Original Article

Coaching behaviors and the type of feedback they provide to young volleyball athletes

MARIA GIANNOUSI¹; FERENIKI MOUNTAKI²; GEORGE KARAMOUSALIDIS³; GEORGE BEBETSOS⁴; EFTHIMIS KIOUMOURTZOGLOU⁵

^{1,3,4}Research Associate, School of Physical Education and Sport Science, Democritus University of Thrace, Komotini, GREECE

²Research Associate, School of Physical Education and Sport Science, Aristotle University of Thessaloniki, GREECE

⁵Professor, Department of Sport Sciences, University of Nicosia, CYPRUS

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Abstract:

The purpose of the present study was to examine the coaching behaviors based on youth sport context through systematic observation. Verbal and nonverbal behaviors were video recorded during two practices for each coach. Coaching behavior was evaluated using the instrument of Pereira, Mesquita and Graça (2009). Results showed a large proportion of reported coaching behaviors, specifically 14.015 comments, 537 comments were recorded for “task explicitness”, 590 comments were for “exigency type in presentation”, 785 comments about “exigency type during practice” and the most comments 4844, about coach “reaction of accomplishment task”, especially in “encouragement”. About the coaches’ “instructional tasks” the most were for “informing” the athletes about the tasks (475) and regards “the nature of information” the majority of comments were for “general comments” (3216) and for “technique” (2288). Mann-Whitney analysis revealed that there were differences between coach comments and the athletes of U12 and U18, at “task explicitness” especially in “criteria form” and the “exigency type on tasks presentation” especially in “performance quality” with coaches of the U-18 group presenting significantly higher values. Differences also found in between the athletes’ age group and “exigency type during practice” especially in “participation/effort” and “coach reaction of accomplishment tasks during practice” differences also were found in “punish” and “no reaction”, with coaches of the U-18 group presenting significantly higher values. Referred on the nature of the coach’s instruction during practice there were differences between age groups and comments in “technique”, in “individual” and “team tactics” with coaches of the U-18 group presenting significantly higher values in all three instruction variables. These results may help create environments that foster positive psychosocial development of young athletes in Greece.

Key words: coach, competency, efficacy, young athletes, reliability, validity.

Introduction

Coaching behaviors and their effect upon athletes have always been interesting for researchers, since the role of the coach and coaching behaviors are directly connected to the athletes’ performance. The evaluation of coaching behaviors is an important part of sports development (Weiss, 2004; Malina & Clark, 2003; Smoll & Smith, 2002). Coaching behaviors can be either positive or negative for athletes (Smoll & Smith, 2006). Coaching is a highly influential role, especially in youth sport and can have a significant effect on the states and attributes of the participants, and subsequently, the individual and social benefits of sport. Appropriate coaching behaviors have been linked to higher self-esteem, higher competence, and longer involvement in sport (Amorose & Anderson-Butcher, 2007; Conroy & Coatsworth, 2006; Smith, Zane, Smoll, & Coppel, 1983). Coaches also influence the youth sport experience through their goals, behaviors, values, and attitudes (Fraser-Thomas & Côté, 2009; Newin, Bloom, & Loughhead, 2008; Smith & Smoll, 2002; Bebetos, Zetou, & Antoniou, 2014).

The degree of enjoyment experienced by youth and their desire to continue their involvement in sport has largely been influenced by their coach or physical education (PE) instructor (e.g., Fraser-Thomas, Côté, & Deakin, 2005; Weiss & Williams, 2004; Smoll, Smith, Barnett, & Everett, 1993; Vernadakis, Kouli, Tsitskari, Giouftsidou, & Antoniou, 2014). In fact, about the one-third of youth athletes do not participate in sport the following year (Weiss & Ferrer-Caja, 2002). Several reasons have been cited for sport withdrawal including disliking the coach or the PE instructor (Hedstrom & Gould, 2004; Kouli, Bebetos, Kamperis, & Papaioannou, 2010).

There are many factors that determine coaching behaviors. Lately, an effort is being made in order to find out which are these factors, since it has been proven that they are interconnected with the coaches’

efficiency (Horn's Model of Coaching Effectiveness, Horn, 2008). Coaching characteristics refer to the initial opinion or expectation that coaches have for their athletes (Horn, 1986), to the goals they will set and to the communication they will develop. The way each coach or PE instructor designs and implements their daily practice plan, is directly affecting the learning process, as well as the likelihood of injury and consequently the performance of the athletes (Beneka, Malliou, Gioftsidou, Tsigganos, Zetou, & Godolias, 2009; Zetou, Malliou, Lola, Tsigganos, & Godolias, 2006). The research on the factors that determine coaching behaviors and efficiency is an effort that has been going on for three decades and investigate the particular coaching characteristics, the abilities, the knowledge, the strategies, the techniques and the coaching behaviors that coaches exhibit and whether these are related to the coaches' efficiency. Duda and Ballaguer (2007), mention in their research that the role of the coaches is a multi-level one. Coaches and PE instructors need to have multiple skills since they have a significant influence on their athletes (Jowett, 2003; Reinboth, Duda, & Ntoumanis, 2004) but they should also be capable of providing support to their athletes in order to create, improve and maintain their competition level. Successful coaches and PE instructors are able and can motivate their athletes/students, providing them an environment that is suitable for learning, improvement and development (Antoniou, Gourgoulis, Trikas, Mavridis, & Bebetsos, 2003; Vernadakis, Giannousi, Tsitskari, Antoniou, & Kioumourtoglou, 2012) and they are the ones that are near their athletes and solve any problem might arise (Bandura, 1997).

An efficient coach can influence the nature and the quality of the experience of his/her athletes and for this reason he/she must have excellent scientific techniques (Cushion & Jones, 2001; Mesquita, Sobrinho, & Rosado, 2008) and knowledge, regardless of the age or the competition level of his/her athletes (Giatsis, Zetou, & Tzetzis, 2005). He/She should be able to aim to his/her athletes' self-confidence and to be in a position to control them under stressful situations, especially at a high level (Chen, Chang, Hung, Chey, & Hung, 2010), a useful attribute, not only within the narrow framework of a team, but in their lives in general. An effective coach or PE instructor should possess educational competency, should be able to design and construct the training appropriately, should be able to provide correct guidance with positive feedback and avoid negative comments (Amorose, 2007; Henderlong & Lepper, 2002; Horn, 2002), by correctly showing models of other athletes and seeking to exhibit the behavior that his/her athletes expect of him/her (Duda, 2001; Laughlin & Laughlin, 1994; Vernadakis, Papastergiou, Zetou, & Antoniou, 2015).

A research of Zetou, Kourtessis, Giazitzi, and Michalopoulou (2007), was recorded the management of time-outs of the game as well as to record and evaluate the coaches' comments using the "Instrument for Recording Coaches' Comments during Time-Outs" (Hastie, 1999). It was found that most of them referred to game tactics (50.85%), followed by psychology-related comments (26.70%), while irrelevant and technique-related comments were even less (19.61% and 2.84% respectively). Tzioumakis, Michalopoulou, Aggelousis, Papaioannou and Christodoulidis (2009) and Zetou, Amprasi, Michalopoulou, and Aggelousis (2011) research was recorded and evaluated the practice behaviors of Volleyball coaches, through feedback that they provided to their athletes. Verbal and nonverbal behaviors were video recorded during practices. Results indicated that a large proportion (17.38%) of reported coaching behaviors were about "Tactical Instruction", followed by "General Instruction" (15.92%) and "Technical Instruction" (12.42%). "Encouragement" and "Motivation" were 10.76% and 10.73% respectively. "Other Comments" and "Demonstration" were in lower rate.

Another important factor for the coaching efficiency, except for coach's behavior, is what to do for the planning, the organization and the management of the practice sessions. There are general rules about where he should be standing and speak to his athletes. The volume of his voice and the words he uses should be the appropriate for the age of his athletes. Therefore, the main purpose of this study was to evaluate the coaches' effectiveness, in comparison to their behavior that is related to a) the organization of the practice, b) the result of the explanation given about the goal of the exercise, c) the type of explanation given, d) the coaches' reaction to an exercise that was not completed, e) the goal of the instructions given and f) the nature of the instructions given, in relation to the age of the athletes. It was hypothesized that coaching behaviors would differ based on the age of the athletes (Gallimore & Trudel, 2009; Horn, 2008). This research is important since it presents exactly what coaches of young athletes put into practice at court and cites any shortcomings in organization, as well as in their behavior. The conclusions of such studies consist of a guide of intervention and improvement of coaching behaviors and, as a consequence of the athletes' performance.

Material & methods

Participants

The participants of this study were 41 Greek Volleyball coaches (29 women and 12 men), aged of 21 to 51 years old ($M=30.24$, $SD=9.52$) and with experience from 2 till 10 years. They were all coaches of young athletes aged 10 to 18 years old, of Greek volleyball clubs. The coach of each club was informed about the purpose of the research and he sign up, before the video recording. The researcher avouches that he did not disturb the practice procedure and the private elements of coach should be keeping, confidential and anonymous.

Recording Procedure

For the purpose of the study there were a systematic observation on 82 training sessions (two practice sessions for each coach) and then the coaching behavior was coded according the observation tool variables (Van der Mars, 1989). A digital video camera was used, simultaneously with sound recording using wireless microphone for each coach. 15 minutes before the practice the researcher was in the court for testing the camera and microphone. Video recording was started when the athletes were all presented and ending when the coach gave the signal that the practice was ended. The video was placed in a high corner of the court, so that to cover all the movements of coach and of his athletes. The microphone was put on coach uniform, without blocking his free movement in the court. After the video recording the video was code and analyzed through the VLC program. The video recordings for each coach were carrying out during one week (Tuesday till Thursday), so that the procedure do not affect the training after or before the match, so the videotaped training should be more representative, as soon as possible. After the recording of all behaviors, it was counted the sum of frequencies and the percentages for each type of behavior.

Instrumentation

The instrument of the study was a Digital Sony HDR-AX 2000, video camera and the wireless microphone Shotgun Sennheiser MKH418S, and Sennheiser EW 100 g3, Sony.

Observation Tool

The systematic observation tool of Pereira, Mesquita and Graça (2009) which was a combination of previous observation tools was used. The structure and content validity was also checked. The parts of the tool were adopted from different feedback tools, such as Rink, (1993), nature of comments of Hastie, (1999), deliberate explanation of instruction of Silverman and his colleagues (1995), the type of instruction and the behavior of coach “to a drill that was not completed” of Hastie and Vlasisavljevic, (1999). This tool was translated twice for the needs of the study. The tool was consisted of questions related on: a) the organization of training, b) the result of explanation of the aim of the drill, c) the type of explanation in athletes’ reaction to the drill that did not complete, d) with the purpose of directions and e) with the nature of directions.

Reliability of Observers

For checking the reliability of observers two expert volleyball coaches were used. The two expert coaches were educated and made practice on how they evaluate the video recordings, according the directions of the creators of the observation tool. They analyzed four practice sessions for each variable. No significant differences were found between the first and second tests, which assured that the coders were able to perform reliable coding with the observation tool (Potrac et al., 2007). The aim of the above procedure was the assurance of condition that they observe and interpret the coaching behaviors with the same way. The Inter observer reliability using Cohen’s k coefficient was 0.92 and Intra observer reliability was 0.91 and 0.93 respectively, indicates strong agreement.

Statistical Analysis

For the reliability of observation tool, the k (*kappa*) (Cohen, 1960) was used as the most appropriate to check the Interobserver and Intraobserver Agreement (Watkins, & Pacheco, 2001) and the most fitting on sport field systematic observation (Trudel, Côté, & Bernard, 1996; Hastie, 1999; Pereira, Mesquita, & Graça, 2009). The Kolmogorov- Smirnov test and the Levene’ test, respectively, were used to check the requirements of normality and homogeneity of the variations. For the dependent variables which were the variables of observation tool, the described statistics analysis of frequencies and of means was used. For the between-group comparisons the non-parametric Man-Whitney analysis was used. Additionally, the Effect Size (ES) was used as an index that measures the magnitude of a treatment effect. The correlation of Spearman was also used to verify the degree of association of the variables. The level of significance was $p < 0.05$.

Results

Descriptive statistics

There were recorded, coded and analyzed 14015 coaching behaviors (171 for each coach in each practice session) during 82 practice sessions. In table 1 was presented the percentages and frequencies of coaches’ comments for each variable.

Table 1. Frequency and percentages of coaches' behaviors.

Task explicitness (task presentation)	Frequency	Percentage %
Outcome (O)	87	16.20
Situation (S)	218	40.60
Criteria-form (CF)	37	6.89
Criteria-product (CP)	65	12.10
Combination (CB)	130	24.21
Total	537	100
Exigency type	Tasks presentation	
Participation/effort (P/E)	153	25.93
Performance Quality (PQ)	179	30.34
Without exigency (WE)	258	43.73
Total	590	100
Exigency type	During practice	
Participation/effort (P/E)	332	42.29
Performance Quality (PQ)	200	25.48
Without exigency (WE)	253	32.23
Total	785	100
Coach reaction of accomplishment tasks	(during practice)	
Punish (P)	85	1.75
Encouragement (E)	4709	97.22
No reaction (NR)	50	1.03
Total	4844	100

According the observation protocol about the task explicitness/presentation (Table 1) the most comments (218, 40.60%) were for situation and then for combination (130, 24.21%). About the exigency type for task presentation, the most comments were without exigency (258, 43.73%) and for the exigency type during practice the most comments were for participant effort (332, 42.29%). For the coach reaction of accomplishment tasks during practice the most comments were for encouragement (4709, 97.22%).

Table 2. Frequency and percentage of coaches' instructional behaviors.

Instructional tasks (task presentation)	Frequency	Percentage %
Informing Tasks (IT)	475	89.96
Refining Tasks (RT)	49	9.28
Extending Tasks (ET)	1	0.12
Applying Tasks (AT)	3	0.66
Total	528	100
Information nature (during practice)	Frequency	Percentage %
Technique (T)	2288	33.99
Individual Tactics (IT)	1008	14.97
Team Tactics (TT)	141	2.09
Physical/Rules (P/R)	78	1.17
General (G)	3216	47.78
Total	6731	100

It was observed 528 comments about the instructional tasks (Table 2). The most comments seem to be for informing tasks (475, 89.96%). With regard to the nature of information comments the most were general comments (3216, 47.78) and less comments for technique (2288, 33.99%) and for individual tactics (1008, 14.97%).

Correlation Analysis

The correlation analysis about the relationships between the categories of coaching behavior and of instructional tasks some correlations were established.

On task explicitness outcome showed: a) a moderate and negative correlation with *refining* ($r = -.425$; $p = 0.006$), and *applying* ($r = -.443$; $p = 0.004$), but positive with *extending tasks* ($r = .462$; $p = 0.002$), b) *situation* showed a moderate and negative effect only with *informing tasks* ($r = -.433$; $p = 0.005$), c) *criteria-form* showed a moderate and positive correlation with *extending* ($r = .930$; $p = 0.000$), and *applying tasks* ($r = .930$; $p = 0.000$), d) *criteria-product* showed a moderate and positive correlation only with *informing tasks* ($r = .552$; $p = 0.000$), e)

combination showed a moderate and negative correlation with *informing* ($r = -.473$; $p = 0.002$) and *extending tasks* ($r = .617$; $p = 0.000$).

About the *exigency type on tasks presentation*: a) *participation/effort* didn't show any correlation, b) *performance quality* showed a moderate and positive correlation only with *extending* ($r = .372$; $p = 0.017$), and *applying tasks* ($r = .372$; $p = 0.017$), c) *without exigency* showed a moderate and positive correlation only with *informing tasks* ($r = .729$; $p = 0.000$).

About the *exigency type during practice*: a) *participation/effort* didn't show any correlation, b) *performance quality* showed a moderate and positive correlation only with *extending* ($r = .356$; $p = 0.022$), and *applying tasks* ($r = .356$; $p = 0.022$), c) *without exigency* showed a moderate and positive correlation only with *informing tasks* ($r = .609$; $p = 0.000$).

Regards to *coach reaction of accomplishment tasks*: a) *punish* didn't show any correlation, b) *encouragement* showed a moderate and positive correlation only with *refining tasks* ($r = .489$; $p = 0.001$), c) *no reaction* showed a moderate and positive correlation only with *refining tasks* ($r = .429$; $p = 0.005$).

The correlation analysis about the relationships between the categories of *coaching behavior* and the nature of *information* some correlations were established.

On task explicitness: a) *outcome* showed a moderate and negative correlation only with *technique* ($r = -.443$; $p = 0.002$) and *individual tactics* ($r = -.433$; $p = 0.005$), b) *criteria-form* showed a moderate and positive correlation only with *team tactics* ($r = .412$; $p = 0.007$) and *physical/rules* ($r = .393$; $p = 0.011$).

Regards to *Exigency type on tasks presentation*: a) *participation/effort* showed a moderate and positive correlation only with *individual and team tactics* ($r = .312$; $p = 0.047$), and *applying tasks* ($r = .397$; $p = 0.010$), b) *performance quality* showed a moderate and positive correlation only with *team tactics* ($r = .362$; $p = 0.020$), and *physical/rules* ($r = .349$; $p = 0.025$), c) *without exigency* showed a moderate and positive correlation with *technique* ($r = -.464$; $p = 0.002$), but negative with *individual* ($r = -.604$; $p = 0.000$) and *team tactics* ($r = -.590$; $p = 0.000$) and *physical/rules* ($r = -.456$; $p = 0.003$).

About the *exigency type during practice*: a) *participation/effort* showed a moderate and positive correlation only with *individual* ($r = .318$; $p = 0.043$), and *team tactics* ($r = .401$; $p = 0.009$), b) *performance quality* showed a moderate and positive correlation only with *team tactics* ($r = .352$; $p = 0.024$), and *physical/rules* ($r = .333$; $p = 0.033$), c) *without exigency* showed a moderate and negative correlation with *technique* ($r = -.395$; $p = 0.011$), *individual* ($r = -.494$; $p = 0.001$), *team tactics* ($r = -.425$; $p = 0.006$) and *physical/rules* ($r = -.357$; $p = 0.022$).

Regards to *coach reaction of accomplishment tasks*: a) *punish* showed a moderate and positive correlation with *technique* ($r = .618$; $p = 0.000$), *individual* ($r = .333$; $p = 0.033$), *physical/rules* ($r = .503$; $p = 0.001$) and *general comments* ($r = .591$; $p = 0.000$), b) *encouragement* showed a moderate and positive correlation with *technique* ($r = .692$; $p = 0.000$), *individual* ($r = .469$; $p = 0.002$), *physical/rules* ($r = .441$; $p = 0.004$) and *general comments* ($r = .507$; $p = 0.001$), c) *no reaction* showed a moderate and negative correlation only with *physical/rules* ($r = -.315$; $p = 0.045$).

Comparative Analysis of Comments According to Athletes' Age Group

Non parametric Mann-Whitney analysis revealed that there were differences between the age group of athletes and *task explicitness* especially in *criteria form* with coaches of the U-18 group presenting significantly higher values ($U = 93.000$; $p < 0.002$). Differences were found between the age group of athletes and the *exigency type on tasks presentation* especially in *performance quality* with coaches of the U-18 group presenting significantly higher values ($U = 122.000$; $p < .045$) and *without exigency* with coaches of the U-12 group presenting significantly higher value ($U = 113.000$; $p < 0.026$).

Differences also found between the age group of athletes and *exigency type during practice* especially in *participation/effort* with coaches of the U-18 group presenting significantly higher values ($U = 115.000$; $p < 0.029$).

Regards on the *coach reaction of accomplishment tasks during practice* and the age groups, differences were found in *punish* (with coaches of the U-18 group presenting significantly higher values ($U = 129.500$; $p < 0.031$)) and *no reaction* with coaches of the U-18 group presenting significantly higher values ($U = 111.500$; $p < 0.016$).

Table 3. Comparison of coaches' behaviors by athletes' age group.

Task explicitness (task presentation)	Under 12 (n=15)		Under 18 (n=18)	
	M	SD	M	SD
Outcome (O)	2.07	1.87	2.15	1.61
Situation (S)	6.13	3.42	4.85	3.64
Criteria-form (CF) *	.13	.35	1.35	2.51
Criteria-product (CP)	1.47	1.92	1.65	2.57
Combination (CB)	3.80	3.42	2.81	1.96
Exigency type task presentation				

Participation/effort (P/E)	2.13	1.24	4.65	3.96
Performance Quality (PQ) *	2.60	3.97	5.38	5.31
Without exigency (WE)	8.67	4.92	4.92	4.66
Exigency type during practice				
Participation/effort (P/E)	4.73	1.94	9.38	7.76
Performance Quality (PQ)	5.80	6.78	8.92	6.93
Without exigency (WE) *	17.47	9.97	10.62	7.76
Coach reaction of accomplishment tasks (during practice)				
Punish (P)*	.13	.35	3.19	8.00
Encouragement (E)	68.33	29.46	76.35	51.54
No reaction (NR) *	.47	.83	1.65	1.71

* $p < 0.05$

Referred on the *nature of the coach's instruction during practice* there were difference between age groups and *comments in technique* ($U = 129.500$; $p < 0.031$), *in individual tactics* ($U = 129.500$; $p < 0.031$) and *team tactics* ($U = 129.500$; $p < 0.031$) with coaches of the U-18 group presenting significantly higher values in all three instruction variables (Table 3).

In table 4 are presented the means and standard deviations of instructional comments.

Table 4. Comparison of nature of the coach's instruction during practice by athletes' age group.

Instructional tasks (task presentation)	Under 12 (n=15)		Under 18 (n=18)	
	M	SD	M	SD
Informing Tasks (IT)	13.87	6.47	10.27	5.03
Refining Tasks (RT)	1.20	2.01	1.19	1.35
Extending Tasks (ET)	.00	.000	.04	.19
Applying Tasks (AT)	.00	.000	.12	.58
Information nature (during practice)				
Technique (T) *	41.60	18.55	64.0	32.91
Individual Tactics (IT) *	6.87	12.24	34.8	29.58
Team Tactics (TT) *	.33	1.29	5.23	4.51
Physical/Rules (P/R)	1.33	1.54	2.23	2.32
General (G)	70.00	40.62	83.31	48.64

* $p < 0.05$

Discussion

The aim of this study was to evaluate the coaches effectiveness, in comparison to their behavior that is related to a) the organization of the practice, b) the result of the explanation given about the goal of the exercise, c) the type of explanation given, d) the coaches' reaction to an exercise that was not completed, e) the goal of the instructions given and f) the nature of the instructions given, in relation to the age of the athletes. There was recording of the coaches, and then their behavior and their comments were codified, according to the systematic observation tool of Pereira, Mesquita and Graça (2009). As far as the results of the evaluation of the categories of *coaching behavior* are concerned, 14015 of comments were monitored (171 for each practice session) in the total of 82 practices that were recorded. More specifically, 537 comments were recorded for *task explicitness on presentation*, 590 comments were for *exigency type in presentation*, 785 comments about *exigency type during practice* and the most comments 4844, about coach reaction of *accomplishment task*, especially in *encouragement*.

As it was revealed the majority had to do with comments that were relevant to the coaches' reward and encouragement towards his/her athletes. The coach rewards and encourages the athletes once the skill is completed, even when the exercise is not complete. This is a very positive step as it seems that positive attitude towards athletes of developmental age is what they need in order to be motivated to continue (Amorose, 2007; Henderlong, et al., 2002; Horn, 2002). It is widely accepted that the training process aims to motivate, encourage young athletes to put an effort and this is possible only when they have fun. Later on, they will try to set higher goals both in training and at the game. In order for young athletes to reach these goals, coaches must locate the positive points of the athletes and not to focus on their mistakes (Smoll et al., 2006). This is an attitude that can be also inferred through the correlation of the variables, since high correlation was spotted between encouragement and rewarding, in relation to the nature of the instructions of the coach and more specifically of the technique and the personal tactics of the athletes. As it seems, athletes perform better when the information they receive about the technique of the skills, as well as the decisions that they must make in a situation include instructions based on encouragement and reward. This arises from the fact that general instructions, feedback for

mistakes and the frequent use of encouragement and support were consisted the largest percentage of the behaviors that arise. This finding agrees with the findings from other researchers such as of Smith, Smoll and Curtis, (1978), Conroy and Coatsworth, (2004), Nicaise et al., (2007) and Smith et al., (1990).

Referring on the coaches' *instruction tasks* the most were for *informing* the athletes about the tasks (475) and *regards the nature of information*, the majority of comments were for nature of information and especially for *general comments* (3216) and for *technique* (2288). These results seem logical because of the age and level of athletes, is needed the most comments for technique. Findings of other studies, such as the study of Zetou et al. (2011) contradict the previous finding, where "regular instructions" were presented as the biggest percentage of behavior apparition, a finding that agrees with Bloom et al., (1999), probably because participants with different age and level was studied in these studies. The participants of the present study were in developmental ages in contrast with adult athletes of national categories that have other kinds of demands, other expectations and they need different ways of treatment. Thus, it can be inferred that coaches display the respective behavior depending on the level of the athletes that they practice and the results that they want from each practice in relation with the goals they set (Cushion et al., 2001).

According the correlation analysis, results revealed that there was positive correlation between *task explicitness and instructional tasks in presentation*, especially in *outcome* and *extending tasks, criteria form* and *extending and applying tasks*. Also *criteria product* and *informing tasks* have positive correlation. Referred on the *exigency type of task presentation*, *performance quality* showed positive correlation with *extending*, and *applying tasks*, and *without exigency* showed also positive correlation with *informing tasks*. The *exigency type during practice*, *performance quality* showed positive correlation with *extending and applying tasks*. *Without exigency* comments showed positive correlation only with *informing tasks*.

Regards to *coach reaction of accomplishment tasks*, *encouragement* showed positive correlation only with *refining tasks* and *no reaction* showed also positive correlation with *refining tasks*. According the correlation between the *nature of information* and the categories of *coaching behavior*, it was found that *team tactics* and *physical/rules* showed positive correlation with *criteria-form* content. In addition positive correlation between *team tactics* and *applying tasks* information. *Individual tactics* showed also positive correlation with *participation/effort* comments and *team tactics* and *physical/rules* with *performance quality* comments. *Technique comments* also had positive correlation *without exigency*. About the *exigency type during practice*, *participation/effort* showed positive correlation with *individual and team tactics*. *Performance quality* showed positive correlation with *team tactics* and *physical/rules*. Regards to *coach reaction of accomplishment tasks*, *punish* showed positive correlation with *technique*, *individual tactics*, *physical/rules* and *general comment*. *Encouragement* showed positive correlation with *technique*, *individual tactics*, *physical/rules* and *general comments*. All these findings highlighted the coaches' profile, which oriented in coaches' approach to technical content and simultaneously support the learning process giving more specific information and encouragement.

The results showed differences between the age group of athletes at *task explicitness* especially in *criteria form* and the *exigency type on tasks presentation* especially in *performance quality* with coaches of the U-18 group presenting significantly higher values and *without exigency* with coaches of the U-12 group presenting significantly higher value. Differences also found in between the age group of athletes and *exigency type during practice* especially in *participation/effort* and *coach reaction of accomplishment tasks during practice* differences were found in *punish* and *no reaction*, with coaches of the U-18 group presenting significantly higher values. Referred on the *nature of the coach's instruction during practice* there were difference between age groups and *comments in technique*, in *individual tactics* and *team tactics* with coaches of the U-18 group presenting significantly higher values in all three instruction variables.

The type of comments that the athletes under U12 received and from under 18 years (competition teams). The only difference was that coaches of athletes of U12 (pre-competition teams) gave more information about the execution of the exercise (where, how many times), as well as comments on individual and team tactics, in contrast with the coaches of U12, who gave information about the technique and the learning of skills and made other, non-specified comments. From these results, it was confirmed that coaches of athletes from U18, use a great number of comments during practice, when they are teaching tactics. They aimed mostly on individual tactics and make comments on tactics in relation to the upcoming game and less on technique, while punishment, verbal or not, are not used almost ever. The findings of the present study agree with the findings of Zetou, Saloustrou, Bebetos and Diggelidis (2015) and Pereira, Mesquita, and Graça, (2009).

It is also very important the type of instructions feedback which instructors provide to their athletes/students. Recently, self-talk instructions which athletes were said to themselves loudly, improved the skill technique in volleyball, swimming and Tae-kwon-do (Zetou, Vernadakis, Bebetos, & Makraki, 2012; Zetou, Vernadakis, & Bebetos, 2014; Zetou, Vernadakis, Bebetos, & Liadakis, 2014), archery (Bebetos, 2015), and in physical exercise involvement in general (Dimitrakaki et al., 2013). Vernadakis, Antoniou, Zetou, and Kioumourtzoglou, (2004) also support the role of computer assistance as instructional mean which instructors could use for skill learning (Vernadakis, Zetou, Antoniou, & Kioumourtzoglou, 2002; Vernadakis, Zetou, Avgerinos, Giannousi, & Kioumourtzoglou, 2006).

Conclusions

The results of this study arises that there were different behaviors and instructions by the coaches, which each athlete may interpret in a different way. Coaches must be really careful during practice, as well as during a game, since these behaviors determine the relation between coach and athlete and in general, determine the environment/atmosphere of the team. It is important to always have a positive environment/atmosphere at the practice, which is also transferred to the game and it is very important for the future development of athletes, personally and as a team.

The appropriate training for coaches of young athletes on the factors that consist the most effective training, has to do with the way they teach, that means, how they present, analyze and show different skills, the way and the kind of feedback they use, as well as the positive approach and the creation of a positive atmosphere both in practice and during the game. Both the practice and the game can be considered to be a process that encourages athletes to pass many psychological situations, such as attention focus, satisfaction/entertainment, anxiety for the game, healthy competition between athletes, cooperation, willingness to compete and to complete goals, discipline. Through the processes of the socialization and training that athlete's experience, they are better prepared for the remaining course of their adult life. For this reason, the coach's effectiveness is a very important factor to the development of the athletes.

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