



O impacto de fatores físicos, técnicos, táticos e psicológicos sobre o status de jovens jogadores de futebol

The impact of physical, technical, tactical and psychological factors on the status of young football players

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Resumo

Introdução: No futebol de alto rendimento, além das qualidades físicas, técnicas e psicológicas dos jogadores, a competência para tomar as decisões táticas corretas e traduzi-las em ações está se tornando cada vez mais importante para alcançar bons resultados nas partidas. **Objetivo:** Este estudo teve como objetivo determinar o impacto de fatores físicos, técnicos, táticos e psicológicos no desempenho de jovens jogadores de futebol (JFPs).

Metodologia: Um total de 40 JFPs sub-20 de dois clubes profissionais foram divididos em dois grupos de acordo com seu status na equipe (titulares ou reservas). Os JFPs realizaram testes de inteligência física, técnica e tática e responderam a um questionário para traçar seu perfil psicológico. Os dados foram analisados por meio de regressão logística binária utilizando o programa SPSS v.20.

Resultados: Os resultados mostraram que os jogadores titulares apresentaram melhor desempenho em 16 dos 22 indicadores analisados, com três deles apresentando diferenças significativas: concentração ($P<0,05$; $d=0,65$), motivação ($P<0,00$; $d=1,15$) e controle da ansiedade ($P<0,01$; $d=0,81$). O modelo para análise dos efeitos com os 4 fatores revelou um ajuste estatisticamente significativo ($P<0,01$), com uma boa variância explicada de Nagelkerke de $R^2=0,41$. Dos fatores analisados, a força mental e o desempenho tático contribuíram significativamente para a titularidade ($P<0,05$). Além disso, essas variáveis apresentaram um tamanho de efeito relevante sobre o status de titular, aumentando a chance de titularidade em 1,15 e 1,2 pontos para cada ponto na escala, respectivamente.

Conclusões: Portanto, conclui-se que a diferença entre ser titular e reserva em categorias de base é atribuída principalmente à inteligência tática e à força mental.

Palavras-chave

Esportes coletivos, treinamento, desempenho e futebol.

Abstract

Introduction: In high-performance soccer, in addition to the players' physical, technical and psychological qualities, the competence to make the right tactical decisions, and to translate them into actions, is becoming increasingly important for achieving good results in matches. **Objective:** This study aimed to determine the impact extent of physical, technical, tactical and psychological factors on the status of young football players (YFPs).

Methodology: A total of 40 under-20 YFPs from 2 professional clubs were divided into 2 groups according to their status in the team (starting players or reserves). The YFPs performed physical, technical and tactical intelligence tests and answered a questionnaire to outline their psychological profile. Data were analyzed using binary logistic regression using the SPSS v.20 program

Results: The results showed that the starting players are better in 16 of the 22 indicators analyzed, with three of them showing significant differences: concentration ($P<0.05$; $d=0.65$), motivation ($P<0.00$; $d=1.15$) and anxiety control ($P<0.01$; $d=0.81$). The model to analyze the effects with the 4 factors revealed a statistically significant fit ($P<0.01$), with a good explained Nagelkerke variance of $R^2=0.41$. Of the factors analyzed, mental strength and tactical performance significantly contribute to starting ($P<0.05$). Furthermore, these variables have a relevant effect size on the YFP status, increasing the chance of starting by 1.15 respectively and 1.2 for each point on the scale.

Conclusion: Therefore, it is concluded that the difference between being a starter and a reserve in YFPs is mainly attributed to tactical intelligence and mental strength.

Keywords

Team sports, training, performance and football.

Introduction

On the one hand, football is a team sport with high competitiveness between teams, and on the other hand, between players. Identifying, selecting and developing talent in the youth categories are specifically important for the future success of the team and for the athlete's chances of achieving a professional career (Williams & Reilly, 2000). A modern athlete must possess, among other qualities, physical, technical and tactical abilities, with at least a moderate level of correlation between them. This demonstrates a balance between these attributes (de Souza Pfeiffer et al., 2025).

Thus, questions arise about which factors influence this process and what are the possible predictors that can determine professional success (or non-success) (Bennett et al., 2019).

Jeffreys (2008) mentions that football is a sport which includes physical factors, such as changing direction, acceleration and running in different directions. Therefore, anthropometric factors and good physical skills are essential foundations for high-performance YFPs.

Corroborating this perspective, recent studies (Castro-Infantes et al., 2025; Fajar et al., 2025; Hermosilla-Palma et al., 2024) have addressed the importance of physical attributes from different perspectives in young football players. Fajar et al. (2025), for example, analyzed whether VO₂max capacity, maturation level, and cognitive ability influence football playing skills in young players. As a result, the authors found that these three elements have a strong correlation with and a strong influence on the athletes' technical skill level, thus demonstrating their great importance for football performance.

Research also demonstrates the fundamental importance of tactical behavior for YFPs as a predictor of success in the sport. Silva et al. (2013) verified whether tactical behaviors in 72 players from the under-11 to under-18 categories of Portuguese clubs differ between winning and losing teams in games with a reduced field. To do so, they used software that analyzes tactical decision-making called Fut-Sat and analyzed 3,810 tactical actions, divided into offensive and defensive categories. The results showed that the players of the winning teams presented superiority in both offensive and defensive tactical principles in relation to the losers, in addition to a different tactical posture. Furthermore, Teoldo et al. (2023) compared, using TacticUP, whether there were significant differences in the number of tactical decisions made by professional players and U-20 players. The results showed that professional-level players made 56% more tactical decisions during the game and did so more quickly. Thus, emphasizing that if young players aim to reach the professional level in football, they must also possess a good level of tactical knowledge.

Technical skill is also considered a relevant predictor of success for YFPs (Huijgen et al., 2013; Joode et al., 2021). Huijgen et al. (2013) longitudinally analyzed 267 players (12 to 19 years old) who were part of 2 high-performance football programs for 7 years, verifying whether dribbling ability was something necessary to compete in high-level football. To this end, two tests were conducted (30-meter sprint with ball and Slalom-sprint with ball). The results showed that the older players get, the faster their dribbling ability becomes. Thus, the authors show that the evolution of a technical foundation of football (dribbling) is a determining factor for the athlete's continuation in a high-performance program and consequently to become a professional.

Psychological factors are sometimes still neglected in talent identification (TI) or even disregarded as high performance predictors in football. However, according to Abdullah et al. (2016), this is changing. More attention has been paid in recent decades to factors related to personality characteristics and mental skills for individual performance in football, whether with studies that outline psychological profiles of athletes (Najah and Rejeb, 2015) or studies which aim to control some psychological markers, as in the study by Olmedilla et al. (2019); the latter study carried out with 19 YFPs with an average age of 16 years to a Cognitive-Behavioral Therapy program for 8 sessions/50 min. The authors used the Psychological Characteristics Questionnaire related to Sports Performance as an evaluation method to analyze competitive stress factors, and the results showed a post-program improvement in indicators such as "Influence of Performance Assessment" and "Mental Skills", thus showing that athletes were able to better manage competition-related stress.

However, these variables are still analyzed in a relatively "modest" manner within a multidimensional model, as well as their possible influence on the performance of young athletes during the game. For example, the studies by Menegassi et al. (2021) and de Souza Pfeiffer et al. (2025) can be highlighted, as



both analyzed the physical, mental, tactical, and psychological attributes of young athletes from a multidimensional perspective.

Assigning starting or reserve status in the process of identifying and selecting talent is essential for both the team and the player. Because it can influence the team's tactical choices or even the importance of that player in the squad. In a way, status represents a variable proxy for the player's performance. Therefore, studies which focus mainly on physical differences between starting and reserve players in football are already present in the literature (Gravina et al., 2008; Hoppe et al., 2020; Nobari et al., 2020).

However, no studies were found in the current literature that simultaneously and multidimensionally analyze the extent to which physical, technical, tactical, and psychological factors influence the status of starter or reserve among high-performance youth football players. Therefore, the present study aims to determine the magnitude of the impact of these factors on players' status. It is hypothesized that starting players present better physical, technical, and tactical performance values, as well as better mental conditions than reserves. This hypothesis is supported by current studies in the literature that also address this topic (Gravina et al., 2008; Hoppe et al., 2020; Nobari et al., 2020).

Method

Participants and Design

The research sample was composed of 40 players from the Under-20 category from 2 professional teams of the regional division of the state of Paraíba, Brazil, aged 18.03 ± 0.83 . The 20 athletes from each team (40) were divided into 2 groups of 10 starters and 10 reserves according to the information provided by the coaches of each team, and according to the last 3 friendly games that each team played in preparing for the league championship. This resulted in 20 subjects for each category.

All players gave written informed consent and did not suffer any type of injury at the time of participation. All study procedures, risks and benefits were previously explained to the subjects, and they were asked to sign the Informed Consent Form (ICF) to participate. This project was submitted and approved under number 4,171,263 by the Research Ethics Committee of the Health Sciences Center (CCS) of the leading institution in compliance with resolution 466/12 of the National Health Council.

Schedule

The study was carried out over 5 consecutive days as follows: day 1 included anthropometric measurements; day 2 included the aerobic endurance test; day 3 included the speed and agility tests; day 4 included the technical ability tests; and day 5 included the psychological test. It's worth noting that all the tests were carried out 24 hours apart, so that the subjects could rest and one test wouldn't influence the other. Below is a detailed explanation of how each test was carried out. It is worth noting that all the measurements were always taken at 4:30pm, when the weather is milder in the city of João Pessoa.

Instruments and data collection

Height measurements were initially taken (Sanny stadiometer – Brazil), as well as body mass and anthropometric measurements using bioimpedance (Inbody 270). The bioimpedance test was carried out with the subjects barefoot and wearing their training clothes. The weight of the clothing was not removed.

Physical tests

Physical capabilities were analyzed by indicators of VO₂max, change of direction, speed and jump height, which were measured by corresponding tests applied in alternating shifts in order to guarantee the athletes' recovery.

Aerobic strength was measured by the VO₂max indicator using the 30-15 Intermittent Fitness Test (IFT) following the Buchheit (2008) protocol.

The 30m Test (Johnson & Nelson, 1975) was conducted on a grass field to test speed, with 30m and an escape zone of 15m being demarcated for the safety of the athletes. For the speed test, photocells (Speed Test 6.0 Standard - CEFISE) were placed at the 10, 20 and 30m points. The athletes stood in the starting



position and, at the assessor's signal, ran at maximum speed. If any problems occurred during the test, the athlete was given time to recover and the test was repeated.

Agility was assessed by the Illinois Test (Getchell, 1979), which measures the time to change direction on a given route. For this test, the route was set up according to the protocol and the subjects were allowed to walk it once so that they could memorize it. After that, for the official test, the subjects got into a prone position and, at the command "Now", stood up quickly to try and complete the test. If any errors occurred, the test was stopped and the subject was given time to rest and repeat again.

Finally, lower limb muscle strength was measured through a vertical jump test using the validated My Jump 2 application (Haynes et al., 2018). In the test, the subjects are initially positioned with their hands on their waist and their feet shoulder-width apart, their heels in contact with the ground, their torso straight and their lower limbs in full extension. At the signal of the word "Go", the subject performed a quick and vigorous jump, trying to reach the maximum height possible. Three attempts were made, with the best one being chosen for the study. After the end of the test, the subjects rested passively for 1 minute (Rodrigues & Marins, 2011).

Technical tests

Ball handling time (dribbling), passing accuracy and scoring of each athlete were considered as indicators for technical skills, respectively. The General Soccer Ability Skill Test Battery was chosen to measure these skills (Mor and Christian, 1979).

Tactical skills tests

Tactical skills were analyzed using the TacticUp test (Machado & Costa, 2020). The test provided a score for the general index, as well as 12 sub-indicators, called tactical principles (6 offensive: penetration, offensive coverage, space with the ball, space without the ball, mobility and offensive unity; and 6 defensive: containment, coverage defensive, recovery balance, defensive balance, concentration and defensive unity), and the average response time spent by each athlete.

Each athlete was given a computer to perform the test, always accompanied by a supervisor who gave each participant the necessary instructions for completing the TacticUp test. Before officially starting, each participant was allowed 3 attempts to simulate scenes to familiarize themselves with the program.

Psychosocial test

Three subscales (motivation, self-confidence and anxiety control) of the Psychological Skills Inventory for Sports – Youth version – Short Form with a total of 8 items were used to measure "mental strength" (Milavic et al., 2019). Each item was measured using a Likert scale, which ranges from 1 (strongly disagree) to 5 (strongly agree). The score for the mental strength construct was calculated from the score of each item in a linear-additive manner.

Indexes calculation construct

In order to calculate the composite indexes using indicators of different magnitude orders, it is first necessary to transform them before aggregating. Therefore, data normalization for the physical (4) and technical (3) variables was performed using the min-max method, which standardizes the variables in the range of 0 to 100. Then, the total score for each index was calculated in a linear-additive way and divided by the number of indicators. Finally, the Mental Strength scale was also linearly transformed into a scale with a range from 0 to 100 to obtain scales with equal magnitudes.

Statistical analysis of data

The means and SD were initially calculated for all variables. A one-tailed independent sample t-test was performed for all indicators and indexes to detect differences in performance between starting players and reserves. The Levene test was performed to verify the homogeneity of variances and the Shapiro-Wilk test to verify the normality of frequency distributions, considering $P \leq 0.05$. Next, $1-\beta$ was used to calculate the post-hoc test power and the G*Power 3.1.0 program was used for the one-tailed t-test with the following parameters: effect size 0.8, $\alpha = 0.05$, $n_1 = 20$, $n_2 = 20$. The result showed a test power of 0.8, considered a satisfactory value.

In addition, a binary logistic regression (Rlog) was used to estimate the effects of independent variables (IVs) on the dependent variable (DV), as it is an analysis with a dichotomous categorical DV which can assume two categories (Fernandes et al., 2020). All prerequisites for applying RLog (absence of multicollinearity, linearity of the relationship between the vector of predictors and the DV, and absence of outliers) were verified and met (Barros et al., 2012). The following procedures were used: correlations between IVs, Box and Tidwell test (1962) and analysis of standardized residuals. The sample size $n=40$ corresponds to the general recommendation of 10 cases per IV (Fernandes et al., 2020). Data were analyzed using the Statistical Package for the Social Sciences software program (SPSS – 20.0).

Results

There was no significant difference in the analysis of the anthropometric characteristics of the subjects for the status between the groups in any of the 4 variables ($P>0.05$), showing that these did not interfere with the research model.

Table 1. Anthropometric characteristics by status of young football athletes.

Measurements	Starting players (Mean $\pm$ SD)	Reserve players (Mean $\pm$ SD)
Weight (kg)	70.9 $\pm$ 7.2	68.9 $\pm$ 6.6
Height (m)	176.8 $\pm$ 6.9	177.6 $\pm$ 5.9
Body fat (%)	12.5 $\pm$ 2.8	11.6 $\pm$ 3.2

In testing the difference between the means for all 22 indicators, 16 showed that the starters achieved better scores than the reserves, while the reserves were better in 4, and they were the same in 2. Three of the differences were significant: concentration ($P<0.05$; $d=0.65$), motivation ($P<0.00$; $d=1.15$) and anxiety control ($P<0.01$; $d=0.81$).

We found 11 small-sized effects ($0.2 \leq d < 0.5$), 4 medium-sized ones ($0.5 \leq d < 0.8$) for containment, defensive balance, concentration and mobility, and 2 large ones ($d \geq 0.8$) for motivation and anxiety control. Contrary to the hypothesis of the study, the average for reserve athletes was higher in the indicators passing and shooting (technical dimension) and space with the ball and without the ball (tactical dimension), but the differences were not significant.

Table 2. Mean standard deviation, significance levels and effect sizes for the indices by status of young football athletes.

Indices	Status		P	d	r ²
	Starting	Reserve			
Physical performance*	58.72 $\pm$ 16.44	50.40 $\pm$ 14.08	0.05*	0.54	0.07
Technical performance*	57.48 $\pm$ 15.68	57.07 $\pm$ 16.04	0.47	0.03	0.00
Mental strength*	66.87 $\pm$ 6.17	60.37 $\pm$ 7.96	0.00**	0.89	0.16
Off. Tact. Perf. (Points)*	72.40 $\pm$ 5.37	69.85 $\pm$ 7.17	0.11	0.40	0.04
Off. Tact. Perf. (Time)	13.91 $\pm$ 8.88	15.30 $\pm$ 9.03	0.31	0.15	0.01
Def. Tact. Perf. (Points)*	71.55 $\pm$ 7.96	64.35 $\pm$ 8.44 18.39 $\pm$ 16.78	0.01**	0.88	0.16
Def. Tact. Perf. (Time)	14.83 $\pm$ 9.47		0.21	0.26	0.02
General Tact. Perf. (Points)*	71.70 $\pm$ 4.27	67.15 $\pm$ 5.27	0.01**	0.95	0.18
General Tact. Perf. (Time)	14.38 $\pm$ 9.03	15.28 $\pm$ 8.36	0.37	0.10	0.01

* Scale from 0 (minimum) to 100 (maximum) Legend: Perf. Off. Tact. Perf. = Offensive Tactical Performance; Def. Tact. Perf. = Defensive Tactical Performance.

In line with the hypothesis, Table 2 reveals that the starters showed better physical, tactical, technical performance and mental strength, specifically in the mental strength ($P<0.01$; $d=0.89$), defensive tactical performance ($P<0.01$; $d=0.88$), general tactical ($P<0.01$; $d=0.95$) and physical performance indices ($P<0.05$; $d=0.54$). These factors can be considered as selective predictors for a player's status and future career. Surprisingly, only a minimal, non-significant superiority of starters was observed in the technical dimension ($P>0.05$; $d=0.03$). A large variance is observed regarding time due to the fact that the test does not provide any limit for responding.

A multiple RLog was carried out to determine the effect of performance factors (physical, technical, tactical) and mental condition, as well as to predict the probability of being a starter (Fernandes et al., 2020). The Omnibus test revealed a statistically significant model fit ($\chi^2(4)=14.7$, $P<0.01$) with a good explained Nagelkerke variance of $R^2=0.41$. The result of the Homer and Lemeshow test, which analyzes the extent to which the expected probabilities deviate from the observed ones, also suggests a good fit of the model ($\chi^2(8)=1.45$, $P>0.9$). The subjects' classification table was used as a measure of the model's prediction quality, and revealed general accuracy in classifying subjects of 75%, with sensitivity of 80% and specificity of 70%. These results prove the quality of the model.

Two of the four variables in the model significantly contributed to the prediction of starting: mental strength ($P<0.05$) and tactical performance ($P<0.05$), while the other two did not show a significant effect: physical performance ($P>0.05$) or technical performance ($P>0.05$). Tactical performance has a greater effect on the chance (odds) of being a starter ($\exp(B)=OR=1.20$), followed by mental strength with $\exp(B)=OR=1.15$. Surprisingly, the impact of technical ability was almost nil and that of physical fitness was only small.

Table 3. Model coefficients and 95%CI of logistic regression.

Variable	B	Sig	Exp(B)	Lower CI	Upper CI
Mental strength	0.136	0.03	1.15	1.02	1.29
Tactical intelligence	0.181	0.04	1.20	1.01	1.42
Physical performance	0.022	0.40	1.02	0.97	1.07
Technical performance	-0.008	0.73	0.99	0.95	1.04

The data in Table 3 reveal that in addition to being statistically significant, the Mental Strength and Tactical Intelligence variables have a relevant size effect on the status of young football players. An increase of one unit in the IV increases the chance of the "starting" event occurring by a factor of 1.15 (mental strength) and 1.2 (tactical intelligence), respectively, keeping the other variables in the model constant. Physical performance also had a positive impact ($\exp(B)>1$), but it did not reach a level of significance. These results are in line with the hypothesis that physical, tactical and mental performance has a positive impact on the status of young football players. However, an impact of the technical factor has not been proven.

Discussion

To the best of our knowledge, this is the first study which analyzes in multiple ways the influence of physical, technical, tactical and psychological factors on the starting or reserve status in high-performance YFPs. The general model is valid and partially confirms our hypothesis, however the factors in the model have very different weights.

The small and statistically non-significant superiority in physical indicators found in the present study corroborates the results of previous studies (Gravina et al., 2008; Paraskevas and Hadjicharalambous, 2018; Hoppe et al., 2020; Arcos and Artetxe, 2021) which analyzed physical differences between starters and reserves in different indicators and age groups.

Arcos & Artetxe (2021) analyzed the impact of physical performance on their careers in 175 players from the Spanish 1st division with an average age of 18 years from a longitudinal perspective. Unlike the present study, the comparison was not made between starters x reserves, but between youngsters who managed to reach the reserve team versus those who did not make it. Then later, on those who reached professional football in the 1st or 2nd division and those who did not. The indicators used to evaluate physical performance were: sprint speed, jump speed and maximum aerobic speed.

The results show that there were no significant differences ($P>0.05$) between the YFPs who reached the reserve team and those who did not, or who subsequently reached the professional level or not. These results are in line with those of the present study, as there was no evidence that physical performance is a determining factor for YFP status. The lack of significant difference in physical performance in both studies is explained by Risso et al. (2017), pointing out that starting and reserve players are exposed to the same type of physical training, which results in the same physical conditioning for both groups. Or,



as Memmert (2019) emphasizes, citing that physical preparation in high-level football is approaching an evolutionary limit that leaves little room for substantial differences.

Following physical performance, the technique did not present a significant difference ($P>0.70$) between starters and reserves. This result is in line with other studies in the area. Also using Mor-Cristian's technical skills protocol, Feltrin and Machado (2009) investigated which technical factors were best related to performance in the game according to positioning on the field. To do this, they used 18 YFPs with an average age of 14 ± 0.70 , and who had been training in football for at least 5 years. According to the results presented, there was no difference between the positions in any of the parameters in the test, nor in the fundamentals used in the game.

Along the same lines, Ganzer, Ribeiro and Vecchio (2016) compared physical conditions (lower limb power, flexibility, agility, ability to repeat sprints and distance covered in a progressive test) and technical conditions (accuracy and passing time) in under-17 reserve and starting players during 3 moments in the season (pre, during and put). The results showed that the starters were only superior in agility ($P<0.05$) in all physical tests carried out, while in the others (physical and technical) there was no significant difference ($P>0.05$), regardless of the season moment.

A possible explanation for this unexpected finding is reported by Ganzer, Ribeiro and Vecchio (2016), who hypothesize that the lack of technical difference between the groups is due to the fact that it is an advanced base category, in which motor learning and technical actions, such as passing, shooting and dribbling are performed constantly during a match, minimizing discrepancies between groups.

However, tactical intelligence in decision making stood out as a decisive factor among those analyzed in the present study. This result corroborates current theoretical approaches that emphasize the importance of perceptual-cognitive components and their neural bases for performance in football and other sports (Memmert, 2019; Memmert and Rocca, 2020).

The importance of tactical decision-making in football has been confirmed in empirical studies. Aiming to validate a video-based diagnostic instrument that assesses decision-making in football, Murr, Larkin and Höner (2020) divided a sample of 86 YFPs aged 16 to 19 from an elite club in the country into 3 sub-samples (age, status in the team and future perspective at the club). Participants watched 48 scenes that portrayed two moments of a match (the construction of the game, which corresponds to defensive principles, and offensive decisions). The findings corroborate ours: the starters showed better tactical decision-making performance in the construction of the game ($P<0.01$) and in offensive situations ($P<0.05$).

The second substantial factor in the model was mental strength. As cited by Sarmento et al. (2018), studies which address the importance of psychological factors on players' performance in football are still scarce. However, recently there has been a growing interest in psychological attributes and their importance for success. The present study showed that mental resistance as a central factor of the psychological dimension presents a significant difference between starters and reserves ($P<0.01$) and a large effect ($d \geq 0.8$).

Together with other studies, our results reinforce the importance and positive influence of psychological factors on individual success in football (Coetzee, Grobbelaar and Gird, 2006; Toering et al., 2009; Zuber, Zibung and Conzelmann, 2014).

When applying 4 sports psychological tests to 36 football players aged between 18 and 28 years old from 2 different teams, and who participated in the same league, Coetzee, Grobbelaar and Gird (2006) found results which showed superiority in the psychological abilities of the winning team of the league in relation to the losing team. The players on the winning team were specifically superior in parameters such as concentration, mental rehearsal and motivation. There was a large effect size $d=0.8$ in these factors, as well as in the findings of the present study, in which motivation and anxiety control also presented the same effect size.

As in the present study, Toering et al. (2009) investigated psychological aspects and performance in YFPs (14.4 ± 1.4 years of age). To this end, they analyzed the relationship between self-regulation and the performance level in 159 elite players (linked to 1st division teams in the Netherlands) and 285 non-elite players (linked to regional teams in the Netherlands), using a questionnaire which measured items

such as self-monitoring, regulation, reflection, effort and self-efficacy of young people. The results found showed that high scores in regulation and effort are related to high performance in football.

According to Toering et al. (2009), these athletes are willing to invest more (motivation) in practice and competition and learn more effectively. From this perspective, motivation, self-confidence and control are factors that influence sports performance to a high extent, as shown by the results of the present study.

Conclusion

We conclude that the difference between starters and reserves in the under-20 category lies in the tactical understanding and mental factors of the athletes, which can be one of the determining factors in allocating athletes to be starters or not. Although physical and technical factors do not seem to have a strong influence on this status, they should not be ignored by athletes and coaches, as they are basic and essential components of the game.

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