Revista de Psicología del Deporte. 2015, Vol 24, Suppl 1, pp. 59-63

ISSN: 1132-239X ISSNe: 1988-5636

Universitat de les Illes Balears Universitat Autònoma de Barcelona

Is there a model of expert coach speech during the competition?

Jorge Lorenzo*, Jesús Rivilla* and Rafael Navarro**

IS THERE A MODEL OF EXPERT COACH SPEECH DURING THE COMPETITION?

KEY WORDS: Coach, Basketball, Communication, Competition.

ABSTRACT. As a part of a team, coaches need to develop their ability to leadership and exercise it to achieve the motivation of their players, since persons who are motivated in work get a greater performance. Communicate and make athletes communicate effectively is one of the major responsibilities of the coach.

There is a number of aspects during the game that makes communication gain some specificities and is shown as an essential element to the performance of the player considering the limitations (Vives, 2011). Performance in critical situations, making tactical decisions in short time and having limited information, interaction with referees, staff and players as well as managing the anticipative communication are other of the tasks for coaches.

The aim of this study is to know the differences of the coaches speeches who compose the sample, and check if it exists between the expert coaches common features that could help us to develop a theorical model of effective behavior during the competition.

A sample of 6 expert coaches were recording during 4 games (n=24), differentiating in the register the independent variables moment, time, place and result in which the coach could provide information to their players and being developed as a dependent variable system consisting of 17 categories validated by an expert committee.

On having compared the content of the speech of the different coaches, the results show that most of the coaches, place in the very nearby analysis of correspondences, which explain than the majority of the relations that are established among the variables should be weak or moderate and that on the other hand most of the content of the speech is common to almost all.

Coaches, as a key element within the team, need to develop their ability to leadership and exercise it to achieve the motivation of their players, since persons who are motivated in work get a greater performance. Communicate and make athletes communicate effectively is one of the major responsibilities of the coach.

During the competition there is a number of determinants that makes communication gain some specificities and is shown as an essential element to the performance of the player considering the limitations. To control the own's emotional state, diminishing the importance of some actions or hide certain emotions to players, is part of the performance of the coach. Performance in critical situations, making tactical decisions in short time and having limited information, interaction with referees, staff and players as well as managing the anticipative communication are other of their tasks.

The information given by the coach during the competition affects the performance of the team (Cushion and Jones, 2001). What the coach transmits to his players, the form, content, the nature of such information, as well as the time and place where it gives are aspects to consider (Vives, 2011). In this sense, Salmela (1996) stated that success in competition is a result of effective communication, which modifies the player's behavior.

The coaches, as said by Chorkawy and Rushall (1981), observed sporting attitudes and categorized in their mind for later information communication concerning these behaviors.

Inexperienced coaches find it difficult to give an effective content to their communication in the tactical information, according to the study of Moreno and Moreno (2007).

However, in the case of expert trainers, the speech is based on the players tactical performance and their presence is more desirable for obtaining a good sporting performance, according to the studies of Escudero et al. (2002). Bloom et al. (1997) argue that expert coaches have a greater knowledge of the communication process and they search both a successful performance in game and personal life for players, since they consider that both are related.

Taking an expert trainer as a model, it is proposed to know the differences and similarities of content in the speech of 6 expert coaches to search common characteristics that would help to make a coach behavior model in competition.

Method

It has been used indirect observation of documentary texts obtained from the recordings transcription of verbal behavior of a person (Annex 1). It was done a sampling of all occurrences of verbal behavior from a sample size of 6 expert coaches during the development of the competition from 4 games, for a total of 24, differentiating in the register the independent variables moment, time, place and result in which the coach could provide information to their players and being developed as a dependent

Jorge Lorenzo Calvo, Facultad de Ciencias de la Actividad Física y del Deporte. Universidad Politécnica de Madrid. C/ Martin Fierro, 7, 28040, Madrid. E-mail: jorge.lorenzo@upm.es

^{*}Faculty of Physical Activity and Sport Sciences, Polytechnic University of Madrid.

^{**}Faculty of Physical Activity and Sport Sciences, University Alfonso X El Sabio, Madrid.

variable system consisting of 17 categories validated by an expert committee. From the data obtained, and with the help of the SPPS V. 21, it was made a statistical analysis of multiple correspondences with the purpose of representing in the same space for different categorical variables where it is shown the relation between them.

Results

It has been done the multiple correspondence analysis with the purpose of displaying the same physical space of categorical variables performance, to show the associations and affinities between the variables. As significant were found the following relations:

1.- Analysis of correspondences between the variables type of instruction and time period.

The results of correspondence analysis showed that there was a statistically significant relation between the two variables ($\chi 2=187.77$, p=.000), and two dimensions with a value of moderate inertia (Dimension 1: 17%, dimension 2: 2%) have been established

As it is shown in Figure 1, there is a prominent association of the instruction "self-offensive technique" in the first and the second quarter, the "self-defense technique" and the "physical" instructions in the third and fourth quarter; and the "opponent offensive tactic" and "opponent defensive tactic" in time out.

2.- Analysis of correspondences between the variables type of instruction and result in the first quarter.

The results of correspondence analysis showed that there was a statistically significant relation between the two variables ($\chi 2$ =59.11 , p= .000), and two dimensions with a value of moderate inertia (Dimension 1: 5%, dimension 2: 2%) were established.

The results presented in Figure 2 show an association between "self-defense tactic" when the first quarter is lost, "opponent offensive technical" when tied, and the psychological aspects, "opponent defense technical" and "self-offensive tactic" when first quarter is gained.

3.- Analysis of correspondences between the variables type of instruction and result in the third quarter.

The results of correspondence analysis showed that there was a statistically significant relationship between the two variables ($\chi 2 = 56.77$, p = .000), and two dimensions with a value of the weak inertia (Dimension 1: 4%, dimension 2: 2%) were established.

The results on Figure 3 show an association between "offensive opponent tactic", "physical" and "opponent defense technical" when the third quarter is lost, the "self-defense tactic" when tied, and the "psychological" aspects and "self-offensive tactic" when the third quarter is won.

4.- Analysis of correspondences between the variables type of instruction and coach.

The results of correspondence analysis showed that there was a statistically significant relation between the two variables (χ 2= 358.89 , p= .000), and two dimensions with a value of moderate inertia (Dimension 1: 18%, dimension 2: 11%) were established.

The results on Figure 4 show a clear association between the coach 6 with the "self-offensive technical", the coach 1 with the "self-defense technical", and the coach 5 with "opponent offensive tactic" and the "self-defense tactic".

Discussion

When comparing the content of the speech of the different coaches during the whole game and without considering the specific variables of the competition, the results show that the majority of the coaches, except one, are located nearby on the correspondence analysis, which explains that most relations that are established between variables are weak or moderate, and that, on the other hand, much of the content of the speech in global is common to almost all.

However, in further analysis, and taking into account the periods of the game, there is a prominent association of the instruction "self-offense technique" in the first and the second period, the "self-defense technique" and the "physical" instructions in the third and fourth period; and the rival tactic in the time out. These results reinforce the previous approaches where the self offense technique actions characterized the first parts of the game and the physical aspects and defensive in the second parts. In accordance with Sampaio et al. (2010a), in the first two periods the influence of situational variables is greater,

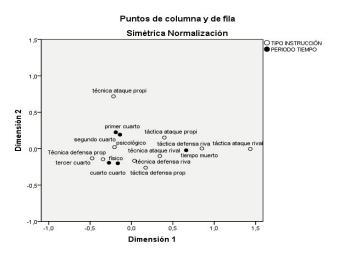


Figure 1. Diagram of association between categorical variables instruction type and time period

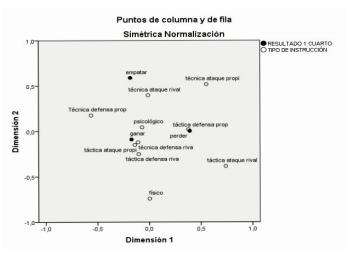


Figure 2. Diagram of association between categorical variables type of instruction and result 1 quarter.

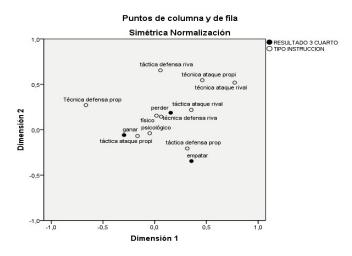


Figure 3. Diagram of association between categorical variables type of instruction and result third quarter.

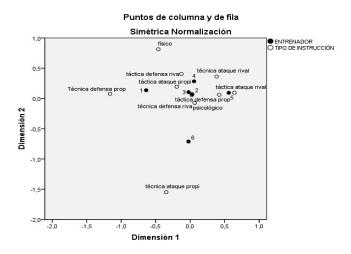


Figure 4. Diagram of association between categorical variables type of instruction and coach

therefore, the individual actions can be much more significant; while in the third and the fourth period physical condition determines the concentration and performance. In addition, this confirms the results obtained in the contingency tables of other previous study on the same sample, which aim to achieve greater development of the information in the time out for having more time and space, to a greater targeting of the discourse in physical aspects as the game progresses and the fatigue accumulates and technical aspects in the first part. The studies on time out (Gomez et al., 2010; Sampaio et al., 2012) show that teams that have times out improve their offensive and defensive performance regardless the period of the game, making it clear that at the request of time out is more important the influence of who request the time out, obtaining better results, the team that request it. Therefore, it would be interesting to know the differences in the instructions of the coach distinguishing this factor.

Adding to the previous analysis the outcome variable, it is noted that there is an association between "self-defense tactic" when the first period is lost and the aspects "psychological", "self-offense tactic" and "defense" when it is gained. Similarly, it is also noted an association between talk of the rival and physical issues when it loses the third quarter, and the aspects "psychological" and "self-defense tactic" when it wins the third quarter.

Rodrigues and Pina (1999) found variability in the verbal behavior of the same coaches in the medium levels of qualification, but this has not been tested in other studies with expert coaches. This study proves otherwise, it may be stated that there is an influence of the coach's level on the type of verbal behavior and that, in the case of expert coaches, there are some behaviors that most frequently occur and that are common to the whole sample.

A similar training as coaches, professions relating to the area of knowledge common to all as well as a similar level of experience and comprehensive in all cases, could be displayed as explanatory factors.

Conclusions

The review of studies conducted regarding this subject and the heterogeneity in the results due to the different methodologies used therein, a historic wide variability increases thereof and the evolution of the sport, makes it impossible to establish a common thought on this issue. To compare the results of different studies with this knowledge sheds and discovers new avenues of research. But not as timeless truths, as environments such as the level of coaches and athletes, type of sport, training or competition context, the instrument of observation, the sample, etc., are so different that make it impossible. On the other hand, claims to develop an effective model of verbal behavior trainer with minimum common features for all is incomprehensible analyzing only the speech itself, despite relating it with outcome variables, place, etc. It is necessary to include other factors in the analysis.

In this line, the model proposed by Horn (2002), which relates the Chelladurai (1990) leadership model with the CBAS and the CET Smith, Smoll and Hunt (1977) model, tells us that aspects such as the context, the organization and the personality of the coach influence their behavior. And the performance of the players and the coach influence each other in the behavior of both. Further, Mallet and Cote (2006), using the CBS-S, discuss other criteria to describe the behavior during practice and competition of expert trainers who are related in any way to any of the variables of the competition as is the result. Therefore, it is suggested in conclusion, the use of skills to behave, with many chances of being applied unequally in different environments and circumstances, understanding how the context influences the behavior of coaches and what they must do to best adapt.

COAC	H: GAME:	OUTCOME:					
DATE:	LOCATION:	PERIODS:					
	CATEGORY	1°	2°	3°	4º	TIMEOUT/INTERVAL	TOTAL TIMEOUTS
1.	Self-Defense Technical Instruction						
2.	Opponent Defense Technical Instruction						
3.	Self-Offensive Technical Instruction						
4.	Opponent Offensive Technical Instruction						
5.	Self-Defense Tactic Instruction						
6.	Opponent Defense Tactic Instruction						
7.	Self-Offensive Tactic Instruction						
8.	Opponent Offensive Tactic Instruction						
9.	Questions						
10.	Psychological Instruction						
11. Physical Instruction							
12.	Push/soul/dynamization						
13.	Complaints						
14.	Rebuke/negative feedback						
15.	Praise/feedback positive affective						
16.	Direction/administration/organization/control		_	\perp	\perp		
17.	Incodificable (to others, not understandable, not audible, references)						

^{*} Adapted from ASUOI (Lacy & Darst. 1984), CAI (Johnson & Franks. 1991), and CBAS (Smith, Smoll & Hunt. 1977).

Annex 1.- Registration form for the content speech analysis of the basketball coach in competition.

¿EXISTE UN MODELO DE DISCURSO DEL ENTRENADOR EXPERTO EN COMPETICIÓN?

PALABRAS CLAVE: Entrenador, Baloncesto, Comunicación, Competición.

RESUMEN. Los entrenadores, como parte del equipo, necesitan desarrollar su habilidad para el liderazgo y ejercerlo para conseguir la motivación de sus jugadores, puesto que las personas que están motivadas en y por su trabajo obtienen un mayor rendimiento. Comunicar y hacer que los deportistas se comuniquen eficazmente es una de las obligaciones más importantes del entrenador.

Durante la competición, se dan una serie de condicionantes propios que hacen que la comunicación tenga unas especificidades y se muestre como un elemento aún si cabe más importante para el rendimiento del jugador dadas las limitaciones en las que esta se da (Vives, 2011). Así, tener el control del estado emocional propio, relativizar las acciones o esconder ciertas emociones a los jugadores es parte del rendimiento del entrenador. Como manejar situaciones críticas, tomar decisiones tácticas con tiempo e información limitadas así como interactuar con árbitros, equipo técnico y jugadores son otros de sus cometidos.

Conocer las diferencias y similitudes de contenido en el discurso de los entrenadores que componen la muestra para verificar o no si existe entre los entrenadores expertos, rasgos comunes que podrían ayudar a la elaboración de un modelo teórico de conducta eficaz del entrenador en competición. Se realizó un muestreo de todas las ocurrencias de conducta verbal de una muestra de 6 entrenadores durante 4 partidos (n=24), diferenciando en el registro las variables independientes momento, tiempo, lugar y resultado en los que el entrenador podía aportar información a sus jugadores y elaborando como variable dependiente un sistema compuesto por 17 categorías. A partir de los datos obtenidos, se realizó un análisis de correspondencias múltiples con el propósito de representar en el mismo espacio diferentes variables categóricas de modo que se pudieran ver las asociaciones entre ellas.

Al comparar el contenido del discurso de los diferentes entrenadores, los resultados muestran que la práctica totalidad de los entrenadores, se sitúan en el análisis de correspondencias muy cercanos, lo que explica que la mayoría de las relaciones que se establecen entre las variables sean débiles o moderadas y que, por otro lado, gran parte del contenido del discurso sea común a casi todos.

References

Abraham, A., Collins, D. and Martindale, R. (2006). The coaching schematic: Validation through expert coach consensus. *Journal of Sports Sciences*, 24(6), 549-564.

Bloom, G., Schinke, R. J. and Salmela, J.H. (1997). The development of communication skills by elite basketball coaches. *Coaching and Sport Science Journal*, 2(3), 3-10

Chelladurai, P. (1990). Leadership in sport: A review. International Journal of Sport Psychology, 21, 328-354.

Chorkawy., A.L. and Rushall, B.S. (1981). Coaching Language-constructs or specifics? Sport coach, 5(3), 8-9.

Cushion, J. and Jones, L. (2001). A Systematic observation of professional top-level youth soccer coaches. *Journal of Sport Behaviour*, 24(4), 354-376. Escudero, J., Balague, G. and García-Mas, A. (2002). Comportamientos que influyen en el rendimiento deportivo de los jugadores de baloncesto desde el punto de vista de los entrenadores. *Psicothema*, 14(1), 34-38.

Gómez, M.A., Lorenzo, A., Ibáñez, S.J., Ortega, E., Leite, N. and Sampaio, J. (2010). An analysis of defensive strategies used by home and away basketball teams. *Perceptual and Motor Skills*, 110, 159-166.

Horn, T. S. (2002). Coaching effectiveness in the sport domain. In Advances in sport psychology, 309-354. Champaign, IL: Human Kinetics.

Johnson, R. and Franks, I.M. (1991). Measuring the reliability of a computer-aided systematic observation instrument. *Canadian journal of Sport Science*, 16, 45-57.

Lacy, A. C. and Darst, P. (1984). Evolution of a Systematic Observation System: The ASU Coaching Observation Instrument. *Journal of Teaching in Physical Education* 3, 59-66.

Mallett, C. and Côté, J. (2006). Beyond Winning and Losing: Guidelines for Evaluating High Performance Coaches. *The Sport Psychologist*, 20, 213-221.

Moreno, M.P. and Moreno, A. (2007). Effect of a mentoring through reflection program on the verbal behavior of beginner volleyball coaches: a case study. *International Journal of Sport Science*, 8, 12-14.

Rodrigues, J. and Pina, R. (1999). Análise da instruçao na competiçao em voleibol. *Pedagogia do Desporto. Estudos 6.* (pp. 45-53). Lisboa: FMH-UTL. Salmela, J. H. (1996). *Great Job Coach: Getting the edge from proven winners.* Ottawa, Ontario: Potentium, the Coaching Network.

Sampaio, J., Lago-Peñas, C., Casais, L. and Leite, N. (2010). Effects of starting score-line, game location, and quality of opposition in basketball quarter score. European Journal of Sport Sciencie, 10(6), 391-396.

Sampaio, J., Lago-Peñas, C. and Gómez, M.A. (2012). Brief exploration of short and mid-term timeout effects on basketball scoring according to situational variables. *European Journal of Sport Science*, 15,1-6.

Smith, R., Smoll, F. and Hunt, E. (1977). Training manual for the Coaching Behavior Assessment System. JSAS Catalogue of Selected Documents in Psychology, 7, 2, (1406).

Vives, J. (2011). Ideas y trucos para una comunicación constructiva y eficaz. Madrid: Ed. Bubok Publishing.