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Insights from elite soccer players: understanding the downward spiral and the complex dynamics of crises

Supplementary Information

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Crises in professional soccer are characterized by a team's unexpected and prolonged poor performances within a season, which can lead to severe consequences for both the club and the players (Noll, 2002). These crises can take on the form of inexplicable fluctuations or dips in team performance over an extended period of time and are associated with negative outcomes such as relegation, loss of revenue, and a decline in the club's reputation (Szymanski & Weimar, 2019). At the individual and team level, crises can be seen as a disruption of the internal equilibrium of the athlete and the team, so that individual and collective behavior is not optimally controlled (Bar-Eli & Tenenbaum, 1988), having a negative impact on players' mental health, manifesting in anxiety, depression, eating disorder, sleep disturbances or alcohol and substance abuse (Woods, McCabe, & Mistry, 2022). These severe consequences point to the importance of understanding the psychological factors underlying the emergence and progression of crises in soccer teams in order to develop effective interventions for players and clubs.

When studying team processes, it seems helpful to distinguish between the

individual level, team level, and external level (Mathieu, Maynard, Rapp, & Gilson, 2008; McEwan & Beauchamp, 2014). On the individual level, one may focus on various state-like (e.g., anxiety) and trait-like (e.g., personality) psychological processes that are related to the individuals' functioning within a team. On the team level, there are various processes, such as team cohesion or communication, related to the functioning of a team as a whole. On the external level, both processes at the team and at the individual level may be affected by organizational (e.g., the culture within a club) or environmental (e.g., media) factors.

In the field of sport psychology, theories have been put forward to explain crises in sport at the individual level. For example, Bar-Eli and Tenenbaum (1989) postulated that a crisis can be characterized as a process in a dynamic, open system (i.e., within the athlete), which can be delineated into three distinctive phases: stability, lability, and crisis. The transitions between these phases are not deterministic but rather stochastic in nature. The athlete performs best in the stability phase, but the probability of this depends on the athlete's activation level. In this theory, the relationship between activation and performance is described as an inverted U-shape, having apparent similarities with the multidimensional anxiety theory (Martens, Vealey, & Burton, 1990). The theory of psychological crisis in competitive sport postulates that the

athlete performs optimally when arousal is at an intermediate level, and the likelihood of experiencing a crisis is contingent upon the athlete's level of activation (Bar-Eli & Tenenbaum, 1989). When the athlete's activation level is excessively low or high, the probability of a crisis is greater than when it is within the moderate range of activation.

A preliminary definition of athletic crisis in sports, as offered by Kleinert (2003, p. 10), describes sports crises as severe, unintentional disturbances that pose a long-term threat to the athletic development of individual athletes or entire teams. This definition underlines the gravity, duration, and unintentional nature of sports crises, emphasizing their potential to disrupt athletes' progress and team dynamics significantly. In the same vein, Hardy's (1996) catastrophe theory is an extension of the multidimensional anxiety theory that describes the relationship between anxiety and performance as a nonlinear function, which can be affected by an athlete's perceived control over the situation. Under high cognitive anxiety, when an athlete's somatic anxiety reaches a certain threshold level, there is a sudden and catastrophic drop in performance, known as the "catastrophe zone." However, an athlete's self-confidence can act as a stabilizing factor, preventing the athlete from entering the catastrophe zone and maintaining their performance at a higher level (Hardy, Woodman, & Carrington, 2004).

Another prominent approach to explaining crises is choking under pressure, which postulates that athletes who are expected to perform well in high-pressure situations experience a decline in performance (Baumeister, 1984). The decline in performance can be explained through a variety of factors, including anxiety (Mesagno & Hill, 2013), distraction (Carver & Scheier, 2012), self-focus (Beilock & Carr, 2001; Masters, 1992), or self-presentation (Mesagno, Geukes, & Larkin, 2015; Mesagno, Harvey, & Janelle, 2011, 2012). Furthermore, Adler and Adler (1978) introduced the concept of momentum, which describes sudden and extreme shifts in individual or team performance. Momentum is associated with a feeling of confidence and determination, which stands in stark contrast to despair, despondency, or disinterest associated with its antithesis: inertia. Positive momentum can lead to periods of strong performance, while inertia can result in a performance's catastrophic decline, leading to a crisis. Boss and Kleinert (2015) have proposed that negative momentum is underpinned by a phenomenon termed "social contagion." A similar concept was proposed by Jekauc, Fritsch, and Latinjak (2021) in their theory of emotions in competitive sports, where negative events can cause athletes to enter a cycle of negative emotions that negatively affect athletic performance. In this conception, a negative event can trigger a chain reaction that leads to a continuous decline in performance and can culminate in a crisis.

At the team level, the concept of team collapse has also been explored in the sport psychology literature (Aritzsch, 2009; Wergin, Zimanyi, Mesagno, & Beckmann, 2018). Team collapse in sport refers to a sudden, collective, and dramatic decline in a team's performance within a match. According to Wergin, Mallett, Mesagno, Zimanyi, and Beckmann (2019), collective team collapse is triggered by a cascade of triggers rather than a single cause. These triggers include antecedents (e.g., perceived pressure, overconfidence, or poor preparation) that make the occurrence of team collapse more likely; critical

on-field events, such as a key player's mistake or a perceived refereeing error, that trigger the actual team collapse; and cognitive (e.g., insecurity), affective (e.g., negative emotional contagion), and behavioral (e.g., cautious play) outcomes that maintain the collapse and prevent the team from recovering. Empirical testing of the theoretical framework showed that negative affect plays a key role in the process of collective team collapse and influences in-game performance (Wergin, Zimanyi, & Beckmann, 2021).

The existing body of literature in sport psychology has predominantly focused on understanding short-term performance crises. While this research has provided valuable insights into the dynamics of crises in sports, it has primarily examined isolated incidents or brief periods of performance decline (e.g., Wergin et al., 2021). However, in the context of professional soccer, there is a noticeable gap in our understanding of the more protracted and enduring performance crises that can extend over multiple matches or even encompass a significant portion of an entire season. These prolonged crises can have profound consequences for both individual players and teams, impacting not only their immediate performance but also their long-term prospects and well-being. To address this gap, our study seeks to delve into the phenomenon of extended performance crises in professional soccer. By shifting our focus to longer-term crises, we aim to uncover the unique factors, processes, and challenges that contribute to this distinct form of crisis in the world of sports. Such an exploration seems promising because it has the potential to provide a holistic view of the complex interplay of psychological, social, and environmental factors that influence players' and teams' performance over an extended duration. By doing so, we can offer practical insights, interventions, and preventive measures that account for the nuanced dynamics of these prolonged crises, ultimately benefiting athletes, coaches, and organizations alike.

Methods

Paradigmatic position

The present study is situated within the framework of the interpretative description, a qualitative research methodology that explores meanings and explanations with subjective perceptions and generates an interpretative description capable of informing understanding (Thorne, Kirkham, & O'Flynn-Magee, 2004). The study is also underpinned by Kelly's Personal Construct Theory, which posits that individuals actively construe their experiences and make sense of their world by creating mental constructs (Kelly, 1970). Personal Construct Theory has been applied in various fields, including clinical psychology, education, and organizational behavior (e.g., Bannister & Fransella, 2019; Guidano, 1991). In accordance with the tenets of Personal Construct Theory, the researchers in this study recognize that participants' experiences are shaped by their unique perceptual and cognitive processes. Therefore, the role of the researchers is to understand the participants' personal constructs regarding the crisis phenomenon in soccer as well as the meanings they attach to their experiences (Bell, Bannister, & Fransella, 2004; Holt, 2016; Sparkes & Smith, 2013).

In accordance with Thorne (2016), it is important to emphasize the understanding of the social and cultural context in which the phenomenon of interest occurs and in which way it highlights the role of the researcher's experiential knowledge as well as the existing theory and research. This resonates with our approach, as we acknowledge that our own preconceptions and experiences influence the way we interpret the data (Crotty, 1998; Sparkes & Smith, 2013). Furthermore, by conducting in-depth interviews with soccer players, we aim to delve deeply into their subjective experiences of crises in soccer. It is essential to note that our approach does not seek to impose a fixed definition of what constitutes a crisis in soccer. Instead, we aim to understand how different individuals construct and perceive a crisis within their subjective

narratives. Through rigorous data collection, analysis, and reflexivity, we endeavor to honor the complexity and diversity of these experiences. Rather than seeking to simplify or reduce empirical complexity, our goal is to provide a nuanced and insightful exploration of the phenomenon of sporting crises in soccer, grounded in the rich tapestry of individual narratives and perspectives.

Our study acknowledges the complex interplay between individual and team processes that influence team performance during a crisis (Mathieu et al., 2008; McEwan & Beauchamp, 2014). At the individual level, team members bring their unique knowledge, skills, and attitudes to the team. They have their own perspectives and experiences that shape their perception and behavior. At the same time, however, psychological processes (e.g., motivation, emotions) at the individual level can strongly influence team performance (Hackman & Wageman, 2005). On the other hand, psychological processes at the team level refer to the different activities and interactions that occur within a team as it works towards achieving its goals. Team processes include communication, coordination, decision-making, cohesion, conflict resolution, and goal-setting (Marks, Mathieu, & Zaccaro, 2001).

Sampling and participants

Soccer was chosen as the case under study due to its global popularity, team dynamics, and relevance for investigating team crises in professional sports environments. Additionally, the researchers' expertise, including that of one of the authors who is a former professional soccer player, facilitated access to relevant participants and enabled a nuanced exploration of the complexities associated with prolonged crises in the sport. In accordance with the principles of interpretative description (Thompson Burdine, Thorne, & Sandhu, 2021; Thorne, 2016), our research employed a purposive sampling approach to select individuals who have directly experienced prolonged crises in professional soccer. Purposive sampling is particularly valuable when studying a niche

population with specific and relevant experiences related to the research inquiry (Suri, 2011; Thorne, 2016). Given the limited availability of individuals who fit this criterion, namely professional soccer players who have encountered extended performance crises, this methodological choice was deemed most appropriate. The sampling strategy was iterative, with the initial data analysis in earlier stages forming the basis for further sampling. The iterative method facilitated a more profound comprehension of the viewpoints of the participants, while acknowledging potential variation in perceptions (Thompson Burdine et al., 2021).

The determination of participants' suitability for our study and their alignment with the inclusion criteria was a meticulous process informed by theoretical sensitivity (Javadi-Pashaki & Darvishpour, 2020). We utilized a multifaceted approach to ascertain their eligibility. This process involved an initial screening based on participants' professional soccer backgrounds, including their playing history in top-tier European leagues such as Germany, England, Italy, Belgium, and Switzerland. Moreover, when recruiting players for the study, we made sure that they reported to have experienced a prolonged crisis in soccer during their career. For the purposes of this study, a prolonged crisis was characterized as an extended period in which a soccer team consistently underperformed or faced significant challenges that deviated significantly from established expectations or team goals. Ethical approval for the study was obtained from the university research ethics board of the Karlsruhe Institute of Technology prior to data collection. A total of nine problem-centered interviews were conducted with six current and three former professional soccer players. The male participants had a mean age of 32.6 years (standard deviation [SD] = 5.2 years) and played in top leagues across Europe (i.e., Germany, England, Italy, Belgium, Switzerland). The researchers gained access to participants through private contacts and informed them about the project's theme, data protection regulations, and intended use.

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Insights from elite soccer players: understanding the downward spiral and the complex dynamics of crises

Abstract

This study focused on identifying the factors that lead to prolonged crises in soccer teams and how players view the development of these crises. A qualitative analysis of interviews with six current and three former professional soccer players revealed that the failure to meet team expectations is often the starting point of crises, which can impact both individual and team levels. The issues at the individual level include anxiety, pressure, lack of self-confidence, somatic manifestations, negative body language, loss of motivation, rumination, and self-focus. At the team level, conflicts arise, the team atmosphere deteriorates, which is reflected in impaired communication and lack of cohesion. During soccer matches, on-field behavior frequently evolves into a more defensive mindset and a desire to avoid mistakes and responsibility, resulting in lower team performance. Poor results usually ensue, perpetuating and even intensifying the crisis process which players refer to as a vicious circle, negative spiral, or vortex. Societal factors such as media landscape, coronavirus disease 2019 (COVID-19) pandemic, club structures, or fans, and individual factors such as crisis experiences, players' resilience, family cohesion, or support from friends affect the development of crises. The study's insights illustrate the negative impacts of pressure on the team's emotional state and social interaction, leading to a downward spiral, and thus, reinforcing the crisis process. The study concludes that crisis management training and support should focus on managing expectations, promoting positive affective states, and supporting healthy motivation among team members, and should expand coaches' crisis competency training.

Keywords

Crisis · Soccer · Interpretative description · Interview · Team

Prior to the interviews, the participants gave a written informed consent to their participation in the study.

Data collection

Data collection for this study was carried out by a former professional soccer player, which adds credibility to the study as the interviewer had an understanding of the subject matter. To collect data, the problem-centered interview was chosen (Rubin & Rubin, 2012), which is often used in qualitative research to gain a better understanding of personal experiences or social processes (Witzel & Reiter, 2012). With the aim of generating a framework, the method seems suitable for assessing the experiences of professional soccer players about sports crises, allowing for the identification of causes, processes and consequences of such from a player's perspective. The problem-centered interview method is characterized by two fundamental positions: object orientation and process orientation (Witzel & Reiter, 2012). Object orientation emphasizes the method's flexibility to adapt to the requirements of the research object, while process orientation views the interview as a development process. This method highlights the importance of a sensitive communication process in the interview through which the participants can reconstruct their experiences, leading to richer and more insightful data (Witzel & Reiter, 2012). The interview guide details can be found in the Supplementary Material.

Data analysis

The data analysis in this study adheres to Thorne's (2016) interpretive description approach, which provides a systematic framework for conducting qualitative research aimed at generating practical and contextually relevant insights. To facilitate a comprehensive understanding of the crisis phenomenon in professional soccer, a constant comparative analysis approach was employed. This method involves six sequential steps—(i) immersion in the data, (ii) development of an initial thematic template, (iii) organization of the data based on the tem-

plate, (iv) condensing of data and reflecting, (v) comparing and contrasting data within similar participant categories, and (vi) comparing and contrasting data with different participant categories. These steps are purposefully designed to reveal, refine, and interpret the abundant qualitative data derived from in-depth interviews with both current and former soccer players.

The first step of data analysis involved immersing ourselves in the extensive dataset collected from the interviews. This immersion allowed us to gain a deep familiarity with the participants' narratives, their unique experiences, and the intricate dynamics surrounding prolonged crises in soccer. By repeatedly engaging with the transcripts and notes, we acquired a holistic perspective that laid the foundation for subsequent analysis. Building upon our immersion in the data, we began in the second step to develop an initial thematic template. This template served as an organizing framework for identifying recurring themes, concepts, and patterns within the participants' accounts. In the context of professional soccer crises, these initial themes encompassed various aspects, including the triggers, emotional responses, coping mechanisms, and the impact of external factors on crisis development. With the thematic template in place, the second step was to systematically organize the data by categorizing participants' responses into relevant thematic groups. These categories enabled us to structure the diverse and multifaceted information provided by the soccer players. Within each category, we examined the nuances and variations that emerged in relation to the crisis phenomenon.

In the fourth step, we engaged in a process of data condensation and reflection. This involved summarizing and synthesizing the key findings within each thematic category. By condensing the data, we aimed to distill the essential insights and participants' perspectives related to prolonged crises in professional soccer. In addition, this step provided an opportunity for deeper reflection on the implications and significance of the emerging themes. In the fifth step, to further re-

fine our understanding of the crisis phenomenon, we undertook a comparative analysis of the data within similar participant categories. This involved examining how themes and patterns intersected or diverged among individuals who shared common experiences or characteristics. Through this comparative process, we sought to identify overarching trends and variations specific to subgroups of soccer players. In the final step of constant comparative analysis, we broadened our perspective by comparing and contrasting data across different participant categories. This comparative approach allowed us to explore how various factors, such as playing position, career stage, or team dynamics, influenced participants' experiences of prolonged crises. By integrating insights from diverse participant groups, we aimed to construct a comprehensive and contextually grounded understanding of the crisis phenomenon in professional soccer.

Methodological rigor

Methodological rigor is essential in qualitative research, particularly when employing an approach like interpretive description (Thorne, 2016). In our study focused on understanding the phenomenon of extended performance crises in professional soccer, we were committed to upholding methodological rigor to ensure the credibility and trustworthiness of our findings. This section outlines the principles and strategies we have employed to maintain rigor throughout our research process.

Reflexivity and member checking: In line with interpretive description, we recognize the significance of reflexivity in understanding how our personal experiences and perspectives may influence the research process and outcomes. Throughout our study, we have maintained an ongoing reflexive stance, critically examining our assumptions, biases, and preconceptions related to the crisis in soccer. This self-awareness has enabled us to approach data collection and analysis with sensitivity to our potential influences and to mitigate the impact of researcher bias on the interpretation of participants' experiences. To

typically begin with a string of unexpected defeats against supposedly weaker opponents. This initial disappointment triggers a cascade of psychological processes at the individual level, which are intricately interconnected and mutually reinforcing. As players grapple with the disappointment, they commonly report experiencing heightened levels of anxiety and pressure, which may manifest in tangible somatic manifestations such as headaches and stomach aches. These symptoms, in turn, fuel a shift in motivation during training sessions, characterized by an intense drive that can escalate into intrateam aggression. Amidst these negative emotions, players engage in rumination and introspection, seeking to make sense of the situation and its implications for their performance and prospects. These processes are often associated with self-doubt, which undermines the players' self-confidence and is subtly reflected in their body language on the pitch. Moreover, the excessive rumination on perceived failures prompts players to turn inward, withdrawing from interactions with teammates. This inward focus further exacerbates feelings of isolation and intensifies the sense of crisis. Importantly, these individual-level processes begin to reverberate throughout team dynamics, precipitating significant shifts within the team.

At the team level, the internal psychological struggles experienced by individual players start to negatively impact the overall team atmosphere. Players consistently reported heightened tension within the team following poor performance. This tension, coupled with increased over-motivation, often escalates into conflicts that were previously concealed. While conflicts are typically kept under wraps during periods of success, they surface more openly during crises. The deteriorating team atmosphere and players' heightened self-focus contribute to breakdowns in communication. As communication deteriorates, players feel increasingly alienated and disconnected from one another.

The breakdown in team processes extends to team cohesion, a crucial factor for team performance. As tensions rise and communication breaks down,

the team becomes fragmented with subgroups being formed. This fragmentation compromises the team's ability to function as a cohesive unit, further exacerbating the crisis. These disruptions in team dynamics frequently spill over onto the field, where players adopt a defensive mindset focused on avoiding mistakes rather than taking proactive actions. This defensive approach proves ineffective against evenly matched opponents, leading to a cycle of negative results that reinforce the downward spiral. With each iteration of this cycle, the downward spiral gains momentum, dragging the team deeper into the crisis.

The coach's role is pivotal in the development of a soccer crisis, as they face immense pressure regarding the team's performance and the potential consequences of continued failure, including the risk of dismissal. Their reaction to this pressure can significantly impact the trajectory of the crisis; they may either intensify it or help alleviate it. Coaches have the power to either transmit pressure onto players or mitigate its effects, increase or reduce anxiety levels among players, diminish or bolster their confidence. Moreover, coaches exert considerable influence over team dynamics, including the team atmosphere, communication patterns, conflict resolution, and cohesion, as well as shaping players' behavior on the field.

Individual players' circumstances also significantly impact their ability to navigate through a crisis. Players with strong support networks of family and friends tend to fare better during crises. Additionally, experienced players who have previous experience with such difficult times are better equipped to handle crises compared to younger, less experienced players who may find themselves more deeply entangled in the downward spiral. Resilience to setbacks and negative emotions also plays a critical role, with players who can bounce back quickly being less affected by crises.

Social factors further influence the emergence, development, and management of crises in soccer. Cultural influences in different countries can exacerbate crises, with certain teams experiencing deeper crises due to societal pressures. Both traditional and social

media may exert significant pressure on players and coaches, while club managers hold considerable power in implementing drastic measures such as coach dismissals or player sales. The mood of fans also impacts team dynamics, with negative fan sentiment leading to decreased morale among players. Moreover, societal events, such as the coronavirus disease 2019 (COVID-19) pandemic-related shutdowns, can have a profound effect on players' mental well-being and team processes, particularly the experience of playing in empty stadiums.

The crisis of a soccer team is the result of a multifaceted interplay between various factors, including individual-level processes like heightened anxiety and self-doubt among players, team-level dynamics such as deteriorating atmosphere and communication breakdowns, external influences like media pressure and societal expectations, and individual conditions such as resilience to setbacks and the presence of strong support networks. These elements interact and reinforce each other, contributing to the escalation and perpetuation of the crisis within the team. In the next section, we will look at the individual components of the crisis framework in more detail.

Downward spiral

As mentioned above several participants used a metaphor of a downward spiral or vortex in a river to illustrate the impact and dynamics of a crisis within a team. This metaphor denotes a sequence of events or outcomes that trigger a dynamic process, which is self-reinforcing and perpetuates the crisis. The negative momentum of the downward spiral results in subsequent losses that affect not only the players and the team but also the club, the surrounding environment, and the fans. Participants also emphasized the difficulty of breaking free from the downward spiral dynamic, as external pressures, such as fan and media criticism, contribute to a further decline in morale and performance. As one player stated: "But yes, when things aren't going well, it's also hard to get out of this vortex again because suddenly everyone is against you, the fans are no longer be-

hind you, and there's just a lot of pressure from outside" (Player J). This quotation illustrates how the negative spiral can be seen as a symbol of crisis, and emphasizes the fast pace of soccer, where highs and lows often come in quick succession.

Trigger mechanism

According to one player, a crisis in a soccer team can be defined as "when you have goals as a club, as a team, from which you are completely far away, that is, in my opinion, a sporting crisis" (Player M). This indicates that a crisis is closely related to the failure of individual players or the entire team to meet their expectations. These expectations may result from the team's goals set at the beginning of the season. They are also often enforced by external factors such as the media or fans. The role of expectations also means that teams with higher expectations are more likely to experience a crisis when these expectations are not met. The failure to meet these expectations can lead to negative emotional states, as one player reported: "We had a series of defeats, and even though we had a good team, it's hard to stay positive when things don't go our way" (Player A). As will be discussed in more detail below, these negative emotional states can then lead to a cascade of processes at both the individual and team levels.

Players

Players reported increased anxiety and pressure, decreased self-confidence, somatic manifestations, negative body language, unhealthy motivation, rumination, and increased self-focus as central features of a crisis at the individual level. The occurrence and intensity of these psychological processes should be viewed as probabilistic, with not all individual players affected to the same degree. Moreover, a key feature of a crisis is that these different psychological processes interact strongly, and thus, reinforce each other so that they can be seen both as consequences and as sustaining factors of a crisis.

Anxiety and pressure

The players reported experiencing high levels of anxiety and pressure during a crisis, which were attributed to various factors such as a potential relegation, financial loss, negative media attention, or even physical attacks from fans. When asked which feelings are associated with a crisis, Player J reported: "Yes, I would also say fear in any case, fear of failure, simply getting off plays a big role". These negative emotions have been shown to negatively affect player performance and overall well-being, as evidenced by the following quote: "The pressure was so great that I almost couldn't stop the ball anymore. I could not stop the ball, which had never been an issue for me before, because I had put myself under so much pressure." (Player A).

Self-confidence

The players reported that it is common to experience low self-confidence during a crisis. They highlighted the reciprocal relationship between self-confidence and sports performance. One player noted that "It's a vicious circle. Of course, without self-confidence you always play much, much worse than when you have success as a team. And of course, then also as an individual player" (Player L). Because self-confidence is crucial for sports performance, participants reported that a lack of self-confidence is particularly evident in decision-making reluctance. For example, Player A reported "And a player in this position lives extremely from self-confidence. If you lose that, then you might offer yourself to the other player, but not in such a way that you are actually playable."

Somatic manifestations

The players further reported that various forms of somatic manifestations tend to happen during a crisis. An example of such a manifestation is described by a player who noted that the locker room atmosphere became tense and dissatisfied (Player A). These somatic manifestations, in turn, affect not only the players' sports performance but also their mental health. One player suggested that physical problems and pain are often linked to psychological distress, stating "I'm con-

vinced that we humans function in such a way that when we're not well, then it starts to hurt us that often pain and physical problems are just mirrored by your head" (Player S).

Body language

The players also emphasized that the players' body language is affected during a crisis. One player reported that "the body language is different, you also have less self-confidence in the way of playing. It doesn't work anymore. It doesn't flow anymore. Disjointed" (Player M).

Motivation

According to the players' reports, their motivational drive is impacted negatively during a crisis. The enjoyment of the game can be lost, as indicated by Player J: "It was just, you didn't have fun anymore, it wasn't fun. You went on the pitch and you just felt this pressure, you have to win now" (Player J). The players may also take training sessions too seriously, causing tension within the team. This over-seriousness can result in an unhealthy aggressiveness during training, leading to enmities among players, as one player noted: "This also creates an aggressiveness on the training field that can be unhealthy. And as a result, there are perhaps, I'll exaggerate, enmities among the players" (Player A). Another player reported: "There are some who, out of anger say, 'next time I'll knock one out.'" (Player F).

Rumination

During a crisis, players tend to ruminate on the negative thoughts and consequences of the crisis, leading to a lack of focus and concentration during games. One player described this as, "But when things go bad, you think: Oh my God, how do I get out of this now?" (Player M). It is common for many players within a team to search for reasons why the team is not performing well, which can lead to a sense of confusion and helplessness. Player F said, "Yes, you just ruminate. As I said, we've now had two matches where we haven't won against supposed relegation candidates. And what's the reason for that? What happens?"

Self-focus

A crisis in soccer can also cause players to become more self-focused. As Player K pointed out, “In soccer, they’re all alpha animals. That means a lot of them. And then everyone looks out for themselves first”. This self-centeredness can lead to players focusing more on their individual performance rather than working collaboratively as a team. Another player highlighted this by stating, “that everyone is more focused on themselves. So not as a team” (Player A). This self-focus can result in a lack of cohesion and coordination, making it difficult for the team to execute strategies effectively. For example, Player M reported: “With one teammate, for example, he doesn’t want to block shots, or doesn’t run back at full speed.”

Team processes

The psychological processes at the individual level are in constant interaction with the psychological processes at the team level. In a team where many players experience a lot of anxiety, have low self-confidence, and focus mainly on themselves, it is very likely that these processes will have a negative impact on communication and cohesion within the team. At the same time, in a team with little cohesion and frequent conflicts between players, individual players are more likely to take little pleasure in their work and become even more self-focused. In the following, we describe the psychological processes of the crisis at the team level.

Team atmosphere

Team atmosphere refers to the overall feeling, mood, and psychological climate that is shared among team members. In times of a crisis, the team atmosphere is one of the first things to be affected. The tension within the team can be palpable, which can be attributed to the pressure to perform and win. Player L reported, “Yes, of course, in a sporting crisis the atmosphere in the team is always, always very tense”. Another player shared similar sentiments, stating, “if you don’t win, or don’t score and so on, then of course the atmosphere between the people is tense” (Player S).

Conflicts in the team

The tense atmosphere during a crisis entails that conflicts between team members are more common and can escalate quickly. These conflicts can even manifest in physical confrontations during training sessions, as players compete aggressively and increase the risk of injury to their teammates. One player reported that “in training, there are situations where it gets harder in the duels, and then one gets knocked down sometimes” (Player J). Notably, players also emphasized that antipathies between players may also exist prior to a crisis, but they are not openly displayed. During a crisis, however, these hidden antipathies are more likely to surface, leading to a further escalation of conflicts. Player A stated: “You notice what I said before, the basic aggressiveness, the mood gets worse. This also creates an aggressiveness on the practice field that can be unhealthy. And it can also lead to animosity among the players, to put it exaggeratedly. People say, I don’t wish him well anymore.”

Communication

Communication is crucial in a soccer team, especially during a crisis. When conflicts arise and the atmosphere in the team deteriorates, communication is one of the first things to be affected. Players may stop talking to each other or stop communicating openly with the coaching team. Player L said, “Yes, maybe it goes so far that you no longer talk to one or the other player, of course, or the whole situation is simply tense”. Unfortunately, some players report that during a crisis, the communication with the coaching team is lacking. “The coach who had zero communication with the players. With whom you as a player never knew where you stood,” said one player (Player K). When communication breaks down, players may feel disconnected from the team and unsure of their role within it.

Cohesion

When the team atmosphere becomes negative, it can lead to conflicts between team members and breakdowns in communication, which can ultimately lead to a fragmentation of the team. This frag-

mentation is evidenced by the formation of subgroups with different interests, which can have a devastating effect on team cohesion. One player described the process of subgroup formation:

“Then it started with looking for a like-minded person. That means practically, yes, he doesn’t play either. I sit on the bench with him. I now look for an ally. Now he has an ally. Now he’s looking for a second, a third. Now there’s another group like that. Which then isolates itself from the whole thing. And that’s what you also felt in the booth.” (Player K).

Once these subgroups are formed, the team is no longer acting as a cohesive unit, and this lack of cohesion is often reflected in the team’s performance on the field. For example, Player A reported: “You don’t work as a team anymore. You don’t attack together in compact pressing, but everyone does his own thing”.

On-field behavior

The psychological processes described above at the individual and team level seem to produce a certain behavior on the field, which is reflected in a more defensive attitude, risk avoidance, and an unwillingness to take responsibility. As one player put it, “You don’t want to make a mistake. You try to do only what is necessary. And you try to get back into the game by doing the most necessary things first” (Player K). Another player reported “Then maybe you’d rather kick the ball long instead of playing normally as usual, because you just want to make sure that you don’t make a mistake” (Player J). These behaviors inhibit creativity and risk-taking, making it difficult to create scoring opportunities. This defensive and error-avoiding style is doomed to fail, and the negative spiral enters a new loop.

The role of the coach

Head coaches play an essential role for a team’s success. They often experience a lot of pressure when the team is not performing well and the coach’s ability to handle this pressure has a huge impact on the psychological processes described

above, both at the individual and the team level. It was reported that during a crisis, some coaches tend to distance themselves from the team and reduce their communication with the team. For example, Player F reported the impact of the coach's distancing, saying that "seeing himself as a coach and the players are players" can lead to a lack of communication and trust between the coach and players, which can exacerbate the crisis. However, a coach with experience can help the team deal with setbacks, as noted by Player A: "the experience of a coach is immensely important, because then he has much more experience with defeats, victories, how to deal with the team afterwards".

Individual conditions

In the context of handling a crisis, certain individual player characteristics have emerged as crucial. One such characteristic is the experience a player has gained throughout his career. As noted by Player A, "Experience is just so important. You can't buy that. You have to have lived through certain moments as well". Through experience, players can become more resilient to deal with the pressure and negative consequences that arise during a crisis. For instance, Player J reported, "You have to deal with it. It's not like now, when a fan insults you up and down, that I'm all over it. That's my job. I've been dealing with it for years".

Another important aspect was the support players received from their teammates, friends, and family. For example, Player J shared how chatting with others can help distract from the crisis: "Yeah, for me it was just like, if it's not going well for me personally or with the team, then I just get my strength from my friends, from my family anyway, that I talk to them more often on the phone and sometimes just talk about completely different things".

Social conditions

Social conditions play a decisive role in whether a crisis occurs or not, but also in the development of a crisis. A team's culture, media presence, social isolation,

fan support, and club management can all contribute positively or negatively to how the team navigates a crisis. The culture of a team's society can greatly impact the importance placed on soccer and the emotional reactions to victories and defeats. For example, a player from Switzerland reported that soccer is not as important in their culture as it is in Italy, where fans are more emotionally invested in the outcome of games. The way supporters react can have a significant impact on players, with some players even experiencing personal attacks. As Player F recounted, "Last year was also really wild, when they [i.e., the fans] visited players privately in the apartment or during a walk and pushed them around and threatened". In this context, social media has also become a major factor in the media's evaluation of players, causing some players to feel pressured to live up to expectations. Some players have even isolated themselves from media to escape this pressure. Player F stated: "I don't read the newspaper. I don't look at these soccer scores or rankings. Because at some point I realized that it drives me crazy, it gets me down."

The social isolation caused by the lockdown during the Corona pandemic also had an impact on team cohesion. While soccer players were allowed to continue playing early on, they were still required to socially isolate, leading to the absence of team bonding. Additionally, the lack of spectators in the stadium has had a significant impact on players who rely on fan support. The culture of the soccer club also plays a crucial role in the emergence and development of a crisis. Larger clubs often have higher expectations, and turmoil can develop quickly if the team fails to live up to them. The management's decision-making process during a crisis can have a significant impact on the team. Some decisions may be reactive and exacerbate the crisis. For example, management may criticize the coach in front of the team or publicly, leading to negative emotions and a lack of trust within the team. A common strategy to manage the crisis is to dismiss the head coach and install a new one in the hope that the new head coach will manage the crisis better. However, the frequent changes of

coaches pose a challenge to the players, who have to adapt to the new coach and his playing philosophy and tactics each time.

Discussion

The aim of this study was to elucidate the dynamics of sports crises in soccer through interviews with nine current and former soccer players. Existing theories predominantly address individual crises or crises occurring within a single match, whereas our investigation delves into the emergence and progression of prolonged crises over an extended duration. The results of this study paint a fairly holistic picture of how crises develop in soccer and what factors promote the development of the crisis. The starting point of a crisis is typically the deviation of the current results from the expectations or the goals of the team. From the perspective of the players studied, negative affective states initially develop from unmet expectations. The observation that negative affective states occur after failed fulfillment of expectations is consistent with Carver and Scheier's self-regulation theory (Carver & Scheier, 2001). Accordingly, it is assumed that deviations of the current state from a reference value lead to changes in affect. If the deviation is negative, i.e., the current state is worse than the reference value, then negative affective states occur.

The findings of our study indicate that negative affective states initiate a cascade of psychological processes that contribute to the development of a crisis. This negative evaluation of the situation is not limited to the players alone but is shared by the coaching team, fans, and club management. The crisis leads to significant changes in the team's environment, which are observed by the players and subsequently result in affective states such as anxiety, pressure, and various physical manifestations, like increased body tension and elevated blood pressure. These physiological reactions further manifest in negative body language, including slumped shoulders and other nonverbal cues. Furthermore, the negative affective states experienced by the players can impact their motivation,

leading to unhealthy levels of motivation. They may question their performance and engage in rumination, continuously analyzing why things are not going well. This self-reflective analysis extends to all individuals involved, with each person evaluating what they could do better and the implications they face. This process of self-analysis intensifies a self-focus within the team, where individuals prioritize their own thoughts, actions, and outcomes.

Our study's findings suggest that a crisis is a complex process that is characterized by a vicious cycle, negative spiral, or vortex, as reported by the athletes. This concept is also in line with the cycle of emotions model, proposed by Jekauc et al. (2021), which describes how a negative event can trigger a chain reaction in an athlete, leading to performance deterioration (Taylor & Demick, 1994). This understanding suggests that affective processes may also contribute to team crises. Moreover, our results align with the perspective of Bar-Eli and Tenenbaum (1989) that a team can be regarded as an open system, which can be influenced by internal processes and external confounders. The identification of the circular process underlying a crisis highlights the importance of interventions that can disrupt this cycle and help athletes and teams regain a positive momentum (Taylor & Demick, 1994). Furthermore, recent research by Buenemann, Raue-Behlau, Tamminen, Tietjens, & Strauss (2023) complements our findings by emphasizing the pervasive nature of negative affective states in team crises. Their study highlights how these affective states extend beyond individual players to encompass the coaching team, fans, and club management, thus, underscoring the collective impact of crises on various stakeholders within the soccer environment.

This idea also shows similarities with the ideas of the choking under pressure approach, where perceived pressure triggers a series of psychological processes that then lead to a decline in performance (Baumeister, 1984; Beilock & Gray, 2007). The study's findings suggest that the negative affective states and the resulting chain reaction as well as

the social conditions within the team, contribute to the emergence of the crisis. In particular, the study highlights the impact cultural differences, media pressure, social isolation during the pandemic, fans, and club management have on the development of the crisis. These findings are consistent with previous research that has highlighted the importance of these factors in sport (Carron, Bray, & Eys, 2002; Pescosolido & Saavedra, 2012).

The finding that negative team results negatively affect self-confidence among athletes is consistent with previous research that has found that self-confidence is a critical factor in performance and is negatively affected by pressure and anxiety (Jekauc et al., 2023; Woodman & Hardy, 2003). While Hardy's catastrophe theory suggests that self-confidence buffers the negative effect of anxiety (Hardy, 1996), the multidimensional anxiety theory posits that self-confidence and cognitive anxiety are counterparts of one dimension and can fluctuate together (Vealey & Chase, 2008). In line with this theory, the athletes in our study reported a decrease in self-confidence as the crisis developed, which is likely due to the negative affective states associated with the crisis. These results highlight the importance of maintaining self-confidence and managing cognitive anxiety to prevent the development of a crisis and to be able to retrieve performance in the match (Jekauc et al., 2023).

In addition to individual-level impacts, the results of our study highlight the role of psychological processes at the team level. The team's lack of success, changes in individual players, and shifts in the team's environment all contribute to a deterioration in team atmosphere and cohesion. This is consistent with the team collapse approach, which suggests that increased pressure can lead to reduced communication and more blaming others, ultimately resulting in a more cautious style of play (Wergin et al., 2018). Our findings suggest that this dynamic can result in the fragmentation of the team into subgroups representing different interests, making it difficult to act as a cohesive unit. Some athletes may withdraw or communicate less

to avoid being infected by the negative mood, further exacerbating the problem. A combination of individual processes (e.g., anxiety, rumination, self-focus) and these team processes can also lead to error and responsibility avoidance, which has been shown to negatively impact team performance (Eys & Carron, 2001; Pescosolido & Saavedra, 2012; Van Vianen & De Dreu, 2001).

Implications

The findings of our study have important implications for sport psychology practice. First, the results suggest that sport psychologists need to pay close attention to the emotional and psychological well-being of athletes during times of crisis (Kittler, Stenzel, Jekauc, & Stoll, 2021). This includes not only addressing anxiety and stress but also helping athletes to develop effective coping strategies to deal with the challenges they may face (Anderten, Ohlert, & Kleinert, 2020; Belz, Kleinert, & Anderten, 2020; Holt & Dunn, 2004). Second, sport psychologists should work with athletes to help them understand the cyclical nature of crisis and how negative events can trigger a chain reaction that leads to further negative outcomes (Jekauc, Kittler, & Schlagheck, 2016; Jekauc, Mülberger, & Weyland, 2022). By educating athletes about the potential impact of negative events on their emotions and performance, sport psychologists can help them develop a more proactive approach to managing crises (Jekauc, 2018; Kittler, Arnold, & Jekauc, 2022; Kopp, Reichert, & Jekauc, 2021; Wylleman, Harwood, Elbe, Reints, & De Caluwe, 2009). Third, given the impact of team-level factors on players' well-being and performance, sport psychologists should also work with coaches and team managers to promote a positive team environment (Jekauc, Mülberger, & Weyland, 2024). This can be achieved by encouraging effective communication and conflict resolution, promoting a shared sense of purpose and goals, and providing support for players who may be struggling (Burton & Raedeke, 2008). Our study highlights the importance of such a holistic approach to sport psychology practice that takes

the interconnected nature of individual and team-level factors influencing players' well-being and performance into account (Fraser-Thomas & Côté, 2009).

Limitations and future directions

Limitations of this study should be acknowledged to provide a more comprehensive interpretation of the results. First, it's important to note that this study primarily focuses on a specific type of crisis in soccer, namely those resulting from a lack of success on the field. While this is a significant aspect of crisis in team sports, it's essential to recognize that there are other potential crises affecting high-performance players, such as those caused by injury, disease, abuse, and other factors. The findings of this study do not fully capture the complexity of all types of crises experienced by players. Second, the small sample size of male soccer players recruited only from European countries may limit the generalizability of the findings. Third, this study is limited to the player's perspective. Future studies could benefit from including the perspectives of coaches, team staff, sport psychologists, and fans to gain a more comprehensive understanding of the team crisis phenomenon (Lee, Wäsche, & Jekauc, 2018). Fourth, the method of this study was retrospective, with the participants recalling their experiences of past crises. The study did not collect data during the crisis, although the researchers tried to recruit participants currently experiencing a crisis in the team. However, these participants refused to take part in the study due to the difficult nature of the situation. Fifth, the study relied solely on self-reported data from players. Future studies may consider incorporating other sources of data, such as objective performance data, to provide a more comprehensive analysis of the team crisis phenomenon. Lastly, we acknowledge that researchers have a considerable influence on the results of the study, as the data need to be interpreted (Thorne, 2016). To mitigate this limitation, two researchers conducted independent analyses to ensure intersubjectivity and discussed the

results until agreement was reached. This process ensured intersubjectivity and consistency in the interpretation of findings. Any discrepancies between the researchers' analyses were discussed, and consensus was reached through thorough deliberation.

There are several avenues for future research that could build on the findings and expand the understanding of team crises in soccer. One direction for future research could be to investigate team crises in other sports, such as basketball or handball. By comparing and contrasting team crises across different sports, researchers could explore potential differences and similarities in the underlying causes, manifestations, and management strategies. Such research could focus on the constructs revealed in the present study such as team dynamics, psychological pressure, cultural influences, physical demands, coaching styles, and media exposure. Understanding these potential differences and parallels could provide insights into the universality of crisis phenomena in sports and inform tailored intervention strategies.

Additionally, future research could investigate the effectiveness of interventions or strategies for preventing or managing team crises (Schinke, Stambulova, Si, & Moore, 2018). Such interventions could include team-building activities, conflict resolution training, or psychological interventions for athletes experiencing emotional distress (Kleinert et al., 2012; Senécal, Loughhead, & Bloom, 2008). Evaluating the effectiveness of such interventions could provide insights into how teams can better manage crises and maintain team cohesion. Finally, future research could build on the findings of this study by conducting quantitative studies to test the hypotheses derived from the insights gained.

In addition to exploring the negative aspects of crises in soccer, it is essential to acknowledge the potential for positive change, development, and learning that can emerge from these challenging situations (Stambulova, 2000). The term "crisis" is rooted in the idea of a decisive moment and turning point, encom-

passing both challenges and opportunities for growth (Hay, 1999). Therefore, adopting a broader conceptualization of crises that incorporates a developmental viewpoint can enrich our understanding of the phenomenon and uncover additional layers of insight within the empirical material. By considering crises not solely as stress-inducing events but also as transformative experiences, we can explore the positive aspects that players may perceive in such situations (Stambulova, 2000, 2017). These positive aspects may include opportunities for personal and team development, enhanced resilience, strengthened cohesion, and the cultivation of valuable skills such as coping mechanisms and problem-solving strategies (Kittler, Gische, Arnold, & Jekauc, 2018). By embracing this holistic perspective, researchers can shed light on the multifaceted nature of crises in soccer and explore how athletes navigate and derive meaning from these complex experiences.

Conclusion

This study has shed light on the phenomenon of team crisis in soccer and its underlying processes from the perspective of players. The results suggest that crisis in soccer teams is a complex and multifaceted phenomenon that involves the interaction of various psychological processes both at the team and individual level. The framework proposed can serve as a valuable framework for future research in this area and provide practical implications for sport psychology practitioners, soccer clubs, and organizations. Future studies can extend on this research by including multiple sources of data and conducting longitudinal and experimental designs to test the proposed hypotheses. Additionally, the development of indicators for soccer clubs to recognize a crisis early on could be a promising direction for future research. Overall, this study aims to contribute to the understanding of team crisis in soccer and highlights the importance of addressing this issue in order to promote the well-being and success of soccer teams.

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Declarations

Conflict of interest. D. Jekauc, D. Vrancic and J. Fritsch declare that they have no competing interests.

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1975 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

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