

Attitudes, Expectations and Demands of English Premier League Football Association Referees

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Abstract

The purpose of this investigation is to assess the attitudes, expectations and demands, both physical and mental, perceived and experienced by Football Association Premier League referees in England during the 1998-99 season. To this end a mailed self-report questionnaire was completed by 72 per cent of the Premier League referees (n=13) at the time of the investigation. Responses to the questionnaire revealed considerable differences between participants in perceived fitness requirements and actual fitness conditioning undertaken throughout a Premier League season. The results also suggest that mental preparation is a consideration amongst those Premier League referees surveyed but the use of sport psychology to assist this consideration is limited. All those referees surveyed indicated that they had been subjected to a number of violent and abusive situations as a result of officiating in the Premier League. The sample also possessed diverse opinions on the proposed role of the professional full-time referee and also on the use of technology to assist the referee in decision making. A clear lack of published research literature on football officiating in England meant supporting this investigation became increasingly complex. Nevertheless, these data are discussed in terms of providing recommendations that may benefit the Premier League referee and also suggest directions for future research.

It is 2.45pm. A quarter of an hour remains prior to kick off on a typical Saturday afternoon in the English Football Association (F.A.) Premier League. One of many football stadia is awash with thousands of encouraging spectators all eager to witness their team produce the highest winning score of the season so far. Both team managers are regurgitating tactics specific to their players, detailing expectant formulas that are intended to enforce a much-needed victory. Kept apart, in a secluded corner of the stadium, the match officials are analysing and discussing the forthcoming match. They too are preparing themselves for the physical and mental battle ahead and the inevitable verbal and possible physical abuse from spectators, players and coaches alike. Previous and personal experiences involving the two teams are discussed and mental notes of potential flash points are digested. The role of officials in such a high profile sport where finances are top of the agenda is no different here than on the parks of Sunday League amateur Association Football. The F.A. Premier League football referee requires a high level of fitness that must be maintained throughout the season and must also be mentally prepared to cope with the psychological demands of the modern game. Evidence of both verbal and physical abuse directed at the referee is commonplace and attitudes

towards the 'men in black' are indifferent depending on their refereeing decisions from week to week and game to game.

Few would dispute the impact the referee has on a game of football, or even on the outcome of a season. Henry Winter, a football journalist, wrote about a F.A. Premier League referee who gave two penalties in an important cup match in 1994. The referee in question received a request from a football-supporting vicar whose team was on the wrong end of the penalty decisions. The request for a photograph of the referee to sit on the Guy Fawkes bonfire was to cleanse the referee's soul after the evil of the two penalties awarded in the cup match (Winter, 1998).

Such obsessive behaviour towards soccer in England is arguably a central part of many people's lives and a key to their culture. If one picks up any national newspaper, they would find that much of the paper was dedicated to extensive reports and reviews into the goings-on of football clubs, players and managers (Williams, 1999). Reflecting the centrality of football in England, huge sums of money are associated with the sport (Dunning, 1999), with some players being reported to earn as much as £40,000 per week. It can therefore be easily seen how influential the role of the referee is, not only in a particular game of football, but at a much grander scale, with media and supporters ready to pounce on any dubious decision which may act against their club. Such decisions may hold a club's prospects of relegation or promotion to the next league in the balance, which themselves have vast financial consequences. The importance of the referee to English culture and people's daily conversations, even until the late 1990s, however, was not rewarded in financial terms.

Despite the important role of the English soccer referee, there is little research in the field of football officiating. The majority of the research conducted into officiating originates from the United States of America, Canada and Australia with emphasis on other sporting referees and umpires. Australian research into the psychology of soccer refereeing is evident but also scarce. A study by Richard Evans (1994), a regional director of coaching in Australia, suggested that top soccer referees in Australia appear to have psychological profiles that are homologous. Does this suggest that only a certain person with a certain psychological profile is best suited to officiating in a top class sport such as soccer?

Much has been published about the infamous assault on a F.A. Premier League referee in 1998. On this occasion a player who regarded his eviction from the field as an injustice pushed the official to the ground. Although it has been reported that assaults on football officials in England are fortunately rare (Munro, 1998), the football referee when officiating, is put in a situation that increases his or her chances of physical and/or verbal assault.

Apart from such abusive situations, there are other factors that officials must contend with in football and other sports. Researchers have studied sport officials in a number of sports and have explored a number of important issues.

These include sources of stress in officiating (Anshel & Weinberg, 1995; Goldsmith & Williams, 1992; Rainey, 1995; Rainey & Winterich, 1995; Reilly, Lees, Davids, & Murphy, 1988; Taylor, Daniel, Leith, & Burke, 1990) and coping with acute stress (Anshel & Weinberg, 1996; Kaissidis-Rodafinos, Anshel & Porter, 1997). Others have examined the behaviour and perceptions of officials (Bar-Eli, Levy-Kolker, Pie, & Tenenbaum, 1995; Mitchell, Leonard, & Schmitt, 1982; Phillips, 1985; Quain & Purdy, 1988; Teipel, Gerisch, & Busse, 1983) and the influence of spectators and coaches (Greer, 1983; Lehman & Reifman, 1987; Levitt & Tockman, 1991; Rainey, Schweickert, Granito, & Pullella, 1990). Researchers have also conducted studies that detail the heart rate responses of a head official during a game of American football (Conti & McClintock, 1983). On a more general note, researchers have also provided results that link aerobic fitness programmes with increased stress responsiveness and reduced tension-anxiety in adults (Long & Van-Stavel, 1995; Steptoe, Moses, Edwards, & Mathews, 1993).

Although previous research and the Referees' Association publication 'Manual of Guidance for Referees' (The Referees' Association, 1997) does exist, how does the F.A. Premier League referee cope with the physical and mental demands of the game? For example, sport psychology is utilised by athletes, but how may officials be using sport psychology? Clearly, there is a situation that needs to be investigated, which should lead to improvements in football officiating, thereby making the role of the official more rewarding and less hazardous. Therefore, the primary purpose of this investigation is to assess the attitudes, expectations and demands (physical and mental) of F.A. Premier League football referees in England during the 1998-99 football season. This was achieved through a self-report questionnaire that looked at six content areas, including fitness, mental preparation and demands, violent and abusive refereeing experiences, attitudes and support towards referees, refereeing expectations and objectives and finally demographics.

Method

Participants

Thirteen of the eighteen F.A. Premier League football referees in England, corresponding to 72 per cent of the total number, participated in this study. All resided in England and officiated in the professional F.A. Premier football League. All subjects were male, with an average age of 42.69 years (*SD* 3.97).

Questionnaire

The questionnaire developed, and subsequently employed, consisted of 38 questions with open and closed responses. Construction of the tool was based on a blueprint (cf. Rust & Golombok, 1989) of six content areas and five manifestations. The content areas were fitness, mental preparation and demands, violent and abusive refereeing experiences, attitudes and support

towards referees, refereeing expectations and objectives and demographics. Blueprint manifestations were understanding the role of the referee in today's game, behaviour and the referee's role in the game, changing their future role, feelings about the referee's situation and fears for the referee and the game.

Each content area was deemed important and essential to be able to clarify the objectives of the investigation. The three content areas; fitness, mental preparation and demands and violent and abusive refereeing experiences were included in order to assess the physical and mental demands placed upon the referees through responses to questions in these content areas. The content areas attitudes and support towards referees and refereeing expectations and objectives were included so as to assess opinions and expectations the Premier League referee possessed with regard to his role as a Premier League referee and his views of significant others. The demographic content area was included to build a general picture of what type of person was refereeing in the Premier League at the time of the investigation.

The questionnaire was assessed on its face validity via a pilot study. This questionnaire consisted of fifty open and closed responses, based on the blueprint, and was presented to a knowledgeable class two referee. The pilot study produced feedback that resulted in a revision of the number of questions, a review of the description of some of the questions and deletion of others.

Procedure

Questionnaires were mailed to all eighteen F.A. Premier League referees via the referee's officer at the F.A. Premier League offices in London approximately twelve weeks after the start of the 1998-99 football season. A covering letter and informed consent explaining the objectives of the investigation accompanied each of the questionnaires along with a postage paid envelope for questionnaire returns. Nine questionnaires were returned after the first mailing, which corresponds to a response rate of fifty per cent.

A follow-up of those referees who had not replied to the initial questionnaire was sent to via F.A. Premier League for redistribution three weeks after the first mailing. After this follow-up mailing, four additional questionnaires were returned, making the final response rate 72 per cent.

Treatment of Data

The data were treated according to the differences or commonalties of responses. For open-ended questions, this required content analysis to be conducted. To assure the validity and worthiness of this analysis, a third party who was unaware of the aims and objectives of the investigation confirmed the consistency of the grouped open-ended responses. Therefore, due to the nature of the analysis, descriptive statistical methods were employed, presenting results in terms of percentage incidence of grouped responses.

Results

Demographic Data

Data from the sample showed that all referees had been in full-time employment at the time of the investigation. Of these, two referees indicated that they were self-employed. With respect to the educational qualifications gained, all reported gaining 'O' levels or GCSEs, four had achieved 'A' levels, two had graduated from university and six had attained a vocational qualification of some description. Of the thirteen sampled, ten were married or had a partner and of those, the average number of children per participant was 2.5. Twelve referees indicated their racial origin to be white with the remaining referee reporting his racial origin as black.

When questioned about the standard to which they had played football themselves, one reported to not having played football at any standard, seven indicated that they had played football at a junior or local level, three had played football at a schoolboy or county level and two had played football at a semi-professional level.

Fitness

There were very few commonalities between referees regarding their feelings of what fitness levels and training regimes were required throughout the year to successfully referee in the Premier League. The opinions ranged from thirty minutes of light training twice a week to 15-20 hours of general training per week. What constituted adequate pre-season training ranged from one hour of intense training three times per week to 20-25 hours of general training per week. The in-season fitness and training regimes varied among the sample from thirty minutes of training three times per week (intense training on day one culminating in light training on day three) to 15-20 hours of training per week.

Again, there were variances between the sample of referees in the investigation concerning their *actual* fitness and training programmes to which they adhere. These variances ranged from an off-season fitness programme that allowed for one hour of training per week to 12½ hours per week of participating in recreational sports to maintain fitness levels. Actual pre-season fitness and training programmes varied between the sample from two hours per week to 15½ hours per week that involved a combination of recreational sport and aerobic training. In-season training to maintain fitness levels to be able to referee Premier League games ranged from a maximum of two hours per week to 7½ hours per week that included both recreational sport and aerobic training.

Four referees combined a sport, such as squash, boxing, badminton with some description of aerobic training at the three different stages of the season (off, pre and in-season). The remaining nine had not introduced a sport into their training programs but did use a combination of aerobic and anaerobic training methods to maintain their required level of fitness throughout the different stages of the season,

When questioned about whether there were any limitations or constraints placed upon the referees that impeded their ability to achieve the required fitness levels necessary to officiate in the Premier League, eight all but indicated that work commitments placed constraints that interfered with their training schedules. The remaining five reported that they had no limitations or constraints placed upon them that hindered their attainment of the necessary fitness requirements of a Premier League referee. Included in these five referees, one suggested that 'if you are professional enough, you ensure training is a priority'. Additional limitations reported by one of the subjects included a lack of available training facilities and limited access to current fitness trends and technologies.

Nine of the referees indicated that they had personally felt that their level of fitness during a Premier League season was sufficient to cope with the physiological demands of refereeing at the highest level. A further three reported that their level of fitness (during a Premier League season) was just about sufficient enough to cope with the physiological demands although it was felt that additional training, if more time was available, would be beneficial. Only one referee in the sample felt that his level of fitness was not sufficient enough to cope with the physiological demands of Premier League refereeing.

When challenged about what additional fitness arrangements they would like to see implemented by the relevant refereeing authorities, the referees' responses were varied. Two suggested that the implementation of full-time professional referees would be beneficial and make officiating in the Premier League easier. Six indicated that implementations including nutritional guidance and quarterly health and fitness screenings had already been realised and were adequate for the needs of the Premier League referee. Three proposed improved training facilities that could include access to local athletic clubs and gymnasiums and also immediate services of a physiotherapist when required. The final two reported that preparations for refereeing in the Premier League would be made easier if personal fitness coaches and programmes were made available to them, and more knowledge and guidance on fitness was provided, and diet and nutritional monitoring of referees were carried out periodically.

All of the Premier League referees surveyed were in full-time employment at the time of the investigation. Of these, two were self-employed. Of the remaining eleven referees, sixty-four per cent indicated that their employers always supported their Premier League refereeing commitments if there was an interference with their working timetable. Twenty-seven per cent communicated that their employers only sometimes supported their refereeing commitments. The remaining one of the full-time employed referees said that his employer never supported his refereeing obligations. One of the referees who indicated that he had an employer that always supported his refereeing commented that he would be unable to referee in the Premier League if it were not for his employer granting him annual leave to be able to referee.

Mental preparation and demands

Seven referees, when asked what they understood about the term 'mental preparation', generally suggested that it was ensuring the referee was totally focused on the game in hand and prepared mentally for the inevitable challenges. The remaining six divulged that they understood the term to be related to relaxing and clearing the mind in order to concentrate on refereeing and being able to cope with the demands and pressures that were associated with Premier League refereeing.

In responding to what psychological demands were placed upon them whilst officiating, seven revealed that they felt either stressed, anxious or a combination of these. Further psychological demands that were mentioned by this same group included the desire to be uninfluenced in refereeing decisions and being able to concentrate over long periods of time during a game. Also included in this group was a comment that internal stresses brought about during a game could not be controlled. Four revealed that they felt pressure from external forces such as the crowd, players and coaches and these pressures resulted in the need to be calm, relaxed and in control of the situation. Of the remaining two referees, one expressed that he was nervous thirty minutes prior to a game and the other revealed that he felt nothing other than total concentration whilst officiating.

As might be expected, there were various descriptions of how each referee attempted to prepare mentally for a Premier League game. Sixty-nine per cent of those surveyed indicated pre-game mental preparations ranging from adhering to set routines to relaxation, positive mental imagery, focusing, researching the competing clubs' previous histories and engaging in social conversation with colleagues. The remaining 31 per cent communicated their mental preparation prior to a game as mainly ensuring they travelled early (arriving overnight prior to a game if possible), thereby eliminating any problems or pressures that might be associated with late arrival at a football ground. Somewhat surprisingly, all thirteen of those referees surveyed revealed that they always coped with the mental demands placed upon them during a Premier League game.

When asked to rate the statement 'I feel that Sport Psychologists can play an important and active role in the mental well being of Premier League referees', only one of the referees surveyed strongly agreed, six more agreed, while five were uncertain and one strongly disagreed. Apart from in-service training seminars where sport psychologists had occasionally addressed the Premier League referees collectively, both the F.A. Premier League and The Referees' Association had not offered the services of a sport psychologist to the referees. This was the view of all the referees surveyed although it was apparent that the F.A. Premier League was in the process of developing a forward thinking training package that may introduce the field of sport psychology to the referees.

Eighty-five per cent of the referees revealed that they had not previously or had not ever contemplated using the services of a sport psychologist to assist them in their role as a Premier League referee. The remaining two had previously used or had previously contemplated using the services of a sport psychologist. Of these two, one referee commented that the Union of European Football Associations (UEFA) had supplied the services of a sport psychologist on a three-day trip to Istanbul for a Champions League game. He said that the sport psychologist was 'very helpful' and introduced him to new relaxation and positive thinking techniques which he still utilised although he personally felt that these services would not be necessary on a regular basis (for himself).

Sixty-two per cent of the Premier League referees strongly agreed with the statement 'being mentally prepared before a Premier League game can prevent the fear of failure and/or prevent bad refereeing decisions during the game'. Twenty-three per cent, eight per cent and eight per cent of those surveyed agreed, were uncertain and disagreed respectively.

Violent and abusive refereeing experiences

When those surveyed were asked whether they felt that possible violence and verbal abuse towards the Premier League referee was something that was part and parcel of the game of professional football, six indicated that they considered this not to be the case. The other seven respondents considered verbal abuse (but not possible violence) to be an unfortunate part of the game and generally indicated that this was due to a common lack of respect for authority in society and because of the pressures of football clubs to succeed financially. Regarding the media's reporting of Premier League referees during post match analysis of games, the respondents described this reporting as fair (23%) poor (54%) and very poor (23%).

The Premier League referees, when asked whether they had personal experiences of a number of scenarios, responded with the following results: Verbal abuse from players/coach (100%), verbal abuse from spectators (100%), physical abuse/assault from players/coach (8%), escorted off the football pitch by police/stewards for own safety (77%), and abusive phone calls at home/work after a difficult refereeing decision (31%).

Sixty-two per cent of the Premier League referees surveyed commented that in their opinion there was not a tendency for some football grounds to be worse than others with regard to possible violence and abuse directed at the referee. However, the remaining 38 per cent of the sample disagreed, arguing some grounds were worse than others. Of this group, all the respondents revealed that they did not feel anxious prior to games at these football grounds. One referee commented that 'it is accepted that certain clubs possess more "partisan" fans than others'.

When asked what measures they would like to have employed by the relevant authorities and clubs that would assist in eradicating possible violence

and abuse towards the Premier League referee, 31 per cent expressed satisfaction at those methods already in place and indicated that these were sufficient. Twenty-three per cent proposed tougher punishments of offenders by the authorities including arrest and ejection of individuals whose language was deemed unacceptable at football grounds. The same percentage proposed measures that included improved education of supporters in the laws of the game, further education related to what referees at the Premier League had accomplished and better standards of behaviour shown by the players on the field of play. Fifteen per cent proposed that all Premier League football clubs should employ the services of professional security guards to 'look after' referees as their presence is reassuring to the officials (it was revealed that a number of clubs already had these security measures in place). The remaining referee commented that he would like to see club stewards made more aware of possible hostilities in the crowd and on the field of play and therefore be prepared for any situation that might arise.

Ten of the respondents thought that the proposed role of the full-time professional referee would not alleviate possible violence and abuse directed towards the Premier League referee. Two thought that full-time referees would alleviate these problems while the remaining one thought it could possibly alleviate the problems faced by the Premier League referee although this would take time. The Premier League referees rated the support they secured from players, managers and coaches as good (54%), fair (38%) and poor (8%).

Attitudes Towards and Support of Referees

When challenged about their opinion on the hardest aspect of being a Premier League referee, 62 per cent revealed that they generally thought the uneducated, personal, biased and unfair scrutiny they were subjected to by the media was a burden on their officiating role in the Premier League. Additional comments from the remaining subjects included the lack of general understanding of the role of the Premier League referee, the maintenance of consistently high levels of decision making and the acceptance of those decisions in every game, the demands made on time and the problems associated with refereeing and fitness coupled with a full time job, and the year round impact that Premier League refereeing had on their lives. Sixty-two per cent felt that attitudes towards Premier League referees were changing for the worse. Twenty-three per cent felt that there was no change and fifteen per cent indicated they felt attitudes were changing for the better, if only slightly. When refereeing in a Premier League game, only one referee always felt respected by the players, managers and spectators. Ten sometimes felt respected, and one occasionally felt respected with the final one hardly ever feeling respected by players, managers and spectators.

With the suggested advent of full-time professional referees in the Premier League, the referees were asked to rate whether they felt that

'becoming a full-time professional referee would only increase the physical and mental pressures and demands of refereeing in the Premier League'. Twenty-three per cent strongly agreed with this statement, 38 per cent agreed with this statement, 8 per cent were uncertain and 31 per cent disagreed.

Thirty-eight, 54 and eight per cent of the referees surveyed described the general camaraderie amongst all the Premier League referees as excellent, good and fair respectively. In their description of the general co-operation between the Premier League referees and the F.A. Premier League, 69 per cent indicated that it was excellent and remainder described the relationship as good. In comparison, when asked to describe the general co-operation between the Premier League referees and The Referees' Association, only four registered it as excellent, six described it as good, two said fair and one described the relationship as poor.

Six of the referees, when questioned whether they had any fears regarding the introduction of new technology to assist the referee, expressed concerns about interruptions that would be caused if video replays and the fourth official were employed as in American football and cricket. These, they indicated, would interfere with the flow of the game and be detrimental to the sport. One referee commented 'the game is successful so why change it?' Three in the sample revealed they felt technology could undermine the referee's decisions but this technology should be welcomed if the opinion of the referee is protected and the referee's decision making process is not compromised. Four revealed they had no fears regarding the introduction if new technology provided it assisted with matters of fact, such as did the ball cross the goal line, and not matters of opinion. It was also felt that any technology introduced should be on an experimental basis to ascertain if it would benefit the game.

Refereeing Expectations and Objectives

When asked about their main objectives and expectations when refereeing in the Premier League, nine of the thirteen surveyed indicated that they aimed to enforce the laws of the game consistently, firmly, fairly and impartially. Other comments from this group included protecting skilful players, adding value to the game and enjoying the experience of refereeing in the Premier League. The remaining four collectively expressed their desire to be seen as impartial and accurate, to be a successful Premier League referee each season and to control the game and earn respect from everyone concerned.

The sample rated the statement 'Premier League referees should be consulted on the severity of player punishments which are currently determined and imposed by the F.A.' with strongly agree (23%), agree (8%), uncertain (8%), disagree (15%) and strongly disagree (46%). Eight, 38, 23, eight and 23 per cent indicated always, sometimes, occasionally, hardly ever and never when asked if they feared a future where technology aimed at assisting Premier League referees would undermine their reasons for becoming a referee.

Questioned whether they felt a large responsive crowd was something that encouraged them when refereeing a Premier League game, the results were divided with 31 per cent indicated always, 23 per cent responded with sometimes, eight per cent said occasionally, 31 per cent revealed hardly ever and eight per cent indicated never. By contrast, twelve revealed that they socialised with family and friends to unwind and relax after refereeing a Premier League game. Only one referee revealed that he experienced difficulty unwinding after games.

The statement 'each Premier League referee should be a member of a regular team comprising two assistant referees,' one reserve official and one match observer for the whole duration of the Premier League season' was addressed with uncertainty (31%), disagreement (31%) and strong disagreement (38%). One referee commented that he agreed with the prospect of a team consisting of two assistants and a reserve official but not the same match observer. His reasoning expressed the need for the referee to be monitored by separate observers in order to gain an objective overview of the referee's officiating performance each and every game.

Discussion

Considerable differences in opinion of what constitutes adequate or acceptable fitness levels for Premier League refereeing and the variances in actual fitness and training programmes each referee adhered to throughout the year were clearly evident from the results. This may suggest that fitness levels varied from referee to referee. Studies have shown that the use of aerobic training methods was productive in curtailing anxiety and improving stress responsively (Long & Stavel, 1995; Scully, Kremer, Meade, Graham, & Dudgeon, 1998). Steptoe, Moses, Edwards and Mathews, (1993), also found that modest aerobic training led to significant increased gains in the perceived ability of adults to cope with stress and reductions in tension-anxiety. Therefore, a sensible suggestion would be that Premier League referees be more directed in the design and monitoring of aerobic fitness programmes that address fitness levels at different stages throughout the season, and which also take into consideration the availability of time for training when combined with full-time employment. Over and above this suggestion, there appears to be a genuine need for the relevant authorities, be it the F.A. Premier League or The Referees' Association, to provide better and additional fitness related services for Premier League referees. These services, as indicated by the subjects in this investigation, include access to improved training facilities, immediate services of a physiotherapist, fitness coaches and dietary and nutritional monitoring of referees. Furthermore, an in-depth critical review of the 'Manual of Guidance for Referees' may also be beneficial.

To be mentally prepared prior to officiating in a Premier League game was a factor that eleven of the thirteen referees (85%) understood to be

important. This result coupled with the acceptance that sport psychology could play a part in the mental well being of the Premier League referee (54% felt this way) does not reflect in the number of referees (only two or 15% of those surveyed) who had used the services of a sport psychologist prior to this study.

Partial evidence can be found in this investigation that suggests that increased appreciation of sport psychology is apparent the more the services of that profession were employed by the officials, this was also concluded in a study by Schell, Hunt and Lloyd (1984). One official in this investigation stated that the services of a sport psychologist were supplied to him during a trip to officiate in a Champions League game and that the 'very helpful' techniques he learnt were still being used.

Thus, a second recommendation of this investigation would be for the F. A. Premier League to explore the possibilities of introducing sport psychology support for its referees. Only then can judgements be made on whether the use of sport psychology for the management of stress and anxiety, the teaching of coping strategies, confidence and assertiveness training, could help the Premier League referee in his officiating.

In terms of abuse, a common lack of respect for authority in society and the pressures of football clubs to succeed financially were general comments from 54 per cent of the sample that resulted in verbal abuse directed at them during (and after) Premier League games. Very little research to date has been conducted on the Premier League referee therefore these results are difficult to support. However, studies on American professional sports officials have found results similar to those in this investigation. For example, a study by Mitchell, Leonard and Schmidt (1982) found over eighty per cent of officials believed supporters were ill mannered or aggressive. It can be argued that verbal abuse falls into the category of being ill mannered and the two findings are similar in nature. This study also found that media coverage of the officials was deemed unrepresentative by over 92 per cent of those surveyed. Similar results were evident as 77 per cent of the Premier League referees described the media's analysis of them to be poor or very poor (Mitchell *et al.*, 1982).

Our findings support those found by Mitchell, Leonard and Schmidt (1982). Thus, it is possible to conclude that the full-time professional referee had similar officiating perceptions to that of a part-time official and that becoming a full-time official will not necessarily reduce these perceptions and thus the problems faced by the part-time official. Furthermore, the results regarding the proposed role of the full-time professional referee show that 77 per cent felt that this scenario would not relieve possible violence and abuse directed at Premier League referees. As this scenario has not occurred in English football, it would be unwise to reject the possibility that professional referees may be beneficial. This study thus suggests that a pilot study involving a number of full-time referees be implemented so as to ascertain whether this role could be a worthwhile and viable proposition in the Premier League.

What is clear from the results is that the Premier League referee had strong opinions on what needed to be implemented to eradicate possible violence and abuse aimed at the referee. These included: tougher punishment, improved education of supporters in the laws of the game and the employment of professional security guards to protect referees as necessary. One possible way in which the F.A. Premier League and The Referees' Association could help the referee would be to raise the level of awareness and the image of the Premier League referee (or the referee in general). It is common knowledge that public relations consultants are employed by many different companies, businesses and associations to promote themselves and thus increase their awareness in the general population. Who is to say this strategy would not be beneficial for the Premier League referee?

With regard to the use of technology to assist the referee during a game of football and thus possibly reduce crowd tension due to debatable decisions, there appears to be little other published research in this area. In other sports, such as American football and cricket, video evidence is used to assist the referee or umpire in the decision making process. What is clear from the results of this investigation is that 46 per cent of those Premier League referees surveyed indicated that they feared that introducing video evidence would interfere with the flow of the game and could cause unwelcome delays. Nevertheless, 31 per cent of the sample indicated that they would welcome technology to assist the referee if it supported decisions on factual matters but not on matters of opinion. Solutions to this debate offered by some of the referees in this sample on whether technology should be used to assist the referee would be to introduce video evidence on an experimental basis. What is evident from the results and comments made in this survey is an openness to explore possible technological tools to assist referees without jeopardising the flow of the game or the referee's judgement. Another suggestion was that referees should be allowed to practice foul evaluations in games or on video therefore honing their decision making skills. This type of video evaluation practice, similar to that in the study by Teipel, Gerisch and Busse (1983) could possibly be used on matters of refereeing fact and may assist the referees when required to make important calls during a game.

In conclusion, football is an extremely high profile and large finance sport in England (Dunning, 1999) with the referee plying a major role in determining an outcome of a game. The requirements upon players to perform to their maximum are increasing by the season, but are also echoed by methods of preparation attempting to become more scientific and effective by the season. However, the results presented here give some insight to the current level of support for referees and to what degree modern advances in sport science, many already utilised by players, are being accommodated in the preparation of referees. The concern must be that referees appear to be left behind by other advances within the sport.

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