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A case study of applying collective technical-tactical performance goals in elite men's volleyball team

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Abstract

The purpose of this study was to test a protocol for establishing collective technical and tactical performance goals in elite men's volleyball. The participants were a professional volleyball team. The period of study was one entire season. A baseline was established in the first half of the season, and the intervention was carried out in the second half of the season. The intervention involved the use of seven collective performance goals for monitoring the team in competitions. The variables studied were: the achievement of the collective performance goals that were established; the game phase; the result of the set; and the players', coaches', and psychologist's perception of the use of the performance goals and the poster. The team slightly increased the number of goals achieved per game in the intervention period. There was a significant reduction in serve errors and a significant increase in block contacts. The intervention increased the players' engagement with the team, although there were differences in opinion about the effect on the different players. The intervention improved the players' understanding of the match. The effects of the goal-setting and the poster were positively perceived, due to helping the players to understand their needs and the aspects to improve.

Key words: team sport, performance analysis, training, goal setting

Introduction

Monitoring practices and competitions is an important part of a coach's job. One of the goals of testing and monitoring is to ensure that the work that is done is appropriate (Sands, 2005a). The use of standard tests and assessment in practices and the evaluation of competitions are common (McGown et al., 1990). These tests, after their design and validation process, usually provide reference values that allow coaches to evaluate their athletes (Sands, 2005b). However, a consequence of tests is that they interrupt an athlete's practice (e.g. the need to follow a specific warm-up and a specific protocol). From this perspective, an ideal test is integrated into the athlete's practice (Goldsmith, 2008; MacDougall, Wenger, & Green, 1991; Palao, 2010; Sands, 2005a). For this reason, strength and conditioning coaches establish goals for the athletes to achieve in practice, such as, a certain weight to lift at a specific speed or power (i.e., González-Badillo & Ribas, 2002; Izquierdo & González-Badillo, 2008). This measurement protocol is standardized with regard to the manner of

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execution, reference values, and the way the data are analyzed. The Bosco Test is a good example of this type of player monitoring (e.g. height in the drop jump) (Bosco, 1992).

For the training of technical and tactical aspects, the use of performance and process goals is common in practices and competitions (Palao & Hernandez, 2014). However, although the protocols used by coaches to establish and implement these goals in practices are well defined in the literature (Burton & Raedeke, 2008), some aspects of the procedures required to set the goals and their viability in peak performance sport are not clear. In professional sports, teams' composition changes every year, which affects the teams' dynamics and the teams' confrontations. Further, at different levels of competition, the normative profiles of the performance indicators also change (Palao & Hernandez, 2014). Team goals must be adapted to the changing situation of each new season. Reference values must be calculated each year by taking into consideration one's own team's characteristics, and the opponent's characteristics. Therefore, although the process to set goals is well defined, the success of the goal-setting process depends on the accuracy of the reference values for the competition and the team (Burton & Raedeke, 2008).

It must be considered that a significant imbalance and disconnect exists between the academic literature and coaches' actions (Esteves et al., 2010; Williams & Kendall, 2007). Studies have shown that the use of goals is beneficial (Morán, 2004), yet coaches do not use research articles as a source of information (Esteves et al., 2010; Williams & Kendall, 2007), and they tend not to trust research studies because they are not done in real situations or with elite or professional athletes (Williams & Kendall, 2007). In other words, coaches are likely using their accumulated data, experience, and subjectivity to establish athletes' goals instead of using systematic and evidence-based protocols. Therefore, the present study describes an experience that combines the work of researchers and coaches to test procedures and adaptations in goal-setting protocols when working with athletes in team sports. This collaboration tested how normative profiles and performance indicators could be used to set objective goals and how they could be integrated into the training and the team dynamics of an elite team during a competitive season. The aim of this study was to test a protocol for establishing technical and tactical collective performance goals in an elite men's volleyball team.

Methods

Participants

The participants played in a men's professional volleyball team from Spain's first division that was ranked third in the regular season the year it was studied (2009-2010 season). The team was composed of 14 players, a two-member coaching staff (i.e. a head coach and one assistant coach), and three part-time support members (i.e. a psychologist, a physical therapist, and a representative). The assistant coach fulfilled the roles of statistician and strength and conditioning coach. The characteristics of the players were: mean age of 23.3 years, mean height of 1.94 m, and mean height reach of 2.50 m. The technical staff had the maximum Spanish coaching certificate and a minimum experience of five years of coaching in peak performance. The psychologist had his licensure in psychology. The study was carried out with the collaboration between researchers and coaches as part of the team's training process. A member of the coaching staff carried out the statistical analysis of the matches and several practices using specific match analysis software (Data Volley, Data Project Sport Software, Bologna, Italy). Each player received an individual report of the effectiveness of his individual actions and the total team actions after each match. Neither coaches nor players had experience setting goals in this way. The goals of the study were set by the coaches and researchers. The researchers did not interact with the players before or during the intervention to avoid influencing the sample. The study was approved by the University of Murcia's Institutional Review Board.

Procedures

The period of study was an entire season that was divided into two halves: the first round (11 matches) and the second round (11 matches). A baseline was established in the first round, and the intervention was carried out in the round. The intervention involved the use of seven collective performance goals for monitoring the team in competitions. A poster placed in the locker room was used to show whether the players achieved these goals. The performance goals were used to guide the practices.

Each week involved: six technical-tactical sessions, two or three weight-training work outs, one or two team meetings, and one match. On the first day of the week, the head coach established the objectives for the week, the scheduling, and the type of work to be done. Before each match, two meetings were held to discuss the game plans. The coaching staff used video to study the opponent's game tendencies in one meeting, and they used the scouting report and the game plans in the other meeting. All matches were analyzed by the assistant coach using Data Volley (Data Project Sport Software, Bologna, Italy). The data were used to provide information to the head coach throughout the match. A complete match report about the players and team was placed in the locker room after each match. The psychologist met the team every two weeks. The psychologist provided imagery, relaxation, self-talk, and other techniques to the team, but not goal-setting. During the period of the intervention, the psychologist used the collective data and the poster in his intervention (for both team and individual meetings). The team had both collective and individual meetings before the season started to establish technical, tactical, and weight-training objectives. These objectives were reviewed halfway through the season. A specific meeting was carried out to explain the poster, the performance goals, and the intervention to the team.

Variables

The variables studied were: the achievement of the collective performance goals that were established; the game phase; the result of the set; and the players', coaches', and psychologist's perception of the use of the performance goals and the poster. The four-step approach (adapted from Bull, Albinson, and Shambrook, 1996) was used to establish the reference values for the performance goals. The first step was to establish the criteria for calculating and analyzing the performance (which involved researchers and coaches). The second step was to do descriptive (e.g. mean, standard deviation, baseline of won and lost sets, and percentiles) and inferential analyses (e.g. Chi-square Test and likelihood ratio) of the data to compare won and lost sets. The third step was to compare the results obtained with data from previous studies in the literature (e.g. normal values and win/loss studies). The fourth was for the coach and researchers to review the data to establish performance goals following the SMART principle: specific, measurable, affirmative, realistic, and time-based. The reference values for the technical and tactical performance goals that were established and used in the intervention are demonstrated in Table 1.

Table 1. *Technical and tactical performance goals in elite male volleyball players (data from the analysis of the team in the previous year and the first half of the season).*

TECHNIQUE	CRITERIA	GOAL
Reception	Efficacy (Perfect - Error)	55% or higher
Attack	Efficacy (Points - Error)	40-45% or higher
Counter-attack	Efficacy (Points - Error)	20-25% or higher
Serve	Percentage of error	9% or lower
Serve	Percentage of points and actions that reduce the opponent attack options	35-40% or higher
Block	Number of contacts per set	3 points & 3 contacts that allow team to continue playing (or more)
Dig	Number of contacts per set	6 contacts that allow team to continue playing or more

The performance goals monitored the level of efficacy of the six game actions (i.e. serve, reception, attack, block, court defense, and counter-attack). The efficacy was measured in relation to the action's success and the options it provides to the posterior action. Data recording was done using the Data Project software (Salermo, Italy). The assistant coach who was in charge of the statistics of the team carried out the observation (inter-observer and intra-observer reliability >0.80 and >0.98 (Cohen's Kappa), respectively). The assistant coach in charge of game statistics had the national volleyball coaching certification, a sport science degree, and more than ten years of coaching experience doing statistical analysis. The inter-observer reliability was calculated with one researcher. The inter-observer and intra-observer reliability was calculated using one match from the previous season. During the intervention process (in the second half of the season), the achievement level of the collective performance goals which were established for each match was indicated on a poster. From the raw observation data, the established criteria were automatically calculated using the spreadsheet that the Data Project software provided. The poster was updated immediately after each match.

A interview was done to evaluate the perception of the goal-setting intervention and poster by four players (that is, the starting setter and captain, a reserve receiver, the starting universal, and the starting middle blocker), the two coaches, and the psychologist. The interview questions focused on the effectiveness of the intervention on the team both collectively and individually. The questions specifically focused on: the perceived effect related to performance; the level of involvement; the work done for the performance goals that were achieved and those that were not achieved; understanding the match, practice, and competitions; and the general effect.

Data Analysis

Skill efficacy values were calculated for each match. The SPSS 21.0 statistical package was used to perform descriptive and inferential analyses. Means and the Wilcoxon Test, with alpha set a priori at .05, were used to study the differences between the first and second halves of the season.

A researcher transcribed the interviews and carried out an inductive content analysis following an adaptation of the criteria by Mathers, Fox, & Hunn (1998). From the interview transcript, the researcher grouped the concepts and themes.

Results

Quantitative Data

In table 2, the goal-setting results throughout the season can be observed. In each of the two halves of the season, the team won six of 11 matches. The team slightly increased the number of goals achieved per game in the intervention period. The average number of performance goals achieved per match, out of the 11 goals, increased from 2.09 goals per match in the first half of the season to 2.45 goals per match in the second half of the season. Specifically, the team achieved the following performance goals in more matches of the second half of the season: attack efficacy, counter-attack efficacy, serve error percentage, and block contacts. There was a significant reduction in serve errors ($p<0.005$) and a significant increase in block contacts ($p<0.046$).

Qualitative Data

Four general themes were found in the content analysis of the post-study interview that summarized the players', coaches', and psychologist's responses to the intervention. These are: increase in the engagement of the players with the team, differences in the individual effect of the intervention, improvement in the players' understanding of the match, and the effect of the goal-setting and the poster.

Increased engagement of the players with the team. All the players who were interviewed, as well as the coaches, coincided in the perception that the use of the performance

Table 2. *Level of achievement of the performance goals established in the first half and second half of the season and match result.*

	Opp. 1		Opp. 2		Opp. 3		Opp. 4		Opp. 5		Opp. 6		Opp. 7		Opp. 8		Opp. 9		Opp. 10		Opp. 11		Total	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Reception efficacy	62.82	47.14	48.39	41.11	47.67	47.62	46.48	40	39.29	61.11	62.07	50	50	49.37	56.04	55	56.99	55.81	57.14	58.93	58.49	41.76	53.22	49.80
	Yes	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	6 out of 11	3 out of 11
Attack efficacy	43.84	39.29	37.8	34.21	43.04	47.95	33.33	24.07	40.58	38	44.64	52.94	28.95	57.75	41.25	25.93	44.58	57.89	63.16	48	65.96	48	44.28	43.09
	No	No	No	No	No	Yes	No	No	No	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	2 out of 11	6 out of 11
Counter-attack efficacy	32.81	39.29	21.67	38.3	45.24	38	8.33	43.48	53.85	23.81	37.78	33.33	40.54	18.97	27.5	52.63	20.69	42.86	44.12	31.58	33.33	26.67	33.26	35.36
	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	8 out of 11	9 out of 11
Serve error percentage	10.42	14.75	7.76	9.70	14	9.67	15.48	13.79	13.46	6.66	10.67	15.38	10.26	10.31	11.43	9.58	12.15	8.22	12.77	10.81	12.33	10.2	11.88*	10.82*
	No	No	Yes	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No	1 out of 11	2 out of 11
Serve limited opp.	29.26	21.39	27.3	17.54	28.09	25.87	23.95	17.29	24.2	25.43	20.08	17.99	32.15	23.81	24.87	27.47	27.12	23.32	37.27	27.05	17.88	21.5	26.56	22.61
	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	1 out of 11	0 out of 11
Block contacts	5.75	3.33	5.2	8	4	5.5	3.75	3.66	4.6	7.33	7	7.667	3.75	8.75	4.4	8	6.6	7	5.5	8.33	7.67	5.6	5.29*	6.65*
	No	No	No	Yes	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No	3 out of 11	7 out of 11
Dig contacts	6.75	3.67	4.2	3.4	3.2	5.25	2.75	3	2.2	3.66	6.67	4	1.75	3.5	2.6	5.33	4	4	4.25	5	2.33	2.2	3.70	3.91
	Yes	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	2 out of 11	0 out of 11
Goals	3	1	1	2	1	2	0	1	1	3	4	3	1	2	2	2	2	5	4	4	4	2	2.09	2.45
Result	3 : 1	0 : 3	3 : 2	2 : 3	2 : 3	1 : 3	1 : 3	0 : 3	2 : 3	3 : 0	3 : 0	3 : 0	1: 3	3 : 1	2 : 3	3 : 0	3 : 2	3 : 0	3 : 1	3 : 0	3 : 0	2 : 3	-	-
Won/Lost	Won	Lost	Won	Lost	Lost	Lost	Lost	Lost	Lost	Won	Won	Won	Lost	Won	Lost	Won	Won	Won	Won	Won	Won	Lost	6 out of 11	6 out of 11

Legend: * Level of significance between the first and second halves of the season (error serve ($p<0.005$) and block contacts ($p<0.046$)).

goals and the poster increased the involvement of the players as a team. During the interview, they commented:

"It gave a collective view of the match. The team tried to achieve the goals together. It was a reference to improve on or to maintain in competitions and in practices" (Starting middle blocker).

"It increased the involvement of the players in teamwork…".

"Some players, like [name of the starting setter], always talked to the rest of the players about the values and the poster in the locker room and in practice" (Starting middle blocker).

"[It was] very positive, everyone wants to see the green check mark" (Starting setter).

"[It was] very positive. It was a different stimulus…". "The poster was a positive reinforcement for the team, for the group…" (Head coach).

"Higher involvement of the players during the training process…". "They know what needs to be worked on. It focused player attention" (Assistant coach).

"Very positive influence…". "It helped to focus the attention of the players, their motivation, involvement, commitment, team cohesion" (Psychologist).

Differences in the individual effect of the intervention. Not all the players and staff members agreed about the individual effect of the intervention. Some players mentioned that the effect was only on the selected actions and only for the players that participated in competitions. However, others mentioned that it helped them to focus on their actions and on the actions of the rest of the players.

"It helped the players to know what to work on in practice individually and collectively. Players were involved in the work of other players" (Starting middle blocker).

"[It was] positive both collectively and in competitions… individually, and in practice, it has not had an effect" (reserve receiver).

"It was not useful for the setter individually because it did not include information about the action…". "I used other aspects such as number of blockers, quality of the pass, etc." (Starting setter).

"Players need things to be specific… it was a good way to establish the path [to follow]. The players saw, felt, and shared the process" (Head coach).

"Players know now where they must focus, where they need improvement" (Assistant coach).

"The involvement has been collective and individual... The players were more involved in the roles" (Psychologist).

Improvement in the understanding of the match. Players and coaching staff emphasized the usefulness of the intervention to understand what happened in the match.

"[It was] really informative about the match…". "A lot of players, after a match, think that we won or lost because of our attack. It helps us to improve in knowledge of the game and aspects that affect the result" (Starting universal).

"It clarified situations… gave clear ideas about the game... It presented the information really clearly" (reserve).

"Information about the match was clear and graphic… the statistics report has too much information. The information was decoded… if we do this, we obtain this" (Starting middle blocker).

"It gives collective information … it complements the statistics report. Although we lost some matches, it gave us information about whether we were doing the things properly. It reflected the information about the match clearly; the statistics report has too many values. Now we know what needs to be improved. The statistics report helps to check the explanation" (Starting setter and captain).

"The poster said the same as the statistics, but it was briefer… it analyzed the match in a critical way. It helped players know if we were going in the right direction or not" (Head coach).

"The poster has helped players know what happens in the match… it avoided subjective or emotional opinions… the same for the coaches" (Assistant coach).

"It gave information to the player about where he must focus his attention" (Psychologist).

General impact of the goal setting and the poster.

Players and coaching staff emphasized how the elements used in the intervention help them to guide their actions. All of the players did not agree on the impact on practice.

"It helped us to understand the needs of the team, what we had to work on, for example, controlling the serve errors…". "Players know what we have to emphasize in practice" (Starting universal).

"To see things [that need] to improve... aspects to improve" "It helped in relation to competitions, not practices. The poster did not affect practice" (Starting universal).

"[Its effect was] positive… it should have been used in the first half of the season" (Starting middle blocker).

"It gave information showing what needs to be worked on … the next step [should be] that coaches establish what we are going to change or work on to correct this aspect" (Starting setter).

"It was helpful…". "It was always there showing us the way…". "Sometimes it looked like the poster was observing you…". "Every player has to get involved". "The criteria and the values were really well studied and established" (Head coach).

"[…] It helped a lot to orient the work week …" "To orient the feedback given by the coaches during practice …" "It gave the same perspective to coaches and players which improved their communication" (Assistant coach).

"I have used the information from the poster a lot in my discussions with the players …". "I have used examples of situations to use the mental skills that I work on with the players, like self-control [and] positive self-talk" (Psychologist).

Regarding the goal setting, the coaches and the psychologist commented that the performance goals were adjusted perfectly to the team. However, the coaches commented that for the future, when the team plays against weaker teams, the performance goals should possibly be raised so the team does not relax. The psychologist also mentioned the idea of sometimes using ranges to reduce the stress of the team. While most thought that there was no need to change or improve the poster, the captain suggested the idea of adding more information, the exact values that were achieved, and not only whether or not the goal was achieved. However, the rest of the players commented that more information would be an overload.

Discussion

The purpose of this study was to test a protocol for establishing collective technical and tactical performance goals in elite men's volleyball. This was done through collaborations between coaches and researchers and in a real situation with elite athletes. The quantitative results showed slight improvements in the collective efficacy of the team between the first half of the season and the second half of the season, as demonstrated by the increase in the achieved goals. These slight improvements were only significant for two of the seven goals. They were the serve error, which depends on the level of risk assumed individually by the server, and the number of balls that the blocker makes contact with, which can be related to the degree of the blocker's involvement in the game. These results differ from previous studies carried out in young players (Zetou, Papacharisis, & Mountaki, 2008). The reason for these differences can be related to the difficulty in improving performance at higher levels of competition (Hopkins, 2004). Older, more experienced, and higher-level players improve less than young players with training (Kitsantas & Zimmerman, 2002; Moreno et al, 2008). Further, the coaches in this study set the goals using the whole match as the reference (as opposed to the set) in an attempt to promote the achievement of the goals during the entire match. This results in won and lost sets compensating their values. If goal achievement is considered by set, the amount of goals achieved in the sets that were won was higher.

The study compared two confrontations between the same teams but at different moments of the season, in different locations, with possible changes in starting players and rotations, etc. Therefore, the second confrontation might be influenced by the previous match, the home/away

aspects, the moment of the season, the season's peak, etc. (Marcelino, Mesquita, Palao, & Sampaio, 2009; Marques, van den Tillaar, Vescovi, & González-Badillo, 2008). This is a limitation of doing applied research with elite athletes in real situations where there are many variables that affect performance.

The qualitative data showed the positive effect of establishing these performance goals. All players and staff members interviewed agreed on the positive effect of the poster with regard to team involvement, cohesion, and increased motivation. The coaches and the psychologist observed that their tasks were easier with regard to feedback, engagement, etc., that the intervention provided because the players were more focused. However, not all the players agreed that the analysis of the match through goal achievement affected the team's practices. A possible reason for the fact that a reserve receiver did not agree is that the data presented in the poster did not apply to him (i.e. it only included data from starters). Previous studies have shown frustration on behalf of non-starting players (Kerr and Males, 2010). A possible solution would be to do similar monitoring in some practices, both individually and collectively, to involve the reserves more in this process.

The starting setter partially agreed with the use of the poster and the work done in practice. He commented that the performance goals were general, and now the coaches needed to study exactly where the problem was through the game statistics in order to create specific tasks for practice to solve this problem. He perceived that the poster helped in regard to motivation, but to actually improve the performance goals that were not achieved, specific work is needed. His opinion supports the fact that defining and setting goals related to performance indicators provides information to help understand the players' and team's actions and provides information to guide practices and competitions (Hughes & Bartlett, 2002).

All the players and the psychologist commented that they should have used the poster at the beginning of the season. However, to measure the effect of the intervention, this was not possible. The initial base line was needed to evaluate the impact of the intervention. If the poster would have been introduced at the beginning, the values from previous years or generic references would have to be used, which is not always accurate for the current season's team. These values should be reviewed and adapted when data from each current season are available. The use of the poster with the team's performance indicators helped the players to better understand the match, to know which aspects were the most important ones, and to see what the team should emphasize in practice (O'Donoghue & Mayes, 2013). Players and coaches remarked that the poster was clearer, easier, and more graphic than the statistics report. The poster helped them to get a more general overview and a complete picture of the match. The poster helped to provide objective information about the match and helped avoid simplifying the match's result by merely relating it to the efficacy of the attack. It was the first step in understanding how the team was working. This idea was shared by the coaches and the starting setter. The poster helped to make sense of the statistics report. The comments provided by the players make it appear that the report was too complex and included too much information. Previous research has shown that coaches tend to simplify their mathematical analysis of the game in order to make it more accessible to players (Palao & Hernández-Hernández, 2014). However, these data show that there is work to do in the way statistical data are presented to players. A common error made by coaches is presenting the players the same information that coaches use to analyze the matches without considering players' education, long-term development, background, and understanding of the information (Kristiansen, Tomten, Hanstad, & Roberts, 2012).

With regard to whether the performance goals that were established were adequate or not, the average number that were achieved when the team won the match was three out of seven. This value shows that the performance goals may have been too difficult. One of these goals (i.e. serve that limited the opponent's attack) was only achieved in one match. However, the coaches asserted in the interview that the performance goals were adequate. The coaches thought that in some cases they would even increase the difficulty

of them when a team played weaker teams. The psychologist commented that in some cases the difficulty should be reduced to the lower limit of the goal's range to reduce the players' stress. These results show the different perspectives they have on how goals should be set in order to challenge and be useful for the team. Everyone agreed that giving consideration to the data from the previous year and the first half of the season was the reason that the performance goals were adequate for the team. The starting setter commented that the absence of specific performance goals about the set skill reduced the goals' applicability to him. It should be noted that the coaches were the ones that preferred to include two performance goals for the serve and none for the set. The reason for this decision was that after analyzing the data from the previous year, the serve was found to be the weakest skill for the team; therefore, the serve was established as an objective to improve throughout the whole year. Due to the team's low serve performance, the coaches and researchers agreed that the opponent's serve level should be used to establish the performance goals (not the serve from the analyzed team), and players knew this. No goal was included about setting because it would have involved a change in the way the statistics were collected by the team. This aspect may create problems in setter development and coach-athlete communication, due to the team's lack of adaptation to the player's needs (Kristiansen, Tomten, Hanstad, & Roberts, 2012).

Another aspect that the coaches and psychologist mentioned indirectly was in regard to the division of roles and responsibilities among the coaching staff. If the different members do not interact and collaborate to increase performance, the concept of teamwork is lost. In this study, the head coach wanted to use the goal setting to get the different coaching staff members to work together. For example, previously, the psychologist used individual goals for the intervention with the players but during the intervention period, he established relationships between these performance goals and the team outcome goals. For this team, the coaches understood tension and stress as part of competition, like something necessary to get focused, engaged, and to achieve success. On the other hand, the psychologist was always trying to reduce the stress and tension that the players had and to give them mental strategies to achieve this. The collaboration between the different professionals on staff is critical to achieve success (Johnson, Andersson, & Fallby, 2011).

Conclusions

The establishment of seven collective technical-tactical performance goals and the use of a poster placed in the locker room to demonstrate these goals to the team have a positive effect on the team both quantitatively (serve errors and block participation) and qualitatively (increased involvement and motivation, increased ability to focus, and a clearer idea of what happens in matches). The qualitative data show that the proposed protocol with adaptations to the specific situation of each team may be a starting point to establish performance goals in elite teams. The present proposal of goal-setting attempted to also establish a link between the available information in the research literature and the different members of the coaching staff (coaches, strength and conditioning coaches, psychologist, etc.).

The data presented are a case study; therefore, the results cannot be generalized. Further, sport performance depends on many aspects, and most of them cannot be controlled. The differences between the first and second halves of the season were the results of the team's training, work outs, tactical changes decided on by the coaches, opponents' actions, and many other reasons. The study shows the implication of establishing the performance goals, the use of the poster on a professional team, and the perception of the players and coaching staff on training and competitions.

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