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Penalty Shootouts

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Introduction

Anxiety is the most significant contributing factor to performance failures in football penalty shootouts (Jordet et al., 2007, 2012). Indeed, the penalty is one of very few occasions in this predominantly fast-moving, team sport when players are under individual scrutiny and have sufficient time to think about the consequences of failure (Jordet & Elferink-Gemser, 2012). Furthermore, unlike most other skills that are susceptible to choking effects (e.g., golf putting), the opposing team’s goalkeeper increases uncertainty and has a direct influence on performance success. Among practitioners there is considerable confusion and controversy regarding the type, utility and effectiveness of practice and preparation for a penalty shootout. Indeed, penalty shootouts are often referred to as a ‘lottery’, with the outcome dependent on luck rather than skill. We argue that such an interpretation is potentially damaging to players’ control beliefs and ultimately to their performance, and that interventions designed to increase perceptions of control might be useful.

Background and evidence

Penalty taking and pressure

Evidence for the effect of pressure on penalty taking performance comes from both observational and experimental studies. For example, Jordet and colleagues have examined almost 400 penalties from penalty shootouts held during major tournaments. They found that players score on fewer than 60% of their attempts when a miss will instantaneously result in a loss for the team compared to about 80% when a missed kick and for the group to support those players who do miss (Jordet & Elferink-Gemser, 2012).

The “Russian roulette” of soccer?: Perceived control and contingency (who believe the outcome is dependent on luck or the goalkeeper’s actions rather than skill) experienced more cognitive anxiety symptoms than those who perceived their competence and contingency level as high (Jordet et al., 2006).

A body of experimental research suggests that the mechanisms behind choking in this task may be related to disruptions in visual attentional control. Three types of visual strategy are used in penalty taking (Wood & Wilson, 2010):

1. Keeper-dependent (ignore the keeper and pick a spot)

2. Keeper-dependent (watch the keeper and make a decision based on his/her movements)

3. Opposite-independent (look one way and shoot to other side).

While performers are more accurate when adopting a keeper independent approach, the relationship between aiming intention, visual strategy and accuracy is disrupted when anxiety is increased. Specifically, anxiety increases the amount of attention paid to the goalkeeper and increases the likelihood that takers will produce shots that are hit significantly closer to the goalkeeper and therefore more ‘saveable’ (Wilson et al., 2009).

What can be done?

Research evidence

By examining video footage of successful and unsuccessful penalty performance it is possible to determine behaviours that appear to be more productive than others. For example, players who take less than one second to place the ball on the penalty spot score on about 80% of their penalties whereas those who take longer score on about 80% of their penalties (Jordet et al., 2009). Similarly, taking a second or more to respond to the referee’s whistle to initiate the shot is associated with a higher probability of scoring than immediately rushing towards the ball (Jordet et al., 2009).

Developing and practicing a suitable pre-shot routine is a potentially useful way to guide these timings and help protect performance under pressure. Indeed, recent research by Wood and Wilson (2012) has suggested the learning a routine involving a gaze control element (i.e., when you want to shoot prior to the run-up) helped penalty takers in a shootout task to be more accurate than the usual technique that involves focusing on the goalkeeper. Similarly, developing a contingency plan for the most likely outcomes (i.e., missing a shot) and, more importantly, discussing strategies for dealing with these outcomes. Teams can develop ‘What if’ plans for each individual to deal with his/her missed kicks and for the group to support those players who do miss (Jordet & Elferink-Gemser, 2012).

Conclusions and recommendations

In training:

- Have team meetings to discuss some of the known success factors in penalty shootouts (see above), the fears of the players; and plans to support individual and team failure.

- Develop and practice pre-shot routines (including the walk in from the centre circle) that have a gaze control element that promotes optimal aiming behaviour.

- Promote target-focused practice so that players can hit each of the four corners consistently (to increase competence/contingency).

- Coaches need to be innovative when designing ways to increase anxiety and distraction, and methods to challenge perceived control during training. For example, players could practise shooting while telling the goalkeeper which side they intend to shoot towards. An accurate shot during this task will be very difficult to stop even if the goalkeeper knows which way it is going - so by practising in these conditions players can reinforce perceptions of control over the outcome.

In match:

- Don’t rush: Place the ball properly on the spot and take a breath while focusing on where you intend to shoot, before starting the run-up. Taking a deep breath is likely to ease feelings of anxiety and provides a temporal cue to ensure that sufficient processing of target-related information is enabled.

- Trust your technique and routine – pick a spot and hit it.

- Celebrate! It will help your team-mates who have to take the subsequent penalty kicks.

It is hoped that this synthesis of research into penalty taking might help alleviate some of the learned helplessness that appears to be rife in football concerning the mental and physical preparation for football penalty shootouts. Penalty takers need to recompute control of this situation rather than allowing themselves to be victims of the environment, their lack of preparation, or the antics of the goalkeeper. Penalty shootouts don’t have to be a lottery!

References:


Jordet, G. & Elferink-Gemser, M.T. (2012). The “Russian roulette” of soccer? Perceived control and contingency (who believe the outcome is dependent on luck or the goalkeeper’s actions rather than skill) experienced more cognitive anxiety symptoms than those who perceived their competence and contingency level as high (Jordet et al., 2006).

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