

Analysis of parents' behaviour in grassroots football from a systematic observation

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ABSTRACT

A significant number of investigations highlight that parents possess a great potential to influence positively or negatively the sport experience of their children. It is necessary to emphasize that they can also perform an astonishing number of inappropriate behaviours during the course of their sons' sport events. In this investigation, the management, pressure, comprehension and active participation comments performed by parents in grassroots football matches have been analysed through the systematic observation. Twelve teams have been observed which belong to the 2nd division league of U-15 in the Balearic Islands (Spain) during 2016-17 season through 12 recordings. These comments were coded by trained observers using LINCE® recording software and POISE (Parents' Observation Instrument at Sport Events) (Kidman and McKenzie, 1996). The results show that neutral comments are the most notorious followed by positives and negatives. In conclusion, it must be mentioned that the relevance of this study is double: (1) It provides objective data about comments done by parents-spectators during the matches of their children; (2) it adds necessary information to carry out a systematic observation of parents and spectators in grassroots sport from the grandstands.

Keywords: Spectators; Grassroot football; Parental observation; Parental behaviour; Observational Instrument.

Cite this article as:

Palou, P., Pulido, D., Borràs, P.A. & Ponseti, F.J. (2020). Analysis of parents' behavior in grassroots football from a systematic observation. *Journal of Human Sport and Exercise*, 15(2), 387-399. doi:<https://doi.org/10.14198/jhse.2020.152.13>

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Submitted for publication May 2019

Accepted for publication June 2019

Published June 2020 (*in press* July 2019)

JOURNAL OF HUMAN SPORT & EXERCISE ISSN 1988-5202

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doi:10.14198/jhse.2020.152.13

INTRODUCTION

Nowadays, the worry about parents' behaviours and conducts is increasing at their sons' sports events. Due to this fact, it appears the necessity of knowing the type of comments performed from the stands, what consequences come with behaving in a certain way on the stands and doing a research of the possible interventions which could be initiated to enhance parents' conducts. The present study will be focused on checking what is known about parent-spectators' behaviours in grassroots football; and, furthermore, an observational instrument will identify different parental comments from various sportive teams.

As Anguera and Hernández (2015) mentioned, the best methodology to analyse the sport, physical activity in its context or its quotidian dynamic is the observational methodology. The main aim of the present investigation is directly related to the observational methodology which defines its objectives, data collection, data management and data analysis (Anguera, Blanco, Hernández and Losada, 2011). It is important to note that the present study has been conducted in a Spain context, which may provide data that could be used in possible cross-cultural analyses.

In the same line, Smith, Smoll and Hunt (1977) proposed one of the first instruments to observe coaches' behaviours in sport events (Coaching Behaviour Assessment System; CBAS). Such instrument implied a turning point in observational methodology, because the previously mentioned authors, based on Bandura's social learning theory, incorporated most of coaches' behaviours. Moreover, CBAS enabled the identification of individualized behavioural differences, as well as the simple implementation of coding systems within the present fieldwork.

Likewise, it is relevant to note the existence of another essential instrument in the observational methodology as Parents' Observation Instrument at Sport Events (POISE) (Kidman and McKenzie, 1996). The abovementioned instrument was initially designed by Graham, Ratcliffe, Faucette, Salter and Walley (1982) to record the spectators' behaviours at sport events. Later, Randall and McKenzie (1987) adopted the same instrument to register the behaviour carried out by adult spectators in grassroots football matches. And, finally, Kidman and McKenzie (1996) adapted such instrument and developed the POISE for recording and analysing the naturalness of parental comments in their children's sport events (Walters, 2011).

It has to be emphasized that Walters (2011) carried out an observational structured research to observe the frequency and naturalness of parental comments during the course of their sons' sports events. According to Walters (2011), POISE is also useful to distinguish various sequences of the game, as for instance: when the ball is in play, whether there is a goal or whether it has been a missed opportunity. This fact helps us to identify different types of comments (Walters, 2011). Walters (2011) also pointed that the recordings executed through Parents' Observation Instrument at Sport Events (POISE) help us to identify the game's duration in minutes, the genre of people who are performing comments or the result of the sport event. Furthermore, Walters (2011) mentioned that POISE establishes a comments' categorization, defining said categories as positive, negative or neutral comments. Moreover, within each category, it is possible to find out subcategories. Hence, within positive comments' category are identified subcategories as positive reinforcement or supporting. In negative comments' category, there are subcategories such as correcting, scolding, sarcastic comments or contradictions (Walters, 2011). This author also noted that within neutral comments' category, there are subcategories such as instructions, direct questions, indirect questions, rhetoric questions or other type of comments.

Thus, Walters (2011) noted that the previous investigations which used POISE (Kidman and McKenzie, 1996; Blom and Drane, 2008), classified as negative those comments which were characterized by giving instructions. Kidman, McKenzie and McKenzie (1999) pointed that when someone says to a young athlete what he or she must learn, or the way he or she must do it, the athlete is inhibited. Therefore, it is necessary to clear up that in the present research, POISE has been used as an observational instrument, and the instructive comments performed by parent-spectators have been categorized as they were negatives. By this way, it has continued in line with Blom and Drane (2008).

Generally, parents have been identified as the key factor that determines the level and the quality of their sons' involvement level in their sports (Clark, 2008; Walters, Schluter, Thomson and Payne, 2011). For this reason, those parental conducts' images and videos which show extreme aggressiveness and violence should not be ignored. These samples are gathered by the popular press, or even uploaded to YouTube™ (Abrams, 2006; Kuyper, 2006; Omli, LaVoi and Wiese-Bjornstal, 2008).

On the other hand, it becomes important to highlight that Randall and McKenzie (1987) noted that parents of young footballers remained seated and in silent during 87% of total minutes of their sons' matches. Moreover, the same authors identified that 74.4% of comments carried out by fathers were instructive, while 19.8% were positive, and 5.8% were negatives. Although negative comments appeared as less frequent in Randall and McKenzie (1987), we cannot forget that this type of interventions influence negatively the sportive environment that involves the young athletes.

It is emphasized that Kidman et al. (1999) or Omli, LaVoi, Wiese-Bjornstal and Rodd (2007), showed similar outcomes related to parents' comments. Thus, Kidman et al. (1999) noted that more than one third of the observed interventions were negative and, the same authors pointed that these negative conducts constituted a 45.4% of total comments in grassroots football's observations. Omli et al. (2007) noted that 35% of comments were instructive, 35% motivational and 30% negatives.

Contextualizing psychologically parents' role in grassroots football, it is relevant to mention that all social agents in sport have the capacity to influence them on their behaviours, maintaining at the same time interconnections between themselves directly or indirectly (Torrico, Santín, Andrés, Menéndez and López, 2002). Therefore, the Ecological Model of Bronfenbrenner (1976, 1977a, 1977b, 1979, 1986, 1992, 1999) is shown as one of the most efficient models for giving a response to the main aims of the present investigation. As Torrico et al. (2002) mentioned, the Ecological Model of Bronfenbrenner (1976, 1977a, 1977b, 1979, 1986, 1992, 1999) made reference to psychological development and, consequently, it has been applied and developed by disciplines such as the evolutionary psychology or educational psychology. This fact reinforces the position of the study regarding Bronfenbrenner's investigations, due to the studied field is closely related to educational and evolutionary psychology.

Bronfenbrenner's basic postulate mentions that natural environments are the main source about the human conduct (Torrico et al., 2002). According to Torrico et al. (2002), Bronfenbrenner considered the human development as a progressive settling between an active human and his immediate environments, which were in constant variation. This process is also influenced by the established relationships between these environments, and by broader scope contexts where such environments are included, such as family, friends or work (Bronfenbrenner, 1979). Furthermore, humans are influenced by wider contexts as ideology, culture, politics or social level.

Bronfenbrenner (1976, 1977a, 1977b, 1979, 1992) established a designation for the group of premises mentioned before, which received the name of ecological environment. This denomination was understood as a group of serial structures, each of them fits inside the next one (Bronfenbrenner, 1976, 1977a, 1977b, 1979, 1992). The first of them receives the name of microsystem, which is defined as a group of activities, social roles and interpersonal relationships characteristics of the quotidian contexts where the subject easily interacts face to face with people. The most common examples would be the school, home, work or friends (Bronfenbrenner, 1976, 1977a, 1977b, 1979, 1992). The second structure receives the name of mesosystem and, according to Bronfenbrenner (1979), it comprises the interrelations of two or more environments where the developing person participates actively, creating simultaneously a system of microsystems. In other words, it represents the interaction between different environments, which comprise the subject. The most common examples are the family, work and social life. The third structure is the exosystem that makes reference to one or more environments, which do not include the developing person as an active participant. And, finally, the relevance of the influence of factors must be underlined, which are related to cultural and socio-historical characteristics. Bronfenbrenner (1979) expressed that a society or a particular social group, the structure and the substance of the microsystem, the mesosystem and the exosystem presented a trend to be alike, as if they were built by the same master model, and all the systems worked similarly.

Hence, it is affirmed that the present investigation is carried out in an ecological environment, following Bronfenbrenner's model (1979) in which different environments whereby parent-spectators participate, influence directly on the change and the cognitive, moral and relational development of young athletes.

On the other hand, it is relevant to highlight that the proposed hypothesis was related to the achievement of more negative comments by top 5 teams' parents. Furthermore, it should be emphasized that the observational design of a research is defined as the guideline that helps the decision-making which must be carried out during the course of the observational study. It is also remarkable that this study is directly related to the delimitation of goals, data management and data analysis (Anguera et al., 2011).

Therefore, the main aim of the present research is to provide objective data about comments performed by parent-spectators during the course of their children's sport events and to add necessary information for carrying out a parent-spectators' systematic observation from the stands in grassroots sport.

MATERIALS AND METHODS

Method and design

The present research has used the observational methodology aimed to implement Parents' Observation Instrument at Sport Events (POISE) (Kidman and McKenzie, 1996) throughout LINCE® software (Gabín, Camerino, Anguera and Castañer, 2012) (see Figure 1).

On the other hand, it is relevant to highlight that the observational design is Ideographic/Dynamic/One-dimensional. It is ideographic because parent-spectators are observed as a unity; it is dynamic due to various observations are performed both before and after the implementation of the socio-educational intervention, and one-dimensional because of the present research is only involved into a unique response value, such as the type of comments carried out by parents from the stands (Anguera et al., 2011).

Referring to the reliability, it must be noted that, two independent observers were trained for obtaining data. It is also noteworthy that both of them were primary and secondary educators respectively. From the beginning, they had access to POISE's guideline, which was studied extensively by both of them.

Furthermore, it is relevant to mention that both observers solved their main doubts and worries about the different sections of the instrument together. Subsequently, the observers performed the registers.

Moreover, it must be pointed that for limiting the object of study, the observational instrument's subcategories were removed. Therefore, such instrument was reduced to three main categories: positive, neutral and negative comments.

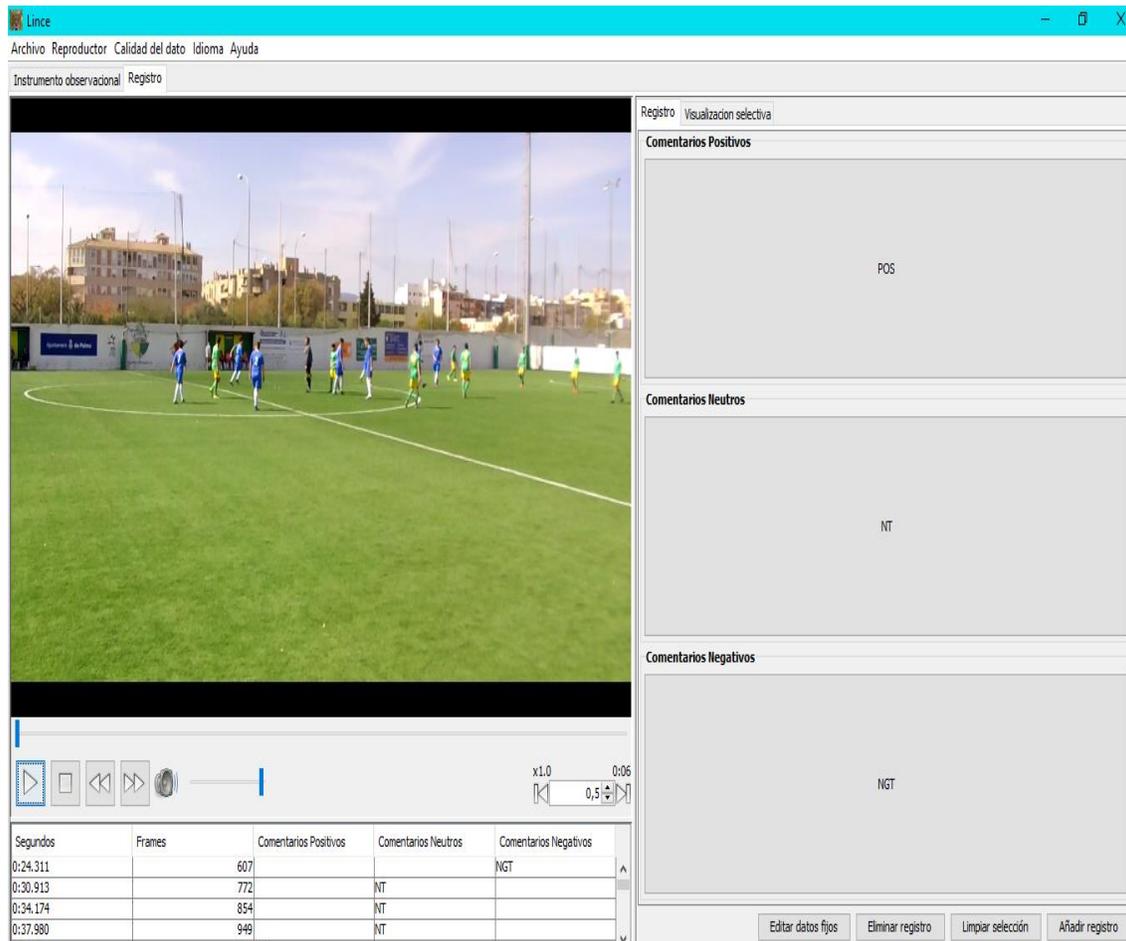


Figure 1. Recording instrument (LINCE) (Gabín et al., 2012).

Participants

The participants in this study were 12 football clubs belonging to the 2nd category of U-15 league in the Balearic Islands (Spain) during the 2016-2017 season. It is important to highlight that fathers, mothers, relatives and spectators participated in the present study. Furthermore, it is relevant to mention that all the participant clubs were chosen randomly; due to one of the main purposes of this investigation was to extrapolate the conclusions and results to all kind of sportive clubs.

Instruments

All the comments performed by parents were analysed using Parents' Observation Instrument at Sport Events (POISE) (Kidman and McKenzie, 1996) (see Table 1), which was implemented through the

specialized software LINCE® (Gabín et al., 2012) to analyse and code the events of each match taken in consideration (Cavalera, Diana, Elia, Jonsson, Zurloni and Anguera, 2015).

Coding instrument. LINCE® software is consistent with the present observational design, due to it provides observational computerized procedures in observational methodology which streamline the register of the game actions or comments from parent-spectators during the course of matches' recordings on the same laptop screen. (Lozano, Camerino and Hileno, 2016). LINCE® also allows to code game actions or comments simultaneously, to verify the data quality control of the coders and to export the obtained results to other computer programs for further analyses (Lozano, Camerino and Hileno, 2016).

Observation instrument. Parents' Observation Instrument at Sport Events (POISE) (Kidman and McKenzie, 1996) is an instrument which was initially designed by Graham, Ratliffe, Faucette, Salter y Waller (1982) for recording spectators' behaviour in sport events. Afterwards, Randall and McKenzie (1987) adopted the same instrument for recording the behaviour carried out by adult spectators in grassroots football. And, finally, Kidman and McKenzie (1996) adopted that instrument and developed POISE (Parents' Observation Instrument at Sport Events). POISE is able to record and analyse the naturalness of parental comments in their children's sport events.

Lastly, it is relevant to note that all football matches' recordings were performed by the camcorder Toshiba Camileo X-200.

Table 1. System criteria, categories and codes (POISE).

Criteria	Categories	Code	Description
	Positive Comments	(POS)	Positive comments performed by parent-spectators (positive reinforcement, respectful comments, applause...).
Parental Comments	Neutral Comments	(NT)	Neutral comments performed by parent-spectators (to talk about the weather, about the school, silences...).
	Negative Comments	(NGT)	Negative comments performed by parent-spectators (negative reinforcement, insults, boos...).

Procedure

Observation

Referring to the observational part, it is important to underline that this research analyses conducts and behaviours in humans and, for this reason, to accomplish with ethical principles of respect to the human dignity, confidentiality and no-discrimination, a favourable inform about the evaluation of this study has been obtained by the ethics committee of the University of the Balearic Islands (UIB). Thus, the study has been conducted in accordance with the Declaration of Helsinki.

Moreover, the permission to carry out the investigation was given by *Govern de les Illes Balears* (Spain) through its project *Posam Valors a l'Esport*. Additionally, from the department of Physical Education and

Sport of the University of the Balearic Islands (UIB) contacted with the Balearic Islands Football Federation (FFIB) for obtaining the permissions of this entity and its football clubs.

Afterwards, researchers started with the analyses of the behaviours and conducts of parents in their sons' football matches. These analyses were carried out throughout 12 observations by Parents' Observation Instrument at Sport Events (POISE) (Kidman and McKenzie, 1996), executing one recording per team. It has to be mentioned that 16 hours were necessary for completing the observation from the stands, due to each match of U-15 category of the Balearic Islands (Spain) lasted 80 minutes divided into two halves of 40 of them. One of the researchers was in all the matches, because he had to record all of them using a camcorder. It is necessary to clarify that the researcher did only record football matches, and that all comments performed by parent-spectators were registered by the sound.

On the other hand, it must be added that, if any father, mother or spectators had any kind of problem with the presence of the camcorder, the researcher reminded them the main aim of the present investigation. Furthermore, the researcher had the possibility to show them the signed agreement by the local government and the University of the Balearic Islands, which allowed him to carry out scientific and technical actions during 2016/17 season.

As regards the recordings, the researcher was cautious positioning himself between both clubs' supporters, always depending on the team that should be registered. In the first matches, it was not easy, due to the researcher and parents did not know with each other. For this reason, the researcher always arrived around 15 minutes earlier of the beginning of the match to identify the place where parents of both teams would be seated.

Codification

The last section referred to the fieldwork of the present investigation supposed an estimated time of 1 hour per match. Two independent coders/observers carried out this work, and both of them classified the registered comments through a camcorder's sound, which were defined by Parental Observation Instrument at Sport Events (POISE). The comments were divided into positive, neutral or negative. It is relevant to highlight that the coders/observers coded the different type of comments using LINCE (Gabín et al., 2012) which allowed to extrapolate the results to EXCEL for the last recounting (see Figure 2).

It should also be noted that in the present investigation, coders have categorized instructive comments performed by parent-spectators from the stands as negatives. In this way, it has continued in line with Blom and Drane (2008).

Statistical Analysis

The statistical analyses were performed using the statistics program SPSS21 (IBM Corporation, 2012). The mean of total comments and the mean of comments per minute were calculated, as well as their respective percentages.

Furthermore, Cohen's Kappa coefficient was calculated using the same statistics program.

RESULTS

The data quality control was measured calculating the level of reliability of both coders/observers' register using Cohen's Kappa coefficient (Cohen, 1960), which provided a value of 0.81 related to inter-observer

reliability. According to Landis and Koch (1977) this fact demonstrates a high concordance in the categories of the instrument.

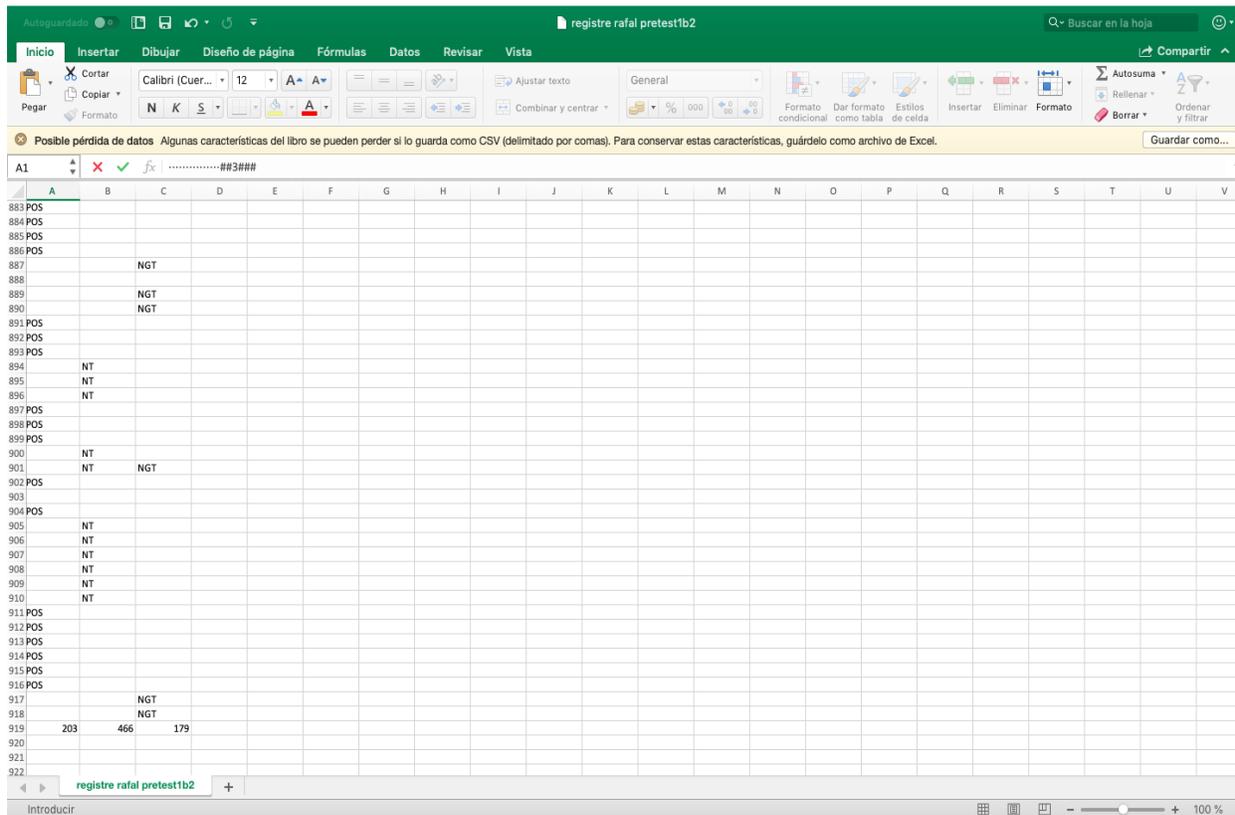


Figure 2. Recount of different type of comments by EXCEL.

It is relevant to highlight that, in Table 2, is identified the mean of positive, neutral and negative comments performed by parents per minute and its respective percentages; as well as the total mean of said comments and their respective percentages. These data determine that neutral comments are the most abundant, followed by positive and negative comments (see Table 2).

Table 2. Descriptive statistics of parental comments per minute and total comments.

Criteria	Ratio comments per minute N(%)	Total comments N(%)
Positive	2 (21%)	172 (21.2%)
Negative	2 (20.5%)	168 (20.8%)
Neutral	6 (58.1%)	468 (57.9%)
Total	10(100%)	808 (100%)

In Figure 3, it can be visualized the current relation between the mean of total comments performed by parents with the clubs' ranking position at the end of the season. It is seen as the 2nd and the 3rd ranked performed a number of negative comments substantially higher than 10th, 12th, 14th and 15th ranked (see Figure 3).

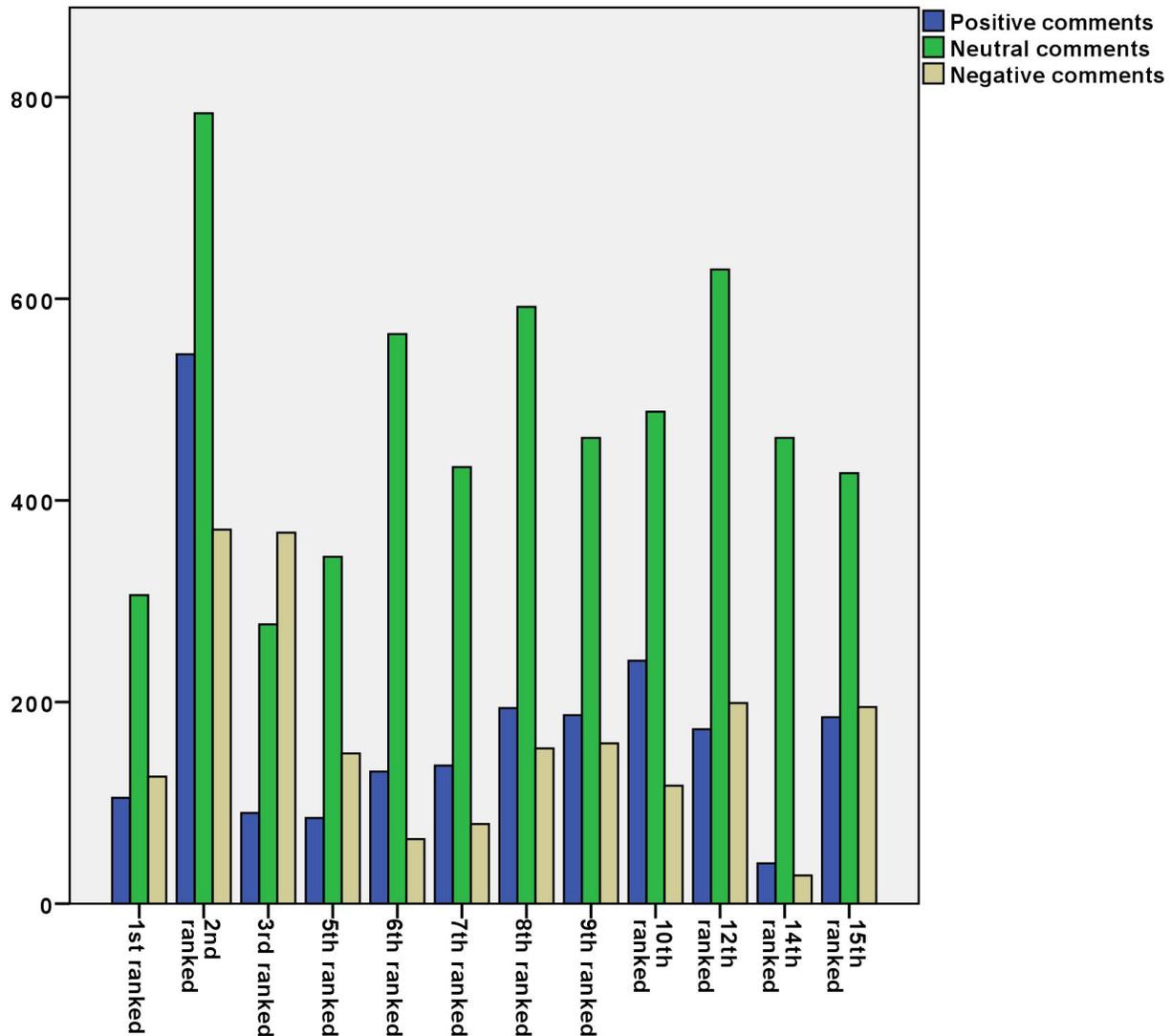


Figure 3. Teams ranking and number of comments from the stands.

Once quantitative results are known, it is important to reflect some of the different comments performed by parent-spectators from the stands. Hereafter, it is visible the differentiation among different comments carried out by parent-spectators from the stands (see Table 3).

Table 3. Comments carried out by parents in U-15 league.

Positives	Neutral	Negatives
“Come on, guys! It is possible! We can... until the last minute”	“Oh my God... It is so cold today”	“Enough! It has been the opposite, referee!”
“Good rehearsed game!”	“I am allergic, and it is still active...”	“Eh, guy! Are you subnormal?”
“There are 80 minutes, come on, boys!”	“Reiterated silences”	“Are you colour-blind? You think all of them are red!”
“Two occasions he has had, and he has caught them all!”	“It is raining... Look how the sky looks now”	“If you do not score, you will not have dinner tonight”

"Nice goalkeeper, nice!"	"I do not mind"	"Fool! Fool! Fool!"
"Very good, buddy!"	"This zone is so fucking great"	"You will not win anything, idiots!"
"Well done, Marc + Applauses"	"I tell you this, because I am interested in this job"	"There is a case, a case! We prefer a chest, because the case is not enough"
"Great, boys!"	"Is it necessary to carry on your license to do it?"	
	"The thing is that she called us, and they gave us the tickets"	
	"Because were awoken from 6am and we went there"	

DISCUSSION

It is methodologically difficult to obtain a precise representation about parent-spectators' behaviour in grassroots sport (Omli et al., 2008; Wann, Melnick, Russell and Pease, 2001). In order to carry out a revision of previous investigations performed in the present field, it is necessary to go back one or two decades ago, where authors as Randall and McKenzie (1987), Kidman et al. (1999), Omli et al. (2007), Shields, Brademeier, LaVoi and Power (2005) or Goldstein (2005) manifested the numerical representation of different types of comments.

The present research provides new evidences about behaviours and attitudes developed by parent-spectators in grassroots sport and, more concretely, in grassroots football. This fact has been possible thanks to the important role that investigations such as Smith et al. (1977) or Anguera and Hernández (2014) play within observational methodology and sports psychology. It must be reminded that Smith et al. (1977) shaped Coaching Behaviour Assessment System (CBAS), which implied the beginning of the behaviour observation of sport coaches. Furthermore, it should be also highlighted the relevance of Anguera and Hernández (2014), because it is analysed the turning point that marked understanding the observational methodology as a scientific discipline.

According to Anguera and Hernández (2014), it is emphasized that the comprehension of the observational methodology as a scientific discipline highlights the importance of the research about participants' behaviour, it facilitates observational designs used to provide data about real events noticeable by instruments. Likewise, this fact causes that technological advances influence positively to recording and coding systems.

Additionally, it is crucial to note that first stated hypothesis is verified due to parent-spectators of 2nd and 3rd ranked teams performed higher number of negative comments than parent-spectators of 10th, 12th, 14th and 15th ranked teams. It is emphasized that has not been possible to establish differences with other researches because there have not been found studies which analyse the relation between parent-spectators' comments and teams' classification.

However, taking into consideration the average of negative comments performed by parent-spectators during the present investigation, it is important to point that it has been of 168 comments. Such negative comments constitute the less notorious type of comments, because these comments represent 20.8% of total interventions from the stands.

Randall and McKenzie (1987) obtained similar outcomes, because they showed that negative comments only represented 5.8% of total comments performed by parents. On the other hand, there are other

investigations such Kidman et al. (1999) which confirmed that 45.4% of total comments performed by parents in grassroots football were negative. In the same line, Omli et al. (2007) demonstrated that negative comments performed by parent-spectators in grassroots football constituted 30% of total comments.

Likewise, it is relevant to highlight that Shields et al. (2005) found that most parents have observed other parent-spectators yelling aggressively to coaches and referees. It is underlined that the mean of total neutral comments of the present research is 468, constituting 57.9% of total comments performed by parent-spectators from the stands. Hence, neutral comments are consolidated as the most notorious of the study, as it already occurred in Randall and McKenzie (1987) where spectators remained seated during 87% of each match. Similarly, to the present investigation, such authors considered the passiveness to youth athletes' actions as neutral interventions.

Furthermore, it is emphasized that mean of total positive comments observed during the recordings is 172, constituting 21.2% of total comments. These results are similar to those outcomes obtained by Randall and McKenzie (1987), because they discovered that 19.8% of the observed comments were positive. In contrast, Omli et al. (2007) found that positive comments constituted 35% of total comments.

One of the main limitations of this study is related to the methodology, because parent-spectators recognized easily the researcher who was executing the recordings. Accordingly, parent-spectators could control their impulses, attitudes and comments from the stands. For this reason, it is proposed that for future studies, the researcher who carry out the recordings should not hand out questionnaires in the baseline.

CONCLUSION

The main conclusions of the present study are: a) Parent-spectators of top ranked teams performed higher number of negative comments than parent-spectators of low ranked teams; b) Neutral comments have been the most plentiful type of comments carried out by parents in this study followed by positive and negative comments.

PRACTICAL IMPLICATIONS

In light of the application of this study, the obtained outcomes must clarify to the wider sporting community that, although negative comments appear as the less notorious comments of the study, the interventions performed by parent-spectators must improve, and simultaneously benefit their own children. For this reason, it is understood as vital to design interventions to grassroots football's categories in order to help players and parents enjoy their sport.

Moreover, it is recommended to use observational and coding instruments mentioned previously; because such instruments will facilitate the fieldwork to researchers, observers and coders.

ACKNOWLEDGEMENT

We would like to thank all parents who participated in our investigation. Furthermore, we would like to highlight those clubs which were involved in the present research.

FUNDING

This research was conducted, in part, thanks to a grant (Values in sport) from *Conselleria de Transparència, Cultura i Esport. Govern de les Illes Balears* (Spain). Project number (06605).

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