

Influence of Coach's Anger on Team's Performance in Basketball

Víctor Hugo Duque Ramos¹, Álvaro Correa Martín², Miguel Ángel Gómez Ruano³ Pedro Sáenz-López Buñuel⁴

Abstract

Coaches exert a significant influence on team environment as well as on the collective performance in team sports. Based on these premises, this study aims to analyze the effects of the coaches' anger on the basketball teams' performance in youth players. The study sample was composed by 24 basketball matches of the semifinals and finals of the Spanish Championship of Autonomous Teams for Under-16 (U16) and under-14 (U14) male and female players during the years 2019 and 2020. Every game was video observed using an ad hoc observational instrument. A total of n=544 anger events from the coaches of all 32 teams were analysed. The results showed a higher frequency of anger in the U14 category, in female players, in teams that were losing and when the result was close. Most anger actions seem to have a negative or neutral effect on team's performance. It is particularly negative when it is focused on the referee, who is the main cause and object of the anger. When coaches showed low intensity anger, they obtained slight improvements. The results suggest that coaches need to manage and control their emotions according to the game context.

Keywords: anger, competition, sport, negative emotions

Introduction

The coach is a reference for the players, both in terms of sporting and personal aspects of their lives (Vázquez & Gayo, 2000). His or her way of leading the group has an influence on the team's climate to achieve the involvement and commitment of players, the ambition to continue improving performances, and to overcome new individual and collective challenges (Buceta, 2004). Thus, it is important to know that the emotions of coaches have a direct influence on the motivation and learning of young individuals (Arens & Morin, 2016). The climate that is generated in a team, especially with youth players, directly affects moods, motivation or commitment in training, and therefore, the team's performance (Vázquez & Gayo, 2000). For example, a negative emotional state during the development of competitions produces psychological alterations that can affect concentration capacity and decision-making (Córdoba, 2008). Therefore, the emotions expressed by the coach will have an influence on the climate and the performance of the team.

Emotion is a personal response of each individual to external or internal stimuli (Mora Teruel, 2013). Emotions are natural and functional, which means they are useful. Some emotions make us feel good and others bad; for this reason, authors such as Bisquerra (2018) classify them as positive, negative or ambiguous in relation to the well-being or discomfort that they

generate. The present author demonstrates the need for emotional education in our communities, since negative emotions are more frequent and powerful than positive ones and are generated in situations where they are really useless and ineffective. Sport, and particularly basketball, is an interesting field of study of the effects of emotions (Buñuel, Ramos, Torres, & García, 2020). For example, players decrease the percentage of free-throws in situations of psychological pressure due to the negative effect of their emotional state (Oñoro Asenjo, Jiménez Sáiz, & Lorenzo Calvo, 2017). In fact, negative emotions limit specific actions, both, at a behavioral and cognitive level and in fact, even affect at a physiological level (Ferrer Maldonado, 2013). Available researches show the need to improve emotional competencies, particularly among coaches of youth teams (Arens & Morin, 2016; Bisquerra, 2007). Thus, it is necessary to address studies that analyze the effect of emotions in educational contexts such as youth basketball (Frenzel et al., 2016).

Physical activity and sports generate situations in which positive and negative emotions are shown with intensity, particularly when there is a competition (Lavega i Burgués, March Llanes, & Filella Guiu, 2013). It is common to observe moments of anger in coaches of different sports specialties, especially when the match outcome has a particularly significant relevance, which is why the semifinals and final of the Spanish championship of autonomous basketball teams have been selected in this study. Likewise, this emotion has

¹Docente de Educación Primaria (Medellín, Colombia),

²y⁴Universidad de Huelva

³Universidad Politécnica de Madrid

Corresponding Author: Pedro Sáenz-López Buñuel.

Facultad de Educación, Psicología y Ciencias del Deporte. Avda. Tres de Marzo s/n. 21071 Huelva

Tfno: 959219266 Email: psaenz@uhu.es

been chosen because it is one of the most difficult one to control for; and also one of the most socially accepted in sport (Goleman, 1996). Anger is usually experienced in the face of injustice, frustration or any kind of invasion (Sáenz-López, 2020). This emotion is observable in sports contexts through gestures, tones, shouts, trash talk or words that show tension, anger, irritation or fury (Oliva Mendoza & Calleja Bello, 2010). The functional utility of this emotion is to defend oneself against unfair situations. Therefore, it is necessary to analyze the cause of anger and determine if it violates our dignity or if it is due to a frustration of expectations. Training the management of anger is a good sign of emotional intelligence (Bisquerra, 2007; Goleman, 1996; Sáenz-López, 2020).

The present study aims to describe moments of anger experienced by coaches according to various variables such as category, gender, time of match, score or cause, as well as to analyze the influence of coach's anger on the team's performance. More specifically, the effect is observed while taking into account the intensity of the anger, as well as to whom it was focused on.

Method

Sample

The current study sample was taken from the Spanish Championships for Autonomous Selections of U14 and U16 male and female players during the years 2019 and

2020. The selected matches were the semifinals and finals. Both championships were held in January in Huelva. The number of basketball games observed was n=24 (n=12 each year). The angry moments of the coaches corresponding to each of the 32 teams have been analyzed. In total there were n=544 anger events of the coaches obtained from the sum of the two championships played.

Instrument

For the purposes of this study, an ad hoc game observational instrument was designed. Each match has been observed live, taking note of the following variables (table 1):

- a) Event number.
- b) Minute and quarter.
- c) Score-line.
- d) Situation: 1 offensive phase; 2 defensive phase; 3 time out; 4 breaks; 5 others.
- e) Coach of every team: C1 and C2. Assistant of every team A1 and A2.
- f) Intensity: 1 low (small gesture or slight rise in tone); 2 medium (gesture with fuss and pronounced tone); 3 high (exaggerated gesture and / or shouting, and everybody realise it).
- g) Cause: 1 offensive decision; 2 defensive decision; 3 referee decision; 4 others.
- h) To whom: 1 player on the court; 2 players on the bench; 3 referees; 4 scorekeepers; 5 others

Table 1

Games observational instrument.

Number	Minute and quarter	Score	Situation	Coach	Intensity	Cause	To Whom
			1. offensive				1. player on the court
			2. defensive	C1		1. offensive	
					1. Low		2. player on the bench
				A1		2. Defensive	
			3. time out		2. Medium		3. Referee
				C2		3. Referee	
			4. Break		3. High		4. Scorekeepers
				A2		4. Others	
			5. Others				5. Otros

Subsequently, all the matches were analyzed through video to complete data matrix with the following information:

- a) Championship year: 2019 or 2020.
- b) Category: 1 U14; 2 U16.
- c) Gender: 1 male; 2 female.
- d) Phase: 0 final; 1 first semifinal; 2 second semifinal.

- e) Quarter: First, second, third or fourth period.
- f) Minute of the video.
- g) Minute of the match.
- h) Score-line.
- i) Partial scoreboard: difference in points, positive if they are winning, negative if they are losing.

- j) Moment: 1 offensive phase; 2 defensive phases; 3 time out; 4 breaks; 5 others.
- k) Team coaches: C1 and C2; team assistant: A1 and A2.
- l) Intensity: 1 low; 2 mean; 3 high.
- m) Cause: 1 offensive situation; 2 defensive situation; 3 referee decision; 4 others.
- n) To whom: 1 player on the court; 2 players on the bench; 3 referees; 4 table; 5 others.
- o) Accumulated anger, if anger appeared within the following 3 possessions: 1 if it is accumulated; 0 is not accumulated.
- p) Points scored and received in the 3 subsequent actions. Number of points scored and number of points received, with the dragged score, that means the previous score is added.
- q) Offensive outcome of the 3 subsequent actions, individually each action; 1 success (basket or foul received) and 0 failure (offensive foul, loss or missed shot).
- r) Defensive outcome of the 3 subsequent actions, individually each action; 1 success (rebound, ball recovered or offensive foul) and 0 failure (basket received).
- s) Points scored and received in the 3 previous actions. Number of points scored and number of points received, with the dragged score,
- t) Offensive outcome of the 3 previous actions, individually each action; 1 success; 0 failure.
- u) Defensive outcome of the 3 previous actions, individually each action; 1 success; 0 failure.

Procedure

Despite the fact that games were open access and the videos are available from internet, the Andalusian Basketball Federation was informed about this study. Two games before the final stage in each championship were used as training for the 3 observers until achieving a percentage of inter-observer agreements higher than 90%. All games were observed on live through the template presented in the table 1. Subsequently, the games were video observed in order to gather data for all the variables analyzed, especially the success or failure as well as the dragged score of the three previous and subsequent offensive and defensive actions. The videos were obtained through the Spanish Basketball Federation and downloaded using the Video Download Helper Plugin of the Mozilla Firefox browser.

Data analysis

First, a descriptive analysis of frequencies and distributions of anger events was carried out in each of the observed variables. Second, the total frequency of the

difference between before and after anger was analyzed: increased, decreased or maintained performance. This frequency analysis was run with the points scored in the three offensive and defensive possessions before and after anger. Third, the normality tests (Shapiro Wilks) were run, finding that all the variables showed non-normal distributions ($p < 0.05$). Fourth, repeated measures comparisons (Wilcoxon test) were made for the variable's points scored and received before and after the anger episode (1, 2 and 3 ball possessions). All analyses were performed using the IBM SPSS statistical package for Macintosh version 23.0. The level of significance was established at a level of $p < 0.05$. Finally, we also calculated the performance through the success and failure of the actions, adding each action (defense and attack) individually, since the action is not carried forward, and then the sum of the three actions.

Results

Frequency analysis by variables

The total number of anger events observed was 544, for an average of 22.6 per game. In the final games, this average rises to 24.0 and in the semifinals, it drops to 21.9 anger per game.

Of the 24 matches analyzed, in 18 the losing team account for more anger events while only in 6 games the winner did. The average anger per game for teams that won was 10.3, and for teams that lost 14. A coach's anger of 30% when losing was accumulated anger (that is, they occurred within the following 3 possessions), and when winning it was of 14.64%.

The number of anger events observed in the two championships is very similar (266 in 2019 and 276 in 2020). More episodes of anger appear in U14 categories than in U16 (302 vs. 242, respectively). Regarding gender, the frequency is higher in female than in male (286 vs 258, respectively). Taking into account the moment of the match, more anger events have been observed in the 2nd and 3rd quarters than in the 1st and 4th ones.

Regarding the score, anger appears more often when the team is losing (305) than winning (212). When the difference in the score was equal to or less than 10 points, the anger events were 396 (204 losing, 165 winning and 27 drawing) and when it was greater than 10 points the events were 148 (losing 100, winning 48).

The intensity of anger observed was low on 315 occasions, medium on 205 and high on 23. The most frequent cause is a referee decision (211) followed by some defensive actions (204) and some offensive actions (108). As to whom the anger is directed, the referee is again the most

frequent target (199), followed by a specific player (178),

then the players on the court (87) and players on the bench (48).

Table 2

Frequencies of anger events by variable.

Variable analyzed	Frequency and percentage of anger events	
Championship	2019	266 (48.9%)
	2020	276 (51.1%)
Category	U14	302 (55.5%)
	U16	242 (44.5%)
Variable analyzed	Frequency and percentage of anger events	
Gender	Male	258 (47.4%)
	Female	286 (52.6%)
Quarter	1º	125 (23%)
	2º	164 (30.1%)
	3º	148 (27.2%)
	4º	107 (19.7%)
Score	Winning	212 (39%)
	Drawing	27 (5%)
	Losing	305 (56%)
Score-line (difference of points)	Less than 10	396 (72.7%) (204 losing, 165 winning y 27 drawing)
	Greater than 10	148 (27.2%) (losing 100, winning 48)
Intensity	Low	315 (58%)
	Medium	205 (38%)
	High	23 (4%)
Cause	Offensive	108 (20%)
	Defensive	204 (37.5%)
	Referee	211 (38.5%)
	Others	21 (4%)
To Whom	Players on court	87 (16%)
	Player son bench	48 (9%)
	Specific player	178 (33%)
	Referees	199 (36%)
	Scorekeepers	6 (1%)
	Others	26 (5%)

Difference of partial score before and after anger events.

Analyzing the first possession of attack and defense before and after the anger, it is observed that the difference in points improves by 39.34%, equalizes in 25.92%, and worsens 34.74% of the time (figure 1).

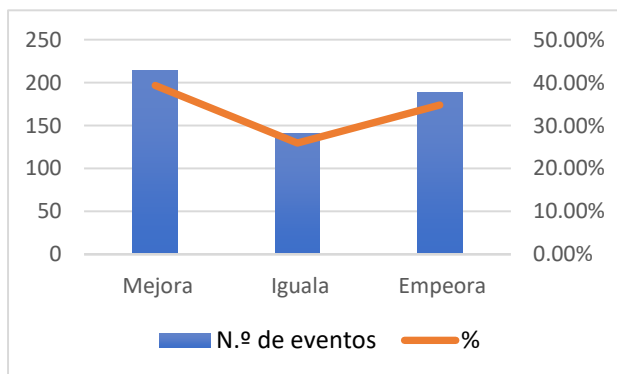


Figure 1. Short-term performance, first possession.

For this same analysis, when taking into account the difference in score between 3 ball possessions before and

after the anger event, the teams' performance increases in 42.46%, is maintained in 15.44% and decreases in 42.10% (see figure 2).

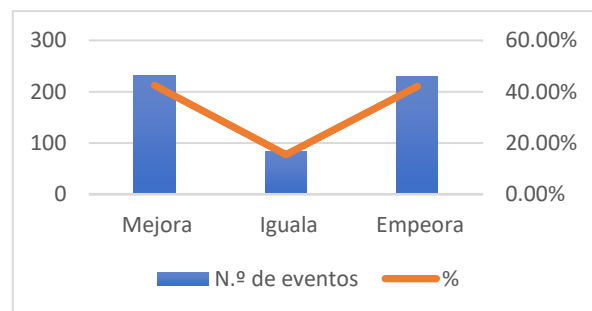


Figure 2. Long-term performance, third possession.

Performance difference in points according to anger intensity

If we introduce the intensity variable in these analyses, it is observed that during low intensity anger events there are only significant differences in the points received in the first possession (see Table 3).

Table 3

Performance differences according to anger intensity (low intensity).

Variable	N	BEFORE		AFTER		Z	P
		M	SD	M	SD		
Points scored 1BP	315	0,6	1,017	0,64	1,023	-0,099	0,921
Points scored 2BP	315	1,11	1,394	1,34	1,485	-1,442	0,149
Points scored 3BP	315	1,86	1,85	1,89	1,741	-0,203	0,839
Points received 1BP	315	1,12	1,161	0,9	1,076	-2,284	0,022*
Points received 2BP	315	1,76	1,556	1,57	1,415	-1,316	0,188
Points received 3BP	315	2,42	1,907	2,27	1,624	-0,747	0,455

When anger is of medium intensity, significant differences are found in points scored in the first ball possession (0.55 before and 0.73 after) and in points received after analyzing 3 ball possessions (2.13 vs. 2.49, respectively) (see table 4).

Table 4

Performance differences according to anger intensity (medium intensity).

Variable	N	BEFORE		AFTER		Z	P
		M	SD	M	SD		
Points scored 1BP	205	0,55	0,981	0,73	1,06	-2,275	0,023*
Points scored 2BP	205	1,19	1,394	1,39	1,464	-1,732	0,083
Points scored 3BP	205	1,84	1,741	2,1	1,811	-1,725	0,085
Points received 1BP	205	0,83	1,114	0,89	1,102	-0,419	0,675
Points received 2BP	205	1,51	1,536	1,67	1,604	-1,278	0,201
Points received 3BP	205	2,13	1,872	2,49	1,934	-2,635	0,008*

Regarding high intensity anger, it is observed that there are no significant differences in any of the situations analysed (see table 5).

Table 5

Performance differences according to anger intensity, (high intensity).

Variable	N	BEFORE		AFTER		Z	p
		M	SD	M	SD		
Points scored 1BP	23	0,65	1,152	0,65	1,071	-0,175	0,861
Points scored 2BP	23	1,3	1,636	1,22	1,204	-0,247	0,805
Points scored 3BP	23	1,7	2,098	1,87	1,632	-0,494	0,621
Points received 1BP	23	1,04	1,147	0,87	0,968	-0,691	0,49
Points received 2BP	23	2,04	1,581	1,43	1,121	-1,478	0,139
Points received 3BP	23	2,7	1,743	2,22	1,347	-1,151	0,25

Performance differences in points according to who the anger was focused on

When introducing the variable "to whom the anger is focused on", no significant differences are found in

field team, bench, scorekeepers and others. Significant differences only appear when anger is focused on referees and it is observed that, after the second and third possession, the team receives more points (see table 6).

Table 6

Performances when the anger is focused on referees.

Variable	N	BEFORE		AFTER		Z	p
		M	SD	M	SD		
Points scored 1BP	199	0,64	1,096	0,77	1,095	-1,39	0,164
Points scored 2BP	199	1,26	1,44	1,45	1,459	-1,313	0,189
Points scored 3BP	199	1,96	1,86	2,1	1,806	-0,577	0,564
Points received 1BP	199	0,73	1,127	0,95	1,127	-1,647	0,099
Points received 2BP	199	1,32	1,492	1,68	1,489	-2,429	0,015*
Points received 3BP	199	1,91	1,808	2,53	1,858	-3,231	0,001*

Performance results according to successful and unsuccessful collective actions

After analyzing team's performance through successful and unsuccessful defensive and offensive actions carried out before and after the coach's anger, it is observed that in 43.75% of the cases the performance decreased. Thus, before the anger the team had more success than after it. In 21.88% of the cases performance is maintained and in 34.37% of the actions the performance increased (see figure 3).

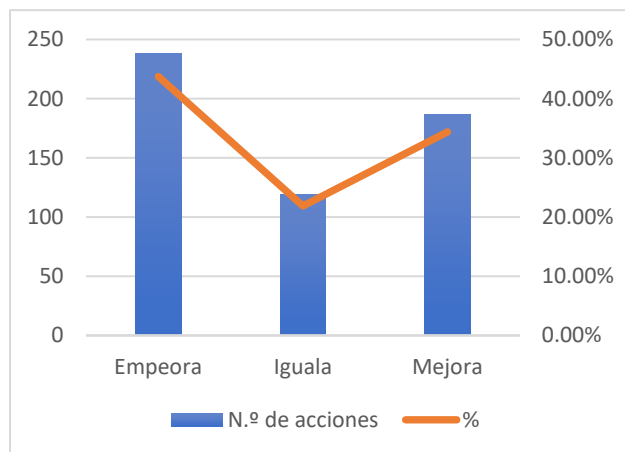


Figure 3. Team's performance according to successful and unsuccessful actions.

Discussion

The aim of this study is to describe the situations in which coach's anger events are observed; and to analyze their influence on team performance.

More events of anger are observed in U14 and females than in U16 categories and males, respectively. The direct expression of anger is considered a sign of dominance and increases social distance (Petkanopoulou, 2016). In recent decades, there has been a clear positive evolution towards anger management by professional coaches. Does it mean that the anger has been reduced according to the level or age categories? This tendency for more anger mainly appears in emotionally weaker groups (younger age and females) requiring more specific studies. In fact, in the variable "to whom the anger is focused on", doing it to a specific player occupies the second frequency (32.7%) after the referee. Further studies are needed to verify whether these players are, following this hypothesis, the weakest emotionally.

Anger usually appears in tense situations and, on many occasions, due to frustration or disappointment (Bisquerra, 2018). This argument would explain that there have been more moments of anger from the coach

of the team when losing than when winning. In addition, when the score balanced (equal to or less than 10 points of difference), the number of anger events is more than double that when the difference is larger than 10 points. These data show that anger arises as a cause of the stress of the context rather than due to a coach's effective strategy. The accumulated anger data confirms the tension and frustration of the coach of the losing team, since it happens twice as often as when winning (30.0% versus 14.6%, respectively).

The effectiveness of anger according to team's performance was one of the main objectives of the study. The results show that on most occasions, the coach's anger events have no effect on or even worsen the team's performance. After the first ball possession, 60.7% of the time the performance was found to be the same (25.9%) or decreased (39.4%). After the third ball possession, the trend is maintained (15.44%) and decreased (42.46%), that is, about 60.0% of the time the effect is null or negative. The events in which the partial score increases (about 40%) can be explained because anger is an energy activator (Mercadet-Portillo & Inufio-Díaz, 2015). However, it also affects players' concentration or self-confidence (Córdoba, 2008), as well as the team's social climate (Buceta, 2004). Anger is related to stress and anxiety (Fredrickson & Joiner, 2002) and these emotional states affect learning and performance (Mora Teruel, 2013). On the contrary, positive emotions help to resist and get recovered before stressful situations and to be more effective in tasks (Isen & Means, 1983). The competence to know and manage emotions is an indicator of emotional intelligence (Goleman, 1996) which has positive consequences in aspects such as self-esteem or efficient decision-making (Damasio, 2001; Meyer & Zizzi, 2007).

If we analyze performance through successful (e.g., rebounds or steals) or unsuccessful (e.g., turnovers) actions, the results are even clearer in relation to the effect of anger. In 43.8% of the cases, the performance decreases and in 21.9%, the performance is maintained, and only in 34.3% of the actions the performance increases.

Focusing on 35-40% of the times that anger has positive effects, the variables "intensity" and "to whom it is focused on" have been analyzed to know in which situations it occurs.

When moments of high intensity anger are analysed, it is observed that their influence on the result is not significant. This outcome, together with the low frequency of high intensity anger (less than 1 per game), is a positive fact in relation to the idea of reducing and

eliminating anger from youth categories. When the anger is of medium intensity, the influence on the result is also irrelevant. Only the difference after the first ball possession is significant (increased performance), although after 3 ball possessions, the team receives more points. Therefore, its effect is not related to team's performance. When the anger is of low intensity there are only significant differences in the points received in the first ball possession. In the rest of the situations, anger has no effect according to the difference in points. These findings are relevant since they confirm that when anger is excessive, it clearly affects social relationships and trust (Goleman, 1996). Therefore, the few positive effects of anger are mainly focused on low intensity actions such as a gesture of disappointment or a slight rise in tone.

The results obtained as to whom the anger is focused on show that there are only significant differences in performance when the focus of the anger is the referee. In both 2 and 3 ball possessions, the team performs worse as it receives more points than before the anger. In other words, getting angry with the referee has negative effects on performance. This result is in accordance with the study of Gómez, Toro, and Furley (2016) in which it is shown that technical and unsportsmanlike fouls negatively affect the team's performance, contrary to what many coaches and the media frequently consider. The most striking finding is that the referee is the focus of the most frequent anger (36.5%) and a referee decision is the most frequent cause of the coaches' anger (38.7%). Therefore, anger produced by causes beyond our control is a clear example of emotional incompetence (Bisquerra 2018).

When analyzing the frequency of the cause that leads to anger behaviours, it is observed that after the referee (211), some defensive actions (204) appear before some

offensive actions (108). This finding indicates that coaches were more focused on defensive phases or show less tolerance for mistakes and errors in these actions. In summary, it is necessary that coaches know the effects of their emotions on the team's climate and performances, as well as the importance of improving their emotional competencies such as self-knowledge, self-control, empathy or social skills (Bisquerra, 2007; Mercadet-Portillo & Inufio-Díaz, 2015; Oriol Granado, Gomila Andreu, & Filella Guiu, 2014) propose the need to reduce negative emotions and promote positive emotions in order to improve sports performance.

Conclusions

Anger appears more frequently in U14 and females than in U16 and males, respectively. In addition, when teams are losing or have balanced scores, the coaches show more anger events than when winning and with score differences greater than 10 points. These findings mean that usually coaches' anger is out of their control due to game contexts.

The influence of the coach's anger on team's performance is found to be not significant in most cases. It is especially negative when it is focused on the referee, which happens very often. Anger rarely performs positively and when it occurs, it is usually of low intensity. When the intensity is high, the influence on performance is not significant. The practical application of this work suggests that coaches of formative categories control anger, especially if it is focused on referees and avoid anger of medium and high intensity. Only low intensity anger in some moments can have positive effects. Thus, it is necessary to promote the development and learning of emotional competencies by coaching staff.

References

- Arens, A. K., & Morin, A. J. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology*, 108(6), 800. doi:<https://doi.org/10.1037/edu0000105>
- Bisquerra, A. (2007). Educación emocional y bienestar, Barcelona. *Praxis*.
- Bisquerra, R. (2018). *Universo de emociones*. Valencia: PalauGea comunicació.
- Buceta, J. M. (2004). *Estrategias psicológicas para entrenadores de deportistas jóvenes*: Librería-Editorial Dykinson.
- Buñuel, P. S.-L., Ramos, V. H. D., Torres, B. J. A., & García, C. C. (2020). BALONCESTO Y EMOCIONES: UNA REVISIÓN SISTEMÁTICA [Basketball and Emotions: A systematic review]. *E-Balónmano. com: Revista de Ciencias del Deporte*, 16(1), 73-84.
- Córdoba, E. P. (2008). Palabras e imágenes positivas en la respuesta de ansiedad en deportistas de competición. *Cuadernos de Psicología del Deporte*, 8(1), 31-46.
- Damasio, A. R. (2001). *El error de Descartes*. Barcelona: Crítica.
- Ferrer Maldonado, L. (2013). Procedimiento de identificación de las emociones positivas adecuadas para revertir el distrés asociado a los tiros libres en baloncesto. *Revista iberoamericana de Psicología del Ejercicio y el Deporte*.

- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological science*, 13(2), 172-175. doi:<https://doi.org/10.1111/1467-9280.00431>
- Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durksen, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemporary Educational Psychology*, 46, 148-163. doi:<https://doi.org/10.1016/j.cedpsych.2016.05.003>
- Goleman, D. (1996). Emotional intelligence. Why it can matter more than IQ. *Learning*, 24(6), 49-50.
- Gómez, M.-Á., Toro, E. O., & Furley, P. (2016). The influence of unsportsmanlike fouls on basketball teams' performance according to context-related variables. *International journal of sports physiology and performance*, 11(5), 664-670. doi:<https://doi.org/10.1123/ijsp.2015-0478>
- Isen, A. M., & Means, B. (1983). The influence of positive affect on decision-making strategy. *Social cognition*, 2(1), 18-31. doi:<https://doi.org/10.1521/soco.1983.2.1.18>
- Lavega i Burgués, P., March Llanes, J., & Filella Guiu, G. (2013). Juegos deportivos y emociones. Propiedades psicométricas de la escala GES para ser aplicada en la Educación Física y el Deporte. *Revista de investigación educativa*, 2013, vol. 31, núm. 1, p. 151-165. doi:<https://doi.org/10.6018/rie.31.1.147821>
- Mercadet-Portillo, O. E., & Inufio-Díaz, R. (2015). INTELIGENCIA EMOCIONAL Y EL ENFADO EN EL BALONCESTO. *Revista científica especializada en Ciencias de la Cultura Física y del Deporte*, 12(26), 111-122.
- Mora Teruel, F. (2013). ¿Qué es una emoción? *ARBOR Ciencia, Pensamiento y Cultura*, 189(759), 10.3989/arbor.2013.3759n1003. doi:<http://dx.doi.org/10.3989/arbor.2013.759n1003>
- Oliva Mendoza, F. J., & Calleja Bello, N. (2010). Medición de la ira en el deporte de combate: validación del STAXI-2 en deportistas mexicanos. *Liberabit*, 16(1), 51-59.
- Oñoro Asenjo, M. Á., Jiménez Sáiz, S. L., & Lorenzo Calvo, A. (2017). Choking under pressure en los tiros libres de la Liga ACB.
- Oriol Granado, X., Gomila Andreu, M., & Filella Guiu, G. (2014). Regulación emocional de los resultados adversos en competición: estrategias funcionales en deportes colectivos. *Cuadernos de Psicología del Deporte*, 14(1), 63-72.
- Petkanopoulou, A. (2016). *Los efectos emocionales del poder social*. Universidad de Granada.
- Sáenz-López, P. (2020). *Educación Emocionando* (Vol. 29). Servicio de Publicaciones de la Universidad de Huelva.
- Vázquez, Á. V., & Gayo, A. A. (2000). Dimensiones de la figura del entrenador profesional en los deportes de equipo. *Apunts. Educación física y deportes*, 4(62), 58-66.