INTRODUCTION:

Yoga is an alternative athletic training methodology that may have a positive impact on the recovery of football players due to the physical and psychological impact on restoration processes [1,2,3,4]. However, there is concern that Yoga may reduce football performance due to decreases in rate of force production and agility due to extensive static stretching aspects of Yoga [5]. Indeed, acceleration, deceleration, and change of direction (COD) are critical skills in football performance [6,7]. However, there is limited research evaluating the impact of Yoga on football skill-related performance. Therefore, the purpose of this study was to evaluate the effect of Yoga on football related skills. We hypothesized is that football players undergoing additional Yoga training would not impact speed, agility and change of direction abilities, and therefore may provide a viable strategy to facilitate recovery.

METHODS:

A convenience sample of professional football players (N=21; senior levels under-23 and B; Age: 19 ± 1.89 yr; Height: 182.5 ± 6.02 cm; Body mass: 75.55 ± 5.69 kg from the 1st Portuguese Football League voluntarily participated and were randomly placed into either the Experimental (EG; n=11) or Control (CG; n=12) group. Participants completed a running velocity (5, 10 & 20 m distances) test and agility (Zigzag test) test using photoelectric cells, before and after 12 weeks of Yoga training. The EG performed (2) 60 min sessions of Yoga per week following football training that were guided by an experienced certified Yoga instructor. Yoga techniques were selected and ordered according to the objectives of the study: pránáyáma (breathing techniques), ásana (psychophysical techniques), yoganidrá (relaxation), samyama (concentration, meditation, etc.). The CG completed the standard football training program only. Mixed factor ANOVA were used to evaluate main and interaction (group x time) effects. Effect sizes (ES) were calculated using partial eta squared (η^2). The level of significance was set at $p < 0.05$.

RESULTS:

Both groups demonstrated significant improvements from pre to posttest in all variables ($p < 0.05$). However, there were no group by time interaction effects for 5m ($F(1,16) = 0.597$, $p = 0.451$; $\eta^2 = 0.036$, Power = 0.11), 10m ($F(1,16) = 0.186$, $p = 0.672$; $\eta^2 = 0.011$, Power = 0.07), 20m ($F(1,16) = 2.535$, $p = 0.131$; $\eta^2 = 0.137$, Power = 0.32), zig zag ($F(1,16) = 1.387$, $p = 0.256$; $\eta^2 = 0.080$, Power = 0.20), and COD ($F(1,16) = 0.357$, $p = 0.558$; $\eta^2 = 0.022$, Power = 0.087) outcomes indicating that Yoga did not attenuate these performance metrics.

CONCLUSION:

In conclusion, Yoga did not have a deleterious impact on running velocity, agility and COD deficit in football players and may thus provide players with a viable option to facilitate physical and psychological recovery during training.

1. Polsgrove et al. (2016) 2. Arbo et al. (2020) 3. Kartal. & Ergin (2020) 4. Khan & Alam (2016) 5. Raj, et al. (2021) 6. Freitas et al. (2019) 7. Loturco et al. (2018)

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