

# **Personality characteristics of UK Association Football referees**

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Running title: Referee personality characteristics

Word count: 5909

**Published in the Journal of Sport Behaviour, Vol 42 (4): 493-508.**

### **Abstract**

Personality has often been associated with job performance and satisfaction, particularly with regard to resilience and coping with pressure. However, the links between personality type and sports officiating performance is sparsely researched. Sports officials, notably soccer referees, come under intense public and media scrutiny for their performance, and 'burnout' is at a high level. Therefore, understanding how personality may influence job performance in this high-pressure role could influence the support and training of referees. The aim of this study was to explore possible relationships between individual differences and performance level in English Association Football (soccer) referees. Using an independent groups design, 185 soccer referees currently performing at 3 levels (Professional, Intermediate, and Amateur) completed measures of mental toughness, locus of control, assertiveness, and social comparison. For every scale, Professional referees scored significantly higher than the other groups, while Intermediates did not differ from Amateurs. This suggests that referees at the highest level possess critical personality characteristics the others lack. The causal direction of this relationship is uncertain, but implications for training and support of officials with regard to increasing resilience and reducing burnout are noted.

*Keywords:* soccer referees; assertiveness; locus of control; mental toughness; social comparison.

## **Introduction**

Despite early misgivings around the role of personality assessment in employee selection and performance (e.g. Schmitt, Gooding, Noe & Kirsch, 1984), current views reveal that individual differences are implicated in levels of performance across various occupational (Smidt, Kammermeyer, Roux, Theisen & Weber, 2018), academic (Poropat, 2009), and sporting (Steca, Baretta, Greco, D'Addario & Monzani, 2018) settings. To date, research has mainly focussed on potential links between athlete/coach personality type and sporting success (e.g. Allen & Laborde, 2014; Allen, Greenlees & Jones, 2011; Olusoga, Butt, Maynard & Hays, 2010; Sheard & Golby, 2010; Woodman, Zourbanos, Hardy, Beattie & McQuillan, 2010). However, thus far, little attention has focussed on officials.

Officials are vital members of competitive sport, regarded as a 'third dimension,' with players and coaches constituting first and second respectively (Glegg & Thompson, 1993). Officials are sometimes acknowledged as performers in their own right, as their decisions impact both player behaviour and game outcomes (Philippe, Vallerand, Andrianarisoa & Brunel, 2009). Worryingly to the sports community, an article in the Telegraph newspaper (2009) revealed dropout rates of up to 80%, argued to be mainly due to the intense pressures associated with their high-profile role (Forbes & Betts, 2003; Van Yperen 1998). Soccer referees perceive that they face a high risk of physical harm (Goldsmith & Williams, 1992), and this added stressor can influence them to quit. Understanding how personality might relate to refereeing performance and burnout is thus timely.

Years of experience contribute towards officiating excellence in football (Catteeuw, Helsen, Gilis, & Wagemans, 2009), rugby (MacMahon & Ste-Marie, 2002), handball and ice hockey (Pizzera & Raab, 2012), but certain personality factors may also be related to role longevity. Attention has focussed on mental toughness (MT) as it is associated with resilience, perseverance, the ability to handle pressure, and the possession of superior mental

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skills (Crust, 2007; Gucciardi, Gordon, & Dimmock, 2008). Studies have discovered positive associations between MT and sporting excellence (see Jones, 2002 for review), but only one has suggested that MT is also related to performance in soccer officials (Slack, Butt, Maynard & Olusoga, 2014). Additionally, the most common reasons for job dissatisfaction and drop-out have been identified as the pressures of making mistakes, inability to find work-life balance, lack of progress at the anticipated rate, abuse and violent incidents (Slack, Maynard, Butt & Olusoga, 2013). In the case of each, there is one common aspect: the need to be mentally tough. Parallels can be drawn with refereeing, in that certain MT characteristics are said to be vital when coping with match-day stressors (Slack, et al., 2013).

Another personality factor associated with job performance is locus of control. Individuals with an internal locus feel that they control their destiny and outcomes. For example, Kosmidou, Giannitsopoulou and Proios (2015) found competition success in rhythmic gymnasts to be linked to internal factors, such as athletes setting performance goals and coach involvement, whereas individuals with an external locus attributed their failure to 'luck' and preferred goals set by their coach. Particularly pertinent, internal locus has been related to better performance (Judge & Bono, 2001; Drago, Rheinheimer & Detweiler, 2018), lower job stress and higher job satisfaction (Chen & Silverthorne, 2008). As the referee environment requires rapid judgements without spectator influence, an incorporation of a locus of control measure allows for the first empirical examination of this construct in soccer referees in recent years (see Scheer & Ansorge, 1979).

A further theme that runs throughout the limited body of literature concerning officiating and job leadership is that of assertiveness (Ames & Flynn, 2008; Anshel & Weinberg, 1996; Magee & Galinsky, 2008; Santora, 2007; Wilson & Mock, 2013). Despite some controversy surrounding the efficacy of highly assertive leaders in professional settings (for review, see Hogan & Kaiser, 2005), research suggests that assertive people often get

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their own way, and are seen as more powerful than their colleagues (Ames & Flynn, 2008; Tripathy, 2018). Additionally, with regard to impression formation, studies have reported that people attend closely to information that surrounds assertiveness, showing high levels of observer and observer-target agreement (John & Robins, 1993; Murphy, Hall & Colvin, 2003; Stolier, Hehman, Keller, Walker & Freeman, 2018). Finally, competitiveness (a dimension of assertiveness), plays a key role in impression formation (Kenny, 1994). It is clear that a soccer referee must demonstrate assertiveness to effectively employ and maintain match control and credibility when applying the laws of the game. Despite this, referees are required to adopt a skilful balance between being perceived to be weak versus being arrogant and ego-driven, the latter of which has been shown to have negative effects in a number of team sports (see Simmons, 2006). The assessment of assertiveness within referee populations is thus valuable.

Finally, self-perceptions that may influence referee success are highly pertinent. Wolfson & Neave (2006) reported that referees rate themselves in a self-enhancing manner typified by illusory superiority, wherein they see themselves as more confident, knowledgeable, decisive and honest than fellow referees. Indeed, recent studies have shown that elite referees are exposed to ever-growing psychological pressures due to the demands placed upon them by a variety of external pressures (Simmons, 2011). As such, it is highly plausible that cognitive biases such as illusory superiority play a central role in officiating success and are perhaps determined by referee level. It would be unsurprising to find that elite referees rely upon further intrinsic mental coping strategies, such as an enhanced perception of themselves, than those operating at a lower level, particularly considering the financial (Franck & Lang, 2014) and interpersonal implications (Parsons & Bairner, 2015) of their decisions.

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Interestingly, this view is further supported when considering views from both fans and players, who rate referees significantly less favourably, even outside of sporting contexts (Simmons, 2011). Thus, the incorporation of a social comparison scale is not only an important addition to the understanding of individual differences relating to referee performance, but also as a key medium to explore the potentially misguided views of referees by the games wider community.

The English Premier League is regarded as one of the most successful leagues in the world in terms of global audience, media exposure, public interest and economic power (Catteeuw, et al., 2009). Given the importance of each fixture to teams, players, fans, managers and club owners, it is not surprising that referee performance comes under intense scrutiny, with great pressure on the Football Association (FA) to produce and train officials to the highest standard (Sinnott, 2011). It is thus important to understand those factors relating to officiating performance in order to improve performance, reduce burnout, and enhance future referee development programmes.

If individual differences are implicated in referee performance, a useful strategy is to identify specific personality factors that differentiate between referees operating at the elite level compared to those operating at lower levels within the FA referee development structure. The aim of this study was thus to examine possible links between personality traits and performance levels based on the standardised FA referee assessment scheme for UK-based soccer referees. In the present study, referees were classified as Professional, Intermediate and Amateur. These three groups were assessed and compared specifically on MT, locus of control, assertiveness, and social comparison.

## Method

*Design:* The study adopted a non-experimental independent groups design. The independent variable was referee level, containing three levels (Professional, Intermediate and Amateur). There were four dependent variables, comprising measures of MT, locus of control, assertiveness and social comparison.

*Participants:* The study recruited 269 currently active FA referees, but full data sets were only available for 185 participants, comprising 180 males aged 18 - 68 ( $M = 35.60$ ,  $SD = 20.65$ ) and 5 females aged 18 - 31 ( $M = 21.2$ ,  $SD = 5.54$ ). Each was registered to one of six English county football associations for the 2016/17 season. The officials were classified into the three groups (see Table 1), based on The FA National Referee Development Structure (<http://www.amateur-fa.com/referees/promotion>).

### Table 1 around here

Those operating at an elite/semi-elite level (levels 1, 2A, 2B, and 3) and officiating at steps 2-9 in the English Football League pyramid were allocated to the Professional group ( $N=24$ ), aged 20 - 58 ( $M = 30.96$   $SD = 7.05$ ), reporting an average of 2.88 years ( $SD = 2.09$ ) officiating experience in their current grade. Level 4 referees, who operate at levels 10 and 11 of the pyramid, are regarded as the bridge between Amateur and Professional leagues and were allocated to the Intermediate group. This group comprised 30 individuals aged 19 - 39 ( $M = 26.20$   $SD = 6.16$ ), reporting an average of 3.00 years ( $SD = 2.23$ ) officiating experience in their current grade. The final Amateur group comprised those officials operating within County FA amateur leagues and officiating at steps 11-20 of the pyramid system. This

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consisted of 131 individuals aged 18 - 68 ( $M = 37.60$ ,  $SD = 16.95$ ) reporting an average of 5.22 years ( $SD = 3.83$ ) officiating experience in their current grade.

*Measures:* Participants were asked to complete four questionnaires.

The Sports Mental Toughness Questionnaire (SMTQ) is a 14-item measure, using a Likert-type scale ranging from 1-5, and yields an overall MT score, encompassing items relating to composure, concentration, unshakeable confidence and freedom from self-doubt (Sheard, Golby and van Wersch, 2009) - for example, "I have an unshakeable confidence in my ability." Although factor analyses suggest that confidence, constancy and control may be extracted as separate subfactors, concerns have been raised about inconsistent loadings and intercorrelations of the clusters, suggesting that an overall total represents a more accurate and useful measure of MT (see Crust & Swann, 2011). The SMTQ possesses good psychometric properties, with satisfactory reliability, divergent validity, discriminative power, and alpha coefficients found to be over .7 (Sheard et al., 2009).

The Locus of Control Scale (Rotter, 1966) was used to measure the extent to which the referees possess an internal or external locus of control. The scale contains 29 forced-choice items, each item consisting of a pair of alternatives - for example, "Heredity plays the major role in determining one's personality" or "It is one's experiences in life, which determine what they are like." Participants are required to select the statement that most represents how they feel at the present moment. Only 23 items are scored, with the remaining incorporated as buffers. A higher score reflects an external outlook. The scale demonstrates good internal reliability with internal items demonstrating an alpha coefficient of .65, and external items .79.

Assertiveness was measured using the Assertiveness Schedule (Rathus, 1973). The scale consists of 30 items, with each item requiring an appropriate response on a 6-point



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Likert-type scale - for example, “There are times when I look for an argument”. Alpha coefficients are reported as .88, and the scale has been widely used in previous research in both undergraduate and cross-cultural populations (Nevid & Rathus, 1979; Eskin, 2003).

The Social Comparison Scale (Allan & Gilbert, 1995) was used to assess how referees compare themselves to their peers. The scale uses a semantic differential methodology and consists of 11 bipolar constructs. Referees were required to provide a global representation of themselves on a 10-point scale - for example, “In comparison with other people I feel: incompetent...more competent”. Low scores signify inferiority and high scores indicate superiority compared to their peers. The scale displays high internal reliability in various populations, with alpha reported to be .91 (Allan & Gilbert, 1995).

*Procedure:* Following ethical approval from our institution, and written approval from the FA, referee development officers were contacted from six counties. Participants were then emailed a link to the online survey hosting website Qualtrics. After giving their informed consent, the participants were asked to complete the questionnaires described above.

### **Results**

Biographical data and mean scores on all questionnaires by group are presented in Table 2.

#### **Table 2 around here**

Note: Professional equates to levels 1, 2A, 2B & 3, Intermediate to level 4 and Amateur to levels 5, 6 & 7.

Scores of the three groups on the Sports Mental Toughness Questionnaire, the Locus of Control Scale, the Assertiveness Schedule, and the Social Comparison Scale were

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subjected to a one-way MANOVA with corrections for multiple tests, using post-hoc pairwise comparisons to analyse group differences.

For every scale, the Professional group differed significantly from the other two groups, who did not differ from each other. On the SMTQ, Professionals were higher than the Intermediates and Amateurs ( $F_{2, 183} = 12.09, p = .000 \eta p^2 = .12$ ).

Similarly, for Locus of Control, where higher scores equate to externality, the Professionals scored as more internal than the Intermediates and the Amateurs ( $F_{2,183} = 831, p = .000 \eta p^2 = .08$ ). On Assertiveness, the Professionals scored higher than Intermediates and Amateurs ( $F_{2,183} = 8.16, p = .000 \eta p^2 = .08$ ), and on Social Comparison the Professionals were also higher than Intermediates and Amateurs ( $F_{2,183} = 4.08, p = .02 \eta p^2 = .04$ ).

With regard to age, post hoc tests revealed that the Amateurs were significantly older than the Intermediates, but the Professionals did not differ from either group ( $F_{2,183} = 8.27, p = .000 \eta p^2 = .08$ ). Finally, the Professionals and Intermediates had been at their level for a significantly shorter period of time ( $F_{2, 183} = 8.14, p = .000$ ) than the Amateurs.

## Discussion

Personality has often been associated with job performance and satisfaction (see Conte, Heffner, Roesch & Aesen, 2017). While research has tended to focus on the psychological and physical demands of sports officiating, and suggested ways in which decision-making can be improved (e.g. Mascarenhas, O'Hare, & Plessner, 2006), much less attention has been paid to potential links between certain aspects of personality and sports officiating performance. Few studies have investigated personality correlates of refereeing success, with, for example, Mellick, Fleming, Bull and Laugharne (2005) reporting that both football and rugby referees utilize a host of communication skills associated with

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assertiveness to manage games effectively. None has thus far assessed the extent to which relevant personality traits are associated with level of performance. The aim of this study was thus to explore the possible relationships between certain aspects of personality and level of expertise in English soccer referees.

The individual difference measures examined in the present study all relate to criteria considered to be important in the assessment and selection of referees. For MT a clear effect of referee level was found, with those at the Professional level scoring significantly higher than the Intermediate and Amateur groups. MT is associated with resilience, perseverance, the ability to handle pressure, and the possession of robust mental skills, with previous studies reporting positive associations between this characteristic and sporting excellence (reviewed in Jones, 2002; Cowden, Crust, Jackman & Duckett, 2019). It is noteworthy that even the two lower ranked groups of referees scored considerably higher on MT than various groups of athletes ranging from those competing at international level to those at club/regional level (Sheard et al., 2009; Gucciardi, 2017).

The present results are consistent with one of the few studies investigating personality characteristics of elite (Premier League) referees. Slack et al. (2013) interviewed 15 referees and found that MT attributes such as coping with pressure, resilience, robust self-belief, and high work ethic emerged as key determinants of their behaviour. The present results confirm that MT attributes are discernible in referees, and more interestingly, that such attributes are significantly higher in Professionals operating at the elite level, compared to Intermediate or Amateur officials.

The same results were found for locus of control, where the Professional group displayed a more internal locus than did the Intermediate and Amateur groups. Internal locus has been related to better performance, lower job stress, higher job satisfaction and motivation, and a reduction in burnout (Chen and Silverthorne, 2008; Judge & Bono, 2001;

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Ng, Sorensen & Eby, 2006). This finding is not surprising given that referees are required to rely on themselves, rather than external factors such as luck or the weather, to make definitive, rapid judgements without succumbing to spectator, coach or player influences.

Likewise, the Professional group displayed significantly higher ratings of assertiveness than the other groups. This finding is consistent with the nature of the role that referees must adopt in order to maintain order within a complex and often highly volatile setting. Taylor, Daniel, Leith and Burke (1990) suggested that experienced referees develop coping strategies relating to assertiveness, inoculating them from stress and burnout. Assertiveness was also a valuable coping strategy in Australian basketball referees, especially when faced with a majority influence (Anshel and Weinberg, 1996). The present results are particularly interesting because the Professional group did not differ in age to the other two groups, so simply being older did not play a role in their being more forceful and commanding.

Finally, the Professional group scored significantly higher in terms of social comparison than the other two groups. Comparing themselves favourably with their fellow referees in terms of competence, talent, strength and confidence should help them to deal with difficult situations, as their belief in their relative capabilities allow them to feel that they have done their best and achieved the best possible outcomes even if they have made errors or are the object of abuse. Few studies have assessed this personality factor in sport officials, but it is interesting to note that Wolfson and Neave (2007) reported the prevalence of cognitive bias known as 'illusory superiority' in a sample of elite referees who felt superior to others on qualities considered central to refereeing, such as the ability to read the game, make offside decisions, and deal with heated situations. As all referees cannot be better than their colleagues, there is clearly a form of bias involved in these perceptions.

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This finding is consistent with the results of the Slack et al. (2013) study where elite football referees were found to possess a robust self-belief in terms of their own officiating skills.

In sum, elite referees score higher on measures of MT and assertiveness than do those at Intermediate and Amateur levels. They also have a more internal locus of control and perceive themselves to be superior to their colleagues. While these differences make sense with regard to attributes needed for promotion to higher levels of refereeing, they are difficult to interpret with regard to causality. On the one hand, it could be that these are fixed, stable personality traits that have typified the individuals throughout their lives and actually facilitated and motivated their progression. On the other, it is possible that training programmes and experiences of some referees impact upon their dispositions, enhancing the characteristics required for high level refereeing. Most likely an interaction of individual and environmental factors leads some individuals to become better performers while others either fail in their quest to be promoted to the top level or are simply satisfied operating at their current level.

That said, the impact of the development of the professionalization of elite referees cannot be overlooked. As of the 2001/2002 season, the birth of the Professional Game Match Officials Limited (PGMOL) - who are responsible for training, development and mentoring – resulted in 18 full-time professional ‘select group’ referees, who regularly officiate in Premier League games. Since then, the 2016/2017 season saw the enactment of the full time Championship referee level – termed ‘select group 2’ – while the 2017/2018 season has seen the rise of these referees teamed with full time assistants to enhance decision-making consistency (The Premier League, 2018, <https://www.premierleague.com/referees>). Those referees who formed the majority of the basis of the Professional group for the present study mandatorily congregate twice a month for physiological, technical and psychological sessions, which could go some way to explaining their distinctive profile illuminated in this

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study. Yet, future research might focus on a longitudinal study of the Intermediate group to see if the referees who are eventually promoted become more similar to those at the Professional level, compared to those who remain in the Intermediate category.

With increasing media, team, and fan demands for referees to perform flawlessly on every occasion, the pressure on the governing bodies to produce high quality officials is immense. Even if some personality traits are relatively stable, it is possible that relevant attributes can be acquired and enhanced through training. Most research into such training has focused on decision making skills, such as through the use of video clips to improve decisions in basketball referees (MacMahon, Starkes, & Deakin, 2007) and training tapes in rugby union referees (Mascarenhas, Collins, Mortimer & Morris, 2005). Such studies do suggest that important aspects of refereeing can be developed and improved.

While studies illustrate a number of coping strategies used resourcefully by referees to help them to deal with psychological stress (see Wolfson & Neave, 2007), few papers actually outline attempts to work directly with referees with the goal of improving their psychological resilience. This is quite surprising, given the large number of programmes devoted to increasing MT among sports competitors, such as young Australian footballers who benefited from conventional psychological skills training or specific MT training (Gucciardi, Gordon & Dimmock, 2008); gymnasts (Fournier, Calmels, Durand-Bush & Salmela, 2005); and rugby players (Sharp, Woodcock, Holland, Cumming & Duda, 2013). Unfortunately, published studies describing such programmes with referees are rare. Overlooking this aspect of referee training can be seen as a genuine shortcoming, given the high levels of MT, assertiveness, internal locus of control and ego-oriented social comparison shown among the most elite of referees in the present study. Whether individuals enter their refereeing career with particular stable characteristics, or they develop these through their experiences on the job, it is likely that structured psychological support programmes designed for this particular group would be

extremely valuable. Noting the importance of improving the training and education of football referees, Nevill, Webb and Watts (2013) suggest that better psychological support in dealing with pressure could even be implicated in reducing home advantage in football.

Despite the clear evidence aligning specific personality traits to referee success and the relevant performance groups these officials populate we acknowledge some limitations in this study. In particular, the sample size differences between groups should be noted. Though this study did recruit a large number of amateur referees, the professional and semi-professional referees proved more difficult to source. Combined, though, these two groups not only represent the top 5% of referees, but the professional group constitutes 49% of the 'elite' referee population in England (Premier League, 2018) supporting the generalisability of this study's findings. While the heterogeneity of gender in this study may be disputed as a weakness in terms of inter-gender differences with regard to personality and burnout, it is arguable that the present sample represents the current refereeing landscape, at least in England, as neither professional football league (EPL & EFL) contains a single female referee. In the future this skewed sex ratio is likely to alter as more females enter the profession, and future studies may be able to obtain a sufficient sample of female referees to explore this group. Finally, we acknowledge that the sample focuses on referees within a single country, and we are thus currently exploring referee personality in a larger cross-cultural sample in order to address this limitation.

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Table 1.

*Referee groups and status within the English football league pyramid.*

Referee group	Level	N	Referee status
Professional	1	72	Select Group 1 & 2; National List.
	2A	35	Panel List.
	2B	88	National League North & South.
	3	487	Contributory Referee.
Intermediate	4	1109	Supply Referee.
Amateur	5	5930	Senior County Referee.
	6	2013	County Referee
	7	13880	Junior County Referee

Table 2.

*Means and standard deviations of biographical data and questionnaire responses for professional, intermediate and amateur referees. N=185.*

Factor	Referee Group							
	Professional (N=24)		Intermediate (N=30)		Amateur (N=131)			
	M	SD	M	SD	M	SD	M	SD
Age	30.96	7.05	26.20	6.16	37.60	16.95		
Years at Level	2.88	2.09	3.00	2.23	5.22	3.83		
Mental Toughness	52.88	6.24	48.30	5.42	45.51	5.95		
Locus of Control	7.75	3.95	10.23	3.63	11.20	4.67		
Assertiveness	136.38	29.55	120.40	17.76	116.86	20.97		
Social Comparison	77.42	17.66	69.20	14.94	68.58	13.04		