

Group Case Study Considering the Value of Mental Training as Part of a Soccer Referees' Performance

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The value of providing a mental skills assessment and corresponding mental training program to soccer referees preparation and performance

What percentage of a soccer referee's work is mental? It's likely that answer will be different for each referee, but as we consider the question, are there components of the referee's mental game that are identifiable? Trainable? Beneficial to improve for their enjoyment and advancement? Finally, how much does dealing effectively with stress and anxiety play a factor with on-field performance? These are all questions to evaluate in order to consider how best to implement a mental training plan for soccer referees.

Referees, like players have many internal and external variables that must be considered in some manner as they pertain to performance. From training, pre-game, skill execution during play, involvement with the various people in and around the field, mistake response, and post-game thoughts, both players and soccer officials have many details to which they can pay attention to, or be distracted by, while performing. Some details are more beneficial to pay attention to than others. The crucial role that mental skills play in high-level performance with athletes has been well demonstrated throughout the last few decades. Williams and Krane (1998) found out that certain mental skills are usually associated with successful performance (e.g. goal setting, self-regulation of arousal, heightened concentration, high levels of self-confidence, motivation, and commitment). Why then have athletes and coaches been the focus of thousands of studies in the field of sport psychology, when sports officials in general, and notably, soccer referees in particular, been neglected (Phillippe, Vallerand, Andriananrisoa, & Brunel, 2009)?

Soccer player development is often centered around the four pillars of the game: Technical, Tactical, Physical, and Mental. Although at times those pillars are comprised of Technical, Physical, Social, and Psychological as well. In either case, the mental side of soccer is routinely references as a key part of performance for players. Could the same case be made for soccer referees as well? In theory, both players and referees are benefitted by thoughtful and well-rounded preparation to do their jobs. For referees we have fitness plans, technical training, rules workshops, and peer discussions to help us improve our on-field ability. But none of those things alone directly helps us improve all the components of the mental side of refereeing. Indirectly yes, not intentionally. When a referee isn't fully prepared to officiate based on their own balanced pillars of the game, then they open the door for stress to affect decisions which could in turn decrease performance. The term "stress" may be defined as "an ongoing process of appraisals of 1

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issues

that may arise” (Fletcher, Hanton, & Mellalieu, 2006, p. 329). As noted in Kittel, et al (2021), nurturing referees in the same manner as elite athletes to reflect in a structured way off field on how they handled themselves while performing is critical to their professional development and their ability to sustain the pressures of refereeing during their work as well as off the field in their day to day lives.

If we posit that referees are athletes too, then it follows stress exists for refs and athletes alike. Both must handle internal and external stresses in order to be their most effective selves on the field. They must prepare to handle stressful situations as well as reflect post-performance on how they handled those situations in order to grow as officials. There are known mental training tools for players to help them deal with these stress points surrounding the game so they can play their best: Breath control, attentional focus, pre-play routines, mistakes response methods, self-talk strategies, mental rehearsal, etc. To date, most of these same tools have not been purposefully adopted in the referee community. Commonly soccer referees are exposed to external sources of stress when dealing with rowdy parents, crowds, loud coaches, the desire to be certified at a higher level, scrappy games, and teams dealing with the pressure to win. Both external and internal pressures can affect how a referee applies their skill to the game, especially when one considers that a single call made by an official could affect the outcome of a game.

Can referees and players effectively use the same types of mental training? First, let’s consider the similarities in physiological output refs and players use to meet the demands of the game to help answer that question. When we look not only at the internal and external stresses of soccer refereeing, but also the physiological demands an official faces during a game, a strong suggestion can be made that paring a physical training program with a mental training program like players do, is vital for effective officiating. Castagna et al (2013) found that soccer referees who officiate high level 90-minute games, cover between 5.5-8 miles per game, have heart rates readings at 85-90% of their maxes at various intervals, and have cardiovascular measurements of 70-80% of their max VO2 uptakes over the course of 90 minutes. This is a parallel equivalent to midfielders competing at the same level.

When covering that much distance in a game, it is vital to have tools in ones’ toolbox to help assist making correct calls once physical fatigue sets in. The results of Rodriguez, Lopez-Aguilar, & Alonso-Arbiol (2021) show that soccer referees have a minor physiological drop in fitness during the second half of games which can result in a slight loss of self-confidence, decreased stress control, motivation and mental ability, and a greater level of somatic anxiety. These drops were shown to decrease mental ability and crew cohesion, which in turn increased stress control and motivation compared to a ref’s baseline behaviors when fitness wasn’t an issue. The conclusions drawn by Rodriguez, et al (2021) suggest that amateur referees would do well to supplement their physical training with mental training to increase stress control to help offset the external stress they must deal with arising from decreases in fitness over the course of a match.

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Another other way to consider the importance of adding a mental training program to referees is found when we examine Orlick & Partington (1988), two godfathers of the sport psychology field, who showed that of the three readiness factors (Mental, Physical, Technical), only mental readiness was significantly related to final Olympic rankings. Importantly for this discussion, Giske et al (2016), found that there are preparation differences between elite and sub-elite referees. They looked at frequency of physical fitness and mental training across both groups. Specifically, elite referees report significantly more time using mental training in their preparation than sub-elite refs. There was no significant difference between the two groups in fitness work. By digging into what these elite refs did for mental training, the three most cited categories were Imagery, Concentration exercises, and Self-Talk as reported in open questions. If elite referees on their own spent more time with mental training topics, then it would seem to suggest that this type of preparation time is important for them as they work to be the best version of themselves, they can while on the field. Combing the results of Giske et al (2016) and Orlick & Partington (1988), it seems reasonable to suggest that the most impactful way referees could enhance their on-field performance is through the adoption of a regular and systematic mental training program.

Now let's take a look at how some other forms of stress impacts a soccer referee. As we know, while out on the field, referees work within a complex, ever-changing environments that impose considerable pressures on them (physical, social, outcome), as well as a wide range of demands which accompany their role within the soccer industry (Buraimo, Forrest, & Simmons, 2010). Taylor and Daniel (1987) recognized sports officiating as a potentially stressful activity and measured the perceived types of stressors among soccer referees. Their study included six subscales of stress: fear of physical harm, peer conflicts, role/culture conflict, fear of failure, time pressures, and interpersonal conflicts. They found that most of the stress experienced by soccer referees comes from fear of failure (internal pressure), whereas the least stressful parameter for these individuals is fear of physical harm. Do we currently offer refs direct ways to manage that internal pressure?

When evaluating how external pressures affect a referee's on-field performance, i.e. making decisions within a complex and dynamic environment, they do so while coping with the social pressures associated with both amateur and professional soccer (Dawson & Dobson, 2010; Dohmen, 2008; Sutter & Kocher, 2004) surrounding the field of play. Often times, those social pressures around club soccer are driven by outcome focus (win, gain scholarship, climb up the tables, keep a job, etc.) and those pressure points result in highly challenging environment with referees literally at the center of it all. These external distractions could interfere with stress management and one's perceived level of competence in challenging situations unless well practiced mental training components are in place and ready to be employed during play.

Data from B.T. Johansen & T. Haugen's (2013) analysis revealed that referees who perceived their refereeing competence as high or very high, typically scored lower on anxiety level compared with the weaker/average group. In other words, individuals who felt confident and saw themselves as referees, s

positively affecting refereeing decisions come from the results of the study by Hoseini et al. (2011) regarding referees working in Iran's premier league. So, while this information tells us reactively how a referee might handle stress and challenge (internal and external), are there ways we might be able to help the less experienced referee begin to increase their self-confidence through some form of stress management as well as effective decision-making during play? To that end, if a referee is able to reduce stress through a mental training program, they will also be able to reduce their pre-match anxiety in theory, thus improving their ability to read the game and adjudicate the rules smartly. In looking at B.T. Johansen & T. Haugen's (2013) research, they showed that a high level of cognitive anxiety before play and performance had a negative relation on the process of decision-making, whereas low levels of anxiety and self-confidence before play and performance had a positive relation. According to Hoseini et al. (2011), a lower level of anxiety is more beneficial in games that require more complicated skills and hence more concentration and attention; soccer fits that description for sure. There is reason to believe that the referees conceive self-confidence as the belief in being able to perform a desired behavior successfully while officiating.

Sometimes situations are such that a referee can take time directly after a game is over to reflect on their performance with their crew and plan for next time which is a great way to learn. But there are also periods of time during games where reflection may happen, intentionally or not. In B.T. Johansen & T. Haugen (2013) it was found that referees reflect on their performance and the decisions made while officiating. Top-class referees, or those with long careers, feel less stressed than do younger referees after an error and that their years of experiencing enable them to call fewer make-up calls (MacMahon et al., 2007). So, a mental training program to help younger referees manage through mistakes and questionable calls would seem warranted to speed up development and improve effective, in real-time officiating.

Finally, as we evaluate one other avenue referee development, we can examine the role of mental toughness on officiating. While mental toughness and mental training are sometimes used as interchangeable terms, in reality a quality mental training program leads to effective skills execution which in turn leads to one being mentally tough in challenging situations. Gucciardi et al. (2009) suggest that mental toughness is potentially important in any environment that requires performance setting, challenges, and adversities. Due to vital importance of mental toughness in sports and particularly in soccer, Bülent et al (2017) focused on the comparison of sport mental toughness levels of soccer officials with their age group, education level, refereeing category, and sports experience years. They showed that there were significant differences between soccer officials' three sub-factors (confidence - constancy - control) of mental toughness and their officiating experience years. Referees with 15 and above years experienced were mentally tougher than those with 0-5 years' and those with 6-10 years' experience. There were not any significant differences between other variables (refereeing categories, education levels and age groups) of soccer officials and their mental toughness levels. Should we then just let it be the case that as we get older, we will just improve our mental toughness and thus, be better as a ref? Or could a structured mental training program for refs effe

Given that the small amount of research available with regards to soccer referees does at least show that stress and anxiety reduction, mental preparation, fatigue fighting concentration strategies, mental toughness, and real-time performance evaluation all are vital for effective soccer officiating, we now shift to examine how it is possible to add a mental training program to the soccer referees' work. Through the above research one could suggest that increasing stress management, improving effectiveness, and boosting enjoyment while performing on the field will likely lead to a higher quantity of positive game facilitation as probable outcomes. How does one put together a structured program that directly meets the needs of soccer refs? A good place to start is how and why can referees effectively manage stress and produce more consistent and accurate decisions. How do we do that and what do we decide to work on mentally to achieve those goals?

Based on Lesyk (1998), the development of a holistic mental training model including assessment and training will benefit performers. Dr. Lesyk created the 9 Mental Skills for Successful Athletes and has given permission for the subsequent creation of the 9 Mental Skills for Successful Soccer Referees (9MSSSR) to Thrive. The unique and newly created 9MSSSR was given to 8 local soccer officials as a group case study to examine initial response trends across the 9 mental skills. The makeup of the 8-referee group includes 4 females and 4 males, with their referee level ranging from Grassroots up through Regional rankings. All 8 have been refereeing for more than one year and are capable of being assigned to high level club, college, and semiprofessional games, respectively. The group ranges in age from 18-30. Ideally after evaluating the group assessment results, a structured plan for a mental training program could be developed for referees, both as a group and as individual, based in part on these results.

The 9 Mental Skills of Successful Soccer Referees Platform and Assessment

You don't have to be a National referee, officiate a World Cup, or run middles in the MLS to be a successful referee. Nor do you have to have a room full of awards, officiate state championships, or be your assignor's favorite go to ref. Successful referees are able to maximize their own abilities each time they step onto the field.

What successful referees have in common is that their work is important to them, and they're committed to being the best that they can be within the scope of their limitations: other life commitments, finances, time, and their natural ability. They set high, realistic goals for themselves, train hard, and officiate smartly. They are successful because they are pursuing their goals and enjoying their role in soccer. Their sport participation enriches their lives, and they believe that what they get back is worth what they put into the game.

There are nine, specific mental skills that contribute to success as a referee. They are all learned and can be improved with instruction and practice. It is key for serious referees of all ages and ability levels to learn and sharpen these important skills.

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What Role D

Successful Referees:

1. Choose and maintain a positive attitude
2. Maintain a high level of self-motivation
3. Set high, realistic goals
4. Deal effectively with people
5. Use positive self-talk
6. Use positive mental imagery
7. Manage anxiety
8. Control their emotions
9. Maintain concentration

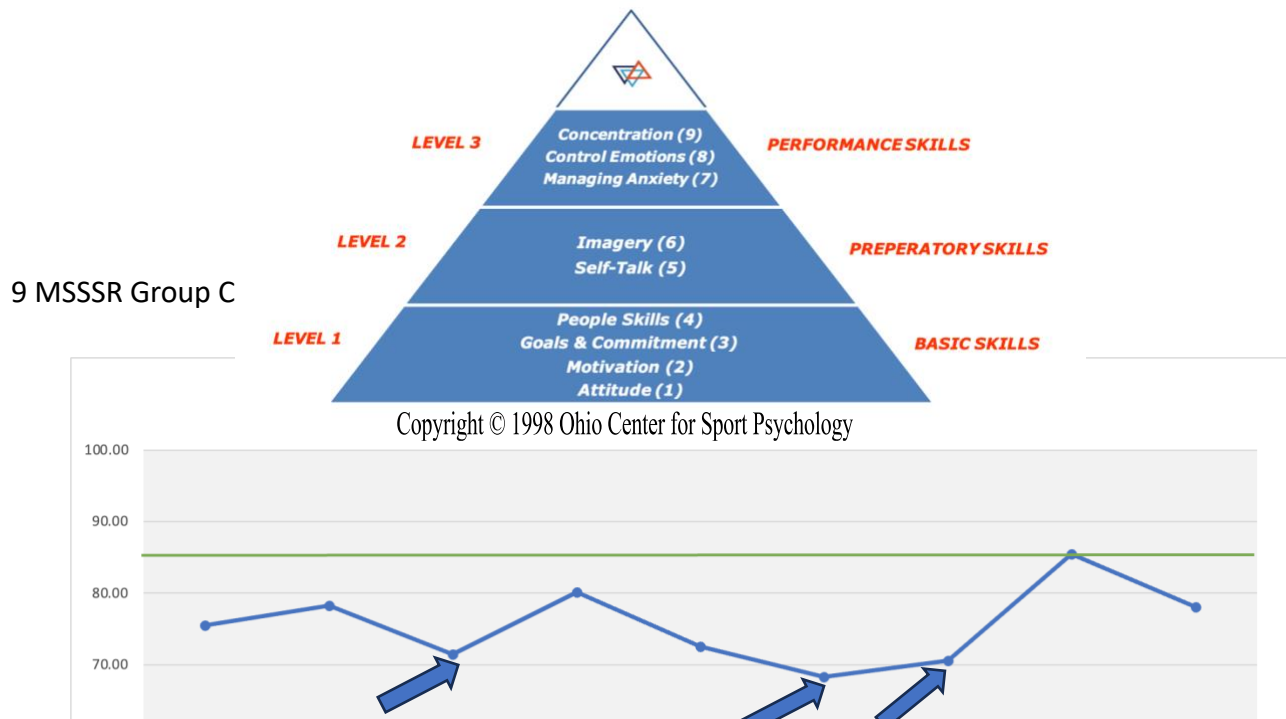
The Performance Pyramid

Although each of the nine skills is important, its primary importance will occur during one of three phases: long-term development, immediate preparation for performance, and performance.

LEVEL 1 - These mental skills constitute a broad base for attaining long-term goals, learning, and sustaining daily training. They are needed on a day-by-day basis for long periods of time, sometimes months and years.

LEVEL 2 - These skills are used immediately before training and games to prepare for performance. They may be used just before competition begins, or immediately before a specific performance action such as during a transition where SPA/DOGSO may occur, or the taking of a ceremonial restart.

LEVEL 3 - These skills are used during actual in-game behavior. The pyramid below represents the relationship of the nine skills to one another. Each of the higher levels incorporates and is based upon the skills of the preceding levels.



Soccer Referee Group Case Study

Group Mental Skills Assessment Results

8 Referees

Group Category Totals	2024
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Attitude	75.45
Motivation	78.27
Goals & Commitment	71.41
People Skills	80.10
Self-Talk	72.50
Imagery	68.25
Anxiety Management	70.57
Emotional Control	85.42
Concentration	78.04

Lowest

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Imagery		
Anxiety Management	70.57	←
Goals & Commitment	71.41	
Self-Talk	72.50	
Attitude	75.45	
Concentration	78.04	
Motivation	78.27	

Conclusion and Discussion

When looking at the group's collective scores, we see that the three lowest category scores are Imagery, Anxiety Management, and Goals & Commitment in that order. Is our group reflective of the referee community as a whole? Unlikely given the small sample size of 8. However, this group does shed some light on which mental skills referees might benefit most from working to understand and improve. For example, the low Imagery group score primarily emanates from three particular areas within the Imagery category:

- Imagining themselves making mistakes
- After a game not visualizing/mentally rehearsing correct choices or actions of mistakes they feel they made during games
- Having a low level of vividness of their images

While there are a wide variety of methods to improve the quality and vividness of imagery work for individuals, that discussion is outside the scope of this writeup. However, one could easily set a goal to review their performances in their mind's eye after a game is over to create positive choices of how they would like to successfully handle those areas on the field where they felt they made mistakes during the game. Additionally, we all see ourselves making mistakes now and again. No problem! Just hit the mental delete button, and then replay that same scenario again in your mind's eye but with a positive outcome this time.

As it pertains to the group scoring the second lowest score in Anxiety Management, the research above is filled with reasons to begin working on decreasing anxiety in order to increase performance effectiveness. The question in this category that came up most for this group was needing to know how to reduce nerves when nervousness became higher than a referee would like. While each referee will have specific ways that most benefit them on how to reduce their own anxiety, suggestions include; make sure you know the appropriate rules for certain infractions, Copyright © 2024 Thrive: Excellence in Sport Performance. All Rights Reserved. www.thrivesp.com some, get your fitness or the level of game you are working, use your imagery skills to see yourself successful and calmly handling troublesome players and coaches. Finally, thoughtfully consider what areas of refereeing tend to make you anxious and do some pre-field work in these areas on weekly basis to make sure

you feel more prepared. Lastly, as breath control is the mental training tool we always have available to us, practicing measured, intentional breath control to improve anxiety management and reduce anxiety during pauses in games you can help to make more accurate decisions.

The final low scoring category in our group assessment was Goals & Commitment. Understanding how to set effective goals and the value of having goal setting as part of one's training and performance is vital to development. Think of goals as your gps coordinates to a location. Without an address, how do you get someplace? In this category the main issues came from our group not having a clear picture in their mind of the ref they were trying to become as well as not consistently setting goals prior to training and practice/study. These are pretty easy fixes if one can see the value in having goals to aspire to.

On the other end of the scoring spectrum is the highest scoring category of Emotion Management. Given the make-up of this group of eight referees who are all motivated, enjoy their work and striving to be the best they are capable of being on the field, it doesn't come as a surprise that they score so well in managing their emotions.

When asked who would benefit from introducing mental training work into referee development, the close to unanimous answer was that motivated Grassroots refs, Advanced Grassroots, Regional, State, and those refs hungry to earn a shot at doing high level games were the levels who would most benefit. Whether it be in Monthly Zooms or in-person meetings, to the Referee Development Academy in July, they believed these places would be ideal methods for diving into mental training and its benefits for refs. Lastly, for those that went through the personal assessment results session where a personal discussion occurred surrounding their own scores, they strongly suggested the work was beneficial to them as it provided new ways to consider their work on and off the field as a soccer official.

Can the question of how much of a referee's game be mental be exactly answered? Not precisely because that answer will be different for every person. However, whatever percentage is mental, we now know how we can define the specifics of that percentage and begin doing some structured, referee specific mental training work to help each and every referee improve their game calling if they choose.

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