

# The Ref Must Be Blind! Identifying Pre- and Post-game Stresses of Australian Sports Referees and Match Officials

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#### Abstract

This study is looking specifically at the pre- and post-game stresses placed on referees and match officials. The initial research has indicated that although people are aware that referees suffer from stress during matches, many of the causes of these stresses can have an ongoing affect leading into pre- and post-game stresses. Identified causes of pre- and post-game stress have included players/coaches, spectators, other referees, commentators, previous results, weather, reputation of the team(s), and the crowd. Preliminary results of the study have shown that referees suffering from stress are more inclined to "drop out" of refereeing as well as make mistakes when they are refereeing, including misinterpreting rules, missing incidents in matches which could result in players injuries. There is also the concern of the lack of numbers of new referees as well as the cost/investment in referees who drop out because of the stress and abuse.

#### Keywords

Sports referees, stress, volunteer retention

The referee and match official make up a crucial element in the game of sport. Like them or not, it is through the diligence, professionalism and often hard work of these men and women, that sport in all fields across the globe can take place. However, the individuals who are match officials are often the target of unnecessary and unruly taunts and abuse, because of the job that they have offered to do. In 2002, the Australian Federal Minister for the Arts and Sports declared that 2003 would be the "Year of the Official" to commemorate all the hard works sports officials do to support sport across Australia (Australian Sports Commission 2003).

The sole job of the referee is to make sure that the game is played fairly and that all of the players, coaches and associated personnel adhere to the rules of the game. The toughest job for referees and umpires is keeping players and coaches calm after a close call (Weinstein 2003). It is this love of sport that inspires people to take on the role of referee.

Stress and anxiety are linked to the role that the sports referee carries out during a game. Stress and anxiety are defined as a difficulty that causes worry or emotional stress and fear (Eubank and Collins 2000). Stress affects everyone, not only referees. Players subside to stress more often than match officials however with respect to the referees and match officials stress plays a crucial role in the ability of

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referees to make correct decisions throughout a game or event by inhibiting their decision-making ability (Anderson and Williams 1999). Referees and match officials are special populations, and as such, it takes a "special" kind of individual to become a referee. Not only do they need to be physically fit and be able to keep up with play, but also they need to be able to cope with the abuse and threats that are targeted toward them from all sides of sport including players, coaches, spectators, and the media (Reilly and Gregson 2006).

As sporting organisations around the world struggle to find sufficient referees and match officials to fill the void of those current officials departing sports refereeing, it is imperative that as sports professionals investigate ways that can nullify this exodus of sporting referees (Haynes and Panazzo 2005; Scott 2002). The reasons for match officials opting to cease refereeing are varied and numerous in number. Lack of respect, constant abuse from players, coaches, spectators as well as criticism from journalists and reporters have all led officials to decide that enough is enough.

The essence of competition naturally brings about stress in individuals, both athletes and officials (Anshel, L. R. T. Williams, and S. Williams 2000; Fletcher and Scott 2009; Hanton, Fletcher, and Coughlan 2005; Olusoga et al. 2010; Thelwell, Weston, and Greenlees 2010). It is how this stress builds up in referees prior to, during and post match that is the basis for this research. The readiness and training of match officials and referees also play an important role in preparing them for the intensity and physiological stresses that are impacted on their bodies during a match (Mascarenhas et al. 2005; Weston et al. 2004). Experience is an element of refereeing that no amount of training can provide. The ability of referees is compounded by their aptitude to draw upon relevant experiences to help them through stressful situations; Rainey and Hardy (1999) identified this as cognitive appraisal.

This research examines the pre- and post-games stresses that impact sports referees and match officials. The experiences of referees and match officials outlined in this paper will give a new insight into how sports officials deal with stresses and how these stresses can impact their ability both on and off the sporting field. The paper will also shed light on the various sources of feedback that sports officials are too privy from relevant referee coaches and advisors to sports coaches and players.

## RESEARCH DESIGN

The research design for this study used a mixture of qualitative and quantitative approaches and the paper principally reported data from surveys and interviews. The interviewees were approached in July 2011 and were drawn from Australian National Officiating bodies. The survey questions were utilised in the interviews to elicit comment from the interviewees on the perception of pre- and post-game stresses in referees and match officials. And 200 surveys were forwarded to referees and associations across Australia in a variety of sports and leisure pursuits between June and August 2011. Of those 200 surveys, 143 were returned, which represents a 71.5% return rate that gives credibility to the survey sample. The surveys were forwarded with an enclosed letter detailing the study and what the researcher hoped to achieve.

In this article, four questions from the surveys conducted will be reported; these questions are:

- (1) Prior to a match, do you have a set routine that you do?
- (2) During a match your stress level obviously raises, list some of the causes for this raising of your stress and anxiety levels;
- (3) On a scale of 1-10 (1 = low and 10 = high) rate your post-game stress levels;
- (4) Has your professional body/association provided you with any advice/resources to combat

stress in your refereeing?

## **FINDINGS**

# Survey Results

Table 1 looks at the number of referees who had set routines that they undertook prior to a match, these routines included listening to music, reading a book, and carrying out warm-up exercises and activities.

The use of routines assisted with the reduction of pre- and post-game stresses in referees. This reduction can be attributed to referees having an outlet to take their mind away from the actual refereeing and officiating. The use of music and exercise routines enabled officials to concentrate their energies elsewhere, thus allowing them to relax and reduce/lower their stresses and anxiety levels.

The survey also had referees and match officials rate their pre-game stress levels on a scale of 1-10. Of the 143 referees and match officials surveyed in this study, zero referees had a pre-game stress level of 10; 65 responses indicated that they had a pre-game stress level of 3-5; and 48 indicated that they had a pre-game stress level of 6-8 (8 being the highest recorded pre-game stress level), the remaining responses were 1-3. Interestingly the 17 referees who had no set routines appeared in the elevated pre-game stress group, giving further evidence that having set routines can aid in your reduction of stress.

Table 2 lists the factors that increase an officials and referees stress levels during a game. The responses concur with previous studies focusing upon stresses of sports referees (Anshel and Weinberg 1996; Nacey 1994; Pearce 2003; Rodafinos, Anshel, and Porter 1997; Rodafinos, Anshel, and Sideridis 1998; Stewart and Ellery 1998). The sources tend to be spectators, coaches, and players. The media especially at the elite level of sport has enormous effects over decisions made by referees. With the continual use of technology this dependence is increasing, and as a result so too is the scrutiny of the media and its

reporters.

Players, coaches and spectators alike through the verbal abuse targeted at referees often create stress and anxiety within match officials. Stress and anxiety have become part of the social framework within sport. The media through their coverage and portrayal of sport can often create stress and anxiety within referees inadvertently and in some cases purposefully through harsh criticism and analysis of a match officials performance in a given game. Other referees can create stress and anxiety amongst themselves through disagreement on a call or a decision and through competition amongst each other for the number one ranking within the association or group of referees.

Table 3 details on a scale of 1-10 how the stress levels of referees and match officials faired at the conclusion of a match. Fifty-five of the surveyed individuals indicated that their stress level had declined since the initial pre-game measurement. Thirty-four referees said there had been no change; while a large number of referees and match officials (54) said their initial stress level had risen when measured at the end of the game. When asked the reason why they felt this was the case, a large number of officials cited the difficulty and intensity of the match as a reason.

This increase in stress level shown in Table 3 would be considered natural especially given the fact that referees, like players, would have been running around and naturally their heart rates rise during the course of a game. The fact that a large number of referees had no change in the levels of stress suggests that post-game levels are not as susceptible to change as pre -game stress levels.

Martin et al. (2001) identified the physical stressors on referees as being equally demanding as the mental stressors placed on match officials. Martin et al. (2001) stated that in a study looking at the activities of English Rugby Union referees during a match, it was recorded that they would run for

**Table 1.** Referees and Match Officials With Set Routines

	N	
Referees/match officials with set routines	126	
Referees/match officials without set routines	17	

Table 2. Causes of Increased Stress of Referees and Match Officials

	N
Players and coaches	100
Spectators	24
Other officials	17
Media	2

Table 3. Stress Levels Amongst Referees and Match Officials in Post-match

	N
Stress levels declined	55
Stress levels increased	34
No change in levels	54

Table 4. Support Organisations to Help Referees Deal With Stress

	N	
Referees who have witnessed support structures within their associations	0	_
Referees who have not witnessed support structures within their associations	143	

approximately 6,700-10,500 metres in a match. It is because of this large distance covered by match officials and referees that the stress levels indicated by these referees are in direct correlation to the amount of physical running that they are required to do as part of their officiating duties (Martin et al. 2001). The significance is that the longer referees run for, the more likely they are to see a rise in their stress levels. Unlike players, referees cannot be substituted when they feel tired, therefore they are unable to receive breaks during a match that may alleviate some of the tiredness and stress occurred during a match.

The final question in the survey looked at organisations of referees and match officials and the support that they provided to referees and officials to combat stress. Although this survey only looked at a small percentage of officials compared to the vast array that officiate throughout Australia, the result was

still quite surprising as shown in Table 4.

As Table 4 indicates, of the 143 referees who returned their surveys, zero of them indicated that their organisation provided support, training and guidance on the issue of stress management. Without any assistance or professionals to assist referees with stress management, it inevitably leads to a high proportion of officials ceasing to referee. Since this study was conducted in 2011, a number of the National Officiating Associations within Australia have begun investing resources to look at combating stress in referees. Although the investment in resources is welcomed, local associations are the ones that deal with stress on a more frequent scale due to the high number of games that a local referee may be called upon to referee in a given week. National Associations also have more access to coaches and trainers than local associations.

# **INTERVIEW RESULTS**

The researcher conducted two semi-structured interviews. The interview questions were the same as the survey questions. The individuals surveyed, one a Rugby League referee and the other an Australian Football League (AFL) umpire had very similar responses in the questions asked and were able to draw similar parallels across all sports concerning referees and match officials.

The most significant issues that were drawn from the interviews were that both officials felt that stress was an inevitable part of their sports. They agreed that no matter how hard you equipped yourself for stress in the game, you would never be fully prepared. They identified that spectator's abuse was one of the main causes of stress for their particular sport. De Lisser's (1994) writing in The Wall Street Journal makes reference to the increasing abuse of match officials and referees and how many referees associations are requesting legislators for protection from unruly parents and spectators. Sport rage amongst spectators (parents in particular) is a growing entity within Australia (Department of Sport and Recreation 2004). To combat this trend, the New South Wales Department of Sport and Recreation released a "Sports Rage Kit" which included pamphlets, brochures, posters, cards, and an audio CD to be distributed and played at local sporting venues across the country. The purpose of the Kit was to bring about a greater awareness of sports rage in a hope to reduce its occurrence.

There was difference between the two officials with regards to post-match routines. With Rugby League, it was not a common practice to go and have a drink and talk with players at the conclusion of the match, whereas with AFL it was. This is an important aspect as referees and officials who did attend a post-match routine (whether it was a swim, cold drink, or listening to music) were more likely to report lower stress levels than referees and officials who did not.

Mockford (2005) supported this argument stating that players quite often appreciated a referee or match official who was prepared to have a drink and a chat with players at the end of the game, as it took away the belief of elitism and that referees were untouchable. The process also puts a human face to the official, who is otherwise in a game very much focused and unrelenting in what he/she does.

There have been some limitations identified in this research. Firstly, the study conducted on Australian sports only. Secondly, the methods used for measuring stress and anxiety levels had no scientific analysis within the methods used. The study solely depended on the ability of the referees to make a sound judgement on what she/he perceived their own stress level to be.

# **DISCUSSION**

Preliminary findings of the study have indicated that pre- and post-game stresses exist in referees and match officials. The use of set routines and socialising after a match with players and associated administrative personnel had a tendency to reduce and limit the amount of pre- and post-game stress perceived by the referees.

Referees and match officials are susceptible to pre- and post-game stress. The interviews and surveys support and show statistically that it is an element of competitive sport which impacts officiating. The stressors have been identified as mostly being a core group of factors that are naturally part of the game (coaches, spectators, and players). D'Ottavio and Castagna (2001) acknowledged that one of the very first actions by a referee and match official when they first went out onto the field was to assert their authority and ensure the players play to the rules. Officials do this so as the players/athletes have no doubt as to who is in control whilst they are on the sporting field.

It is argued that this activity undertaken by the

referee often only invigorates players and athletes further, which can ultimatley lead to a heightened level of intensity in the early stages of a match. Helsen and Bultynck (2004) acknowledged that the intial opening of a match was quite often the most intense part of the contest. This makes sense as the beginning of a match/game is when players tend to be the freshest, as the match progresses the energy levels of the players deteriorate. The same can be said of referees with respect to their anxiety and stress levels at the beginning of a match, the difference is that these anxiety/stress levels tend not to decrease as the match progresses but increase.

Fatigue can have an adverse effect on the way referees and players become susceptible to stress and anxiety. Martin et al. (2001) identified that English Rugby referees, due to the fast nature of the game and the high stress levels imposed on the body through physical activity, were extremely vulnerable to stressors from outside sources including players, coaches, and spectators. This is because the activity undertaken by referees results in an increase in blood lactate concentraion and an acclerated rate of glycogen utilisation which lead to fatiguing. This increase in fatiguing can be directly related to an increased likely-hood of poor decisions made by referees and/or an increased stress level appearance in a match official.

The logical solution to this fatiguing is having substitutions for referees (Seneviratne 2003). As players are able to be substituted when they tire and fatigue, thus replenshing their energy levels, so too should referees. The main problem is that no two referees officiate the same. So by substituting referees when they tire it would be creating an unequitable situation by having one referee officiate a certain way than be substituted by a referee who officiates an entirely different way making the substitution of referees not a viable solution.

Reflecting on decisions at the end of a match which referees have made during a game has the

potential to affect their stress and anxiety levels. Burke et al. (2000) identified the anxiety levels of basketball officials before, during, and after a match; the study found that many basketball officials may be prone to anxiety at the conclusion of a match due to reflecting on decisions which they felt may have been wrong. This is quite common in the game of basketball as referees do not have the chance to think about decisions given the fast speed of the game. Other sports have the luxury at times of confirming calls with other officials but basketball decisions are generally made solo. So is it the solution to have more referees?

Increasing the number of officials involved in a sport would allow referees to see and identify more aspects of the game through increased supervision (Seneviratne 2003). Fatigue could be lowered due to more officials being present on the court/field. The burden of stress could also be reduced as decisions could be spread across a number of officials instead of just one. The major concern and problem with this would be that it may create a situation where referees disagree with each other. If there were two or three referees on a court incharge, who would have the final say? It creates a discrepancy in the chain of command for the officials and for the players. It is often difficult enough as a player to deal with one referee, let alone having two or three to cope with. The substitution of referees and/or the increasing of the number of officials available to referee matches is not a solution that can be adequately utilised at the moment. Therefore there is a need to focus on the development of current and future officials through providing adequate match experience.

Experience was identified as a cause for stress becoming apparent in younger less skilled referees and match officials. Rainey and Hardy (1999) identified experience as being a major defence against stress in referees. They alluded that as referees became more exposed to the levels of anxiety and the stressors amongst their game, they developed an

"immune" system toward it, which ultimately saw the spectator's abuse, the constant bickering from the coach, or the continued in the face approach by the Captain as non-existent.

The implication is that referees are not able to gain experience unless they are given the opportunity to referee and officiate; with that opportunity comes the inevitable mistakes. Players, coaches, and spectators alike want referees to get the decisions right, but concede that to do that they need to gain experience. The only way they (referees) can gain experience is learning through the mistakes they make, which ultimatley means that players, coaches, spectators and the media need to be more accomodating to the learning and development of referees.

The increased popularity of sport within society has led to an increase in the coverage of sport by the media. Evans and Rowe (2002) suggested that the increase in sporting violence including abuse and assaults directed at and performed against referees and match officials was due to the increased coverage by the media personnel. They further stated that "I've actually seen media people prompting and encouraging violence for their pictures" (Evans and Rowe 2002: 47). The media is a very powerful tool in society, and the messages it portrays often have a lot of influence over the people who view it. Therefore if the media potrays an image that violence and abuse directed at referees are acceptable, the greater public will perceive it as sociably tolerable. Given sports standing in society and the fact that so much is often riding on the outcomes of sporting contests in the world today, the media's portrayal of an athletes and referees performances can be often scandalous in its analysis and critiquing of the way a player or referee has performed.

There has been some research conducted into the field of home team advantage and sports fixtures and how the home team has a distinct advantage over the visiting team. Balmer et al. (2003) investigated the belief that referees and match officials tended to

favour the home team. It is revealed that there is indeed a correlation with home teams generally winning more games than the away teams, however it is not significantly proving that a referee or match official has any direct impact on the final outcome of a match. The contrary to this hypothesis is the sport of boxing, which is reported to have a home boxer winning percentage of 57% (Balmer, Nevill, and Lane 2005). As a referee, it is quite often difficult to listen to and ignore the constant barrage of abusive comments and taunts from the sideline, espeially ones which you cannot at times ignore.

The importance of home team advantage is that some referees are intimidated by certain teams and spectators. Referees can feel pressured into ensuring that a team is given more opportunity because of a vocal crowd or a confronting team Captain. A number of referees informed that prior to a game they will identify the quickest route off the field and the fastest road out of the sporting arena just in case players and spectators are not happy with the way the referee has officiated the game.

An individual's ability to cope with the demands of stress can be heightened by their personal and situational characteristics. Rodafino and Anshel (2000) acknowledged this detailing that if a person was more outgoing than they were more likely to develop a good rapport with the players, coaches and spectators. Officials who do not appear approachable and socialable tend to be hounded more by abuse and taunts from spectators, coaches and players. Self-esteem is also mentioned as a crucial element for the fight against stress, as those referees who are positive about themselves and what they do, generally perform better on the field because they have more belief in their decisions and assert an array of confidence about their decisions. The research conducted within this paper reiterated Rodafinos and Anshel by showing that referees who had set routines and socialised with players and coaches after a match exhibited far less increases in pre- and post-game

stress than referees and officials who did not engage in routines and/or socialise after a match.

The coaching and tutoring of referees and match officials is an important issue in the overall outcome of an efficent and competent referee. Mascarenhas, Collins, and Mortimer (2003) acknowledged that a crucial element in producing efficient referees was the referee coach. They revealed that referee coaches had the worst percentage rate at identifying referee decisions correctly. Campsall stated that "... most of these individuals are ex-referees who had not performed in many years, this is perhaps not surprising since the speed of the game is now much quicker and inevitably interpretations have similarly evolved to meet the new demands of the professional game" (High 2002: 265).

The importance of High's research underlies the trust and confidence that players and coaches are asked to put in the hands of referees week after week. If the referee coaches, the people entrusted with tutoring new and old referees are unable to get the decisions right: How can the match referee be trusted to officiate the game effectively?

Experience helps referees combat and deal with stress and anxiety. Nacey (1994: 11) acknowledged that experience was a crucial element as "more mature referees tend to have strategies for coping with a stressful situation. They may for example have a mechanism for delaying the decision fractionally to give them time to evaluate rather than react". The notion of delaying a decision allows the referee to consult her/his assistants and also allows them to calm themselves down before making that crucial choice. The concept of time management could be analysised here as a lot of referees fall into the trap thinking that sport needs always to be played at a fast pace. Whilst this may be true to an extent, the overall speed and pace of a game are controlled by the referee, which can allow a novice referee to take a little extra time to ensure that decsions he/she is making are the correct ones.

Just as stress can affect the decision-making abilities of referees and match officials, it can also affect the playing ability of athletes, from hindering their judgement, increasing their heart rate and oxygen intake before a performance, as well as increasing anxiety levels of players which in turn can affect their overall performance (Hanton et al. 2005).

# **CONCLUSIONS**

Referees and match officials are human beings and will make mistakes. It is important that individuals understand and acknowledge this very important point. Just like players make mistakes by missing tackles and dropping the ball, so too will referees. The unfortunate side effect of referees and officials making mistakes is that at most of the time when they do make these mistakes it is replayed over and over again and commentators, journalists, coaches and players make a big deal out of it and exaggerate how it ended up costing a team a match.

Referees are only human and will often make mistakes based on stress, pressure, or poor judgement. It is concluded that referees and officials will sometimes adapt the rules of the game to suit the conditions and skills of the players.

Referees and match officials are quite often subject to emotional and physical aggression from a variety of sources.

Referees and match officials are a fading group among sports circles. Organisations around the world are desperately seeking more people to pick up the whistle and take a vocation into refereeing. The lack of officials has greatly impacted the performance of referees, it has impacted the quality of refereeing as many officials are being required to officiate multiple games in any given day, this in turn has affected the quality of competition avaliable for players, coaches and spectators. As referees are forced to officiate more games, then, naturally their strength and endurance and mental capacity to make decisions begins to

deteriorate. Unlike players, referees are not able to put their hands up during a match and be substituted off, once the game begins they are there until the final whistle.

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