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Match officials and abuse: a systematic review

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ABSTRACT

Research question: Match official abuse (MOA) in team sports has become a prominent issue within sport management; the effects of MOA on the safety, wellbeing and retention of officials has led to a growth of academic enquiry. The present review aimed to develop a thorough understanding of MOA through the perspective of sport officials from various sports.

Research methods: The authors conducted a systematic literature review on match officials' experiences of abuse. Research databases (*PsychInfo, Scopus, PubMed, Science Direct, SPORTDiscus, Web of Science*) were screened for peer-reviewed research published between 1999 and 2022. Sixty studies of mixed research designs were retained and evaluated using the Mixed Methods Appraisal Tool (MMAT).

Results and Findings: Qualitative synthesis of the results identified five key themes of empirical findings pertaining to the nature and prevalence of abuse; the effects of abuse on performance, wellbeing and retention; methods of interpersonal conflict management; facilitators of abuse; and match officials' attitudes towards current support and intervention. Results show that MOA affects individuals at all levels of competition and can adversely affect the performance and wellbeing of officials.

Implications: The findings are used to identify relevant sport management issues and the authors discuss potential policy outcomes for reducing the prevalence and adverse effects of MOA.

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referee; retention; dissent;
match official; abuse

Introduction

Match officials are central to the structure of sports across the world. Without the presence of an arbiter, the majority of sports at most levels of competition are unable to function effectively. However, despite the importance of match officials in the structure of sport, the majority of the research with this population has historically tended to focus around physiological and psychological perspectives and the technical performance of the match official (Pina et al., 2018; Webb, 2017). One study has considered an overarching coverage of the literature concerning football refereeing. Pina and colleagues conducted an integrative review, identifying a lack of connectivity between different

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empirical topics in football referee research (e.g. wellbeing and performance), although clearly this study only focused on one sport (Pina et al., 2018).

There is an emerging and evolving field of research which has focused upon the discontinuation of match officials and the reasons behind such discontinuation (Webb, 2020). Scholars have focused on the negative behaviour of stakeholders towards young referees in football (Brackenridge et al., 2007) and the sources of stress for match officials (Dorsch & Paskevich, 2007). Research has also considered the role of organisational factors (Dell et al., 2016), support networks (Ridinger et al., 2017b; Warner et al., 2013) and the inextricable relationships that exist with attrition rates. Whilst it is clear that the reasons behind resignations can vary far and wide, one of the most problematic contributors of match official discontinuation, globally, is match official abuse (MOA; Ridinger et al., 2017a).

Furthermore, research has started to consider match officials in larger populations (Giel & Breuer, 2020) and transnationally for comparative purposes (Webb et al., 2020a). However, recent work has called for an extension of the research concerning sports match officials, with significant gaps identified in the extant literature (Webb, 2020). Research has also begun to consider the mental health impact of any abuse on sport match officials (Gouttebauge et al., 2017; Webb et al., 2020b), although such research is in its infancy and requires further development (Gorczyński & Webb, 2020). The surge in academic enquiry into MOA has allowed both academics and sports organisations to procure a stronger understanding of the phenomenon, namely in relation to the prevalence and causes of abuse, the adverse effects on officials and the best practise for management and prevention. Research studies have varied in relation to the type of sport and level of competition being examined, sometimes yielding varying results. To gain a more complete understanding of MOA, one must consider and contrast research findings across all team sports. Yet despite MOA and related areas of academic interest becoming a growing focus within sport management research, there have been no attempts to examine the literature through an empirical review (as of May 2022). The aim of the review was to develop a thorough understanding of MOA through the perspective of sport officials. To achieve this, we provide a detailed synthesis of the literature in relation to the four objectives listed below:

1. To gain a detailed understanding of the prevalence and nature of MOA across different sports and countries.
2. To understand the adverse effects that MOA can have on individuals, including, but not limited to, the effects on their wellbeing, performance, and intentions to continue officiating.
3. To understand how match officials manage abuse during matches.
4. To explore match officials' attitudes towards the support and interventions put in place by sporting organisations in response to MOA.

Methods

The authors followed the four-phase article selection protocol (see [Figure 1](#)) and 27-item checklist set out in the PRISMA guidelines for abstracts (Supplementary materials A) and systematic reviews (Supplementary materials B; see Moher et al., 2009). In accordance with these guidelines, our review protocol was pre-registered and made accessible through *PROSPERO* (ID: CRD42019133850).

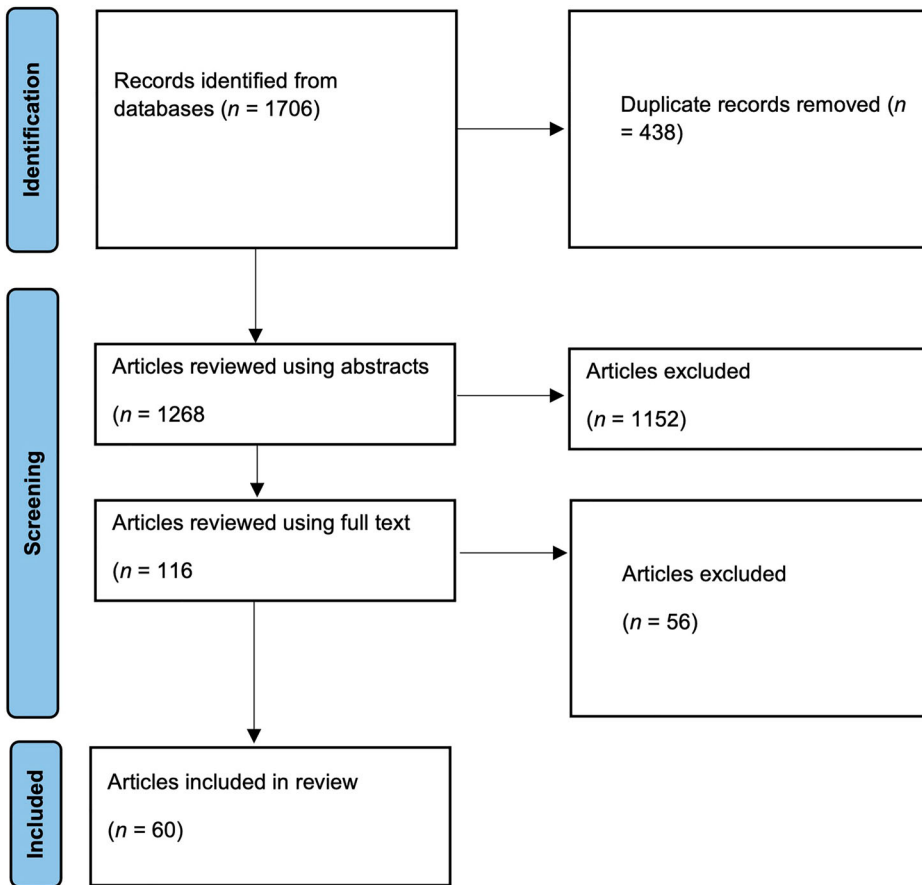


Figure 1. Process of selection of the sample of articles (2009-2022).

The search process took place during May 2022. Six of the most prominent databases for sport psychology and management research (*PsycInfo*, *Scopus*, *PubMed*, *Science Direct*, *SPORTDiscus*, and *Web of Science*) were searched for literature published between 1999 and 2022. The year 1999 was chosen as a starting point after preliminary searches indicated that dedicated research on MOA began emerging at this time (e.g. Anshel & Weinberg, 1999; Rainey, 1999).

The literature search included the terms (Referee* OR Officials OR Umpire OR Linesm*) AND (Abus* OR Stress* OR Pressure) AND (Sport* OR Football OR Soccer OR Basketball OR Baseball OR Volleyball OR Hockey OR Cricket OR Rugby). The first and third search terms were applied to the domains of title, abstract and keyword, whilst the second search term was applied to any domain of the article to include studies that may have examined MOA without making it a primary focus of the study.

The references were introduced into the Zotero bibliography manager (v4.0) to remove duplicates. Two reviewers independently preselected the relevant references from the titles and abstracts of articles, using the following inclusion/exclusion criteria: Empirical research published in a peer-reviewed journal between 1999 and 2022, in English; data had to have been collected from match officials of team-based ball

sports; study had to explore match officials' experiences of and/or attitudes towards abuse. In cases of discrepancies between the reviewers, the reference was persevered for a deeper analysis in the next phase. The process was repeated for the remaining articles, this time using the full text to identify the final set of literature. Remaining discrepancies were discussed with the first author until a unanimous agreement was reached. There was an 87.69%¹ initial agreement rate between both reviewers (all disagreements were settled) and 60 references were included for review.

Quality appraisals for each study were assessed by two investigators using the Mixed Methods Appraisal Tool (MMAT), version 2018 (Appendix C; Hong et al., 2018). The MMAT was judged to be the most appropriate tool for our review because it allows for the evaluation of different research designs. Furthermore, the tool has demonstrated great usability, time efficiency and reliability (interclass correlation) (see Pace et al., 2012). Agreements were reached on almost all articles reviewed (>90%) and all disagreements were resolved through further discussion.

For data analysis, all relevant information from the articles were extracted from the full texts. For this purpose, a meta-data form was created for the extraction of the following data: Authorship, year of publication, study aims, sample size, sample average age, location of study, sports explored, method of data collection, and method of analysis. Further details of each article were recorded and compiled into a comprehensive literature database (available on request). The findings were then examined and analysed to identify patterns and themes of empirical findings pertinent to the review's objectives.

Results

Sample metadata and quality appraisal

The 60 references included in the review are marked with an asterisk in the *References* section. They were published in 36 different journals between 1999 and 2022 with a predominance of publications between 2013 and present-day (see Table 1). The descriptive characteristics of the samples are presented in Table 2. Data were mainly collected through surveys and interviews with match officials. Of the 60 articles reviewed, 20 used qualitative analysis, 31 used quantitative analysis, and 9 used mixed methods. Each study provided an empirically supported rationale, however, only 25 of these studies clearly outlined a theoretical framework that informed their aims.

The methodological quality of the studies was generally high, all studies provided clear research aims and were able to reliably answer them through the collected data. Most (17/20) of the qualitative studies utilised semi-structured interviews with match officials. Some interview studies utilised additional novel data collection methods such as video elicitation tasks (Cunningham et al., 2018) and field notes (Avalos, 2020). Other methodologies included focus groups (Polat et al., 2017), unstructured interviews (Dell et al., 2016) and an autoethnographic commentary (Schaeperkoetter, 2017). Most of the qualitative studies used appropriate data collection and analysis methods, reported and interpreted findings that were adequately derived from the data, and demonstrated coherence between the data sources, analysis, and final interpretations. Limited information from some studies (e.g. Kim & Hong, 2016; Parsons & Bairner, 2015) made it difficult to evaluate the relatedness between the conclusions drawn by the authors and the interview data.

Table 1. Publication years for sources.

Publication year	F	%*
1999	3	5
2000	1	2
2002	1	2
2004	1	2
2005	1	2
2006	1	2
2007	3	5
2009	1	2
2011	2	3
2012	3	5
2013	5	8
2014	4	7
2015	4	7
2016	5	8
2017	7	12
2018	6	10
2019	3	5
2020	3	5
2021	5	8
2022	1	2

*Rounded figures.

All quantitative studies were based on survey responses and measured match officials' attitudes and experiences of abuse. Some studies (e.g. Kaissidis-Rodafinos & Anshel, 2000; Praschinger et al., 2011) utilised vignettes within the surveys to elicit responses to specific in-game scenarios. Most studies used sampling strategies that were relevant to addressing the research questions, recruited samples that were representative of the target population, and used appropriate and reliable measures of testing and analysis. However, most of these studies had a low risk of nonresponse bias due to having high non-response rates without clear explanations. Some aspects of the methodological and analytical procedures used by Karakus et al. (2013) were not transparent or justified. However, findings from this study are still considered because there were no concerns about the accuracy of the findings. One quantitative study (Cuskelly & Hoye, 2013) utilised a non-random trial design. Suitable sampling and testing methods were used. However, the study failed to account for all confounding variables within the design and analysis.

Mixed method studies were primarily survey-based (7/9), however, some studies also included semi-structured interviews (Deal et al., 2018; Zelyurt & Ataçoçu, 2017) and diary content analysis (Friesen et al., 2017). Many of the studies provided an adequate rationale for using a mixed methods design and effectively integrated the different components of the study to answer the research question. None of the studies addressed divergence and inconsistencies between qualitative and quantitative results but this was primarily due to a lack of contradicting findings (see Supplementary material C for individual quality appraisal scores).

Nature and prevalence of abuse (n = 29)

Nature of Abuse. Players, coaches, and spectators are the key perpetrators of MOA (Kellett & Shilbury, 2007; Rayner et al., 2016) with most studies identifying spectators

Table 2. Descriptive characteristics of samples used in sources.

Descriptive variable	<i>F</i>	%
Country of the sample		
UK	16	27
USA	11	18
Turkey	8	13
Australia	6	10
Canada	5	8
Greece	2	3
Sweden	2	3
Spain	2	3
France	2	3
Netherlands	2	3
Japan	1	2
Slovakia	1	2
Germany	1	2
Catalan	1	2
Norway	1	2
South Korea	1	2
Austria	1	2
Israel	1	2
Nigeria	1	2
Brazil	1	2
New Zealand	1	2
Sport		
Football	38	63
Basketball	17	28
Rugby union	7	12
Ice hockey	5	8
Volleyball	5	8
American football	4	7
Australian rules football	3	5
Handball	3	5
Baseball	3	5
Lacrosse	3	5
Rugby league	2	3
Softball	2	3
Field hockey	2	3
Netball	2	3
Cricket	1	2
Futsal	1	2
Touch rugby	1	2

Note: Some studies included match officials from multiple sports and countries; * Rounded figures.

as the most frequent perpetrators (Ackery et al., 2012; Rayner et al., 2016), especially in youth sports where parents are the main source of abuse (Cleland et al., 2015; Walters et al., 2016; Webb et al., 2019). In contrast, Folkesson et al. (2002) identified spectators as the least common source of abuse; however, the study focussed primarily on spectators of adult football rather than youth football. Although coaches commit MOA less frequently, their behaviours can be considered more problematic due to their influence over players and spectators. Multiple studies have shown that the abusive actions of coaches towards match officials can normalise MOA and influence others to mirror the behaviour (Andersson, 2019; Rayner et al., 2016). Some American football officials from Avalos (2020) identified assistant coaches as being more problematic due to their expendability compared to head coaches, however, this contention was not reported in other studies which may suggest that this issue is pertinent to American Football.

MOA can be presented as verbal abuse (VA), physical abuse (PA) or threatening behaviour. VA mainly consists of aggressive dissent (Rayner et al., 2016) and insults (Neil et al., 2013; Webb et al., 2020a), including racist (Bressan et al., 2019; Devís-Devís et al., 2021) and homophobic (Drury et al., 2021) remarks. Many female officials also experience sexist comments, questioning their abilities and suitability for the role (Bressan et al., 2019; Drury et al., 2021; Kim & Hong, 2016; Tingle et al., 2014; Webb et al., 2021). Regarding PA, officials have reported being forcefully pushed/grabbed, spat on and assaulted (Ackery et al., 2012; Avalos, 2020; Samuel et al., 2017). Threatening behaviour, suggestive of an imminent physical assault or even death have also been reported by officials (Kellett & Shilbury, 2007; Rayner et al., 2016).

Prevalence of Abuse. Before examining the prevalence of MOA, it is important to note that all prevalence studies use retrospective estimations from officials rather than confirmed rates. In addition, interpretations of what constitutes ‘abuse’ can vary between officials (Webb et al., 2019) and the prevalence rates may be dependent on whether the researchers defined *abuse* to their participants. Therefore, prevalence rates should only be taken as approximations and interpretations of cross-study comparisons should be made cautiously.

VA appears to be the most common form of MOA (Walters et al., 2016). Prevalence studies suggest that the majority of match officials (>50%) from various sports and countries are likely to experience VA during their careers (Ackery et al., 2012; Dawson et al., 2021; Folkesson et al., 2002; Kellett & Shilbury, 2007; Rayner et al., 2016; Webb et al., 2019). Although the majority of the studies used a predominantly male sample, Cleland et al. (2015) suggest that female match officials were equally vulnerable.

Match officials with the highest probability of experiencing VA appear to be Canadian hockey umpires (98%, Ackery et al., 2012) and English match officials (93.8%; Cleland et al., 2018; Webb et al., 2017), whilst officials from other sports and countries are less susceptible (51–88%; Folkesson et al., 2002; Rayner et al., 2016; Webb et al., 2020a; Webb et al., 2019; Zelyurt & Ataçoğlu, 2017). The frequency of VA also varies between sports. Football match officials reported experiencing VA once every few games and approximately one in five officials reported experiencing VA during every game (Cleland et al., 2018; Webb et al., 2017, 2020a); whereas in other sports (e.g. cricket and rugby union), match officials reported experiencing VA twice a season (Webb et al., 2019).

Exposure to PA was less frequent than VA and seemed to vary depending on the sport. Canadian Hockey umpires were more likely to experience PA (43%) in comparison to other sport officials (Ackery et al., 2012). Among football officials, Turkish football match officials were the most likely to experience PA (20–38%, Zelyurt & Ataçoğlu, 2017); followed by Israeli (22%, Samuel et al., 2017); English (19%; Webb et al., 2017); French and Dutch (16% & 14.6%, respectively, Webb et al., 2020a); and Swedish (0–2.1%, Folkesson et al., 2002) officials. As with reports of VA, rugby union officials were less likely to experience PA in comparison to other sports (6.4%, Webb et al., 2019).

There appears to be some discrepancies on whether MOA rates differ across competition level. Reports from Webb et al. (2020a) suggest that officials at higher levels of professional sport receive the most abuse. However, research suggests that amateur and youth matches have the highest perpetration of spectator abuse (Polat et al., 2017; Samuel et al., 2017). Researchers have suggested that high levels of spectator abuse in

amateur games are due to a combination of reduced security and proximity between spectators and match officials (Cleland et al., 2015; Parsons & Bairner, 2015). Furthermore, amateur games typically involve one official working alone (Deal et al., 2018). Social impact theory (see Latané, 1981) would suggest that in such situations, players, coaches and spectators would feel less pressure to adhere to the official's rules and officials would be far more susceptible to the social pressures exerted on them by the larger groups. There appears to be a trade-off in risks: within elite-level matches, officials are under more scrutiny to perform well, required to officiate in front of larger audiences and involved in games where players and coaches have far more authority and power. As a result, there are more sources of abuse present and players can get away with MOA more easily (Cleland et al., 2018). However, in amateur games, there is a lack of security and distance separating officials from abusive parties, thus there is a greater risk for the abuse to escalate and become more severe.

Another reason amateur sports contain higher levels of MOA is due to the relatively younger age of the match officials. Younger officials seem to be more frequently targeted by abusive individuals due to their inability to assert authority and inexperience in managing conflict (Cleland et al., 2018; Hacicaferoğlu & Gündoğdu, 2014). However, in relation to PA, Rayner et al. (2016) found that rugby union match officials aged 25–34 were the most susceptible. This may be due to the PA against very young or senior officials being perceived as a greater injustice. In terms of gender differences, research findings are inconsistent, with some research suggesting no gender differences in abuse rate (Cleland et al., 2015), whilst other studies have suggested that both male (Dawson et al., 2021) and female officials are more likely to experience MOA (Hacicaferoğlu & Gündoğdu, 2014; Serkan, 2014). Together, the studies suggest that the relationship between MOA and gender is dependent on further factors such as sport, country, and type of abuse.

The effects of abuse (n = 38)

Effects of abuse on performance. A considerable proportion of match officials admit that abuse can impact their performance (Ackery et al., 2012; Neil et al., 2013). For some, receiving abuse can make it difficult to concentrate on the game (Folkesson et al., 2002; Neil et al., 2013) – in some cases leading to further mistakes being made (Lane et al., 2006). Some match officials have also reported losing confidence in their decision-making after receiving verbal dissent (Dell et al., 2016; Johansen & Haugen, 2013), which suggests that match officials are susceptible to influence. Excessive MOA can also lead to officials losing control of the game (Ackery et al., 2012). Match officials also appear to be susceptible to normative pressures for compliance. Numerous studies have found that acts of aggression aimed at a match official can influence them into making more favourable decisions towards the abuser's team to avoid further conflict (Ackery et al., 2012; Lane et al., 2006). However, the same acts of abuse can also have a reverse effect, Neil et al. (2013) found that some football match officials were more likely to make decisions that went against their abuser's team as retaliation. Yet not all officials are equally as vulnerable to influence (Karakus et al., 2013). A large proportion of officials (47–49%) are able to maintain focus and remain uninfluenced by abuse during games (Ackery et al., 2012; Johansen & Haugen, 2013; respectively).

Some of this variance can be explained by the age and experience of officials, with older match officials being more experienced in handling abuse (Folkesson et al., 2002; Gencay & Aydin, 2015).

Effects of abuse on stress and retention. Many officials have identified abuse as a significant source of stress and anxiety (Dell et al., 2016; Dorsch & Paskevich, 2007; Giel & Breuer, 2020), which can manifest to occupational burnout (Orviz-Martínez et al., 2021). Moreover, constant abuse, fear for personal safety, and general lack of respect has been cited by officials across different sports as reasons for quitting (Andersson, 2019; Hancock et al., 2015; Webb et al., 2020a). Dawson et al. (2021) found abuse and intimidation to be directly associated with intentions to quit. In contrast, respect towards officials by spectators, coaches and players were identified by Giel and Breuer (2020) as predictors of intentions to continue officiating. Female match officials also claimed that sexist comments and prejudice towards them negatively affected their mental health (Webb et al., 2021) and caused them to resign (Kim & Hong, 2016).

However, not all officials are affected by MOA to the same extent (Karakus et al., 2013). For many, MOA is not seen as a significant stressor in comparison to other work-related factors (e.g. being supervised; Anshel, et al., 2013; Gillué et al., 2018), nor is it cited as a contributing factor for resignation (Kellett & Shilbury, 2007; Rainey, 1999). Some officials also claim to be unintimidated by threats (Kruger et al., 2012; Rainey & Hardy, 1999; Samuel et al., 2017; Voight, 2009). This is in part due to the way match officials perceive the abuse, that is, some officials see MOA as a by-product of the sport with no real risks (Kellett & Shilbury, 2007; Wolfson & Neave, 2007). However, the severity of abusive actions experienced can vary across sports and thus, it may not be as easy to dismiss certain actions so easily. Individual differences can also explain why some officials find MOA more stressful than others. For instance, self-esteem and confidence have been linked to lower levels of stress and anxiety from abuse (Johansen & Haugen, 2013; Kaissidis-Rodafinos & Anshel, 2000).

Managing interpersonal conflict (n = 19)

Match officials use a combination of *approach* and *avoidance* coping methods when attempting to manage interpersonal conflict, depending on the source and *type* of abuse (Anshel & Weinberg, 1999; Cunningham et al., 2018).

Approach coping methods. Approach coping strategies require confrontational actions to be taken towards abusive parties. Common approach coping strategies in officiating include issuing cautions and penalties (Devís-Devís et al., 2021), criticising coaches for their behaviours or inability to control their players, and verbally expressing anger (Anshel & Weinberg, 1999). Such methods are often used when the abuse requires immediate action and is controllable (e.g. player abuse). Further, many officials stress the importance of acting on dissenting behaviour as soon as their control is threatened, through caution or penalisation, to maintain control (Lane et al., 2006). Resultantly, many rugby officials choose to apply such approach strategies when dealing with abusive players (Rayner et al., 2016), and similar behaviours have been adopted by Spanish and Italian officials who use penalisation to prevent escalation (Webb, 2017). The use of approach coping strategies allow match officials to increase their perceived level of control, however if players choose to reject the official's actions, perceptions of

control can be significantly reduced (Cunningham et al., 2018) and players may become more uncontrollable (Hill et al., 2016). In cases where no other approach strategy is working, some officials may end the match if they feel that there is a serious risk of harm (Cleland et al., 2015).

Non-imposing approach coping strategies can also be used by officials. Many officials believe that MOA can be reduced by explaining decisions to players to demonstrate impartiality and by taking accountability for their errors (Cunningham et al., 2018; Lane et al., 2006). However, consistently admitting to errors can cause players and coaches to deem the official as unreliable and lead to further dissent towards subsequent decisions (Cunningham et al., 2018). Officials also believe that letting players vent their frustrations can present the official as being more understanding and ease players into accepting leadership (Avalos, 2020; Friesen et al., 2017).

In addition to the particular coping methods outlined above, officials will adjust their style of communication to deter hostility. Many officials have identified humour as an effective way of building rapport with players and presenting themselves as approachable (Cunningham et al., 2018; Friesen et al., 2017; Lane et al., 2006). In relation to player abuse, most players will act abusively when they feel that their team have been subjected to an unfair decision. Thus, many officials highlighted the importance of understanding the player's circumstances and their reasons for acting out (Cunningham et al., 2018; Friesen et al., 2017). They also highlighted the importance of monitoring emotional responses for effective communications and displaying emotions through non-verbal behaviour (e.g. facial reactions, Cunningham et al., 2018). However, too much empathy and openness can cause some players to perceive match officials as being suggestible (Cunningham et al., 2015, 2018).

Due to the confrontational nature of approach strategies, some officials may be hesitant in using such methods. Kaissidis-rodafinos and Anshel (2000) found that match officials with low self-esteem were less likely to use approach strategies when receiving abuse; and Webb et al. (2020b) found that some officials would not take any action towards abusive individuals due to blaming the abuse on their own mistakes.

Avoidance coping methods. Abusive behaviour that does not require immediate attention or is seen as less controllable (e.g. abuse from spectators, is more frequently handled through avoidance coping methods (Anshel & Weinberg, 1999). The most cited avoidance strategy used by officials is ignoring the abuse (Drury et al., 2021; Neil et al., 2013; Voight, 2009; Webb et al., 2018; Webb et al., 2020a) and choosing not take VA personally (Devís-Devís et al., 2021). Many officials choose to detach themselves from the abuse so that they can remain focussed on the match (Cleland et al., 2015; Friesen et al., 2017; Warner et al., 2013). More proactive avoidance strategies include quickly continuing play so that the players do not have time for dissent (Anshel & Weinberg, 1999) and physically guiding abusive players out of an area by walking away from it (e.g. Cunningham et al., 2018). Avoidance strategies are frequently used by officials because they allow them to maintain their credibility whilst avoiding the adverse effects of abuse (Cunningham et al., 2018). However, many officials have admitted that such methods are not always effective and can lead to a loss of control (Hill et al., 2016). Avoidance coping strategies are more likely to be used by match officials who perceive MOA as an inevitable part of sport (Webb et al., 2018) with low risks of escalation (Webb et al., 2019, 2020a).

Officials are also able to deal with abusive incidents better through personal effective use of emotional regulation, which has been identified as a means for maintaining composure during matches to minimising focal disruption (Lane et al., 2006; Neil et al., 2013). For many officials, motivational self-talk has been identified as an effective method to help them reaffirm self-confidence during the game (Friesen et al., 2017; Mack et al., 2018). A heightened level of confidence can minimise the risk of dissent by presenting the official as more competent and accurate (Lane et al., 2006). Match officials have also reported using deep-breathing exercises to help manage their emotional states which led to clearer communication with parties (Hill et al., 2016).

Facilitators of MOA (n = 9)

Officials interviewed by Cleland et al. (2015) believed that many younger players were influenced to act disruptively after watching professionals behave in such ways. Officials also believed that some players would become frustrated and fail to understand why they were being punished for actions that were permitted at professional level. It appears that leniency towards abusive players at elite levels normalises the behaviour for those watching and portrays MOA as an acceptable form of conduct within sports (Cleland et al., 2018). Webb et al. (2017) found that officials attributed the failure of previous educational campaigns aimed at stopping MOA at grassroots level on the social influence of abusive athletes. Moreover, they suggested that campaigns should follow a top-down approach, targeting professionals first rather than amateur players. A lack of knowledge towards the rules of the sport is another fundamental cause of MOA. Many match officials believe that players and spectators will often act abusively due to an incomplete understanding of the rules causing them to erroneously believe that an incorrect decision was made by the official (Deal et al., 2018; Webb et al., 2019; Wolfson & Neave, 2007). In the same vein, many officials described abuse from parents as overemotional responses over perceived injustices towards their children (Avalos, 2020). Other facilitators of MOA that have been reported in research include spectator intoxication (Bressan et al., 2019), perceived performances of official (Momoh et al., 2021), and co-spectator influence (Avalos, 2020).

Match officials' attitudes towards current support and intervention (n = 19)

Existing campaigns. The most notable programme aimed at tackling issues of MOA in English football was the *Respect Programme*, launched by the *Football Association (FA)* during the 2008/2009 season after a build-up of behavioural problems during games (Cleland et al., 2018; Lusted, 2014). The programme primarily focussed on building awareness around the issue of MOA and promoting positive behaviours. Unfortunately, a considerable proportion of English football officials did not believe that the programme was successful (Cleland et al., 2015; Dell et al., 2016; Parsons & Bairner, 2015), with 22.1% of football match officials reporting that they continued to receive VA during every match (Cleland et al., 2018). Some officials believed that the programme had not successfully reached lower level teams (i.e. grassroots) where MOA was more common (Cleland et al., 2015). Moreover, the majority of officials believed that the behaviour of competitive parents was still problematic (Cleland et al., 2018) and that educational campaigns should

focus more on parents of junior players (Cleland et al., 2015). For others, an educational programme was not seen as enough to impact current issues with MOA; many officials believed that without the implementation of stricter rules, MOA would persist (Cleland et al., 2015, 2018). Some officials did believe the programme was somewhat successful. However, many of these individuals argued that the effects of the programme slowly disappeared as soon as the campaign dropped out of public consciousness (Cleland et al., 2018).

Organisational support. A number of officials believe that local or regional football associations do not provide enough support, especially at grassroots level (Cleland et al., 2015; Dell et al., 2016; Parsons & Bairner, 2015; Webb et al., 2020a), with only 49.4% of English football officials believing that the level of support from their local associations were adequate (Cleland et al., 2018). Moreover, some officials reported receiving no support from their associations after reporting abuse (Parsons & Bairner, 2015; Webb et al., 2020a) and instead, sought support from other parties such as colleagues and external associations (Cleland et al., 2018). Studies have found that perceived lack of organisational support directly influences match officials' intentions to discontinue (Giel & Breuer, 2020; Webb et al., 2018), partly due to making officials feel undervalued (Dell et al., 2016). Furthermore, some female officials have identified the lack of mental health support and training as a significant issue that exacerbated the damaging effects of MOA on mental health (Webb et al., 2021). In contrast, some officials held positive views about the organisational support they received (Cleland et al., 2018; Wolfson & Neave, 2007). The variation in organisational support can be attributed to differences in available resources and club numbers within different sports and counties (Cleland et al., 2018). In particular, the majority of research highlighting the lack of organisational support tend to involve football officials, with a greater proportion of officials from other sports such as rugby reporting satisfactory support (Rayner et al., 2016).

Disciplinary procedures. Many officials refuse to report abuse due to a lack of faith in the disciplinary procedures in place (Deal et al., 2018; Webb et al., 2019). More specifically, officials from different sports believe that the process of reporting abuse (Rayner et al., 2016) and receiving feedback (Cleland et al., 2018; Webb, et al., 2018, 2020a) needs to improve. As well as feedback, there appears to be a mixed response among match officials regarding whether the disciplinary processes are enough to deter abuse (Webb et al., 2020a).

Match officials also argued that many teams were not concerned about repercussions from their footballing associations and thus, were not deterred from abusive conduct (Cleland et al., 2015). As a result, many officials assert that change can only be instigated through the implementation of stricter rules and punishments aimed at clubs (Webb et al., 2019). One suggested approach is to publicly publish lists of abusive teams to motivate teams to start actively trying to reduce MOA from their spectators and players (Cleland et al., 2018; Webb et al., 2019).

Need for further training and mentorship. Some of the respondents from Cleland et al. (2018) believed that younger officials would benefit from more training on managing interpersonal conflict. Yet, it has been repeatedly stated that current training programmes over-emphasise the rules of the game rather than advising individuals on how to deal with players and fans (Dell et al., 2016; Warner et al., 2013). Mentoring-schemes using experienced or retired officials could be used to help prepare

inexperienced officials on dealing with disruptive individuals (Cleland et al., 2018; Dawson et al., 2021; Deal et al., 2018; Mack et al., 2018) - emerging research suggests that this could lead to positive outcomes (see Webb et al., 2018).

A strong community amongst match officials can also help individuals cope with MOA. Voight (2009) found that many officials would use their community to reflect on their experiences of MOA with other officials and seek guidance on improving their interpersonal conflict management skills. Officiating communities were also endorsed by Australian rules football officials who believed that it helped build self-esteem and improve overall performance (Kellett & Shilbury, 2007). Female match officials have also identified the need for female-only officiating communities, to allow female officials to discuss issues and approaches specific to them (Kim & Hong, 2016; Nordstrom et al., 2016). Officiating communities have also been linked to greater match official retention rates, due to an increased sense of Camaraderie and perceived support (see Tingle et al., 2014; Warner et al., 2013).

Discussion

Implications of results

The present study aimed to synthesise current empirical knowledge on match officials' experiences of abuse. Most studies reviewed demonstrated high methodological and analytical quality. The review identified a comprehensive list of the causes and effects of MOA. Utilizing a similar conceptual model to Webb et al. (2020b, p 76), Figure 2 was constructed to visualise the risk factors and adverse consequences of MOA, as well as potential moderators of these effects. Together the literature presents MOA as a persistent problem for all team-based sports with adverse consequences that can impact match officials and the quality of sport (Webb et al., 2020b). However, the literature also provides practical and empirically supported insight into effectively tackling the issue. Based on the evidence synthesised in this review, the authors identified six policy implications concerned with the management of MOA (presented in Table 3), which are discussed throughout this section. Variations in self-reported victimisation rates between

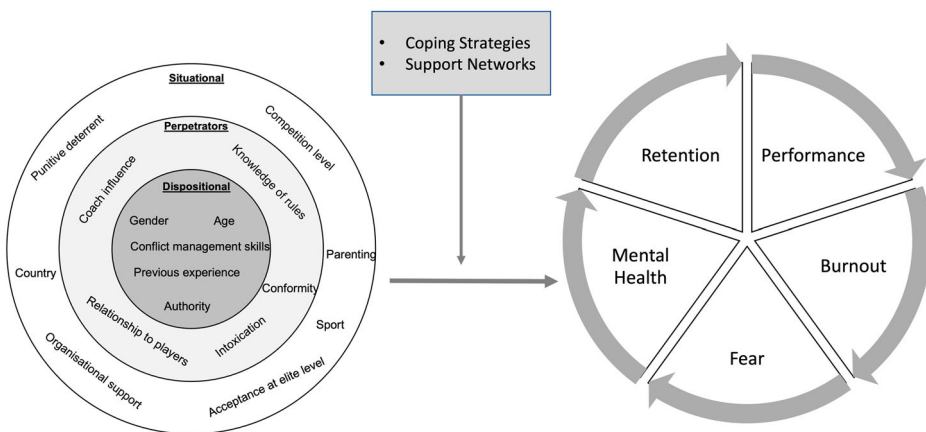


Figure 2. Conceptualisation of factors associated with MOA, adverse outcomes, and moderators.

different studies suggested that the nature and frequency of MOA varied depending on the level of competition, with spectator abuse being more common within amateur matches and abuse from players and coaches being more common within professional games. As one would have predicted, the most common form of abuse was VA by way of aggressive dissent and insults. Youth sports appeared to incite greater levels of noticeable spectator abuse, which was attributed to a closer proximity between officials and spectators, and a lack of security/assistance for officials within amateur matches. Attempts have been made to increase protective barriers within amateur sports by some organisations, such as the *Respect* programme's implementation of touchline barriers in youth football (Ronay, 2015); unfortunately, such practises are not exercised across other sports. Thus, our first policy recommendation is the implementation of barriers to keep spectators at a distance from officials (PI 1, Table 3). However, whilst the lack of protective barriers has been reported by some officials as being responsible for the elevated spectator abuse rates (Cleland et al., 2015; Parsons & Bairner, 2015), evidence is needed to confirm whether the implementation of these barriers would reduce spectator abuse. Also, such implementations may not be feasible because the financial and logistical requirements for implementing barriers within all amateur matches may exceed the resources that are available to most local leagues.

In relation to the consequences of MOA, both the performance and psychological wellbeing of officials are negatively affected. Our findings indicate that many officials struggle to focus as a result of MOA and consequently make further mistakes. Also, some officials appear to lose confidence in their judgements and in some cases, impartiality. Abuse can also affect the wellbeing and mental health of match officials (Gorczyński & Webb, 2021). Many officials reported stress and anxiety from persistent abuse, which sometimes lead to resignation. The literature suggests that there are realistic mental-health risks present, which highlights the need for more supportive measures to be put in place by sport official associations and governing bodies to protect the wellbeing of their staff (Webb et al., 2021). Currently, research on psychological support for abused match officials is scarce and has been identified as a crucial direction for future research (see Gorczyński & Webb, 2020; Webb et al., 2021). Governing bodies and match official organisations require further insight in order to structure effective support programmes for their workforce. As such, the FA have introduced a mental health champions pilot scheme to begin to tackle some of these issues and concerns within the grassroots officiating community (The FA, 2021).

There is a consensus amongst match officials that appropriate training on managing interpersonal conflict could help reduce the level of abuse, and its effects (Webb et al., 2020a). Despite some development programmes incorporating conflicting management skills within their framework with reported success (e.g. *The Cornerstones Performance Model of Refereeing*; Mascarenhas et al., 2005), reports suggest that many programmes fail to successfully prepare developing officials on dealing with abuse (Dell et al., 2016; Warner et al., 2013). Our second policy recommendation is that conflict management training should be recognised as an essential skill for officiating and integrated into match official development programmes further (PI 2, Table 3). Many officials highlighted the importance of mentoring programmes, where inexperienced match officials could gain consultation and pastoral care from more experienced officials (Cleland et al., 2018; Deal et al., 2018; Mack et al., 2018). The current authors

Table 3. Policy implications derived from the empirical evidence.

PI	Issue	Recommendation	Action	Potential impact
1	Spectator abuse significantly higher in amateur matches which can negatively impact a match official's wellbeing and performance.	Higher occurrence of spectator abuse is in part due to closer proximity between spectators and match officials. By creating a greater distance between spectators and match officials, the adverse effects of abuse can be mitigated.	Implement barriers within amateur games to prevent spectators from getting close to match officials. Additional match officials could also be included to provide further support to each other.	Whilst it may not necessarily deter spectators from committing VA, it could deter them from approaching officials during the match. By distancing the officials from the source of abuse, abuse ignition would be easier.
2	Many match officials do not feel that they have been trained to deal with abusive individuals.	Conflict management training should be recognised as an essential skill for officiating and integrated into match official development programmes further.	Training programmes should be designed to prepare officials on how to deal with abuse during matches, manage interpersonal conflict and the actions to take after experiencing abuse during a match.	Inexperienced match officials will have more knowledge on the most efficient ways to deal with different form types of interpersonal conflict during matches.
3	Inexperienced match officials may need continual one-on-one support to help discuss and resolve newly encountered problems.	Implement mentoring programmes using experienced or retired match officials to provide inexperienced match officials consultation and pastoral care.	Through email correspondence and routine meetings, inexperienced match officials could reflect on their experiences and seek advice on various issues including and beyond MOA.	Match officiating in many respects could be considered as an iterative process, where officials identify and perfect effective ways of working with players, spectators, and coaches. The wealth of knowledge experienced officials hold could be a fruitful resource for new officials to learn from. Working under the tutelage of an experienced and successful mentor is likely to build the confidence of new officials. Mentoring would also allow retired referees to maintain some involvement with the vocation and thus, would likely result in larger numbers of potential mentors being available.
4	Some spectators misunderstand the rules of the sport and act abusively over false beliefs that the official's decisions are wrong.	Stakeholders involved in sport games should be educated on the rules and common misconceptions within the sport.	Stakeholders could be educated using information booklets or pre-season seminars/ meetings. Spectators could also receive the information through information sheets or within the match programs during the matches.	By educating various stakeholders about the rules of the sport and common misconceptions, these individuals may be less inclined to make false accusations of incompetence and impartiality towards match officials.

(Continued)

Table 3. Continued.

PI	Issue	Recommendation	Action	Potential impact
5	Past educational campaigns aimed at reducing MOA from players have had little long-term success.	Due to the influence of elite athletes on amateur players, educational campaigns would greatly benefit from greater endorsement from elite level teams.	A top-down initiative should be implemented by sporting organisations with active endorsement from professional teams and player.	Educational campaigns that feature elite athletes are likely to have greater influence on amateur players. By changing the attitudes towards MOA at the highest level of the sport, junior players may be more inclined to act accordingly.
6	Many amateur teams take little action to prevent MOA by their players and spectators.	Given that sport teams hold some authority over their players and spectators, greater punitive actions should be taken on teams that fail to control their players and spectators.	Greater punitive punishments such as financial penalties, deduction of points, removal from leagues and publicly naming abusive teams could be used on teams that fail to control their players' and spectators' abusive conduct.	Greater punitive punishment will motivate teams to actively try combat the misconduct of their own players and spectators. Stricter punishments could also help increase the level of perceived organisational support that many referees currently feel is low (Giel & Breuer, 2020; Webb et al., 2018).

stand in agreement with past scholars and recommend the implementation of mentoring schemes for novice match officials (PI 3, Table 3). However, considering the declining rates of match official retention and thus the increased workloads of existing officials, there may be limited availability of experienced match officials to mentor developing officials. Thus, before this recommendation can be implemented, organisations need to work towards improving the retention of their officials.

Social influence was frequently brought up as a facilitator of MOA. Many officials believed that MOA was a learnt response from elite professionals, parents and coaches. Kelman's (1958) conceptualisation of social influence processes can explain this effect. Many players and spectators could be influenced into acting more aggressively towards match officials due to *compliance* (Cialdini & Goldstein, 2004). Individuals who witness others within their group acting aggressively towards the official may perceive the action as a group norm. Resultantly, they may then mirror the abuse in an attempt to gain or preserve approval from their group. This explanation fits with the mirroring behaviours of abusive spectators described by Avalos (2020). The influential effect of elite professionals discussed by Cleland et al. (2015) can be explained by the process of *Identification*, in which an individual's desire to be more like an idolised athlete influences them into emulating their behaviours (Brown et al., 2003). Many players may also associate the action with the elite athlete's success and internalize the action as an effective means for succeeding in competition. The processes of compliance and identification would suggest that perpetration of abuse could have a *domino effect* during matches. As such, it is imperative for officials to identify and diffuse abusive conduct from players from the onset.

Officials also cited ignorance towards the rules of the sport and the harmful effects of abuse as facilitators of MOA. Social conformity theories (see Suls & Wheeler, 2000)

suggest that there may be an interaction of effects between ignorance and social influence. Research has found that individuals are more likely to accept the belief of others as reality, when they believe that the group is more likely to be correct (Mojtahedi et al., 2017, 2018, 2019). Thus, individuals with a lack of understanding towards the rules of the sport may be more inclined to accept other spectators' criticisms towards the match officials and perpetrate abuse as a result. If spectators were more aware of the rules however, they may be more likely to challenge the criticisms of others internally and be less inclined to partake in the abusive conduct. Based on many officials' claims that abusive parties often lack an understanding of the rules, our fourth policy recommendation is for greater efforts to be made towards educating stakeholders (primarily spectators) about the rules of the sport and correcting common misconceptions (PI 4, Table 3). It is anticipated that a greater understanding towards the rules may mitigate false accusation of incompetence and bias towards officials. However, this explanation disregards the effects of emotion on rational thinking (see Lerner et al., 2015).

Whilst educational campaigns would appear to be the most suitable solution, previous attempts suggest that the long-term benefits of such interventions are not as easy to maintain (Cleland et al., 2018). The Respect programme attempted to utilize a top-down initiative in promoting prosocial conduct, however the programme was unable to gain sufficient endorsement from the Premier League, limiting the programme's influence and reach. Our fourth policy recommendation advises future campaigns to adopt a similar initiative, using elite athletes to endorse and promote prosocial behaviour to amateur players (PI 5, see Table 3). However, to date, there is not enough evidence to suggest that awareness campaigns, alone, can incite permanent change in players' and spectators' conduct. Finally, there was a consistent narrative born out of interviews with match officials that current punitive deterrents of MOA are insufficient (Webb et al., 2019). Officials have suggested that stricter punishments aimed at both players and teams could reduce the prevalence of MOA and place more responsibility onto the teams. Based on these findings, the authors suggest that greater punitive actions towards teams that fail to control their players and spectators may motivate them to combat the misconduct of their own players and spectators (PI 6, Table 3). Given the hierarchical structure of most sport teams, we propose that a top-down approach of conduct control from within the organisation may produce greater results. Increased respect towards officials from players, spectators and coaches will also have a positive impact on match officials' intentions to continue (Giel & Breuer, 2020).

Directions for future research

Through this review, the authors identified multiple areas within the field where research is lacking.

1. Very few studies (e.g. Jacobs et al., 2020) have examined the precursors and justifications of MOA through the perspective of the actors of abuse. Match officials' beliefs about the motivations of abusers is somewhat speculative and often contested by other stakeholders (Walters et al., 2016). Semi-structured interviews with players, spectators, and coaches should be used to explore the motivations and justifications of MOA through the perpetrators' perspectives.

2. Little is known about the availability and efficacy of psychological support offered to match officials. To understand how the adverse effects of MOA can be mitigated, we must first understand the current support being provided. Past studies suggest that perceived organisation support varies between sporting organisations (Cleland et al., 2018), which could explain the differences in how match officials are affected by MOA (Webb et al., 2018). Thus, we propose the use of longitudinal research to examine the effects of psychological support on match officials' wellbeing and intentions to continue. This would help identify the best practises for match official management and development.
3. There is a dearth of research exploring gender differences in MOA (Drury et al., 2021), with the few available studies producing conflicting results. Recent research by Webb et al. (2021) uncovered significant mental health effects faced by abused female officials. Whilst recent studies are showing greater consideration towards female match officials (e.g. Drury et al., 2021), further exploration of gender differences in MOA are needed.
4. Finally, with existing research highlighting the importance of integrating conflict management training into development programs, it is currently unclear whether such programmes would be pragmatic. Future research should focus on evaluating the effectiveness of conflict management training in helping match officials control MOA during matches.

Limitations

The current review constitutes a significant contribution to the knowledge of match official abuse. However, there were some limitations. Firstly, the search was limited to research that had been written in English, which could have resulted in useful evidence being left out of the review. Second, the review only included evidence from articles published in peer-reviewed journals. This was done to ensure that all recommendations put forward in the discussion were devised from reliable research. However, this ultimately led to a reduction in potentially useful evidence from the *grey literature* and an increased risk of publication bias within the results (Perestelo-Pérez, 2013).

Conclusion

Research into MOA has gained much traction over the past decade and allowed us to understand the phenomenon as a universal issue that impacts various sports across different levels of competition. We hope that the evidence presented herein will inform future practise in sport management by providing a holistic overview of the issues and potential solutions to MOA. The application of such empirical findings to potential policy outcomes is a crucial step forward for academics and practitioners in combatting MOA. Sport organisations are urged to draw on such scholarly works within their active efforts to improve the experience of match officials.

Note

1. Disagreements centred around sources of data (i.e. referees) and whether the results involved MOA.

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