

Conference Highlights

Performing under pressure: What can we learn from football penalty shoot-outs?

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In this paper, I outline a programme of research that has examined the antecedents of choking in sport through an analysis of successful and unsuccessful kicks in football penalty shoot-outs at the World Cup, the European Championships and in the UEFA Champions League. This body of research attests to the role of ego-threat, emotional distress and self-regulation breakdown for unsuccessful kicks and choking under pressure. The paper also outlines how this knowledge has informed interventions with professional football teams.

Keywords: skill breakdown; choking; soccer.

ATHLETES frequently cite performance pressure as a source of stress in competitive sport (e.g. McKay et al., 2008). In our research programme on the penalty shoot-out in major international football tournaments, we have attempted to describe and explain how some athletes choke and others excel in situations that are characterised by extremely high levels of performance pressure. Conceptually, we have used a model of choking under pressure as a case of self-destructive behaviour that involves three steps: ego threat, emotional distress, and self-regulation failure (Baumeister, 1997).

The first step of the model posits that when high levels of egotism are threatened, emotional distress is triggered. This has the potential to set off a cascade of processes that end up with performers choking under pressure. In the football penalty shoot-out, we find support for this step when linking status to performance under pressure. Based on video analyses of all the shots ever taken in penalty shoot-outs in the World Cup, European Championships and the Champions League between 1976 and 2006, the most esteemed players (i.e. those who took a shot after they had received one or more prestigious international awards, such as 'FIFA Player of the Year' or 'Ballon d'Or') performed worse than players at the same

level of performance, but with no awards (Jordet, 2009a). In another study with the same data base, players from the national teams with the highest status performed worse than players from the teams with lower status (Jordet, 2009b). This suggests that having a high status or position in one's sport, which will lead to high expectations to perform, can sometimes turn around to become a liability in extreme pressure situations.

The second step of the model refers to the rise of unpleasant emotions that often accompanies ego-threat. We conducted an interview study with 10 players who took part in a 2004 European Championship penalty shoot-out and found that anxiety was the only emotion reported by all 10 players (Jordet et al., 2008). A more detailed analysis of the same players revealed that the ones who reported low perceptions of control also reported higher anxiety symptom intensity and more debilitating symptom direction (Jordet et al., 2006). However, we have no reason to believe that anxiety in itself will lead to reduced performance. In our model, these first two steps represent perfectly normal processes that most people will experience when they are about to perform under high levels of pressure.

The third step of the model is when athletes self-regulate to cope with the unpleasant emotions experienced as a result

of the ego-threat. Athletes choke when they self-regulate to escape these unpleasant emotions (so-called trade-offs) or when they engage in misguided self-regulation strategies (so-called counterproductive strategies). Our video analyses of penalty shooters consistently show that players under particularly high ego threat engage in escapist self-regulation strategies. Specifically, players performing under negative valence conditions (i.e. when a missed shot instantly means a lost penalty shoot-out; Jordet & Hartman, 2008), who had high individual status (Jordet, 2009a) or who played for a team with high status (Jordet, 2009b), prepared their shots faster than players who performed under lower levels of ego-threat. Fast preparation times are thought to reflect a desire to escape the situation by getting their shots over and done with quickly. This is illustrated in quotes from players who have missed some of these shots. For example, Steven Gerrard (2006) spoke about his missed shot during the 2006 World Cup shoot-out against Portugal: 'Why do I have to wait for the bloody whistle? Those extra couple of seconds seemed like an eternity, and they definitely put me off' (pp.419–420). Similarly, Gareth Southgate, who failed to score against Germany in 1996, said 'All I wanted was the ball: put it on the spot, get it over and done with' (Southgate & Woodman, 2003, p.191). Further analyses show that fast preparation times in these situations are positively associated with more missed penalties (Jordet, Hartman & Sigmundstad, 2009). Our analyses also show that players from England (the country with the worst penalty shoot-out record in the world, five losses in six attempts) are faster than players from all other nations (Jordet, 2009b). Thus, there seems to be ample evidence from the soccer penalty shoot-out that people under ego threat who experience high levels of emotional distress may prioritise temporary escape from the distress and these attempts to cope may backfire and cause performance failure.

In sum, this paper has reviewed some of the major findings of a research programme that addressed the mechanisms involved when elite performers choke under severe levels of pressure. It was found that choking in major football penalty shoot-outs corresponds well to a three-step model (based on Baumeister, 1997), involving ego threat, emotional discomfort, and self-regulation failure. Performers who self-regulate well can successfully cope with both high levels of ego-threat and discomfort, whereas those who self-regulate less well may choke. An implication for practitioners is that working on improving one's self-regulation is a natural way to prevent choking under pressure. However, a broader approach may also have some advantages and recommendations to prevent choking can be structured to address each of the three steps of the model: (1) reduce ego-threat; (2) normalise emotional distress; and (3) optimise self-regulation. Further, a particularly exciting approach to performing better under pressure can be inspired by lessons learned from high-reliability organisations such as airlines, nuclear power plants, and hospitals (Weick & Sutcliffe, 2007). In these organisations, making a mistake does not merely cost a lost spot on the team, a lost game or a lost trophy, mistakes cost human lives. The best of these organisations focus on quickly responding to and coping with errors – instead of avoiding them completely – and then on learning from them. Moreover, they acknowledge that mistakes under pressure, indeed, will occur and rather than attempting to avoid individual mistakes altogether, they put the focus on collectively coping with the consequences of these mistakes. An intervention based on this type of approach has shown some promising results with elite level soccer players (Jordet, 2008).

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