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How do amateur soccer referees destabilize a match?

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The refereeing system in amateur football is not without weakness. Some referees could be deliberately led to destabilize a match in order to demonstrate their skills in regulating a situation of potential conflict. This has posed an ethical problem to soccer institutions. Our study proposes to focus on this phenomenon by questioning seventy four referees from district or league level living in the North of France. The way in which these sports actors combine different informational cues (physical tiredness, communication, aggression, mark, emotion) when deciding to destabilize a football match was investigated. Equally at the level in which they whistled, two clusters stood out. In the first one, the referees (44.6%) estimated that they would never implement this strategy in any situation. In the second one, the referee (55.4%) judged that they would sometimes use such destabilization particularly in a situation where they communicated with the players, were not physically tired and could obtain an excellent mark from the observer.

This work is based on the qualitative results obtained by social scientists from SHERPAS (sports laboratory in France). They found a weakness in the refereeing system in amateur football. Sometimes, some referees could be deliberately led to destabilize a match, i.e. to ensure that it is weakened in order to demonstrate their skills as a regulator, for example during a control (Nuytens, Hidry-Neys, Penin, & Sallé, 2010). It is an original issue because it considers the referee as an actor of destabilization, whereas sports literature underlines that players often take the initiative in this type of action (for instance Grange & Kerr, 2009; Kerr, 2008; Maxwell, Visek, & Moores, 2009). In particular, this investigation questioned the ethics of referee decisions. We can define unethical decision-making in a

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social context (such as situations in sport) as an illegal or immoral decision which the population finds difficult to accept (Jones, 1991).

The large number of the soccer referee decisions during a match, about three or four decisions each minute, is quite striking (Helsen & Bultying, 2004). A lot of elements such as a team's reputation for aggressiveness (Jones, Paull, & Erskine, 2002), crowd noise, experience and anxiety (Balmer et al., 2007), a preceding foul judgment (Plessner & Betsch, 2001), the haughtiness of the players involved in a foul (Quaquebeke & Van Giessner, 2010), individual differences in referee ability to cope under pressure (Page & Page, 2010), and social pressure and nationality (Dawson & Dobson, 2010) act upon soccer referee decision-making. Using a qualitative method, Lane, Nevill, Ahamad and Balmer (2006) identified four categories of themes influencing soccer referee decision-making: ideal decision-making (accuracy -error, regulations, and professionalism), individual factors (opinion, concentration, and control), experience factors (experience, personality, personal life) and situational factors (crowd interaction, environmental factors, player reaction, crowd factors). These authors proposed that a quantitative method could be used to test the impact of these themes on referee decision-making. Apart from these researchers, no one else looked into the impact of observers on referee decision-making during a match.

However, referee decision-making can have an effect on the course of a game and on sports actors' behaviour. Indeed, some decisions can inflame a match, get supporter or coach exited or lead players to behave in such a way that their misconduct cannot be made up for. Otherwise, referees can also calm down various social tensions and diminish excessive behaviour (Friman, Nyberg, & Norlander, 2004). No thought was given to the positive or negative outcome of such decision-making since, in principle, it was only used to regulate players' acts. And yet, sometimes, referees went too far with that type of decision-making.

Soccer actors have often been studied from a moral point of view. The major part of the investigations have focused on the players. In roleplaying experiments, Taclet, Rascle, Souchon and Coulomb-Cabagno (2008) studied on the perceived legitimacy of aggression in soccer as a function of instrumental or hostile aggression and in both positions of aggressor and victim. In another study, Rascle, Traclet, Souchon, Coulomb-Cabagno and Petrucci (2010) established the aggressor-victim difference in the perceived legitimacy of aggression by French male soccer players according to the type of aggression, score information and sporting penalization. Given that social context influences moral judgment, decisionmaking and behaviour in the domain of sport (e.g. Kavussanu, Roberts, & Ntoumanis, 2002), Kavassanu and Spray (2006) took an interest in and highlighted the effects of the moral atmosphere of a team and the perceived motivational performance climate as two aspects of social issues effecting moral functioning in young male footballers. From a developmental perspective, researchers demonstrated that two components of moral functioning, moral judgement and moral intention, were important predictors of moral behaviour (Romand, Pantaléon, & Cabagno, 2009). Other ethical research emphasized well-known unethical personal behaviour such as Zidane's "Head-butt" (Kerr, 2007) or Maradona's "Hand of God" (Vorstenbosch, 2001), sportspersonship behaviour in competitive boy and girl Norwegian youth football players and its relation to the motivational climate, or resulted in the elaboration of a questionnaire for the assessment of moral content judgement in sport (Proios, 2010).

However, unlike the morality of soccer players, that of referees has not yet been studied. This may be due to the simple reason that they are perceived as people who represent rigidness and/or honesty. It is difficult to imagine them taking advantage of an ambiguous game situation in their own interests. But nevertheless, it would seem that this kind of behaviour exists (Nuytens et al., 2010). How is such a phenomenon possible? Is it a strategy set up by the totality of amateur referees irrespective of the level in which they blow their whistles? What factors would be taken into consideration by a referee when deciding to destabilize a match?

Functional Measurement (FM) was an ideal theoretical approach to reply to these questions. This can make a new contribution to ethical decisions in sport largely because it is a well-tried method in various psychological ethical domains such as bioethics (e.g. Muñoz Sastre, Gonzalez, Lhermitte, Sorum, & Mullet, 2010) and politics (e.g. Mullet, Neto, & Pinto, 2008) and because of its outstanding use in decision-making and judgement in sport (Fruchart, Dracon, Pâques, & Dru, 2009). This framework offers a new perspective in understanding ethical or unethical judgments and behaviour in sport (Fruchart & Carton, 2011). In ethical sport, Fruchart and Mullet (2011) demonstrated that amateur, professional handball players and lay people judged the condoning of an aggression in handball differently and confirmed that FM could make a judicious contribution to moral issues in sport. Here, it was applied to ethical decision-making in sport.

PRESENT STUDY

Our study sets out to investigate the amateur referee world and the conscious use of a destabilization strategy during a soccer match which would allow amateur referees to demonstrate their capacity to control a game while being marked by observers. It was based on the Functional Measurement method (Anderson, 1996, 2008) and was aimed at identifying the influence of different factors on a destabilization decision. The choice of factors was guided by their importance in refereeing and their various contributions to scientific sports investigations into soccer referees.

(a) The first factor considered was physical tiredness. Its influence on referee decision-making in soccer has already been discussed (Mascarenhas, Button, O'Hara, & Dicks, 2009). The intensity of a match and fatigue can affect cognitive functioning and the quality of decision making (Reilly, 1997, 2006). Conversely, fatigue does not seem to have a detrimental effect on offside decision-making by assistant referees (Catteuw, Gilis, Wagemans, & Helsens, 2010).

(b) The second factor considered was referee communication with players. Mellick, Fleming, Bull and Laugharne (2005) demonstrated the importance of using verbal and non-verbal techniques for enhancing player acceptance of decisions. The kind of referee communication influences the players' perceptions of the correctness of decisions that go against them (Simmons, 2008).

(c) The third factor considered was the level of aggression of which the referee was victim. Verbal aggression is defined as speech acts directed against referees which are experienced as unpleasant (Friman, Nyberg, & Norlander, 2004). Continually, amateur referees suffer verbal aggression from players, coaches or supporters (Folkesson, Nyberg, Archer, & Norlander, 2002).

(d) The fourth factor considered was the mark given by the observer to the referee. No matter what level soccer referees are involved in, their main function is to apply the rules of the game and to be in control of the match, but also to achieve a performance because it is assessed (Reilly & Gregson, 2006). Nuytens et al. (2010) indicated that referees are given a mark by observers. This mark is an element which allows them to grade the referee at the end of the sports season. Thus, the best referees will be upgraded and the worst referees will be downgraded, which makes this mark very important. One of the principal characteristics that determine this mark is the skill to control a match. It is obvious that a match which is too calm will not give a referee an opportunity to demonstrate this capacity and so it is made rougher. (e) The last factor considered was linked up with emotions and more particularly how calm the referee was during the match. This might influence him about his decision-making. Simmons (2006) advanced that referees must appear calm in order to prevent and manage player aggression following a refereeing decision. In another study, Krettenauer, Jia and Molesh (2011) showed the influence of emotions in adolescents' moral decision-making. Furthermore, the role of emotion in decision-making has been strongly established in various psychological domains such as in economics, management and marketing. (Heilman, Crisçan, Houser, Miclea, & Miu, 2010; Kwortnik & Ross Jr., 2007; Sayegh, Anthony, & Perrewé, 2004; Stocco & Fum, 2008; Strohminger, Lewis, & Meyer, 2011; Wout, Chang, & Sanfey, 2010).

We hypothesise that the manner in which they opted for a destabilization would depend on a combination of information cues relative to referee activity. We supposed that referees questioned would not be unanimous in the use of this strategy which would underline varying cognitive rules in moral decision-making.

METHOD

Participants. The subjects are seventy-four amateur soccer referees from the North of France (twenty-six at district level and forty-eight at league level). Contacted during their early season meeting or individually in 2010, their task was to judge the degree of decision to destabilize a match (in rejecting one goal) in order to demonstrate their ability to regulate a situation of potential conflict to an observer in charge of evaluating them.

Material. Each person was presented with 48 scenarios constructed from 5 variables: physical tiredness (tired or not tired), communication (communication or no communication), aggression (verbal aggression or no aggression), mark (excellent or bad), emotion (extremely agitated, somewhat agitated, calm).

One typical story was as follows: "Maël referees an amateur soccer match. During the match, he is being evaluated by an observer in particular as regards his control over the match. Since the beginning of the match, Maël has been calm. In managing the match, Maël follows the rules and communicates with players. The game is quiet, easy to referee. Maël is aware that with this kind of game, he will not have an excellent mark regarding the control of the match, selected item to grade referees at the end of the season. On a corner kick, a player scores a goal at the time of a contentious air contact with the goalkeeper. Maël, though in an advanced state of fatigue, uses the situation to demonstrate to the observer that he can manage a situation of potential conflict: he cancels the goal. Following this, the sanctioned player loses his self-control and verbally attacks Maël. During debriefing with the observer, Maël understands he will receive an excellent mark for his control of the match."

The question under each story was "If you had been Maël, would you have cancelled the goal in order to demonstrate yours skills to regulate a situation of potential conflict?" Beneath each story was an 11-point response scale with "I am completely sure that I would not cancel the goal" indicated on the left and "I am completely sure that I would cancel the goal" indicated on the right.

Procedure. The participants were instructed to read the same set of scenarios (that were presented in random order) one at a time, to try to identify with the player who was depicted in each scenario, and to express a rating along the response scale. There were two phases: a familiarisation phase and an experimental phase (Anderson, 2008; Pâques, Fruchart, Dru, & Mullet, 2005). In the familiarization phase, the experimenter explained to each referee what was expected, i.e., that he was to read a certain number of stories in which a referee destabilizes a match in order to demonstrate to an observer his ability to control the match and that in each case he was to indicate the degree of decision-making of destabilization if he were that referee.

During this phase, each participant was presented with eight scenarios taken from the set of 48. The purpose was to make the participant as familiar as possible with the test material and the task. The choice of these scenarios was guided so as to expose the participants to the full range of stimuli. The participant was told to read each scenario, and to provide the requested ratings. After completion of the 8 ratings, the participants were given an opportunity to compare their responses and make changes if necessary.

During the following, experimental phase, the participants were presented with the whole set of 48 scenarios. Each of them provided his/her ratings at his/her own pace but they were not allowed to compare their responses or to go back and make changes as in the familiarisation phase. The session lasted about 45 minutes.

RESULTS

As participants appeared to respond in very different ways, a cluster analysis (K-means, Euclidian distances).was performed on the raw data (Hofmans & Mullet, in press). This procedure is particularly recommended to group individuals according their integration rule when the pattern involves many factors, as is the case in the present study. Two clusters were identified. For each cluster, an ANOVA was drawn up based on: Referee Category x Physical Tiredness x Communication x Aggression x Mark x Emotion.

The first cluster (N = 33) was termed Never Destabilization since the mean response was always close to the left hand of the scale (M= 1.02 on a 0-10 point scale). This cluster is shown in Figure 1 (top panels). The mean "destabilization" ratings are on the y-axis. Each panel corresponds to one level of the mark factor. Each level of communication is on the x-axis. The two curves correspond to two levels of the physical tiredness factor. They are parallel with the x-axis, merged and presented in the same manner in each panel. From these patterns it possible to state that the referees of Cluster I judged they would never adopt destabilization in whatever situation. An ANOVA showed that all factors were non significant.

The second cluster (N = 41) was termed Sometimes Destabilization since the mean response was in the region of middle of the scale (M = 5.67). It is shown in the bottom panels of the Figure 1. In three cases, the response level was higher than 7. These three cases correspond to a situation where the mark was excellent, the referee communicated with players, and was not physically tired. The slope of the curves is ascending, which indicates an effect of communication. In the left panel, the curves are less elevated in relation to the y-axis than they are in the right panel, which indicates an effect of the mark. The curves are separated, which indicates an effect of physical tiredness. This separation is greater in the right panel than it is in the left panel, which highlights that the effect of tiredness was greater in obtaining an excellent mark than in obtaining a poor mark. All the curves were parallel, which indicates that there was no interaction between factors. An ANOVA was also conducted on the data from this cluster. Aggression, (F(1.40) = .02; p = .881) and emotion, (F(2.80) = 1.18; p = .311), were not significant. In increasing order, physical tiredness (F(1.40) = 4.33; p =.044), communication, (F(1.40) = 6.81; p = .013) and mark (to see figure 2), (F(1.40) = 12.72; p = .001) were significant. Yet, these effects were all rather small (10% of the response scale). The results are shown in Table 1 and Figure 2.

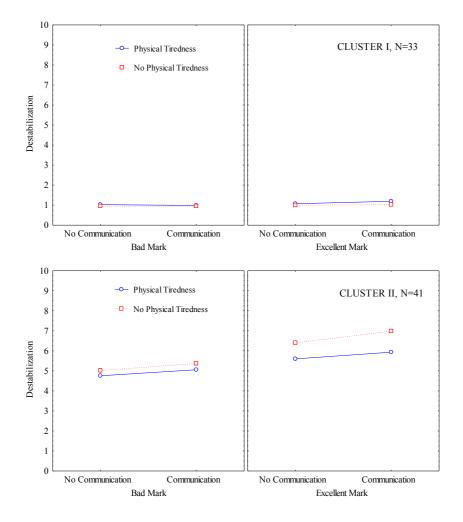


Figure 1. Effect of physical tiredness, communication, and mark on "destabilization" judgments in both clusters.

Table 2 shows the composition of the two clusters in terms of demographic characteristics. There was no correlation between being district or league referees and cluster membership, ($\chi^2(1) = .039, p = .843$).

	F	Effect	E	rror		
Factor	df	MS	df	MS	F	р
Physical Tiredness (PT)	1	181, 10	40	41,83	4,33	0,044
Communication (C)	1	75,32	40	11,07	6,81	0,013
Aggression (A)	1	0,11	40	5,03	0,02	0,880 (<i>ns</i>)
Mark (M)	1	684,92	40	53,86	12,72	0,001
Emotion (E)	2	27,75	80	23,42	1,19	0,311 (<i>ns</i>)
PT x C	1	2,71	40	1,50	1,81	0,186 (<i>ns</i>)
PT x A	1	0,32	40	2,94	0,11	0,744 (<i>ns</i>)
C x A	1	11,59	40	2,88	4,02	0,052 (<i>ns</i>)
PT x M	1	49,78	40	4,52	11,03	0,002
C x M	1	2,15	40	3,03	0,71	0,405 (<i>ns</i>)
A x M	1	1,54	40	2,71	0,57	0,456 (<i>ns</i>)
PT x E	2	0,80	80	3,06	0,26	0,771 (<i>ns</i>)
C x E	2	2,56	80	3,15	0,81	0,446 (<i>ns</i>)
A x E	2	4,14	80	2,11	1,96	0,148 (<i>ns</i>)
M x E	2	8,65	80	9,13	0,95	0,393 (<i>ns</i>)

Table 1. Main results of the ANOVA performed on Cluster II.

Table 2. Composition of clusters.

	Cluster			
	Never Destabilization	Sometimes Destabilization		
District	21	27	48	
League	12	14	26	
Total	33 (44.6 %)	41 (55.4 %)	74	

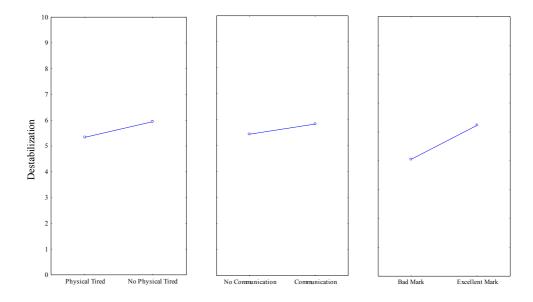


Figure 2. Simple effect of physical tiredness, communication, and mark on "destabilization" judgments in cluster II.

DISCUSSION

The aim of our study was to demonstrate that the decision to set up a phenomenon of destabilization, such as an unethical decision, is found in amateur soccer refereeing and to advance the combination of factors in referee activity which leads to this type of decision-making. Destabilization allows referees to make a match rougher and to show observers their ability to control the on-going match. The latter represents a factor among others which is taken in consideration in grading at the end of season (Nuytens et al., 2010).

Irrespective of the level at which referees intervened (district or league), two populations were indentified among the seventy-four referees questioned. 44.6% decided that they would never adopt such a strategy whatever the situation in which they found themselves. On the contrary, 55.4 % of the participants considered that they would sometimes use destabilization; in particular when they would communicate with players and would not be physical tired so that the mark given by observer would be excellent.

The additive pattern of data is shown (figure 1) based on the factors: Physical Tiredness x Communication x Mark. From these curves it is possible to state that the less physical tiredness, the more destabilization decisions, and the more communication, the more destabilization decisions, and the better the mark, the more destabilization decisions. The following equation can be written: To Destabilize a match = f (Physical Tiredness + Communication + Mark).

Different factors did not have the same impact on the destabilization decision. Emotion and verbal aggression were never considered by referees as factors which encourage them to destabilize a match.

It is surprising and worrying that verbal aggression was not taken into consideration by referees. We thought that it would have a deterrent effect on decisions to destabilize a match. In a way, this kind of act of aggression has become natural on soccer areas. This result links up with the conclusion according to which referees are constantly confronted with verbal aggression (Folkesson et al., 2002). Its frequency could be responsible for it being considered perfectly normal behaviour. It would be interesting to investigate other types of aggression such as physical aggression.

The mark given by observers was the primordial factor in the use of this destabilization strategy. This statement emphasized the important role of these individuals in the refereeing system because of their responsibility as regards possible promotion that referees could obtain in the structural hierarchy.

Verbal communication is an essential component of referee activity as far as ethical decisions are concerned. Relations between players and the referee are based on previous spoken exchanges. Besides, Mellick et al. (2005) established strategies for improving player acceptance of referee decisions. Referees are aware that communicating before destabilizing a match may help them to avoid problems with players.

Physical tiredness remains a significant factor in referee activity. Feeling good physically and not being tired have repercussions on cognitive operations (Helsen & Bultuynck, 2004). In this mood, the decision is perhaps easier to put in place because a player will be in a position to face up to referee reaction.

It is primordial to warn referee institutions about this unethical decision-making. In connexion with results of Friman et al. (2004), referees acknowledged that decision-making was an opportunity to demonstrate their skills in managing a match. However, in an ambiguous situation, the decisions made by the referee may be misunderstood by players and may be transformed into a veritable source of aggression or threat. Ethical decisions

do not contradict this principle. For instance, using an unethical strategy may spark off a sentiment of injustice in players who could feel wronged (Faccenda, Pantaléon, & Long, 2011). We could ask players about their acceptance of immoral decisions. Their answers could highlight aggressions of which referees are sometimes victims.

Recently, research into sports morals has focused on antisocial behaviour. This has been defined as intentional behaviour bent on harming or disadvantaging another individual (Kavassuna, 2008). The decision to destabilize has two things in common with anti-social behaviour so it can be practically identified as an antisocial decision. This may, in fact, disadvantage a team and above all turn a situation to a person's advantage. In this case, it is a deliberate decision on the part of the referee. In future research, it would be enriching to develop and improve the definition of an antisocial decision or judgement in sport.

It allows us to confirm the existence of immoral behaviour in amateur soccer refereeing. In the future, observers will be vigilant when witnessing this kind of unethical behaviour since some referees have prioritized their careers instead of being at the disposal of the players. Informed about this behavioural pattern, officials from soccer institutions could counter it in order to make refereeing more decent. They still need to find how to do it, notably among young referees.

This acknowledgement does not paint a rosy picture of the situation in amateur refereeing but it does not have any real repercussions (excepting aggression towards referees). The same remarks in professional soccer would be far more alarming as referee decisions can have profound implications on the outcome of a game such as economic incidence (Castagna, Abt, & D'Ottavio, 2007).

The approach used present study has a number of obvious advantages. One of its strengths is that it is based on a standard operating procedure used to make a judgement based on various stimuli. All the individuals should have been able to isolate information in order to tell us if it was important for them but they were not aware how much weight they lent to each factor. Furthermore, our study used amateur referees as subjects. They particularly interested in the matter of destabilization since they was directly concern by this domain.

However, we can identify some weaknesses in our approach as well. Some researchers who question FM's approach might criticize the prominence of the factorial design with so many combinations, and by inference the validity of the responses. To avoid that, in future researches, we could have presented a shortcut approach to the task. As specified by Weiss (2011), we could also space trials more widely over time or even use graphic rating response instruments.

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