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# Assessing Football Coaches' Stressors and Coping Mechanisms During Competition Using a Think Aloud Protocol

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## Abstract

The aim of the study was to examine the stressors and coping mechanisms of football coaches of underage teams (under 18s or below) during competition, utilising Think Aloud. Six coaches (age:  $M=27.17$ ,  $SD=8.82$ ) participated, all of whom held some form of coaching accreditation and coached

for at least six hours per week ( $M=8.17$  hours,  $SD=1.57$ ). All participants were trained to use Think Aloud and all verbalisations were recorded. Data was transcribed and analysed for potential stressors or coping mechanisms. Stressors experienced during competition for football coaches were related back to player performance, opposition, officiating, coach

performance, player welfare and organisation. Coping mechanisms used included problem, emotion and avoidance-focused strategies. This study displayed that Think Aloud can be used as a measure of stressors and coping mechanisms in coaches. It provides practical implications for coaches, in that they may consider the use of Think Aloud to gain an understanding of their current stress and coping responses and, in turn, improve their coping responses during competition-specific situations.

### Keywords

Coaching, Think Aloud, stress, coping, football, competition.

### Introduction

Stressors and how they are consequently coped with depict a key area of applied sport and coaching research (Whitehead et al., 2016; Thelwell et al., 2007). More specifically within coaching, it is important that we gain knowledge and understanding of what stressors occur and the subsequent coping mechanisms that are in place. Stress in both the athlete and coach can have a significant impact on performance (Lazarus, 2000). According to Norris et al. (2017), coach stress can have a negative impact on an athlete, highlighting the need for stressors to be further researched within a coaching setting.

The Transactional Model of Stress and Coping (TMSC) (Lazarus and Folkman, 1984) was used to underpin this research. The model depicts stress and coping instances occurring in a number of stages, the first of which is the primary appraisal. The primary appraisal represents a stage where threat, harm or a challenge must be dealt with (Swettenham et al., 2020; Quine and Pahl, 1991). Following this is the secondary appraisal, where there is an analysis of obtainable resources for coping (Quine and Pahl, 1991). Within athlete research, Swettenham et al. (2020) illustrate positive coping as seeing situations more as challenges rather than threats. The most widely used coping dimensions are problem-focused, emotion-focused and avoidance coping (Nicholls and Polman, 2008; Compas et al., 2001).

The primary appraisal of the TMSC has been examined in sport and coaching. Such research has provided evidence for the negative psychological effects of coaching, such as self-doubt and anger (Olusoga et al., 2010). These are indicative of the stressors coaching can bring. Research has evidenced how a football coach's stress originated from bad performances, inappropriate training

conditions and officiating (Thelwell, et al., 2010), in addition to competition environment and athlete behaviours (Rees, 2011). Other research indicates that coaches experience a range of different stressors within a football environment, such as poor officiating and contract violation (Surujilal and Nguyen, 2011).

As stress and coping is a transactional process and does not occur in isolation (Lazarus and Folkman, 1984), it is important to consider the coping mechanisms that are employed by coaches when experiencing stressors. Potts et al. (2019) found that the most salient coping mechanisms within coaching involved problem solving, information seeking, self-reliance and seeking support in coaches. Olusoga et al., (2010) also found that elite coaches prioritised psychological skills, planning and the coach-athlete relationship in their coping. Other coping mechanisms that have been reported involved mindfulness training (Longshore and Sachs, 2015).

A common theme throughout the majority of these previous studies is a reliance on retrospective methods of data collection (Potts et al., 2019; Olusoga et al., 2010). Capturing stress and coping data from a participant at a later date may be distorted by memory decay or knowledge about the success of the task, which may lead to biased reports (Ericsson and Simon, 1980; Whitehead et al., 2015).

Think Aloud offers an alternative method that eradicates such disadvantages (Ericsson and Simon, 1993). Think Aloud represents a form of verbal reporting that involves a person verbalising his or her thoughts throughout the duration of a task (Eccles and Arsal, 2017). This permits information within the short-term memory to be captured in real time. Such thoughts and feelings may be forgotten if asked to recall at a later time. Consequently, Think Aloud offers a potential solution to retrospective memory decay or potential bias in reports. Ericsson and Simon (1980) propose three different levels of Think Aloud:

- Level 1 - the expression of inner speech
- Level 2 - the articulation of thoughts that are not in a direct focus but must be said aloud
- Level 3 - explanation surrounding certain cognitions and reasons for actions.

Nicholls and Polman (2008) demonstrated this method to be effective for data collection within sport in a study with golfers. They used Think Aloud to identify stressors and coping strategies in high performance golfers. Since this study, further research has implemented the use of Think Aloud in sport. For example, Whitehead, et al. (2016) has used Think Aloud to identify cognitive differences between higher and lower skilled golfers. In addition, Samson et al. (2017) utilised Think Aloud to assess the in-event cognitions of long-distance runners, which also collected stressors within the study. Whitehead et al. (2018) assessed the cognitions of cyclists over a track of 16.1 kilometres using Think Aloud.

However, the technique does not come without flaws. According to Eccles (2012), descriptions/explanations can occur that are not part of the actual thought process. Also, an occurrence called verbal overshadowing can happen. This means that during Think Aloud, the participant can become distracted from actually verbalising their thoughts (Lee et al., 2019; Chin and Schooler, 2008). Stephenson et al. (2020) adds to this, displaying that the coach within this study experienced feelings of anxiety whilst using Think Aloud.

Despite these disadvantages, Think Aloud is a solid method of gathering data concurrently during the completion of a task and to capture data such as stressors and coping mechanisms.

Therefore, this study aims to adopt the use of Think Aloud to capture the stressors and coping mechanisms of male football coaches during a competition environment.

## Methods

### Participants

Six male participants took part in the study, all of whom coached underage schoolboys' football league teams and participated in at least six hours of coaching per week ( $M=8.17$  hours,  $SD=1.57$ ). Of the six coaches (age:  $M=27.17$ ,  $SD=8.82$ ), three were licensed (UEFA B licence or above) and three were non-licensed (below UEFA B licence). All six coaches had a Football Association of Ireland (FAI) coaching accreditation. Additionally, all coaches coached on a part-time or voluntary basis. Ethical consent was granted from the authors' institutions and all participants signed a consent form prior to data collection.

### Materials

The study took place on the side of football pitches around the Leinster region of Ireland. The coaches would perform normal duties with their own team. The Olympus DM-650 digital recorders gathered real-time verbal data from participants during matches. These were placed in the participants' pocket, whilst the microphone was attached to their shirt collar.

### Procedure

Approximately 45 minutes before the protocol, participants met with the author and executed a number of specific Think Aloud practice tasks (see Birch and Whitehead, 2020). This familiarised the participants with the Think Aloud process. Participants were instructed to verbalise their thoughts and were given the following instructions: "Please Think Aloud as much as possible; only say what you are thinking at the time; do not try to explain your thoughts." During the initial Think Aloud training tasks, participants were encouraged to ask questions and then clarify their understanding of the use of Think Aloud. All Think Aloud training was conducted within 30-40 minutes of the match situation.

### Data analysis

From each audio recording the first 40 minutes of the football match were used from each participant. Only the first 40 minutes were used as two participants were only willing to participate for this length of time, so this approach provided some consistency. After the data collection process, all audio files were transcribed. NVivo, a qualitative analysis software, was used to analyse the data. The study was informed by a constructivist epistemology. Although the authors believe that new knowledge is socially constructed, some of the themes have been generated from the previous knowledge of stress and coping known to the authors (Lazarus and Folkman, 1984; Kaiseler et al. 2012). Therefore, both a deductive and inductive approach was taken during data analysis, following Braun and Clarke's (2006) and Clarke and Braun's (2013) approach.

To identify stressor and coping strategies, a similar process to Kaiseler et al., (2012) was taken. This involved verbalisations that the first author

perceived had caused the participant's adverse concern or worry, or had the potential to do so, being coded as stressors. Verbalisations, whereby participants attempted to manage a stressor, were coded as coping strategies. The analysis then followed an inductive process where the first author read all transcripts of Think Aloud in the NVivo software (step 1). Once complete, the first author developed a list of codes from the first two transcripts. At this stage, the initial codes were reviewed and considered by the second author (step 2). This collaborative coding approach is supported by Saldana (2013) as it allows a 'dialogic exchange of ideas' that support interrogation and discussion from multiple perspectives. From the initial inductive process, codes were grouped into stressors and coping, and Lazarus and Folkman's (1984) coding of emotion, problem and avoidance-focused coping was used in a deductive way to allocate the initial inductive 'coping responses' into these 'umbrella' coping categories. This inclusion of Lazarus and Folkman's (1984) coping responses was a result of the second author's involvement in the analysis process, where they linked previous theory to initial generated themes.

These deductive codes were then used as a starting point to analyse the remaining transcripts. However, as the first author identified new codes, they were also included in the analysis, and again they were considered and reviewed by the second author. Once all transcripts were analysed, a further review was conducted by the authors (step 4). Once complete and consistent with the potential limitations of inter-rater reliability as highlighted by Smith and McGannon (2018), a different researcher (outside the author team) acted as a critical friend to ensure data collection and analysis were plausible and defensible (step 5; Smith and McGannon, 2018). Following this refining and naming of themes, the findings were produced (step 6) and are presented in the results section. It is important to note that this was a process of critical dialogue between authors. Rather than to agree or disagree to achieve consensus, the critical friend encouraged reflexivity by challenging the first author's construction of knowledge (Cowan and Taylor, 2016).



Results

Table 1: Stressors experienced by football coaches during competition

Higher-order Theme	Lower-order Theme	Score at time	Opponent	Quotation
<b>Performance</b>	Performance tactics	1 - 1	Above in table	'We haven't had a good phase of play at all'.
	Technical performance	1 - 1	Above in table	'Poor decision making is such a freaker. Particularly from set-pieces when you have a chance to keep the f*****g football'.
	Team holding onto winning position	1 - 1	Above in table	'They still have a mental battle I suppose, in the case of not conceding, not winning games, chasing games. So they can go away thinking we played well and won rather than we played well and didn't win'.
	Conceding goals	1 - 4	Above in table	'It's not good conceding 3 goals from set plays and crosses'.
<b>Opposition</b>	Opposition players	0 - 0	Below in table	'So the panic there was, our centre half and right back keep stepping in front, every time they're stepping in front they're being turned by more physical boys and that's what's going to cause us trouble'.
	Opposition tactics	1 - 0	Below in table	'How're we in the middle? They've an extra man in the middle, the 8, the 16 and the 10 and the 17 is coming in as well'.
	Opposition actions	1 - 3	Below in table	'So the ref blew up for an injury and we had possession of the ball and the other team were pressing us. A big thing I hate is when players don't give the ball back to the keeper and instead kick it out of play, really frustrating'.
<b>Officiating</b>	Referee decision-making	1 - 4	Above in table	"Why would you wait that long to blow? I hate refs. Ref is frustrating me anyway...do your job right!"
	Referee interference with play	1 - 0	Below in table	"So the noise there was the ref been in the way of the play. Third time he's been in the way of the play. Two seconds later he was in the way. Josh fouled again because you can see the frustration in him from trying to make key passes and the referee is constantly in the way. We're constantly trying to play central balls but he keeps on being in the centre too much."
	Referee living location	0 - 0	Below in table	"Home referee. They are literally just going to wind us up until the last."

<b>Coach Performance</b>	Attaining perfection	0 - 0	Above in table	'I think, I'm not a psychologist, but definitely in football you like to be in control and the fact we couldn't set up our dressing room, warm up properly, get the kit out on time, I feel like I'm out of control and get stressed'.
	Own coaching methods	0 - 0	Above in table	'Throws have been freaking me out lately. Been trying to coach it but the details and decisions. It's funny how sometimes when its off the cuff it's a lot better'.
	Sharing information	0 - 0	Above in table	As the game is getting more and more away from us, its gets frustrating you know? Quite tough to impact it as well from this position'.

<b>Player Welfare</b>	Player injury	1 - 0	Below in table	'Player just pulled out of a challenge and I'm concerned because that's where you could pull a hamstring'.
	Player safety	2 - 0	Below in table	"This is the same craic as the **** game with this lad, people milling people. So the referee has let a few decisions go and were probably 15, 16 minutes in and the issue is at this time of the game if nobody has been dealt with due to a decision, he's given a yellow to our left sided midfielder ****, so there's been a few tackles now and the referee should've pulled them up but it looks like people think they've a license now to make a few tackles and in my opinion that's how somebody gets hurt'.

<b>Organisational Stressors</b>	Coach performing officiating duties	2 - 0	Below in table	'The coach shouldn't do the linesman job'.
	Dishonesty from other coaches	2 - 0	Below in table	"He goes 'do you want a copy of it?', I says you can't copy it, he says yea you can, ***** told me you couldn't, snakes aren't they?'
	Organisation disorganisation	0 - 0	Below in table	'Maybe we put too much pressure on ourselves as coaches to do everything perfect when really with facilities and everything here is difficult to have 100%'.

**Table 2: Coping Mechanisms used by football coaches during competition**

Higher-order Theme	Lower-order Theme	Score at time	Opponent	Quotation
<b>Problem-focused Coping</b>	Concentration	1 - 0	Below in table	'***** *****don't be caught, now look, better. Now you have it'.
	Planning	1 - 0	Below in table	'So the info I put onto the pitch was there we tried to press the ball 60 -40 to pass the ball onto their weakest centre half so our right sided forward is going to press their other centre back so the ball goes to the other one so were going to angle our run and hopefully the ball goes to the other centre half and try nick it in their half'.
	Technical correction	2 - 0	Below in table	'***** , tell **** to stop trying to beat men, tell him now. Were losing possession every time he does it'.
<b>Emotion-focused Coping</b>	Positive talk	0 - 0	Above in table	'Find straight away kids make a mistake, heads go down. Be more positive and actually give them some positive encouragement'.
	Venting emotion	2 - 0	Below in table	'***** bleeding kicked the ball away (t2a). Crying like a baby in front of ref, he deserves it'.
	Acceptance	1 - 1	Above in table	'Just realised we scored a goal just there, obviously morale goes up straight away, start playing better. Relieves the pressure. But it was the style of goal and the reaction was 2 minutes in'.
	Relaxation	0 - 0	Above in table	'Okay straight away it's a bit calmer from me. Once I hear the whistle kind of gets me in the mindset'.
<b>Avoidance Coping</b>	Humour	0 - 0	Below in table	'Pick him up boys, don't be complicating it (mocking other manager)'.

## Discussion

### Findings

This study aimed to discover the different stressors and coping mechanisms experienced by male football coaches during competition using Think Aloud. The main stressors experienced during competition related to performance, opposition, officiating, coach performance, player welfare and organisational stressors. The coping mechanisms exhibited fit into the three coping responses of problem-focused, emotion-focused and avoidance-based.

**Performance-related stressors** appear to be salient with the coaches within this study. Two primary themes, technical performance and performance tactics (where coaches stressed over tactical decisions or individual player errors), are in accordance with previous findings by Thelwell et al. (2010), who found that a football coach's main stressor was linked to poor performances. The description of this stressor included performances with errors made by players, relating to technical performance. Similarly, Chroni et al. (2013) found that during competition player/athlete performance was one of the most prominent stressors. The implication of these results is that the player performance aspect of sport is a prominent stressor for coaches.

Another noticeable stressor was the **opposition**. This stressor related mainly to the opposition players, however, opposition actions and tactics also provided stress. The **officiating** of matches was a common finding both in the literature and this study (Chroni et al., 2013; Surujilal and Nguyen, 2011; Thelwell et al., 2010). The decision-making of the referee played a critical role in formulating this stress. Surujilal and Nguyen (2011) describe this stressor as being a common occurrence and also having a high capacity to manipulate coaching outcomes, which can affect the coach's position, giving reason to its sustained appearance in stress-related studies on sport coaches.

The **coach's performance** was a key stressor with lower-order themes such as attaining perfection, own coaching methods and sharing information. Chroni et al. (2013) and Potts et al. (2019) both unearthed comparable outcomes to these findings. What can be concluded from this is that the coach may consistently stress over their own performance both in and out of competition. Player

welfare was an additional higher-order theme, which is supported by the literature (Potts et al., 2019; Chroni et al. 2013). Potts et al., (2019) displayed this primary theme in their study, where full-time paid coaches stressed over player injury. What this demonstrates is that player injuries can be labelled as a consistent stressor for coaches whether it is in or out of competition.

The final main stressor was **organisational-related**. Three lower-order themes came about, including dishonesty from other coaches, organisation/disorganisation and the coach performing officiating duties. Potts et al. (2019) provides support for the first two lower-order themes, conversely, the last finding has not been documented in previous studies, to the author's knowledge. This adds to the literature in the area as the coach's stressors come about from the demand to do other duties. This stressor could appear due to the coach's concentration being taken away from the match.

How the coaches managed these stressors is displayed in a variety of coping mechanisms, which were separated into problem-focused, emotion-focused and avoidance coping categories. Problem-focused coping was a key strategy of coping, with planning being its main form. This supported findings by Olusoga et al. (2010). This would regularly be carried out by consulting with another colleague/coach. This also matched the findings of Surujilal and Nguyen (2011), who suggested that talking with colleagues assisted with coping. Technical correction was also displayed to be a reoccurring coping mechanism. This was achieved usually in the form of direct instruction. As far as the author is aware, this last finding has not been cited previously, adding to the literature. In more simple terms, coaches shout onto the pitch to tell players what to do technically, in order to cope with stressors brought about from competition.

Emotion-focused coping was employed regularly, with positive talk being a prominent form of managing stress. The coach would give positive words to other coaches or players. Venting emotions was also key in coping throughout the study. Thelwell et al. (2010) found that emotion-focused coping was applied in relation to performances. The coach would show frustration by shouting at players. However, the literature also suggests that psychological skills are often used as a means to control emotions (Olusoga et al., 2014; Levy et al., 2009; Thelwell et al.,

2008). Additionally, Longshore and Sachs (2015) displayed, in an intervention-based investigation, that mindfulness is advantageous to calming coaches. No apparent psychological skill (other than Think Aloud) was used. The indication this gives is that coaches neglect, or are not aware, of psychological skills to assist them with their own coping/performance.

Avoidance coping was used by the sample (mainly humour). This was also the case in another Think Aloud study, however, this was non-related to coaching (Swettenham et al., 2020). Additionally, avoidance coping is a method used in previous coaching literature. Olusoga, et al. (2010) accounted for it being used seven times by coaches. Surujilal and Nguyen (2011) displayed it coming up twice within soccer coaches, however, this was in the form of ignoring the issue. This differs from its use in the form of humour, in this study. In alignment with the literature, avoidance coping was utilised but not to a great extent. This could mean it is not a beneficial coping mechanism as its use throughout the literature is minimal.

### Limitations

The current study is not without limitations. Coaching may not always be a conscious process and Think Aloud cannot assess what happens to decision-making and coaching processes outside of awareness (Bowers et al., 1990; Jacoby et al., 1992). Therefore, future research may consider adopting both Think Aloud and video observations, where coaches can engage in stimulated recall to supplement the additional Think Aloud data.

Furthermore, Think Aloud could have had an impact on the coaches' verbalisations of stress. Despite there being no noticeable evidence in the audio recordings, coaches may have felt self-conscious (Stephenson et al., 2020) and as a result reactivity may have occurred, where the coaches think more about their thinking (Double and Birney, 2019). This may in turn have had an impact on what the coaches may have verbalised.

The sample size used in the study was only six. This depicts a relatively small sample size in comparison to previous research in Think Aloud literature. Swettenham et al. (2020) and Whitehead et al. (2016) used 16 participants, Welsh et al. (2018) employed seven and Samson et al. (2017) used 10. Although the study differed slightly from these above in the sense that it took a qualitative constructivist approach, a larger sample could have provided additional stress and coping themes or further strengthened the current findings. Future

research should aim to match or go beyond what is expected in terms of sample size in current Think Aloud studies.

Additionally, the use of a single-gender sample limits the results to males. The study only offers results from the male perspective, meaning results cannot be applied to both genders. Future studies should aim to include a mixed gender sample or a female-specific sample.

### Conclusion and practical implications

The purpose of this study was to analyse male football coaches' stressors and coping mechanisms, during competition, utilising Think Aloud. The findings of the study demonstrate six main stressors (performance, opposition, officiating, coach performance, player welfare and organisational) during competition and a range of coping mechanisms (all allocated into problem, emotion or avoidance-focused categories). These results provide readers with real-time stressors and coping mechanism experience by football coaches, using a novel method of data collection (Think Aloud).

From a practical perspective, coaches may want to adopt the use of Think Aloud in their future coaching to gain an insight into their own stress and coping responses, which in turn can help support their development in managing this stress and incorporating more successful coping responses. Consequently, this could lead to an improved performance within the team or athlete being coached. This is something that we also recommend for future researchers who wish to adopt the use of Think Aloud as a coach development tool.

### Key points

- Think Aloud is an effective measure of stress and coping for football coaches.
- Football coaches' stressors, during competition, span over performance, opposition, officiating, coaching performance, player welfare and organisational-related stressors.
- Football coaches cope with such stressors by mainly dealing with the problem itself directly (concentration, planning, technical correction) or through focusing on the emotional aspect of the situation (positive talk, venting emotion, acceptance and relaxation).
- Football coaches may benefit from adopting certain psychological techniques to cope with stress during competitive match coaching.



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