

## 38. REFEREE AND RULES

### P-146 Analysis of between-half work rates in English Premier League soccer referees

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**OBJECTIVE** The analysis of between-half distance coverage can reveal the occurrence of fatigue and/or refereeing strategies; both of which would be classified as determinants of overall physical match performance. However, the literature presents conflicting evidence with regards to this aspect of physical match performance in referees. The aim of the present study was to examine the influence of first half activity on the physical match performances of English Premier League soccer referees during the second half of matches.

**METHODS** Match analysis data was collected using the Prozone® match analysis system from 19 full-time, professional soccer referees during a total of 254 matches in the 2004-2005 football season. Physical match performances were classified into two separate categories: 1) total distance covered (TD); 2) high-intensity running distance (running speed > 5.5m/s-1, HIR).

**RESULTS** The referees covered less TD during the 2nd half of the match (5790±416 vs. 5832±389m, p=0.04). HIR was consistent between halves (391±139 vs. 396±142m, p=0.54). When the TD and HIR data set were divided into three subsets ('High', 'Medium' and 'Low') according to score rankings on the basis of distances covered in the 1st half significant interactions were found for the 1st half distance x time.

**CONCLUSION** The results of this study appear to support the observation that referees moderate their behaviour during a match to avoid fatigue. Further examination is required as to whether reduced physical performances in the second half of matches are a consequence of referee fatigue, tactical strategies on behalf of the referee or reduced player match activities resulting in a slower tempo of match.

**KEY WORDS** Association football, match analysis, fatigue, intermittent exercise, referee

### P-147 Interpretation and application of the laws of the game in football incidents leading to player injuries

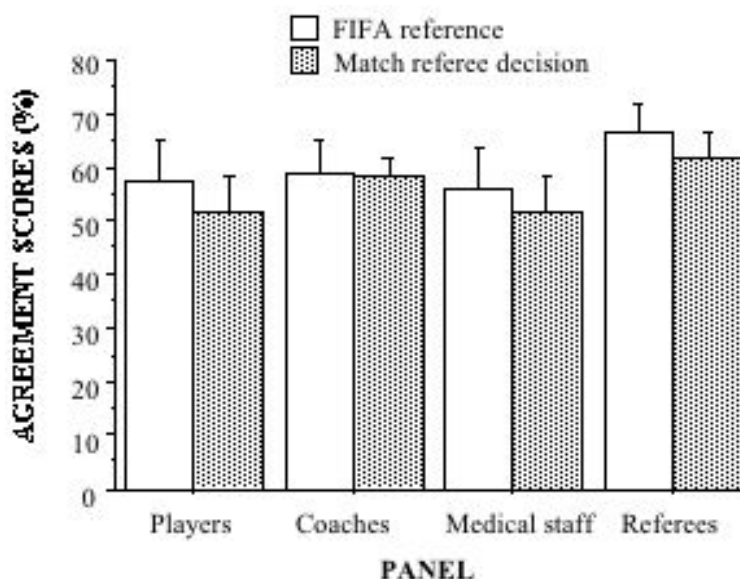
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**OBJECTIVE** Previous research has shown that the majority of the injuries occurring during competitive football (soccer) matches are caused by physical contact (Junge et al., 2004). In this respect, it is the match referee who is responsible for interpreting and implementing the laws of the game in an appropriate way, thereby protecting the players from a potential risk of injury through unfair challenges. The objectives of the present study were 1) to assess whether the laws of the game adequately protected players from injury in player to player contact situations, and 2) examine if there was a need for an improvement in the standard of refereeing. This study also investigated how various groups involved in professional football interpreted the laws of the game to sanction foul play.

**METHODS** The FIFA refereeing department determined a reference decision for 60 player-to-player contact incidents from the 2002 World Cup, all resulting in a player injury. This reference was compared with the decision of the match referee. Four expert panels (players, coaches, medical staff and referees) also assessed all incidents and expressed an appropriate sanction (nonfoul, foul, yellow or red card). The level of agreement was calculated between the FIFA reference and the match referees decision and with the different panels.

**RESULTS** The results showed that the FIFA reference decision indicated that the laws of the game were adequate for the majority of the situations (70%). Secondly, the match referees' decision was in agreement with the reference in 57% of the incidents. Finally, the level of agreement between the referees' panel and the FIFA reference decision was higher than with any other panel (Figure 1).



**Figure 1.** Agreement scores (%) between the different panels and both the FIFA reference and the match referee decision.

**DISCUSSION** The results showed that in a vast majority of the incidents, the laws of the game could deal with foul play. The discrepancy that was observed between the FIFA reference decision and the interpretation and application of the laws of the game by the actual match referee clearly has implications for post-match disciplinary procedures based on video replays in major football competitions.

#### REFERENCES

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**KEY WORDS** Contact injury, foul play, decision making.

## P-148 Offside decision-making process in association football using recall paradigm

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**OBJECTIVE** During the FIFA World Cup 2002, assistant referees (ARs) assessed, on average, 5.3 offside situations per match (Helsen et al., 2006). On a total of 337 offside situations, there was an error percentage of 26.2%. To reduce the number of incorrect offside decisions, it is important to fully understand the underlying mechanisms that may impact on the correctness of offside decisions. This study investigated the offside decision-making process in computer animations using the recall paradigm (Chase & Simon, 1973). The purpose of this paradigm was to objectively record if the attackers were perceived ahead of their actual position, and if so, to what extent.

**METHODS** FIFA ARs (n=23) and Belgian elite ARs (n=21) assessed 2 sets of 32 computer-based offside situations. The position of the attacker relative to the offside line was experimentally manipulated. The ARs had to judge the offside situations and also had to recall the positions of the attacker and second-to-last defender who were involved in the offside situation on a replication of the field of play.

**RESULTS** In terms of response adequacy, FIFA ARs (72.9%) performed significantly better than the Belgian elite ARs (63.2%). FIFA ARs were also more accurate in recalling the positions of the attacker and second-to-last defender than the Belgian elite ARs. Interestingly, all ARs marked the attacker less ahead of his actual position the more the attacker was positioned closer to the offside line.

**DISCUSSION** The results of the recall showed that ARs perceived the players ahead of their actual position. This may be explained by the flash-lag effect (Baldo et al., 2002). Therefore, ARs should be aware of the perceptual processes that come into play when judging offside situations. Alternative training tools such as video clips and computer animations may be considered to improve offside decision-making.

## REFERENCES

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**KEY WORDS** Offside decision-making, perception, assistant referees, recall paradigm.

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## P-149 Job satisfaction in Turkish football referees

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**OBJECTIVE** The referees have responsibility for control of players' behaviour and game during competitive football and implementing the rules of the game. When governing a football match, referees should give true decisions in seconds. If their job satisfaction isn't enough, their decisions may be affected. The purpose of this study was to investigate and determine the job satisfaction of the Turkish football referees and their expectations of the headquarters of referee committee.

**METHODS** Research is made up of assigned 100 referees (super league assistant, II. league A, II. league B, III. League C, C assistant) who participated in a course given by the headquarters of referee committee in Edirne in 2004. Questionnaire was used that assesses the opinion and observation of football referee. Paired-samples t test was used to compare between the opinion and observation of the referees at significant level of  $p < 0,05$  and  $p < 0,01$ .

**RESULTS** Referees' answers showed that they like to be a football referee. However, there are significant differences between the opinion and observation of football referees. The questions about money, transportation, security, equipment and facility are significantly different at level of  $p < 0,01$ . Nevertheless, the questions about referee committee and its honesty are significantly different at level of  $p < 0,05$ .

**DISCUSSION** The referees have responsibility for control of everything in the football area. Referees should get enough education about football, to manage the matches more efficiently. In addition, video training is discussed as an additional method for improving match officials' decision making. Referees would be protected from the outer factors before the match that would effect their decisions, provided that they have enough self-confidence.

**KEY WORDS** football referee, job satisfaction

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## P-150 Deconstructing referee

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**OBJECTIVE** The introduction part of this paper considers the status of referee in today's football game. The first part of the paper deals with deconstruction. The theory of deconstruction, as presented by famous philosopher Jacques Derrida, is explained in detail. How deconstructions work? The main philosophical concern of deconstruction and the way it uses history of philosophy is presented.

**METHODS** Second part of this paper is based on the resemblances between referee and priest. The first resemblance is from the clothing. The second argument will be the argument of reference. The third part is the Church and the FIFA resemblance argument. "In what ways are the wrong decisions of referee and priest are subject to penalty?" are presented in this third argument.

**RESULTS** Third part of this paper is based on the decision and undecidability concepts of Derrida together with the concept of "aporia". In this part the decision making process of the referee is discussed together with the resemblances and differences between referee, priest and judge. The conclusions of this discussion are compared with the case of referee.

**CONCLUSION** In the conclusion part of this paper the pressure on the referee is re-defined and re-examined with respect to the jobs that are put into analysis, lawyer and priest. This pressure together with the explanation of the

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Church argument is also defined from the perspective of FIFA. What is needed for future is the main question of this conclusion part.

**KEY WORDS** Soccer referee, deconstructing referee.

## P-151 A research on sprint and vertical jump capabilities of professional football league referees in Turkey

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**OBJECTIVE** Nowadays soccer is being played faster than before. It is getting increased soccer player's speed. It is so important for soccer referees capabilities of speed, quickness and quick strength to keep up with playing tempo. The purpose of this research was study speed, vertical jump, age, training age and levels of level referees.

**METHODS** This research was made on all levels of football referees (556) in Turkish Professional leagues in 2005-2006- season. 30 meter speed test were measured 1 meter from behind line by photocell with 0,01 sensitivity. Vertical jump test were measured by jump meter steadily. Average of arithmetical and value of standard deviation of age, training age, height, weight, speed and vertical jump of soccer referees:

**Table 1.** Information on football referees.

N	Age	Training age	Weight	Hight	Vertical Jump	Speed
556	27,62 (3,94)	11,59 (5,55)	74,806 (6,48)	178,05 (4,76)	55,67 (9,08)	4,44 (,26)

**RESULTS** Corelation and anova results between ages, levels, training ages and vertical jump, speed of soccer referees Level C was faster than assisting level C. It was observed that younger referees with high training age were faster and higher in vertical jump. As a result, younger referee is with high training ages have beter speed and vertical jump capabilities. There was a statistically significant relation in a research on sprint capabilities of different level soccer referees in Ankara (Kayisoglu and Koz) Speed of referees is very important in 105x68 meter soccer field. Sprint capabilities of referees can not be thought independently from sprint capabilities of soccer players. Soccer players avorage of 30 meter sprint capability in Turkey is 4,00-4,22 second (Taskin, 2006).

**Table 2.** Values of referees.

Soccer Referees	N	Vertical Jump		Speed	
		P	F	P	F
Levels	556	,462	,774	,599	,513
Training age	556	,027	1,637	,402	1,047
Age	556	,000	-,164	,004	,121

**DISCUSSION** There was a weak, negative and significant relation between age and vertical jump. As age increased, vertical jump values decreased. There was a positive, weak and significant relation between age and sprint capabilities. As age increased, sprint values increased. Vertical jump values according to different levels. Level B has lower jump level compared to level C and assisting level C. Level C has a higher jump level compared to assisting level C. Speed values according to different levels. Level B is slower than assisting level C and faster than level C. Sprint and vertical jump capabilities of soccer refrees are significant in choosing refrees and determing their levels.

## REFERENCES

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**KEY WORDS** Referee, speed, level, verticaljump.

## **P-152 Career development of youth football players in J-League Academy: Case of career formation and career orientation**

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**OBJECTIVE** Majority of professional players have gone through the competitive market and forced out of sport to choose the second career in some years. While more research is available on career transition, most of the previous works focused on the after-retirement career, and thus little is known to understand how the young football players perceive their career throughout their developmental phase. By focusing on the perceptions of male young footballers this research intended to examine initial and later involvement in football (socialization process as a football player) and the future career orientation and choice.

**METHODS** The subjects of this research were 261 young football players from 11 different J-League youth teams. A questionnaire was constructed around their attributes, the factors of their construction of career paths as football player, their satisfaction of their current surroundings and future career orientation.

**RESULTS** More than 90% of players started playing football before the age of 9. Their own decision was the biggest motive for involving in playing football, followed by the recommendation from friends, brothers, and parents in order. To continue playing football, future plan for higher education and job-hunting appeared to be the players' biggest anxieties and concerns (46.4%).

**DISCUSSION** The youth players in J-League teams were influenced by parents, brothers and peer groups and watching matches with a desire to become professional player. More than half of players were concerned about their future academic and occupational career. Nevertheless, the older they got, the higher career orientation with the specific aim for becoming professional player they driven for.

**KEY WORDS** J-League Academy youth football players, career development, career orientation.

## **P-153 Analysis of strategic planning in Asian institute of rugby**

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**OBJECTIVE** The development of Rugby in Asia will spread rugby to a global level. Asian Institute of Rugby (AIR) will link the rugby working for the development of Asian and world Rugby. The purpose of this study is discussed about the advantage of rugby in Asia and about development of human resources.

**METHODS** Direct interviewing with the key persons of AIR was conducted to make a discourse analysis of the qualitative structure of the strategic planning of AIR.

**RESULTS** Some supporting activities like 'kit aid' and 'consulting the Asian International competitions' have occurred in 2006. Until 2006, all activities were from Japan to the other unions, but the cooperative works have been gradually increased.

**DISCUSSION** The cognition of AIR could be extended in Asian Unions step by step. There are some planning of scientific conference or practical seminar. And International Rugby Board (IRB) deepens recognition gradually.

**KEY WORDS** Rugby Union, strategic planning, Asia, management.