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Comparison of Different Coach Competition Micro-Cycle Planning Strategies in Professional Soccer

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Abstract: Background: Coaches propose training strategies to develop their playing model, but the impact on the conditional demand of players is unknown. The objective of this study aimed to assess the conditional demands associated with five competitive micro-cycle (Mi) planning strategies put forth by professional soccer coaches. The dependent locomotor variables were: total distance traveled (TD, in m), high-speed running distance (TD21, >21 km·h^{-1}, in m), sprint distance (TD27, >27 km·h^{-1}, in m), acceleration load (aLoaD, in AU) and number of accelerations (ACC2, >2 m·s^{-2} in n) and decelerations (DEC2, <−2 m·s^{-2} in n). The activity profile of the players was monitored during each training session using a global positioning system (GPS) during four seasons (2018–2019 to 2021–2022). Regardless of the coach, the sessions furthest from Mi (MD+1, MD-4 and MD-3) were the most conditionally demanding, where TD27 was especially stimulated on MD-3 (ES = 0.7, 0.2/1.2, mean and range; $p < 0.05$); furthermore, MD-2 was the least demanding session of all the trainers (ES = −2.4, −2.6/−1.5, mean and range; $p < 0.01$). However, there were nuances regarding the conditional demand among the coaches: Co1 and Co2 proposed a higher conditional demand in the MD-2 and MD-1 sessions ($p < 0.05$). The conclusion was twofold: elite soccer coaches proposed a horizontal alternation in the weekly distribution of training stimuli; nevertheless, the differences in the style of play of each coach affected the week-planning strategy.

Keywords: soccer; periodization; micro-technology; training demand; coaching strategy

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1. Introduction

In recent years, elite soccer teams have experienced a significant increase in the conditional demands in competition, accumulating 2% more total distance (TD) covered and 30–50% more effort at high speeds (HSR) [1] as well as an increase in contextual demands basically represented by an increase in the number of congested periods of matches [2]. This increase in the conditional and contextual demands experienced by players throughout the season can cause temporary metabolic, neuromuscular or mental fatigue, reducing performance and increasing the probability of injury [3]. In addition, due to different behavioral and contextual, technical, tactical and physical requirements associated with each position, the demands of training and competition can cause significant imbalances between players, making it even more difficult to prescribe and optimize training doses [4,5]. These differences between players could potentially be amplified according to the level of participation of each player in competition (starting vs. non-starting), which indicates that a considerable number of players per team are not regularly exposed to competition stimuli [5]. In this sense, knowledge of the distribution of frequency (F), intensity (I), time (T), type (T), volume (V) and progression (P) of training (known as the FITT-VP principle) [6] is crucial to adjusting the organization of training sessions [7].

As heads of the team, sports coaches play a fundamental role in proposing a work method that includes the planning and design of training sessions [8]. Although there are different options for periodization or planning strategy in elite soccer [9], these can be grouped into two levels [10]. At a macro level, the coach's staff assess the general season calendar as well as the distribution of the competitions in which they will participate in order to identify and plan work blocks where the conditional, psychological, technical and tactical objectives can be emphasized [10]. At the micro level, planning focuses mainly on the organization of the different sessions within the week [7,11–13]. In this second approach, in recent years, new proposals have emerged (e.g., tactical periodization, structured micro-cycles) [6,14–16]. These approaches have arisen from the need to focus the preparation process from the tactical dimension of the game without neglecting the coordinative, conditional and socio-affective dimensions [7]. From this approach, the training sessions of the competitive week are distributed considering the time, in days, between two consecutive matches. Usually, a periodization with an inverted U profile is proposed, allowing a horizontal alternation in the central days of the micro-cycle to stimulate the three main physical qualities (e.g., strength, endurance and speed), while, for the days prior to competition, a set-up or activation [14–16] is proposed.

However, in elite soccer, the continuity of the coach is unstable. The evaluation of the capacity of a coach is based mainly on the result and not on their way of training, which means that poor results lead to their dismissal [17]. It should be noted that research carried out in the main European soccer leagues describes the rotation of coaches as something common when there are bad results, regardless of the performance of the teams, and occurs in a short period of time [18–20]. In this sense, the academic literature [19,21,22] appears to concur that a coaching change has a short-term positive impact on the physical demands placed on players. However, as time progresses, it is often followed by a gradual decline in match performance. For instance, Zart and Gullich [23] have observed that improvements following a coaching change often last only for the subsequent 16 matches. A team's performance in matches depends not only on its own abilities but also on external factors, such as the performance of the opponent or refereeing decisions. In this context, it is relevant to investigate whether coaching changes also entail a modification in the weekly micro-cycle planning strategy due to new task design proposals, which ultimately could significantly influence the physical performance of players.

Therefore, the replacement of the coach can result in changes in the game model, the work methodology and the level of motivation of players [17,24]. These factors may be directly related to changes in physical performance during games and training, although results in other publications are inconclusive. In this sense, Radzimiński et al. [22] described significant improvements in locomotor variables such as TD and HSR in competition immediately after the arrival of the new coach. On the contrary, Augusto et al. [25] found that changing coaches had a negative influence on high-intensity variables such as HSR, sprints (SPR) and accelerations/decelerations during official games. Applied to the intervention process, Guerrero-Calderón et al. [26] discovered a decrease in the high-intensity activity during sessions after a change in coach. In contrast, other studies have not found changes in physical performance after the dismissal of a coach [24,27]. To the knowledge of the authors, there is no study that compares different planning strategies in the same team for training sessions distributed in the competitive micro-cycle, based on the locomotor and neuromuscular variables demanded on players.

For all the above, the objective of this study will be to assess the conditional demands associated with the competitive micro-cycle (Mi) planning strategies put forth by five professional soccer coaches. Our starting hypothesis is that although all coaches will implement the inverted U-profile micro-cycle strategy, moving the most demanding sessions away from the pre- and post-matches to the current micro-cycle, the different game models proposed by the coaches will justify variations in the conditional demands on players in the training sessions of a seven-day competitive micro-cycle.

2. Materials and Methods

2.1. Participants

The total number of different players included in the study over the four seasons was 54 (between 21 and 24 players per season). Of the total number of players, 12 players repeated for three or four seasons, 10 players completed two seasons and the rest only stayed for a single season. Only outfield players participated in this study (age; 27.7 ± 2.9 years, body mass; 76.9 ± 5.2 kg and height: 180.9 ± 5.2 cm). Training data across same professional soccer team belonging to the top standard of Spanish soccer (La Liga) have been analyzed (n = 318 sessions) during four consecutive seasons (from the 2018–2019 to the 2021–2022 season), where five different coaches (numbered from 1 to 5: Co1, Co2, Co3, Co4 and Co5) trained the team. The distribution of training days and coaches are collected in Table 1.

Table 1. Number of sessions according to training day and coach.

	Coaches					
Training Day	**Co1**	**Co2**	**Co3**	**Co4**	**Co5**	**Total**
MD+1	8	6	9	9	7	39
MD-4	23	11	14	4	4	56
MD-3	31	10	16	8	6	71
MD-2	33	13	17	8	7	78
MD-1	32	12	15	8	7	74
Total	127	52	71	37	31	318

Note: Co1, Co2, Co3, Co4 and Co5 are the five coaches training the team. MD-4, MD-3, MD-2, MD-1 and MD+1 are days before (4, 3, 2 and 1) and after (1) day/s of the micro-cycle, respectively.

2.2. Coaches Style

CO1, in defense, is characterized by its high-pressure game with a high-block defense (1-4-4-2), with compact lines where forwards pressurize the central players and the midfielders move forward to cover spaces. The aim of the game is to regain possession as close to the opponent's goal as possible. In attack, they aim for a direct style of play to deliver crosses into the box as quickly as possible. CO2, in defense, focuses on an organized defense in a 1-4-4-2 medium block, pressing opponents in the wide areas and avoiding central play. In attack, they prioritize direct and fast possession, effectively transforming the formation into a 1-4-2-4 by involving the wide players, using long balls to exploit the height and strength of the players. CO3, in defense, employs a compact defense with a low-block defensive line in a 1-4-4-2 system, pressing the opponent in their half of the field and mainly avoiding interior play. In attack, they favor direct offensive play, aiming to exploit the opponent's defensive lines with long passes and giving greater importance to ball possession. CO4, in defense, uses a five-defender system (e.g., 1-5-3-2 or 1-5-4-1), with a common focus on retreating and a low block. In the offensive phase, they provide offensive opportunities to the full-backs and strongly emphasize a quick transition from defense to attack, with an emphasis on pressure in the center of the field, utilizing a double pivot to add verticality and speed to the attacking game. CO5, in defense, deploys a 4-2-3-1 system and relies on solid defense with medium pressure. They also involve advanced players in defensive collaboration to hinder the opponent's progression and reduce dangerous spaces. In the offensive phase, they prioritize direct play, based on transitions, while adapting to the opponent's strengths.

The variables studied were: total distance covered (TD, in m), high-speed running distance (TD21 is the cumulative distance over 21 km·h^{-1} in m), sprinting distance (TD27 is the cumulative distance over 27 km·h^{-1} in m). In addition, *acceleration load* (aLoad, AU) is the accumulation of absolute acceleration values over the specified period [28] and was computed as the vector magnitude representing the sum of accelerations recorded in the anteroposterior, mediolateral and vertical planes of movement. Accelerations (ACC2 is the number of accelerations above 2 m·s^{-2}) and decelerations (DEC2 is the number of decelerations below −2 m·s^{-2}) were also variables studied.

2.3. Procedures

Player's activity during each training session was monitored using a portable 5S and 7V GPS unit (Catapult Innovations, Melbourne, Australia) of a sampling frequency of 10 Hz, where its reliability and validity are optimal [29]. Each unit was placed inside a mini pocket positioned between the shoulder blades of a specially designed vest. To avoid inter-unit errors, each player used the same device during the entire study [2]. After completing each training session, GPS data were extracted using the corresponding software (OpenfieldTM v.3.7.3). The number of satellites used to infer GPS signal quality, horizontal dilution of precision and the average of the GNSS quality were: >10 satellites, >0.9 and >70%, respectively.

For the analyses, only the records of the players who completed the session were chosen, excluding the goalkeepers, in order to calculate the average of each session. Furthermore, only sessions that were part of micro-cycles with only one match and seven days with respect to the previous match were selected for the study. Data from rehabilitation, individual prevention or off-court strength training sessions were excluded. The sessions chosen to compare the coaches' strategies respected the same micro-cycle structure, i.e., a complementary post-match session (MD+1), a rest day and four, three, two and one day(s) before the next match (MD-4, MD-3, MD-2 and MD-1, respectively). Once the training sessions were finished, the sessions were separated by the periods where there were tasks, collecting only the activity of the players in the effective time. A matrix was created with all the sessions of all the players and coaches, from which the different statistical analyses were implemented.

2.4. Statistical Analysis

Data are presented as mean and standard deviation. Generalized mixed models (GMMs) were used to examine training physical demands across the coaches' planning strategies (Co1, Co2, Co3, Co4 and Co5) and training days (MD+1, MD-4, MD-3, MD-2 and MD-1). To examine differences in physical demands among coaches and days, all player training sessions were pooled in the analyses to minimize type II error. Post hoc pairwise comparisons between the estimated marginal means were performed. The significance level was set as $p \leq 0.05$ for all statistical comparisons. For interpreting, the magnitude of the estimated effects [30] among coaches and training days were: 0–0.2 (trivial), >0.2 (small), >0.6 (medium), >1.2 (large) and >2 (very large). The statistical analyses were performed using the Statistical Package for the Social Sciences (SPPS version 21.0 for Windows).

3. Results

The descriptive values (mean and standard deviation) for each training day and coach for the six physical variables recorded are shown in Table 2. There was a greater number of significant differences between sessions than between coaches.

Table 2. Physical demands (mean and standard deviation) according to training day and coach.

Variable		Coach											
		Co1		Co2		Co3		Co4		Co5		Grouped	
	T-Day	Mean	sd	Mean	sd	Mean	sd	Mean	sd	Mean	sd	Mean	sd
TD (m)	MD-1	3824.8	501.5	3524.5	744.5	3114.6	328.6	3882.3	445.7	3840.9	326.5	3529.8	592.6
	MD-2	2884.2	1004.9	3737.6	979.0	2673.0	1040.0	3248.9	926.1	2764.8	1274.0	3085.3	1094.5
	MD-3	4912.1	823.7	5078.4	1681.9	4792.1	1133.6	5872.4	808.3	5216.5	778.8	5093.4	1198.5
	MD-4	5209.0	1344.1	4415.2	1359.0	4666.3	1092.3	5941.4	1362.9	4919.0	1030.6	4834.0	1276.7
	MD+1	5240.1	1080.0	4075.6	1205.6	4464.0	675.0	4591.3	915.9	4641.3	633.1	4559.1	929.8
	Total	4241.2	1297.0	4059.7	1265.7	3696.5	1257.9	4399.1	1276.3	4147.6	1203.6	4043.1	1280.9

Table 2. *Cont.*

Variable	Coach												
		Co1		Co2		Co3		Co4		Co5		Grouped	
	T-Day	Mean	sd	Mean	sd	Mean	sd	Mean	sd	Mean	sd	Mean	sd
TD21 (m)	MD-1	66.3	26.3	52.8	29.0	81.7	22.8	82.9	31.9	56.8	20.7	69.5	29.1
	MD-2	37.6	36.9	84.3	48.4	44.1	47.2	47.8	37.2	44.3	43.1	54.4	47.0
	MD-3	173.1	73.5	169.6	96.7	175.5	109.3	189.5	45.2	177.1	63.4	176.0	86.2
	MD-4	181.8	167.0	103.8	104.5	151.4	125.7	187.8	56.3	137.3	76.3	142.9	114.6
	MD+1	207.9	80.6	98.9	134.8	206.6	108.6	178.6	95.2	111.5	146.3	162.3	119.7
	Total	120.5	102.2	95.0	86.8	114.7	100.2	124.8	83.6	96.8	94.9	110.1	93.9
TD27 (m)	MD-1	3.6	3.7	3.3	3.3	5.2	3.2	4.4	4.3	2.7	2.2	4.1	3.4
	MD-2	1.9	2.7	5.8	4.8	1.9	2.7	2.6	3.6	3.2	4.8	3.2	4.0
	MD-3	16.8	13.8	14.1	13.0	18.6	22.1	16.9	8.1	20.7	16.6	17.2	16.1
	MD-4	12.3	14.0	5.6	9.8	7.1	10.0	18.1	11.9	9.6	13.0	8.9	11.3
	MD+1	11.4	11.0	0.6	1.0	7.8	8.8	20.7	22.2	8.0	9.6	10.5	15.0
	Total	8.5	10.9	5.9	8.3	7.4	12.2	11.3	14.5	7.8	11.0	7.9	11.5
ACC2 (n)	MD-1	50.1	9.8	50.5	12.6	26.5	5.2	38.4	5.9	54.6	6.8	41.1	14.0
	MD-2	29.7	19.0	51.3	19.7	20.7	13.7	25.6	12.9	32.4	21.4	31.9	20.6
	MD-3	65.4	15.0	69.3	22.4	45.0	14.3	57.5	11.1	74.9	13.0	59.4	19.3
	MD-4	85.0	15.1	66.5	19.8	49.3	15.6	70.7	12.2	76.0	7.5	65.1	19.8
	MD+1	88.2	19.4	75.4	27.1	52.0	10.7	52.5	12.3	83.3	16.6	66.7	22.5
	Total	59.1	26.5	59.6	21.5	34.8	17.4	44.7	17.7	62.7	24.3	49.6	23.6
DEC2 (n)	MD-1	42.6	10.4	45.0	11.0	24.0	6.0	38.4	4.3	47.0	5.7	37.1	12.2
	MD-2	27.1	19.4	44.7	20.1	20.5	15.6	26.7	14.1	28.8	19.4	29.6	19.7
	MD-3	58.3	13.4	63.1	23.6	50.7	15.8	62.3	11.6	68.6	12.2	58.7	17.4
	MD-4	76.6	12.6	58.6	18.6	56.2	17.3	73.0	13.2	66.9	10.6	62.9	17.3
	MD+1	75.4	18.3	69.0	25.1	56.1	12.9	59.6	15.4	74.4	13.6	65.2	18.2
	Total	51.9	23.8	53.2	20.9	36.6	20.9	47.8	20.0	55.7	22.0	47.2	22.4
ALoaD (ua)	MD-1	1356.2	169.9	1347.4	259.7	1023.8	124.8	1310.3	109.0	1451.1	62.8	1250.2	231.9
	MD-2	1182.8	326.8	1368.6	333.0	958.4	303.5	1208.3	253.4	1071.6	362.5	1149.0	346.5
	MD-3	1706.2	231.3	1705.8	507.9	1512.0	365.3	1839.3	306.6	1781.8	186.9	1671.0	374.7
	MD-4	2044.5	337.2	1617.0	425.7	1435.5	4559	2138.0	520.4	1882.4	354.3	1706.9	485.2
	MD+1	1970.6	395.7	1559.4	492.9	1533.3	314.8	1571.3	260.7	1947.9	279.7	1679.4	382.0
	Total	1578.9	430.5	1484.5	404.6	1220.1	396.1	1506.6	389.9	1597.1	428.7	1433.0	429.8

Note: T-Day is training day, TD is total distance covered, TD21 is high-speed running distance, TD27 is sprinting distance, aLoaD is acceleration load, ACC2 is number of accelerations and DEC2 is number of decelerations. Co1, Co2, Co3, Co4 and Co5 are the five coaches training the team. MD-4, MD-3, MD-2, MD-1 and MD+1 are days before (4, 3, 2 and 1) and after (1) day/s of the micro-cycle, respectively.

When the training sessions (MD+1, MD-4, MD-3, MD-2 and MD-1) were compared independently of the coach, significant differences were found for all physical variables. The sessions that were most similar were MD-3, MD-4 and MD+1. The only variable that differentiated the central sessions of the week (MD-3 and MD-4) was the TD27 being superior for MD-3. MD-2 was the session used to reduce the training load in the competitive micro-cycle, which was the session where the lowest values were recorded in all the variables studied, with a magnitude of effect between high and very high. Finally, the coaches used MD-1 for pre-game activation, obtaining a magnitude of the differences that was between higher and very higher than MD-2, but lower than the rest of the sessions (MD-4 and MD-3). Figure 1 shows the magnitudes of these differences between trainers for each of the locomotor variables.

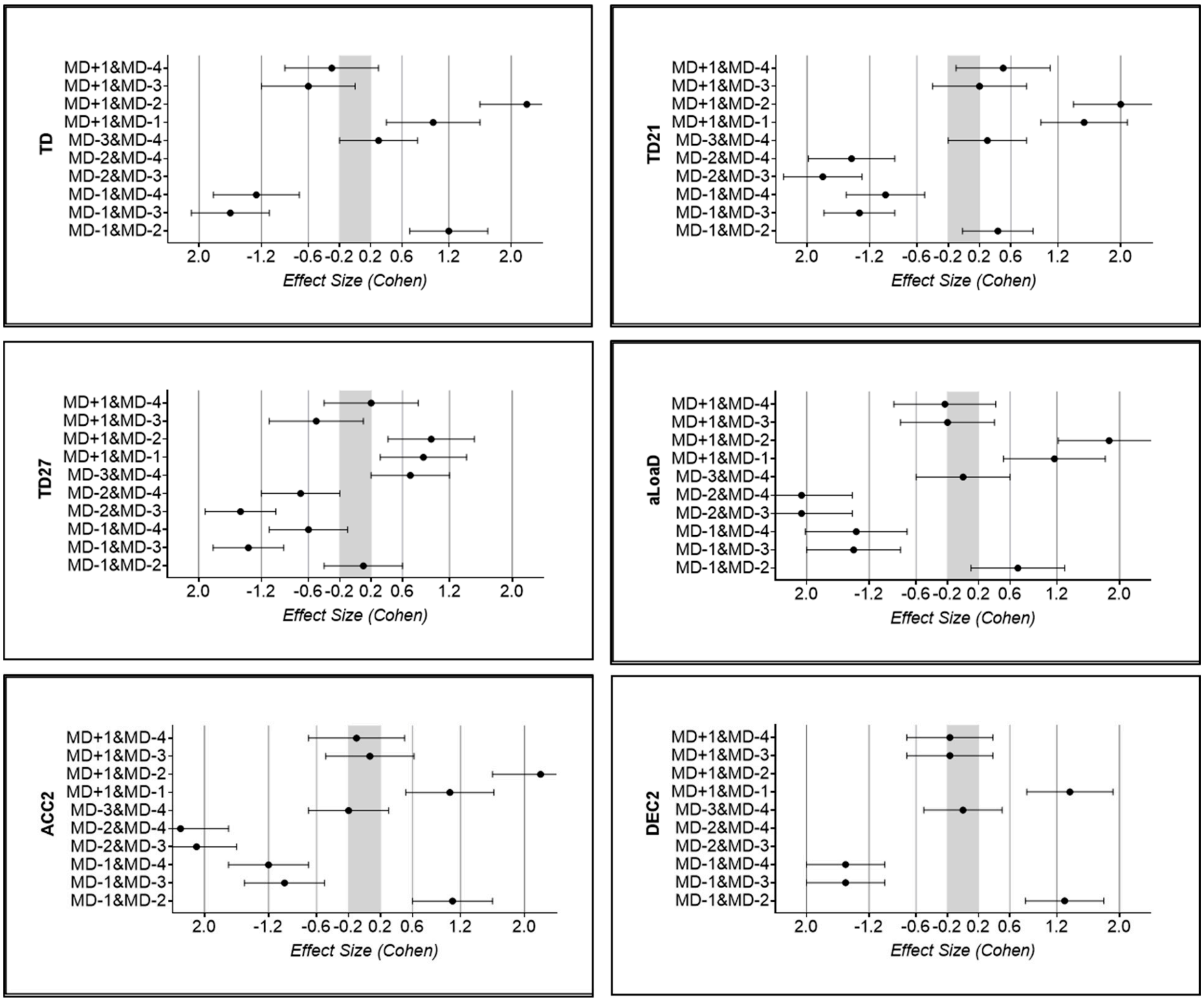

Figure 1. Cohen's d standardized mean difference (lower and upper 95% CI) of the physical demands among training days for all coaches grouped. **Note:** TD is total distance, TD21 is high-speed running distance, TD27 is sprinting distance, aLoaD is acceleration load, ACC2 is number of accelerations and DEC2 is number of decelerations. MD-4, MD-3, MD-2, MD-1 and MD+1 are days before (4, 3, 2 and 1) and after (1) day/s of the micro-cycle, respectively.

Table 3 shows the magnitudes of the differences (effect size and 95% CI range) between the different training days proposed by each coach in a competitive micro-cycle of a single match and seven days between matches. All coaches agreed on a very large magnitude of lower values in the neuromuscular variables (aLoad, ACC2 and DEC2) and the TD of the MD-2 session with respect to the MD-3 and MD-4 sessions. On the other hand, it was only Co2 who did not achieve clear differences in the variables between MD+1 and both MD-2 and MD-1 sessions. Only coaches Co1, Co3 and Co4 managed to differentiate with a very large magnitude the variable TD21 between MD+1 and MD-2 and MD-1. None of the coaches' proposals for session MD+1 differentiated the variables TD, TD21, TD27 (except for Co3, where MD+1 < MD-3), aLoaD (except for Co4, where MD+1 < MD-3), ACC2 and DEC2 with respect to the central sessions of the week (MD-4 and MD-3).

Table 3. Cohen's d standardized mean difference (lower and upper 95% CI) of the physical demands among training days for each coach.

		Coaches [Mean (lo95%CI/up95%CI)]				
Variable	**Training Day**	**Co1**	**Co2**	**Co3**	**Co4**	**Co5**
TD	MD+1 vs. MD-1	1.3 (0.1/2.5) *	0.5 (−1/2)	1.5 (0.2/2.7) **	1.1 (−0.4/2.7)	0.9 (−0.8/2.6)
	MD+1 vs. MD-2	3.1 (1.8/4.4) ***	0.6 (−0.8/2.1)	2.9 (1.5/4.3) ***	1.8 (0.1/3.5) *	2.7 (0.7/4.7) ***
	MD+1 vs. MD-3	0.2 (−0.9/1.3)	−1.5 (−3.1/0.1)	−0.9 (−2.1/0.4)	−1.3 (−2.9/0.2)	−0.8 (−2.6/0.9)
	MD+1 vs. MD-4	0.2 (−0.9/1.4)	−0.6 (−2.1/0.9)	−0.4 (−1.7/0.8)	−1.6 (−3.6/0.3)	−0.1 (−2.0/1.8)
	MD-1 vs. MD-2	1.8 (1.0/2.6) ***	0.1 (−1/1.3)	1.5 (0.4/2.5) **	0.6 (−0.9/2.2)	1.8 (−0.0/3.6) *
	MD-1 vs. MD-3	−1.1 (−1.8/−0.3) ***	−2 (−3.4/−0.6) ***	−2.3 (−3.5/−1.1) ***	−2.5 (−4.3/−0.7) ***	−1.7 (−3.6/0.1) *
	MD-1 vs. MD-4	−1.1 (−1.9/−0.3) **	−1.1 (−2.4/0.2)	−1.9 (−3/−0.7) ***	−2.8 (−4.9/−0.7) ***	−1.0 (−3.0/0.9)
	MD-2 vs. MD-3	−2.9 (−3.8/−2.0) ***	−2.1 (−3.5/−0.7) ***	−3.8 (−5.2/−2.4) ***	−3.1 (−5.1/−1.2) ***	−3.5 (−5.8/−1.3) ***
	MD-2 vs. MD-4	−2.9 (−3.8/−1.9) ***	−1.3 (−2.5/0.0) *	−3.3 (−4.7/−2) ***	−3.4 (−5.7/−1.1) ***	−2.8 (−5.1/−0.6) **
	MD-3 vs. MD-4	0.0 (−0.8/0.8)	0.9 (−0.5/2.2)	0.5 (−0.6/1.5)	−0.3 (−2.2/1.5)	0.7 (−1.3/2.7)
TD21	MD+1 vs. MD-1	1.7 (0.6/2.9) ***	1.0 (−0.5/2.5)	1.8 (0.5/3.1) ***	2.2 (0.5/3.8) **	0.9 (−0.8/2.5)
	MD+1 vs. MD-2	2.4 (1.2/3.6) ***	0.8 (−0.7/2.2)	2.5 (1.1/3.9) ***	2.7 (0.8/4.5) ***	1.1 (−0.6/2.8)
	MD+1 vs. MD-3	0.5 (−0.7/1.6)	−0.6 (−2.1/0.9)	0.6 (−0.6/1.8)	0.4 (−1.0/1.9)	−0.5 (−2.2/1.3)
	MD+1 vs. MD-4	0.5 (−0.7/1.7)	0.2 (−1.3/1.7)	0.9 (−0.3/2.2)	0.3 (−1.5/2.1)	0.2 (−1.7/2.1)
	MD-1 vs. MD-2	0.7 (−0.1/1.4)	−0.3 (−1.5/0.9)	0.7 (−0.4/1.7)	0.5 (−1.1/2.1)	0.2 (−1.4/1.9)
	MD-1 vs. MD-3	−1.3 (−2.0/−0.5) ***	−1.6 (−3.0/−0.3) **	−1.2 (−2.3/−0.1) *	−1.7 (−3.4/−0.1) *	−1.3 (−3.1/0.5)
	MD-1 vs. MD-4	−1.2 (−2.0/−0.4) ***	−0.8 (−2.1/0.4)	−0.9 (−2.0/0.2)	−1.8 (−3.8/0.1)	−0.7 (−2.6/1.3)
	MD-2 vs. MD-3	−1.9 (−2.7/−1.1) ***	−1.4 (−2.7/−0.1)	−1.9 (−3.0/−0.8) ***	−2.2 (−4.0/−0.4) **	−1.6 (−3.4/0.3)
	MD-2 vs. MD-4	−1.9 (−2.7/−1.0) ***	−0.6 (−1.8/0.7)	−1.6 (−2.7/−0.4) ***	−2.3 (−4.4/−0.3) **	−0.9 (−2.9/1.0)
	MD-3 vs. MD-4	0.0 (−0.8/0.8)	0.8 (−0.5/2.1)	0.3 (−0.7/1.4)	−0.1 (−2.0/1.7)	0.7 (−1.3/2.7)
TD27	MD+1 vs. MD-1	0.8 (−0.3/2.0)	−0.3 (−1.8/1.1)	0.2 (−1/1.4)	1.7 (0.1/3.4) *	0.8 (−0.8/2.5)
	MD+1 vs. MD-2	1.0 (−0.1/2.2)	−0.7 (−2.1/0.8)	0.5 (−0.7/1.7)	1.7 (0.061/3.4) *	0.9 (−0.8/2.6)
	MD+1 vs. MD-3	−0.7 (−1.8/0.5)	−2.2 (−3.9/−0.5) ***	−1.0 (−2.3/0.2)	0.8 (−0.7/2.3)	−1.1 (−2.9/0.6)
	MD+1 vs. MD-4	−0.2 (−1.4/0.9)	−0.8 (−2.3/0.7)	−0.1 (−1.3/1.2)	0.5 (−1.3/2.3)	0.7 (−1.3/2.6)
	MD-1 vs. MD-2	0.2 (−0.5/0.9)	−0.3 (−1.5/0.8)	0.3 (−0.7/1.4)	−0.0 (−1.6/1.5)	0.1 (−1.6/1.7)
	MD-1 vs. MD-3	−1.5 (−2.3/−0.8) ***	−1.9 (−3.2/−0.5) ***	−1.2 (−2.3/−0.1) *	−1.0 (−2.5/0.6)	−2.0 (−3.9/−0.1) *
	MD-1 vs. MD-4	−1.1 (−1.9/−0.3) **	−0.5 (−1.7/0.8)	−0.2 (−1.3/0.9)	−1.2 (−3.1/0.7)	−0.2 (−2.1/1.7)
	MD-2 vs. MD-3	−1.7 (−2.5/−0.9) ***	−1.5 (−2.8/−0.2) **	−1.6 (−2.6/−0.5) ***	−0.9 (−2.6/0.7)	−2.1 (−4.0/−0.1) *
	MD-2 vs. MD-4	−1.3 (−2.1/−0.5) ***	−0.1 (−1.3/1.1)	−0.6 (−1.6/0.5)	−1.2 (−3.2/0.7)	−0.3 (−2.2/1.7)
	MD-3 vs. MD-4	0.5 (−0.3/1.2)	1.4 (0.049/2.8) *	1.0 (−0.094/2.1)	−0.3 (−2.1/1.6)	1.8 (−0.3/3.9)
aLoaD	MD+1 vs. MD-1	2.1 (0.3/3.9) **	0.4 (−1.0/1.9)	1.3 (0.0/2.6)	1.2 (−0.4/2.7)	1.7 (−0.1/3.5) *
	MD+1 vs. MD-2	3.1 (1.1/5.1) ***	0.7 (−0.7/2.2)	2.2 (0.9/3.5) ***	1.5 (−0.1/3.2) *	3.6 (1.3/5.8) ***
	MD+1 vs. MD-3	1.1 (−0.6/2.8)	−1.0 (−2.6/0.5)	−0.5 (−1.7/0.7)	−0.9 (−2.4/0.6)	0.4 (−1.3/2.1)
	MD+1 vs. MD-4	−0.3 (−2.0/1.5)	−0.6 (−2.1/0.9)	0.09 (−1.2/1.3)	−2.2 (−4.2/−0.2) **	0.2 (−1.7/2.1)
	MD-1 vs. MD-2	1.0 (−0.5/2.6)	0.3 (−0.9/1.5)	0.9 (−0.1/2.0)	0.4 (−1.2/1.9)	1.8 (0.0/3.6) *
	MD-1 vs. MD-3	−1.0 (−2.6/0.5)	−1.5 (−2.8/−0.1) *	−1.8 (−2.9/−0.7) ***	−2.1 (−3.8/−0.3) **	−1.3 (−3.1/0.5)
	MD-1 vs. MD-4	−2.4 (−4.3/−0.5) **	−1.0 (−2.3/0.2)	−1.2 (−2.3/−0.1) *	−3.4 (−5.6/−1.1) ***	−1.6 (−3.6/0.5)
	MD-2 vs. MD-3	−2.0 (−3.8/−0.3) **	−1.8 (−3.1/−0.4) **	−2.7 (−4.0/−1.5) ***	−2.4 (−4.2/−0.6) ***	−3.1 (−5.3/−1.0) ***
	MD-2 vs. MD-4	−3.4 (−5.5/−1.3) ***	−1.3 (−2.6/−0.1) *	−2.1 (−3.3/−1.0) ***	−3.7 (−6.1/−1.4) ***	−3.4 (−5.8/−1.0) ***
	MD-3 vs. MD-4	−1.4 (−3.1/0.3)	0.4 (−0.9/1.7)	0.6 (−0.5/1.7)	−1.3 (−3.2/0.6)	−0.2 (−2.2/1.7)
ACC2	MD+1 vs. MD-1	2 (0.8/3.2) ***	1.3 (−0.3/2.8)	2.1 (0.7/3.4) ***	1.5 (−0.1/3.1)	1.9 (0.1/3.7) *
	MD+1 vs. MD-2	3.7 (2.3/5) ***	1.8 (0.2/3.3) **	3.8 (2.3/5.4) ***	2.6 (0.8/4.5) ***	3.8 (1.5/6.1) ***
	MD+1 vs. MD-3	1.1 (−0.1/2.2)	−0.2 (−1.7/1.4)	0.0 (−1.2/1.2)	−0.5 (−2.0/1.0)	0.4 (−1.3/2.2)
	MD+1 vs. MD-4	0.5 (−0.7/1.7)	0.2 (−1.3/1.7)	0.0 (−1.2/1.3)	−2 (−3.9/0.011) *	0.4 (−1.5/2.3)
	MD-1 vs. MD-2	1.6 (0.9/2.4) ***	0.5 (−0.7/1.7)	1.8 (0.7/2.9) ***	1.1 (−0.5/2.7)	1.9 (0.1/3.8) *
	MD-1 vs. MD-3	−0.9 (−1.7/−0.2) **	−1.4 (−2.8/−0.1) *	−2 (−3.2/−0.9) ***	−2.0 (−3.7/−0.3) **	−1.4 (−3.3/0.4)
	MD-1 vs. MD-4	−1.5 (−2.3/−0.7) ***	−1.0 (−2.3/0.2)	−2 (−3.2/−0.8) ***	−3.5 (−5.8/−1.2) ***	−1.5 (−3.5/0.5)
	MD-2 vs. MD-3	−2.6 (−3.4/−1.7) ***	−2.0 (−3.3/−0.6) ***	−3.8 (−5.2/−2.4) ***	−3.2 (−5.1/−1.2) ***	−3.4 (−5.6/−1.1) ***
	MD-2 vs. MD-4	−3.1 (−4.1/−2.2) ***	−1.6 (−2.9/−0.3) **	−3.8 (−5.2/−2.4) ***	−4.6 (−7.2/−2.0) ***	−3.4 (−5.8/−1) ***
	MD-3 vs. MD-4	−0.6 (−1.4/0.2)	0.4 (−0.9/1.7)	−0.0 (−1.1/1.1)	−1.4 (−3.4/0.5)	−0.1 (−2/1.9)
DEC2	MD+1 vs. MD-1	1.5 (0.3/2.6) **	1.1 (−0.4/2.6)	2.3 (1/3.7) ***	1.9 (0.2/3.5) **	2.2 (0.3/4.1) **
	MD+1 vs. MD-2	3.3 (2.0/4.6) ***	1.8 (0.3/3.4) **	3.9 (2.4/5.5) ***	2.7 (0.9/4.6) ***	3.8 (1.5/6.2) ***
	MD+1 vs. MD-3	−0.1 (−1.2/1.1)	−0.3 (−1.9/1.2)	−0.2 (−1.4/1.0)	−0.2 (−1.6/1.3)	0.5 (−1.3/2.2)
	MD+1 vs. MD-4	−0.2 (−1.4/1.0)	0.2 (−1.3/1.7)	−0.3 (−1.5/1.0)	−1.1 (−3.0/0.8)	0.7 (−1.3/2.6)
	MD-1 vs. MD-2	1.8 (1.0/2.6) ***	0.7 (−0.5/1.9)	1.6 (0.5/2.7) ***	0.9 (−0.7/2.5)	1.6 (−0.1/3.4) *
	MD-1 vs. MD-3	−1.5 (−2.3/−0.8) ***	−1.5 (−2.8/−0.1) *	−2.5 (−3.7/−1.3) ***	−2 (−3.7/−0.3) **	−1.7 (−3.6/0.1) *
	MD-1 vs. MD-4	−1.7 (−2.5/−0.8) ***	−0.9 (−2.2/0.4)	−2.6 (−3.9/−1.3) ***	−3 (−5.2/−0.8) ***	−1.5 (−3.6/0.5)
	MD-2 vs. MD-3	−3.4 (−4.3/−2.4) ***	−2.2 (−3.6/−0.8) ***	−4.1 (−5.5/−2.6) ***	−2.9 (−4.8/−1) ***	−3.4 (−5.6/−1.1) ***
	MD-2 vs. MD-4	−3.5 (−4.5/−2.5) ***	−1.6 (−2.9/−0.3) **	−4.2 (−5.7/−2.7) ***	−3.8 (−6.3/−1.4) ***	−3.2 (−5.5/−0.8) ***
	MD-3 vs. MD-4	−0.1 (−0.9/0.7)	0.6 (−0.7/1.9)	−0.1 (−1.1/1.0)	−0.9 (−2.8/0.9)	0.2 (−1.8/2.2)

Note: TD is total distance covered, TD21 is high-speed running distance, TD27 is sprinting distance, aLoaD is acceleration load, ACC2 is number of accelerations and DEC2 is number of decelerations. Co1, Co2, Co3, Co4 and Co5 are the five coaches training the team. MD-4, MD-3, MD-2, MD-1 and MD+1 are days before (4, 3, 2 and 1) and after (1) day/s of the micro-cycle, respectively. lo95%CI is lower 95% of confidence interval and up95%CI is upper 95% of confidence interval. Significant level is set at * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$.

Table 4 shows the magnitudes of the differences (effect size and 95% CI range) between the competitive micro-cycle planning strategies proposed by the five coaches. The five coaches used a horizontal alternation in the weekly planning of the sessions with some minimal differences. Thus, for example, Co1 and Co2 programmed tasks with a higher number of accelerations (ACC2) than Co3 in all training sessions. The greatest differences were found in the sessions closest to the competition, MD-2 and MD-1. With a long or very long magnitude, Co2 accumulated more TD, TD21, TD27, aLoaD, ACC2 and DEC2 than those of Co3 on MD-2, whereas on MD-1, Co1 and Co2 accumulated more ACC2 and DEC2 than Co3 and Co4 with a very long magnitude.

Table 4. Cohen's d standardized mean difference (lower and upper 95% CI) of the physical demands among coaches regarding training days.

		Training Days [Mean (lo95%CI/up95%CI)]				
Variable	**Coaches**	**MD+1**	**MD-4**	**MD-3**	**MD-2**	**MD-1**
TD	Co1 vs. Co2	0.8 (−0.9/2.4)	−0.1 (−1.2/1.0)	−1.1 (−2.2/−0.0) *	−1.3 (−2.3/−0.3) *	0.6 (−0.4/1.5)
	Co1 vs. Co3	0.5 (−1.0/1.9)	−0.0 (−1.0/1.0)	−0.4 (−1.3/0.5)	0.1 (−0.8/1.0)	1.1 (0.2/2.1) *
	Co1 vs. Co4	0.1 (−1.3/1.6)	−1.3 (−3.0/0.3)	−1.3 (−2.5/−0.1) *	−1.1 (−2.3/0.1)	0.1 (−1.1/1.2)
	Co1 vs. Co5	0.3 (−1.3/1.8)	−0.0 (−1.6/1.6)	−0.6 (−1.9/0.7)	−0.2 (−1.4/1.0)	−0.2 (−1.4/1.0)
	Co2 vs. Co3	−0.3 (−1.9/1.3)	0.1 (−1.1/1.3)	0.7 (−0.5/1.9)	1.4 (0.3/2.5) *	0.6 (−0.6/1.7)
	Co2 vs. Co4	−0.7 (−2.3/0.9)	−1.2 (−3.0/0.5)	−0.2 (−1.5/1.2)	0.2 (−1.1/1.6)	−0.5 (−1.8/0.8)
	Co2 vs. Co5	−0.5 (−2.2/1.2)	0.1 (−1.6/1.8)	0.5 (−1.0/2.0)	1.1 (−0.3/2.5)	−0.7 (−2.1/0.6)
	Co3 vs. Co4	−0.4 (−1.8/1.1)	−1.3 (−3.0/0.4)	−0.9 (−2.2/0.4)	−1.2 (−2.5/0.1)	−1.1 (−2.4/0.2)
	Co3 vs. Co5	−0.2 (−1.7/1.3)	0.0 (−1.6/1.7)	−0.2 (−1.6/1.2)	−0.3 (−1.6/1.0)	−1.3 (−2.7/0.0)
	Co4 vs. Co5	0.2 (−1.4/1.7)	1.3 (−0.8/3.4)	0.7 (−0.9/2.3)	0.9 (−0.7/2.4)	−0.3 (−1.8/1.2)
TD21	Co1 vs. Co2	0.4 (−1.2/2.0)	0.3 (−0.8/1.4)	−0.4 (−1.5/0.6)	−1.1 (−2.1/−0.1) *	0.9 (−0.1/1.9)
	Co1 vs. Co3	−0.3 (−1.8/1.1)	0.1 (−0.9/1.0)	−0.3 (−1.2/0.6)	0.2 (−0.6/1.1)	−0.2 (−1.1/0.8)
	Co1 vs. Co4	−0.2 (−1.7/1.2)	−0.4 (−2.0/1.2)	−0.4 (−1.6/0.8)	−0.4 (−1.6/0.8)	−0.2 (−1.4/0.9)
	Co1 vs. Co5	0.4 (−1.1/2.0)	0.4 (−1.2/2.0)	−0.2 (−1.5/1.1)	−0.1 (−1.3/1.2)	0.8 (−0.5/2.0)
	Co2 vs. Co3	−0.7 (−2.3/0.9)	−0.2 (−1.4/0.9)	0.2 (−1.0/1.3)	1.3 (0.2/2.5) *	−1.1 (−2.2/0.1)
	Co2 vs. Co4	−0.6 (−2.2/1.0)	−0.7 (−2.4/1.1)	0.1 (−1.3/1.4)	0.7 (−0.7/2.0)	−1.1 (−2.5/0.2)
	Co2 vs. Co5	0.1 (−1.6/1.7)	0.1 (−1.6/1.8)	0.2 (−1.3/1.7)	1.0 (−0.3/2.4)	−0.2 (−1.5/1.2)
	Co3 vs. Co4	0.1 (−1.3/1.5)	−0.4 (−2.1/1.3)	−0.1 (−1.4/1.2)	−0.7 (−2.0/0.7)	−0.1 (−1.3/1.2)
	Co3 vs. Co5	0.8 (−0.8/2.3)	0.3 (−1.4/2.0)	0.1 (−1.3/1.4)	−0.3 (−1.6/1.0)	0.9 (−0.4/2.3)
	Co4 vs. Co5	0.6 (−0.9/2.2)	0.7 (−1.4/2.8)	0.2 (−1.4/1.7)	0.4 (−1.2/1.9)	1.0 (−0.5/2.5)
TD27	Co1 vs. Co2	0.6 (−1.0/2.3)	0.5 (−0.6/1.5)	−0.2 (−1.2/0.9)	−1.4 (−2.4/−0.4) ***	−0.1 (−1.1/0.9)
	Co1 vs. Co3	0.2 (−1.2/1.7)	0.4 (−0.6/1.5)	−0.1 (−1.0/0.8)	−0.0 (−0.9/0.8)	−0.6 (−1.6/0.3)
	Co1 vs. Co4	−1.2 (−2.7/0.3)	−0.8 (−2.4/0.8)	−0.1 (−1.2/1.1)	−0.5 (−1.8/0.7)	0.1 (−1.1/1.2)
	Co1 vs. Co5	−0.0 (−1.6/1.5)	0.7 (−0.9/2.3)	−0.3 (−1.6/1.0)	−0.2 (−1.4/1.0)	0.1 (−1.1/1.3)
	Co2 vs. Co3	−0.4 (−2.01.2)	0.0 (−1.2/1.2)	0.1 (−1.1/1.2)	1.4 (0.3/2.5) *	−0.5 (−1.6/0.6)
	Co2 vs. Co4	−1.9 (−3.6/−0.1) *	−1.2 (−3.0/0.5)	0.1 (−1.3/1.5)	0.9 (−0.5/2.3)	0.2 (−1.1/1.5)
	Co2 vs. Co5	−0.7 (−2.3/1.0)	0.3 (−1.5/2.0)	−0.2 (−1.7/1.3)	1.3 (−0.1/2.7)	0.3 (−1.1/1.6)
	Co3 vs. Co4	−1.5 (−3/0.057) *	−1.2 (−2.9/0.5)	0.1 (−1.2/1.3)	−0.5 (−1.8/0.8)	0.7 (−0.6/2.0)
	Co3 vs. Co5	−0.2 (−1.8/1.3) *	0.3 (−1.4/1.9)	−0.2 (−1.6/1.2)	−0.1 (−1.4/1.2)	0.8 (−0.6/2.1)
	Co4 vs. Co5	1.2 (−0.4/2.8)	1.5 (−0.6/3.6)	−0.3 (−1.8/1.3)	0.4 (−1.2/1.9)	0.1 (−1.4/1.6)
aLoaD	Co1 vs. Co2	1.2 (−0.6/3.0)	0.8 (−0.8/2.3)	−0.8 (−2.2/0.7)	−0.5 (−1.9/0.8)	0.2 (−1.1/1.6)
	Co1 vs. Co3	1.3 (−0.4/2.9)	1.4 (−0.1/3.0)	0.1 (−1.1/1.4)	0.9 (−0.4/2.2)	2.0 (0.6/3.4) ***
	Co1 vs. Co4	0.9 (−0.7/2.6)	−0.4 (−2.4/1.5)	−0.6 (−2.1/0.9)	−0.3 (−1.8/1.2)	0.7 (−0.7/2.2)
	Co1 vs. Co5	0.2 (−1.5/1.9)	0.5 (−1.5/2.4)	−0.4 (−2.0/1.2)	0.4 (−1.1/1.9)	−0.5 (−2.1/1.0)
	Co2 vs. Co3	0.1 (−1.5/1.7)	0.7 (−0.6/1.9)	0.9 (−0.3/2.1)	1.5 (0.3/2.7)	1.8 (0.5/3.0) ***
	Co2 vs. Co4	−0.2 (−1.8/1.3)	−1.2 (−3.0/0.6)	0.1 (−1.3/1.6)	0.2 (−1.1/1.6)	0.5 (−0.8/1.9)
	Co2 vs. Co5	−1.0 (−2.7/0.7)	−0.3 (−2.0/1.5)	0.3 (−1.2/1.9)	0.9 (−0.5/2.4)	−0.8 (−2.2/0.7)
	Co3 vs. Co4	−0.3 (−1.8/1.1)	−1.8 (−3.7/−0.0) *	−0.8 (−2.1/0.6)	−1.3 (−2.6/0.1)	−1.3 (−2.6/0.1)
	Co3 vs. Co5	−1.1 (−2.7/0.5)	−1.0 (−2.7/0.8)	−0.6 (−2.0/0.9)	−0.5 (−1.9/0.8)	−2.5 (−4.1/−1.0) ***
	Co4 vs. Co5	−0.8 (−2.3/0.8)	0.9 (−1.3/3.0)	0.2 (−1.4/1.8)	0.7 (−0.9/2.3)	−1.3 (−2.9/0.3)
ACC2	Co1 vs. Co2	0.8 (−0.8/2.5)	0.7 (−0.4/1.8)	−0.3 (−1.4/0.8)	−0.6 (−1.6/0.3)	0.9 (−0.1/1.9)
	Co1 vs. Co3	2.1 (0.5/3.7) *	2.0 (0.8/3.1) ***	1.5 (0.5/2.5) ***	1.3 (0.4/2.2) ***	3.8 (2.5/5.1) ***
	Co1 vs. Co4	2.0 (0.3/3.6) *	0.6 (−1.0/2.2)	1.0 (−0.2/2.1)	0.5 (−0.8/1.7)	2.8 (1.5/4.2) ***
	Co1 vs. Co5	0.5 (−1.1/2.0)	0.4 (−1.2/2.0)	−0.1 (−1.4/1.2)	0.3 (−0.9/1.6)	0.5 (−0.7/1.7)
	Co2 vs. Co3	1.3 (−0.4/2.9)	1.3 (0.1/2.5) *	1.8 (0.5/3.1) ***	1.9 (0.8/3.1) ***	2.9 (1.6/4.2) ***
	Co2 vs. Co4	1.2 (−0.5/2.8)	−0.1 (−1.9/1.6)	1.3 (−0.2/2.7)	1.1 (−0.3/2.5)	2.0 (0.6/3.4) ***
	Co2 vs. Co5	−0.3 (−2.0/1.3)	−0.3 (−2.0/1.4)	0.2 (−1.3/1.7)	1.0 (−0.4/2.4)	−0.4 (−1.8/1.0)
	Co3 vs. Co4	−0.1 (−1.6/1.3)	−1.4 (−3.1/0.3)	−0.5 (−1.8/0.7)	−0.8 (−2.2/0.5)	−0.9 (−2.2/0.4)
	Co3 vs. Co5	−1.6 (−3.3/−0.0) *	−1.6 (−3.3/0.1)	−1.6 (−3.1/−0.2) ***	−1.0 (−2.3/0.4)	−3.3 (−4.8/−1.7) ***
	Co4 vs. Co5	−1.5 (−3.1/0.1)	−0.2 (−2.2/1.9)	−1.1 (−2.7/0.5)	−0.1 (−1.7/1.4)	−2.4 (−4.0/−0.7) ***
DEC2	Co1 vs. Co2	0.3 (−1.3/1.9)	0.8 (−0.3/1.9)	0.1 (−1.0/1.1)	−1.1 (−2.1/−0.1) *	0.3 (−0.6/1.3)
	Co1 vs. Co3	1.0 (−0.5/2.5)	1.2 (0.1/2.3)	1.0 (0.1/1.9) *	0.7 (−0.2/1.6)	2.9 (1.7/4.1) ***
	Co1 vs. Co4	0.6 (−0.8/2.1)	0.1 (−1.5/1.7)	0.6 (−0.6/1.8)	−0.5 (−1.7/0.7)	1.6 (0.3/2.8)
	Co1 vs. Co5	−0.1 (−1.7/1.4)	0.6 (−1.0/2.2)	0.3 (−1.0/1.6)	−0.3 (−1.5/0.9)	0.4 (−0.8/1.6)
	Co2 vs. Co3	0.7 (−0.9/2.3)	0.4 (−0.8/1.6)	1.0 (−0.2/2.1)	1.8 (0.6/2.9) ***	2.6 (1.3/3.9) ***
	Co2 vs. Co4	0.3 (−1.3/1.9)	−0.8 (−2.5/1.0)	0.5 (−0.8/1.9)	0.6 (−0.8/1.9)	1.2 (−0.1/2.6)
	Co2 vs. Co5	−0.4 (−2.1/1.2)	−0.2 (−2.0/1.5)	0.2 (−1.3/1.7)	0.7 (−0.6/2.1)	0.1 (−1.3/1.4)
	Co3 vs. Co4	−0.4 (−1.8/1.0)	−1.1 (−2.8/0.6)	−0.4 (−1.7/0.9)	−1.2 (−2.5/0.1)	−1.3 (−2.7/−0.0)
	Co3 vs. Co5	−1.1 (−2.7/0.4)	−0.6 (−2.3/1.1)	−0.7 (−2.1/0.7)	−1.0 (−2.3/0.3)	−2.5 (−4.0/−1.0) ***
	Co4 vs. Co5	−0.7 (−2.3/0.8)	0.5 (−1.6/2.6)	−0.3 (−1.9/1.2)	0.2 (−1.4/1.7)	−1.2 (−2.7/0.4)

Note: TD is total distance covered, TD21 is high-speed running distance, TD27 is sprinting distance, aLoaD is acceleration load, ACC2 is number of accelerations and DEC2 is number of decelerations. Co1, Co2, Co3, Co4 and Co5 are the five coaches training the team. MD-4, MD-3, MD-2, MD-1 and MD+1 are days before (4, 3, 2 and 1) and after (1) day/s of the micro-cycle, respectively. lo95%CI is lower 95% of confidence interval and up95%CI is upper 95% of confidence interval. Significant level is set at * $p < 0.05$, and *** $p < 0.001$.

4. Discussion

The objective of this study was to compare the planning strategy proposed by five coaches in professional soccer, considering the distribution of training sessions within a seven-day competitive micro-cycle. The main results were that: (1) all the coaches, to a greater or lesser extent, respected a horizontal alternation, with an inverted U profile, of the load distribution in the training sessions, accumulating higher values in neuromuscular and locomotor variables in the MD-4 and MD-3 sessions, and accumulating lower values in the pre-competitive sessions, MD-1 and, especially, MD-2; (2) the MD+1 or complementary session was the one that most resembled the central sessions of the week; (3) despite the horizontal alternation, there were differences in the distribution of the conditional stimuli among the coaches studied.

In conjunction with previous works [3,11,13,16,31], the present study confirmed the general tendency to accumulate a greater volume in all physical variables regardless of the coach during the central days of the week (MD-3, MD-4) with respect to the pre-competitive sessions, MD-1 and, especially, MD-2. The planning with an inverted U profile aligns with established findings in the literature [7,15,32] or references consulted [10] regarding weekly training programming. This micro-cycle strategy facilitates robust stimulation of various physical capacities, including strength, endurance and speed, primarily achieved through strategically timed acquisition sessions, typically conducted during the midweek period. The overarching goal is to foster the development and sustenance of these capacities throughout the course of the season, as previously discussed [14,15]. Stimulating different conditional aspects during the acquisition sessions of the competitive week in the central days would avoid overloading any of them, trying to avoid the phenomenon of physiological interference, and would result in an interesting strategy for approaching the game [15,32].

Focused on the demanded variables, the coaches unanimously prioritized all locomotor and neuromuscular variables (TD, aLoad, TD21, ACC2 and DEC2) on the central days (MD-4 and MD-3) of the micro-cycle. The only variable that differed regardless of the coach in the central sessions of the week (MD-3 and MD-4) was TD27, it being higher for MD-3. These results coincide with the academic literature, where a greater stimulation in terms of ACC/DEC has been described during the first day of acquisition (MD-4) [33], while variables such as TD and HSR are stimulated with priority during the second day, (MD-3) [12], of the micro-cycle. This locomotor over-stimulation of HSR performed 72 h prior to the competition could improve the workload efficiency of players (e.g., estimated distance divided by an internal load indicator or training impulse "TRIMP"), according to the principle of super-compensation [34]. However, unlike previous studies [11–13,16,32], where MD-1 is the session used for tapering with the least conditional demand, in the present study, MD-2 was the session that required the least from the players, from the conditional point of view. It is probable that stimulating more neuromuscular variables on MD-1 compared to MD-2 could be justified in that the coaches analyzed in the present study used this session with a clear pre-competitive "activation/preparation" objective that has been suggested as an optimizer of neuromuscular performance justified by the effect of delayed potentiation [35].

Regarding the particular intervention of the different coaches, it should be noted that there were some differences in their proposals. Thus, for example, coaches Co1 and Co2 programmed a greater demand at the neuromuscular level (ACC2) than Co3 throughout the micro-cycle, probably due to an intervention where reduced game formats had a greater role [36]. In addition, Co1 and Co2 reached a higher conditional demand in the two pre-match sessions (MD-2 and MD-1); that is, Co2 differed from Co3 in the locomotor variables TD, TD21 and TD27, as well as in the neuromuscular variables aLoaD, ACC2 and DEC2, while Co1 and Co2 made the players accumulate greater neuromuscular demand (ACC2 and DEC2) on the pre-match day (MD-1). It is probable that the differences found in the conditional aspects among the five coaches could be explained by the different game philosophies proposed by each one [26]. Previous studies highlighted the influence of styles of play (possession, direct, counterattack) and the different tactical formations used on the measurement of performance indicators related to physical aspects [26,35] in soccer. Different proposals in the game model would condition the design of tasks with which to develop them and, therefore, particularities in the conditional aspects demanded [37,38]. In this sense, it is highlighted that there were significant differences in all the physical variables for the MD+1 session vs. MD-2 and MD-1 except for Co2. In addition, locomotor (TD, TD21 and TD27) and neuromuscular (aLoad) variables were found to be more important on MD+1 for Co3 and Co4, respectively, compared to the central days (MD-4 and MD-3). It is important to note that, in this study, similar to previous research conducted with elite teams, distinct training strategies were employed for players with varying levels of playing time during the post-match session (MD+1). The primary purpose of this session is to address post-match recovery for players who had more playing time (>60 min) while focusing on conditional stimulation for those who played less than 60 min [16]. The MD+1 session arises to solve this imbalance in the conditional demand of players with less participation, since matches are the most important stimulus for improving and/or maintaining physiological, mechanical and neuromuscular qualities [16,39,40]. This first post-game session aims to replicate the competitive stimuli, especially those related to high speed, to maintain and even optimize the conditional dimension of players with a non-regular division throughout the season [12,16].

The current research showed some limitations that should be considered when interpreting the results: (i) the influence of an in-seasonal phase (e.g., beginning, middle or end of the season) was not considered in the comparison of the micro-cycles. This was not possible to adhere to because the periods of activity of the coaches could not be preset; (ii) the choice of a single type of competitive micro-cycle (seven days between games and a single game) left out numerous sessions and weeks of training, common in each season (micro-cycle with less or more than 7 days between games or with none or two competition games), which allowed for a partial comparison of the coaches' planning strategies; and, (iii) although the sample covered several consecutive seasons, the study was focused on the same team (club) and, therefore, on a particular way of understanding the preparation process, which conditions the generalization to other teams or clubs with different cultural and competitive contexts. Nonetheless, the data presented here add to the growing body of applied research and provide benchmarks for activity profile planning strategies and their distribution over a seven-day competitive micro-cycle in elite soccer.

5. Conclusions

In summary, this study investigated the training strategies of five professional soccer coaches within a seven-day competitive micro-cycle. A common trend among coaches was found in alternating training loads, concentrating higher demands on neuromuscular and locomotor variables during central days and reducing them in pre-competitive sessions. The complementary session (MD+1) stood out as crucial. Variability in conditioning demands among coaches was observed, likely influenced by preferred training philosophies and playing styles. This study reinforces the effectiveness of the inverted U-profile micro-cycle strategy, strategically stimulating various physical capacities. Despite some limitations, this research contributes to the understanding of elite soccer training and provides insights into activity profile planning strategies within a competitive micro-cycle.

6. Practical Application

Understanding how coaching changes and their strategies impact players' physical demands is valuable for coaching staff. It allows for the optimization of training periodization by adjusting the volume and intensity of training tasks to align with the new coach's vision while considering the players' previous habits before the coaching change. This holistic approach to coaching transitions goes beyond traditional performance indicators, offering insights into the procedural aspects and playing style, which are crucial for long-term team success.

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