DOI: 10.1111/sms.14556

ORIGINAL ARTICLE

Revised: 14 December 2023

WILEY

A longitudinal interpretative phenomenological analysis study of athletes' lived experiences in elite disc golf competitions

Runar Furre¹ | B. T. Johansen¹ | C. J. Knight^{1,2} | A. D. Mosewich³ | B. E. Solstad¹

¹Department of Sport Science and Physical Education, University of Agder, Kristiansand, Norway

²Department of Sport and Exercise Sciences, Swansea University, Wales, United Kingdom

³Faculty of Kinesiology, Sport, and Recreation, University of Alberta, Edmonton, Alberta, Canada

Correspondence

Runar Furre, Department of Sport Science and Physical Education, University of Agder, Service Box 422, NO-4604 Kristiansand, Norway. Email: runar.furre@gmail.com

Abstract

Gaining the inside perspective of an elite athlete throughout the competitive season provides a unique approach to understand the lived experience during multiple competitive events. The purpose of the present study was to investigate how elite disc golf athletes perceive and interpret their experiences of performing during various training and competitive events over the course of an elite disc golf season. Two elite disc golf athletes, one man and one woman, were recruited using homogeneous purposive sampling. The participants were interviewed three times and observed during three competitive events, as well as before and after a training session. A longitudinal interpretative phenomenological analysis (LIPA) was adopted to capture temporal and dynamic changes of the participants' lived experiences. The findings illustrated the athletes' personal experiences of performing during competitive disc golf events, with both athletes' experiences of competition changing during the season. Their competitive experiences appear to relate to the meaning disc golf has for the athletes, which in this study had both an experiential and existential level of meaning over time. Such a finding illustrates the importance of honoring athletes' unique experiences in making sense of their performances during an elite disc golf season. Taking the time to understand athletes' perceptions of their personal experiences appear important in attempting to understand their sense-making of their hot cognition before, during, and after competitions.

K E Y W O R D S

cognitive, competition, elite, emotional, international, sense-making

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Authors. Scandinavian Journal of Medicine & Science In Sports published by John Wiley & Sons Ltd.

1 | INTRODUCTION

WILEY

An elite athlete's performance is often the "moment of truth" where the difference between a win or a loss can be settled in a split second. Indeed, there are countless hours of training, preparation, and evaluation leading up to the "moment of truth" which are required to put an athlete in a position to succeed.¹ To sustain success in sport competitions, elite athletes must therefore function effectively in their competitive encounters and maintain their performance level over repeated competitive events.^{2,3} In doing so, elite athletes are required to reflect on experiences happening to them and, thus, attempt to make sense of the meaning of their competitive encounters. Hence, because of the human factor in performance, there is a need to get close to personal experiences of performing in the elite sport context.⁴

To gain a clearer picture of the subjective experience of performing, there is a need to understand what is going on in the mind of elite athletes in the training sessions leading up to the competitive event, in the days before the competitive event, immediately prior to, and during, performance, and in the time after the competitive event. Indeed, Wilson and Richards argued, "the association between feedback and the event is more powerful the closer in time they are—an idea referred to by behavioral psychologists as temporal contiguity (p352)."⁵ Additionally, if elite athletes are encouraged (or forced) to reflect on their perceptions of experiences happening to them (e.g., training and competitive events) and which engage hot cognition, which facilitates much cognitive and emotional activity about the event, then we can gain a more nuanced understanding of how they make sense of the event's meaning.⁴ It is worth noting, however, that these experiences can either be relatively current and discrete, or they can be ongoing.⁴ The subjective experience of elite athletes, involving both single and repeated events, is therefore important to understand due to the "inner game" of training and competition and the way these athletes deal with their mind as they deliver their unique performances over time.

Performance can be objective, subjective, or a combination.⁶ Typically, objective performance does not account for factors outside the athlete's control; that is, objective performance considers outcomes irrespective of the subjective experience.⁷ Meanwhile, the subjective experience of performance is based on how satisfied athletes are with their performance.⁸ To further illustrate, "an objective measure exists as a quantity in and of itself; in contrast, subjective measurements are based on attitudes, beliefs, and perceptions (p403)."⁹ The subjective experience of performance is therefore a more sensitive indication of performance and enables comparison with

other sports.¹⁰ Furthermore, what turns a competitive event into an experience is the subjective significance bestowed on it by the person participating in, and potentially changed by, what is happening during the competitive event.⁴

The success elite athletes experience in training and competition is influenced by their physical, psychological, tactical, and technical skills, which vary between sports.¹¹ For instance, in disc golf, which is a fine motor skilled sport, competition rounds are long lasting with low intensity but involving high technical demands, which require a shift of focus to prevent fatigue.¹² If athletes are unable to effectively manage the different demands or challenges they encounter while training and competing, it is likely to influence their athletic performance and, in turn, their subjective experience of performing.^{11–13}

Furthermore, elite athletes may associate different levels of meaning to their subjective experience of performing. Such meaning has been considered across five levels: (1) Literal (what does that mean?); (2) Pragmatic (what do they mean?); (3) Experiential (what does it mean?); (4) Existential—significance (what does it mean for my identity?); and (5) Existential-purpose (what does my life mean?) (p168).⁴ Hence, knowing that elite athletes are heavily invested in their sporting activity (e.g., time and resources),¹ and assuming that the significance of training and competitive events might change over time, the typology of meaning might be used to explore the level of sense-making in which elite athletes are engaged.⁴ Moreover, to access the different depths of meaning and explore the individual variation in subjective experience, it has been suggested that research should be close to the action and adopt a within-participant, longitudinal, and embedded methodology to capture immediate responses to a given situation and possible change in response during and across multiple training and competitive events.^{5,11} Additionally, collecting data over time from the same sample of athletes is valuable as it enhances our understanding of how elite athletes' perceptions and interpretations of the experience of performing evolves over the course of a competitive season. Such insights are particularly valuable in individual sports (i.e., golf or tennis) that are acknowledged to have a substantial mental component¹⁴ and, thus, understand how it may shift over time.

To the best of our knowledge, there are few, if any, studies reporting how elite athletes experience repeated training and competitive events (i.e., before, during, and after the event), and how these experiences evolve across the competitive season. Given this gap in our understanding of elite athletes' subjective experiences of performing, and to gain a deeper understanding of the elite athlete's state of mind while training and competing, the purpose of the present study was to investigate how elite disc golf athletes perceive and interpret their subjective experiences of performing during various training and competitive events over the course of an elite disc golf season.

2 | METHOD

2.1 | Philosophical underpinnings

This study is located within the interpretivist paradigm.¹⁵ An interpretivist paradigm suggest that sport is a social phenomenon where the participants act upon a number of external social forces, but also have the free will to respond in an active way to these forces.¹⁶ Thus, their behavior cannot be understood in terms of a simple causal relationship and the researcher attempts to uncover meaning, values, and explanations through the collected data.⁴ The interpretative approach tries to understand the athletes "from within" by using data collection from the viewpoint of the participant.^{4,16}

2.2 | Study design

This study aimed to understand the dynamic nature of athletes' perceptions and interpretations of their experiences of performing during a competitive season. To do this, a longitudinal qualitative research (LQR) design comprising in-depth interviews and observations at specific times in competitions (before, during, and after) and over a season (training, domestic tournament, national tour, national championship, and European championship) was adopted. LQR allowed for identification of temporal change across experiences, thereby facilitating a rich exploration of how individuals interpret and respond to such change.¹⁷ Further, LQR has the ability to access fluid, time-sensitive accounts of subjectively experiences and thus enabled illumination of the meaning, causes, and consequences of changes or continuities across time.^{4,18} LQR is also iterative, drawing on what has been learned, enabling insight into what might change over time.¹⁸

It has been recommended that researchers should seek to combine LQR with theoretical and methodological perspectives that encompass concepts such as time and the experience of change to move beyond a simple description of perception and interpretation of experience at each time point.¹⁷ Subsequently, given the epistemological approach of LQR that prioritizes expressed and subjective meanings as valid forms of knowledge, interpretative phenomenological analysis (IPA) has been identified as a fitting approach to utilize.¹⁹ A combination of longitudinal research and IPA, namely longitudinal interpretive phenomenological analysis (LIPA), aims to collect data over time to explore the dynamic effects of variability and change.¹⁹ The collection of data through various methods and from different perspectives (i.e., the athlete and the observer) is recommended.²⁰ The analysis generally consists of processes that move from the particular to the shared, and from descriptive to interpretative, as the researcher tries to make sense of the participants' experiences, which they themselves are also trying to understand.^{4,21}

2.3 | Participants

In collaboration with the Norwegian Federation of American Sports, two elite disc golf athletes (one man and one woman, both aged in their early 20s) were identified as potential participants. Homogeneous purposive sampling was used to gain the perspectives of both genders regarding the experience of performing during national and international level elite disc golf competitions.^{20,22} The athletes represented their nation and competed at the international level in their respective division, Mixed Professional Open (MPO) and Female Professional Open (FPO). Both athletes had jobs outside of disc golf, combining training and work in their everyday lives. Due to the time-consuming commitment of a large data collection through 26 interviews, the focus on depth instead of breadth, and their elite competitive level, two participants were considered adequate to address the research question and illustrate their experiences.²³

2.4 | Data collection

Prior to starting data collection, appropriate ethical approval was obtained. Subsequently, participants were invited through email to a private online information meeting. After obtaining participant consent, interviews were scheduled around the selected competitions in collaboration with the athletes' calendar and preferences (e.g., 2 days before tournament to clear the night before competition).

The initial interview guide was developed through an inductive approach with open questions, to encourage the participants to talk freely. Questions were based on their past, present, and future experience of the competitions included in the study, asking (e.g., "How did you experience the competition? In what way are you preparing for the next tournament?"). As the study/season progressed, the interview guide was adjusted for temporality and context before each interview, without thematic difference. Copies of the interview guides are available from the corresponding author on request.

To support the development of a dynamic interview guide, observation also occurred and focused on the participants' experiences (e.g., performance, behavior, and reactions) to help understand the context of experiences they may share during interviews and to get a more holistic and in-depth view of the participants' immediate experiences.^{20,24} The observation was useful in supporting athletes if/when they struggled to describe events that happened because participants knew the interviewer had observed what they were attempting to discuss (e.g., "When I barely came out of bounds, you were there right?").

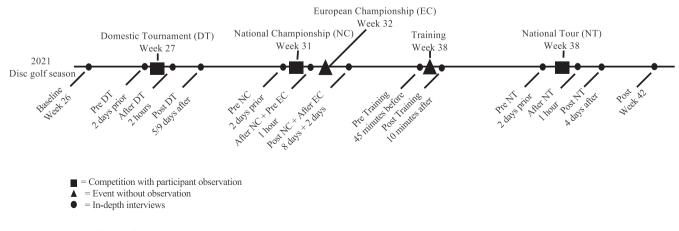
The data collection occurred over a 5-month period (from June to October), which included the whole 2021 season in disc golf (shortened due to the COVID-19 pandemic). Interviews were audio recorded, lasting between 23 and 76 min (M interview time = 38.97 min). The interviews occurred before (T1), during (T2), and after (T3) three competitions across the course of the season. Additionally, each of the three competitions were observed by the interviewer who recorded instant commentary of the participants' experience (e.g., performance, behavior, and reactions) to help remember the observed, resulting in approximately one and a half hours of recorded commentary. The choice of tournaments was predetermined to include a range in size and types of competition, with consideration to the participants' competition schedules. For abbreviations, timing and sequence of the competitions, and data collection, see Figure 1.

2.5 | Data analysis

All interviews and observation records were transcribed verbatim. In total, 151 pages of single-spaced transcripts for the semi-structured interviews and 22 pages of singlespaced transcripts pertaining to the observation records were generated. As LIPA prioritizes depth, is ideographic, and changes over time, the interviews and observation data were transcribed in chronological order.^{20,25} Each of the participants' datasets, including transcription of the interviews and the observations, were inserted into NVivo12 to help organize the data. Specifically, NVivo was valuable in facilitating the cross-comparison of codes and quotes identified across participants.

The data analysis sought to address the aims of the present study: to understand and describe the participants' lived experience and to interpret their experience in relation to a wider cultural, social, and theoretical context. The formal process of analysis began with the first author reading and re-reading each transcript in its entirety, to develop an overall sense of the case.²⁰ While reading, comments were made pertaining to the participants' situation (descriptive comments), interpretations of their experiences (linguistic comments), and prior experiences (conceptual comments).²⁰

While reading the transcripts, statements of what the participants said in the interviews were identified by the first author using codes, which explained the topic of the statements (e.g., confidence, nerves).²⁰ The codes were checked against all of the transcribed data to ensure the data was reflected by the identified codes. The most recurring codes from each event (before, during, and after a training/competitive event) were collected and mapped together with the other events in a chronological order for each participant, respectively.^{21,26} This constituted the lived experience storyline of each participant across the competitive season. Similarities between the codes of the participants were also noticed while reviewing the lived experience storyline of each participant. Finally, as the first author started to write out the participants' lived experience based on the codes, and while writing and discussing with the other authors, three overarching themes were developed to cover the generated codes: (i) the disc golf competition experience, (ii) the experience of performing during a disc golf competition, and (iii) the experience of evaluating a disc golf competition.^{4,20,27}



The participants' stories of their lived experience across the competitive season, involving multiple training and competitive events, were captured in the data analysis through constant interpretation of their preparation and expectations (before the events), performance (during the events), and evaluation (after the events).^{20,28} More specifically, the participants' lived experience storylines were created through an ideographic process-based method.²⁰ As such, the analysis process was inductive through being open to the participants' lived experiences.²⁸ At the same time, however, it was difficult for the authors, despite having an inductive mindset, to not be influenced by what had taken place in previous data collections. Indeed, a key challenge in the process of analyzing the longitudinal qualitative data was to create each lived experience storyline without assuming how each story would evolve, as well as maintaining the uniqueness of each storyline throughout the process of data collection and analysis.⁴

2.6 Methodological rigor

IPA is an established quality method to explore personal lived experience with the focus on the participants' meaning making.²⁰ In this study, we have elected to use the guide of Nizza, Farr and Smith (2021) containing four markers of high-quality IPA studies: (1) close analytic reading of participants' words, (2) attending to convergence and divergence, (3) developing a vigorous experiential and/ or existential account, and (4) constructing a compelling, unfolding narrative.

Through the analysis we had several rounds of reading each participant's interviews, first with focus on the specific participant before comparing themes, together with talks and discussions with critical friends.²⁷ This supported depth in interpretation and the ideographic focus where themes were created with quotes from both participants (first marker). There was never an intention to use the quotes to create two individual stories, but rather to show the ideographic nature of the experience through the participants. At the same time, there were differences and similarities between the participants that made it natural to compare and connect quotes (second marker). Through the data, we saw the hermeneutic circle where parts pointed to the whole (e.g., missed putts diminished confidence) and how it affected the next event.¹⁹

The depth in the data is shown through the level of meaning of the participants through the season. Due to the timing and number of interviews, the participants were able to reflect before, during, and after an event, to catch the hot cognition and the heightened emotional activity caused by the significance of the event, and giving them time to reflect on the sense-making of the experience.^{4,29}

Through their interpretation of the experience and our interpretation of their quotes, we found that the third and fourth level of meaning was present in this paper (third marker).⁴ These levels made the narrative compelling and depth filled with meaning. Also, the timing of the triangulation of the interviews and observation through the season in diverse settings supports a rich and cohesive storyline with momentum grounded in the participants' experiences (fourth marker).²¹

3 | RESULTS

The results are centered around the athletes' lived experiences. Three overarching themes, within which several interpretive themes sat, were generated to illustrate the diverse nature and depth of the athletes' lived experiences: the disc golf competition experience, the experience of performing during a disc golf competition, and the experience of evaluating a disc golf competition. David and Susan are pseudonyms given to the participants to protect anonymity.

3.1 | The disc golf competition experience

During a competition and across the season, both athletes experienced a shift in the perception of competition experience. How the athletes approached competitions seemed to influence how they appraised situations during and across competitions.

3.1.1 | Difference in training and competition

David's experience comprised a shift from a pleasant to an unpleasant feeling several times during the season and in different situations. At the start of the season, his experience was one in which he felt good about his game, although a bit uncertain about his putt. In the first tournament of the year, the observer thought he putted confidently, but his reality was one in which he was dreading each putt:

> I use a lot of mental strength and energy just to dread, like in the moment I had thrown my drive, [I think] 'ah, what distance [from the basket] am I at now'? (DT, T2)

His experience involved putting a lot of psychological energy for attentional focus on the putt, resulting in negative WILEY

thoughts regarding the drive because of the consequences for the subsequent putt. These negative thoughts remained throughout the season: "It has always been worries, heavy worries. [...] [I] must use a lot of energy on the doubt" (Post). Further, his experience seemed to fluctuate frequently from 'pleasant' to 'unpleasant' quickly during the round from the drive to the putt and between training and competition. He explained:

> The putting I perform in training is like, almost world-class. [...] I know I have put in an insanely amount of practice on my putting, so many hours, but I cannot make it show in competition. It really annoys me. (DT, T2)

He explained that he did not understand what he was doing wrong during competition when he was putting so well in training, and it was observed that he often analyzed the putt by replicating his putting motion without the disc as he attempted to try and identify why he missed. Later in the season, as he attempted to make sense of his experience, David suggested that it was the mental aspect of competing compared to training which was the difference:

> And, yes, it is like a proof that putting is so insanely much mentally. I have made those putts, all of those putts thousands, maybe millions of times, almost blindfolded. So, it is like, not about that, it is the mindset, thoughts, and confidence. (NC, T1)

The difference in mindset between training and competition was amplified depending on the perceived importance of the competition (his goal), as well as his and others' expectations for his performance: "I take big competitions [DT, NC, and NT] pretty seriously. [...] I must play as good as people expect of me. If I don't, it is embarrassing" (Baseline). For instance, not all tournaments were unpleasant for David. During the last round of NC and EC, he had no expectation of winning, felt no pressure, which, in turn, made his body more relaxed:

> Things just flowed, it was just really, really fun. But it is due to the more relaxed shoulders. [...] I only get relaxed shoulders if I know I cannot win [...] when my body is relaxed, I have a bit more control of how it performs the movements. (NC, T3)

Overall, across the season, it seemed that David's experience was variable, with changing feelings influenced by his thoughts, the context he was in, and his understanding of what was happening. David's experience was one comprised of pleasant feelings in situations where there was no pressure and he felt in control, such as training, on the drive, and in competitions with no expectations for success. In contrast, he felt uncomfortable putting when he had the possibility to win; hence, when he perceived pressure. Like David, Susan's perception of the competition experience shifted through the season.

3.1.2 | Difference and change in competition experience

When considering her competitive experience, Susan shared that before a competition she "always got nervous" (Baseline), and at the DT there was no exception:

> I was very nervous [laughing] to begin with [...]. I know what I am good for, and it creates a pressure on myself and my expectations, and then I become extra nervous. So, the start [of each round] was always equally painful, almost. Maybe today [last round] was a bit calmer from hole 1. (DT, T2)

However, her nerves faded during the round and across the event, showcasing the dynamic emotions experiences within competition. Her unease at the start of a round was observed, displayed through an underperformance. However, four holes in, she appeared to relax, moving to a more pleasant feeling. The observer speculated that this shift may have occurred because she got used to the situation, felt good about her game, and developed a comfortable lead over the other competitors and this appeared to align with the experience that she had.

As in the DT, Susan dominated in the national competitions as well, but this was a new experience for her, "That is quite new to me, to be able to do that [win with a good margin]" (NT, T3). Despite winning comfortably, it was apparent that her focus was on bettering her own personal score and this allowed her to feel more in control. Interestingly, however, Susan's experience shifted when the focus on her own score became insufficient after she gained experience of international competition during EC. The consequence of her success at national competition was that she suddenly did not find them exciting or challenging any more:

I do not know, the national tour suddenly became a bit like, is it allowed to say not as exciting, after coming back from an EC [...] now I feel that to be able to push myself further, I need more competition like I got in the EC, simple as that. That maybe it does not give me as much as an athlete to play NT. Like, I know I am supposed to play for myself, but I want to push myself further. And then I maybe need a bit enhanced competition, maybe. (NC, T3)

In describing this experience, Susan recognized that she was not used to the lack of competition at the national level, which resulted in her having to change her focus to maintain her motivation. However, maintaining motivation was particularly challenging because, in the last tournament of the season, she was not nervous, something that she would typically feel and interpreted to be beneficial:

> Like, when I am nervous, it is like a mixed feeling inside. But it was nothing, it was more neutral inside [...]. I think it is good to have a few nerves, actually. I think I enter my state of mind better with some nerves before the start [...] I used music to activate myself. (NT, T3)

To overcome a lack of nerves, it was observed that Susan was slapping her cheeks and listening to music during the round. Discussions with Susan highlighted that this was something she felt she needed to do to help her reach an appropriate/ desired activation level and was a new experience.

Overall, during the season, Susan's experience change as she transitioned from always being nervous in competition to feeling neutral. She learnt that she needed to feel challenged by other elite disc golf players to become a better player herself and help her to enter her optimal zone of activation.

3.2 | The experience of performing during a disc golf competition

The perception of the competitive experience seemed to be influenced by the two athletes' own performance goals, expectations, and the level of importance of the competition. Both Susan and David's experiences were underpinned by feelings of anxiety or nerves while playing but, where their experiences differed was with regards to how they interpreted their thoughts and feelings. David seemed to want to avoid this unpleasant feeling, while Susan embraced it and attempted to use it to her advantage. How the athletes appraised the feelings they noticed before, during, and after competition affected the experience of performing during and across competitions. Important attributes that participants suggested helped them to perform during a competition and thus positively influence their experience, was dealing with adversity, the ability to reset, and perceived self-confidence.

3.2.1 | Their competitive bubble

During the final round of the DT, David entered what he termed a "good bubble" (DT, T2). In this bubble, he performed well and collected several birdies giving him a good start to the round. "If I thought something, it would be this is going well, this is easy" (DT, T2). He did not think about the consequences of possibly missing his shots. It appeared that he had entered a flow state. After a throw, he was asked where he was aiming, but he could not remember. "I could barely remember that I had thrown" (DT, T2). At the same time, while being in the 'good bubble', the road back to reality was short and the bubble was fragile. Later in the round he missed his lines and went out of bounds (OB) twice, which brought a penalty to his score, and the 'bubble burst':

> I went long on the first drive, going barely OB. I thought 'fine, at least it was a good drive, bummer it went OB, but I am still in a good position'. [...] Then I hit a tree and I went OB again. I tried to hit a long putt, but I missed. [...] Then it just extinguished completely. [...] Then I started to think too much [...] [He thought] 'this is difficult'. (DT, T2)

He tried to remain positive, but after this incident, his focus was disrupted which impacted on his performance and competitive experience. He subsequently lost his good feeling and was unable to re-enter his 'good bubble'. Initially, during observation, his frustration was not apparent when his bubble burst, as he quickly had a good drive but when he missed the next throw, his frustration emerged providing a visual demonstration of the change in his experience.

Conversely, Susan talked about a "focus bubble" (post) in which distractions disappeared, and the focus was solely on the throw. During the last round in the EC, the pressure was high, and she had a couple of holes in a row where she made some mistakes that affected the score:

> Then I struggled to keep my head calm and just think one throw at a time. I actually did not manage to do that. But after that hole, I calmed down a bit, or you could say I calmed down. At least then I managed to think one throw at a time and not just on the things gone bad until now. Then I became a bit more loose again. (NC, T3)

After the mistakes, her experience changed as she felt tense, but she was able to regulate the unpleasant feeling, reset, and regain her focus on the next throw instead of focusing on prior situations, making her body feel more relaxed.

WILEY Susan did not get caught up in the past but looked forward, appearing to appraise this situation as a challenge. Observation in a different competition also showed her ability to deal with adversity; when she got an unlucky OB, she smiled and performed a good putt regardless of the penalty stroke providing a visual demonstration of the experience she was having. She used visualization, active breathing, and positive self-talk to remain focused: "Okay, I know this". "Sometimes I take an extra breath [illustrates deep breath]". "You visualize the throw [...] and pull the arm through to test" (DT, T2). The flexibility of mindset and being able to reset seemed to require her to believe in her abilities.

3.2.2 The competitive mindset

Both Susan and David highlighted confidence as a key factor for them to perform in competitions and subsequently enhance their experience of competing. Before the first tournament of the season, Susan explained the role of confidence to be ready to compete:

> That, summed up well what I call a competitive state of mind. You have confidence in every throw you perform, that you will make all of your putts, and that you have the confidence it takes [to perform well]. Because it is very much in your head, the execution of a throw. (DT, T1)

For her, the competitive state of mind comprised having confidence to execute every shot. With this confidence, it seemed that she sensed that she could reset after facing adversity and consequently appraised performance anxiety as helpful for her performance. Due to her training, she believed she had the skills necessary to perform, but her mentality was particularly important. After a tournament, she pointed out that she got her confidence from mastery. She felt that her body did what it had been trained to do, and that gave her confidence during the round:

> It was really fun [to master during the round], and then you feel more confident. When you feel your body is doing what it has been training for the entire time. It does not start to adjust to try and do something else. So, no, it was fun, really fun. (DT, T2)

Being in control over her body, which she referred to in the third person, gave her confidence. Through observation, it appeared that her confidence in herself rose and influenced her performance during DT. For example, after she performed a good putt from long range, she got her caddy to film the next putt to document it, and she made it again.

David also highlighted the importance of confidence, not just for the particular performance, but also for his experience during a round. In NC, he experienced a difference in feeling, but not in outcome, after playing two objectively equal rounds. He reflected on this after the tournament:

> I did not have full, full belief in what I was doing [in the first round], but in the [second] round I almost thought I went more [under par]. That is, I knew like 'ah come on, I have so much more to offer' because I had the belief. Then I am almost high on myself, in a way. Then it is like 'argh, why did I not go more under [par]'? But in the first round it was like, 'okay, I will take that [score]'. Like I thought I played worse. That is, the mind is saying 'oh well, it was lucky', that is the difference between those rounds really. (NC, T3)

The lack of confidence he felt during the first round could have resulted from the bad run of competitive performances he had experienced up to this point: "I can absolutely be better than them [his opponents]. That is the thoughts I need to find again" (NC, T1). Here, he indicated that he needed to find his confident mindset. However, it also highlights how the act of performing can be different subjectively, but objectively equal.

Additionally, in the second round, David had nothing to play for because he had already lost. Thus, it seemed that he had high confidence when feeling in control and pleasant, but low confidence when feeling pressured and unpleasant. Talking to him after the first round, he said he felt the round went really well, but he was surprised to hear how well it went. The observation recordings did not show his lack of belief in himself that round, commenting "one could see he played with confidence and played solidly" (NC). How David experienced performing and felt on the course, also affected how he valued himself, and the attributed meaning of disc golf.

The experience of evaluating a disc 3.3 golf competition

Disc golf is a central part in Susan's and David's lives and identities. How they experienced their performance during a disc golf competition appeared to affect their motivation, self-image, and well-being and thus their broader experiences of life. The existential meaning for Susan and David was showcased through them identifying themselves with disc golf. They highlighted that the sport was giving back to them.

3.3.1 | "It is a lifestyle I have chosen for myself"

In the post NT interview, Susan explained that her body had been at breaking point after playing tournaments three weekends in a row, together with the daily obligations and work, and her body had been pushed too far. Despite this, she still prioritized playing in the tournament, showcasing her ability to reset while meeting adversity and the value of competing: "It gives me joy. It is something I choose voluntary. What can I say? It is a lifestyle I have chosen for myself" (NT, T3). During the season, Susan talked about the social part of disc golf, highlighting the positive atmosphere during the rounds she played, as well as the social aspect of traveling to new places, playing new courses, and meeting new people. She highlighted that the community and meeting up with friends gave her joy and excitement. "It gives me a lot [to compete]. It is the package. Traveling a new place, preparing on a new course. [...] Meeting new people [...] and meet familiar people" (Post). Our observation also showed her being comfortable, confident, and enjoying herself. It was a way of life she had chosen, which she enjoyed, and which gave her life meaning. Her experience of life and her identify was shaped by disc golf, work is from 8 am to 4 pm, but disc golf is around the clock. Also, she was enjoying the excitement that the competition brings, almost making competition her "adrenalin addiction" (post). The competition excitement was present when the pressure was high and was therefore less present after the EC. David did not strive for this excitement.

3.3.2 | "I love playing disc golf, but not as much this year"

Disc golf has been part of David's life from early age and meeting his disc golf friends at a tournament was important to him and his life experience, "It is not often you see the frisbee people, and very many of them are my best friends" (DT, T1). While observing him during competition, you could see in his interactions with the other players that he enjoyed being there and loved joking around with his friends, and he had respect from the other players. It seemed like disc golf was a part of David's identity, making him more confident in himself:

> On the disc golf course [...] I feel much more confident in who I am on the disc golf course than I do normally. [...] I am generally pretty confident in what I do [at the disc golf course], and it gives, like, a feeling of confidence in general. (Baseline)

He indicated that he was not a very confident person, but his skills on the course bring value and confidence to him as a person. He followed-up later saying "it is absolutely the best I can do" (Baseline). Having his identity in the sport also resulted in him putting pressure on himself to perform, illustrated by him saying "I want to live up to my name" (Baseline) and "I want to be associated with the best" (NC, T3).

David felt that the meaning of the experience provided an existential status to live up to, both for the people watching and for himself. Through the season, this status had gone from exceeding his expectations and being one of the best disc golfers, to downgrading himself. In the last interview of the season, he emphasized the pressure he put on himself:

> I will always be critical regarding my own game, like, it is important for me to feel that I am successful in what I do. (Post)

He emphasized further in the post interview that it was not important for him to win, but it was important to feel that he was playing well. This feeling had not been around this season, not having felt in control of his putting resulted in unpleasant feelings (see citation in the first theme from the post interview). This had been difficult for David and had reduced his enjoyment:

> I love throwing frisbee, but I might not have loved it as much this year. But it is kind of like, I am not a very competitive person really [...] I do not enjoy being uncomfortable. (Post)

When observing David, it was surprising to hear that he did not identify as a competitive person, because we could see his desire to perform based on his body language and reactions on the course. After the interviews, it seems that David's desire was not to win, but to bring value and existential meaning to his identity.

4 | DISCUSSION

The purpose of the present study was to investigate how elite disc golf athletes perceive and interpret their subjective experiences of performing during various training and competitive events over the course of an elite disc golf season. In general, our findings provide an inside perspective of elite athletes' experiences of performing during training and competition as well as providing empirical evidence on how performance is experienced over time at the elite level in a fine motor skilled sport. The findings also revealed that both participants experienced ever-changing perceptions and interpretations of their competitive experiences. More specifically, it appeared that David interpreted the competition demands as a threat, influencing his confidence and ability to reset during a competitive event. Additionally, the setbacks in the season negatively influenced not only his confidence for the next competitive event but his personal life as well. Conversely, it appeared that Susan interpreted the competition demands more as a personal challenge, which was witnessed by her experience of keeping her head calm during multiple competitive events. This seemed to help her game through adversity and to reset during different competitive events, which seemed to have a positive influence on her overall

4.1 | Different levels of meaning

disc golf performance and experience.

From an IPA perspective, the third level in the typology of meaning is concerned with the meaning of major circumstances happening in a person's life.⁴ This is one of the reasons why elite sport and IPA fits well together. For instance, because elite sport requires athletes to invest a vast amount of time and effort in training and competition,¹ it is reasonable to argue that the analysis of data collected during a competitive event is mainly centered around experiential (significance) meaning, "Then I struggled to keep my head calm and just think one throw at a time. I actually did not manage to do that" (NC, T3). Indeed, during a competitive event, elite athletes are likely to be concerned with questions such as "what does it mean that I almost always have trouble sleeping the night before a competitive event?" or "what does it mean that I most likely become nervous during the final rounds of a competitive event?" or "what does it mean to me that I keep calm in stressful situations?".¹¹ For instance, in the present study, we noticed that the subjective experience of the participants was related to the typology of meaning in a meaningful manner. While Susan managed to switch from both adaptive and maladaptive situations and focus quickly on the next competitive event, David seemed to need more time to regain his focus and motivation to compete and, thus, let the various competitive events affect him in a more negative manner. Susan was also able to convert the competitive events into adaptive experience in a shorter timeframe and used these experiences in the next competitive event. David, on the other hand, seemed to bring the maladaptive experience from his last competitive event into the next one, making him stressed and demotivated for the upcoming event. Moreover, we witnessed that Susan got excited with the competition demands, while David felt threated. This finding supports the theory of optimal stress level to perform and reveals the difference with competitive stress appearing to facilitate performance for Susan and hinders it for David.³⁰ Both before, during, and after a competitive event, Susan was focused on how to prepare to perform, while David was preparing to avoid failure. Therefore, it seems reasonable to suggest that the level of meaning is related to the personal experience of performing in elite disc golf competitions.

The added value of the LIPA approach, however, is that researchers are able to connect the experiential significance of major things happening in elite athletes' lives over time.¹⁹ Thus, in the present study, we witnessed that both athletes were reporting personal experiences at the highest level in the typology.⁴ David was concerned with questions such as "well, what do these performances mean for my identity as an elite disc golf athlete?" while Susan, on the other hand, was concerned with questions such as "does my elite disc golf life have a new meaning now after the successes this season?". In these cases, we witnessed the athletes' attempts to make sense of the meaning of performing in elite disc golf competitions over time: witnessing, as in Susan's extract, her experience of dealing with adversity, dominating the national competitions, and making elite disc golf to a lifestyle for herself; witnessing, as in David's extract, his experience of trying to live up to his name in disc golf, and his heavy worries about dealing with pressure and performing in line with other people's expectations. What comes out of this longitudinal witnessing is the recognition of the complexity of performing in elite sport over time. Thus, although two elite sport performances are objectively similar, they are most likely experienced in two unique ways.

4.2 | Limitations and future directions

In a LIPA study, the researcher is the instrument in the data collection and analysis.¹⁹ In hindsight, we would have liked to be more systematic with our reflection and suggest future researchers engage in writing a reflexive journal during the different stages of analysis.³¹ Furthermore, the value of highly representative smaller samples in elite sport may not be appreciated in academia due to the low number of participants. However, to be rigorous and true to the research question, we had three measurement points at each of the three competitive events together with observation to be in-depth and understand the ideographic experience of performing in training and competition as they unfold over time.²³ We recommend future studies to remain focused on gaining a within-participant, longitudinal, and embedded perspective of the athletes, especially at the elite level where there is high pressure to perform and use our design to investigate other athletes-disc golf and otherwise-with different cultural backgrounds.

The findings showed a difference between the participants in the perception and interpretation of their competitive experience, and it is difficult not to acknowledge that some of the difference might be due to potential gender differences. While the purpose of the study was not to compare gender differences, future studies are encouraged to examine whether there are any gender differences when it comes to experiencing competition demands in other types of elite sport and to investigate the need of individualized and perhaps gender-based support.

5 | CONCLUSION

The present study has elaborated on the complexities of two athletes' subjective experiences of performing during an elite disc golf competitive season. Through collecting data in the days before, immediately prior to, and in the time after several competitive events, our findings revealed that numerous factors, including past competitive events, appraisals of competition demand, and performance satisfaction, influenced the athletes' personal experience of performing during a disc golf competitive event. The findings revealed an inter- as well as intra-variation in appraisal and interpretation of athletes' experiences of competition demands, which shifted in and across a competition, as well as over the competitive season. This individual variation, in combination with the different levels of meaning a sport can have for elite athletes both on and off the course, shows the importance of honoring the athletes' unique experiences of a competitive event, thereby facilitating the experience of performing in elite sports.

5.1 | Perspectives

To perform in sport is of great importance among elite athletes and is associated with a high level of status in the mass media and the general population.¹ To our best knowledge, there are relatively few publications which have tried to understand what is going on in the mind of elite athletes in the days before a competitive event, immediately prior to, and during, performance, and in the time after a competitive event. Hence, the findings in this study highlight the importance of elite athletes' experiences of competitive events, which facilitate a lot of cognitive and emotional activity, where the level of meaning may be a disclosing factor of performance. Furthermore, knowing that individual sports (i.e., tennis, golf, disc golf) have a substantial mental component, it is crucial to be aware that various performances can be objectively equal, but be experienced subjectively different.^{6,12} Thus, the findings

in this study might contribute to increased interest among sport science researchers to gain a better understanding of the subjective experience of elite athletes during training and competition. Future research should therefore investigate whether there are longitudinal associations between elite athletes' competitive experience, their level of meaning, and their performance. By doing so, researchers might enhance knowledge regarding how to cultivate an individualized approach to mental training in elite sport.

AUTHOR CONTRIBUTIONS

Formal Runar Furre: Conceptualization, analysis, Writing-Original Investigation, Methodology, Draft. Visualization. Bjørn Tore Johansen (bjorn.t.johansen@ Supervision, Writing-Review & Editing, uia.no): Methodology, and Conceptualization. Camilla Jane Knight (c.j.knight@swansea.ac.uk): Writing—Review & Editing. Amber Dawn Mosewich (amber.mosewich@ualberta.ca): Writing-Review & Editing. Bård Erlend Solstad (bard.e.solstad@uia.no): Supervision, Writing-Review & Editing, Methodology, Conceptualization, Visualization.

ACKNOWLEDGEMENTS

The authors would like to warmly thank the athletes involved in this study and the Norwegian Federation of American Sports for their valuable contribution. This research study did not receive any spesific grant from funding agencies in the public, commertial, or not-forprofit sectors.

CONFLICT OF INTEREST STATEMENT

No potential conflict of interest was reported by the authors.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Runar Furre https://orcid.org/0009-0005-4095-9456 *B. T. Johansen* https://orcid.org/0000-0003-3621-7933 *C. J. Knight* https://orcid.org/0000-0001-5806-6887 *A. D. Mosewich* https://orcid.org/0000-0001-5870-4738 *B. E. Solstad* https://orcid.org/0000-0002-6695-8321

REFERENCES

- Collins D. Introduction: performing on the day. In: Collins D, Button A, Richards H, eds. *Performance Psychology: A Practitioner's Guide*. Churchill Livingstone; 2011:279-280.
- Button C, MacMahon C, Masters R. "Keeping it together": motor control under pressure. In: Collins D, Abbott A, eds. *Richards H, Eds. A Practitioner's Guide*. Elsevier; 2011:177-190.

12 of 12 | WIL

- Lazarus RS. How emotions influence performance in competitive sports. Sport Psychologist. 2000;14(3):229-252. doi:10.1123/ tsp.14.3.229
- 4. Smith JA. Participants and researchers searching for meaning: conceptual developments for interpretative phenomenological analysis. *Qual Res Psychol.* 2019;16(2):166-181. doi:10.1080/147 80887.2018.1540648
- Wilson MR, Richards H. Putting it together: skills for pressure performance. In: Collins D, Button A, Richards H, eds. *Performance Psychology: A Practitioner's Guide*. Churchill Livingstone; 2011:337-360.
- Nicholls AR, Taylor NJ, Carroll S, Perry JL. The development of a new sport-specific classification of coping and a metaanalysis of the relationship between different coping strategies and moderators on sporting outcomes. *Front Psychol.* 2016;7:7. doi:10.3389/fpsyg.2016.01674
- Gaudreau P, Nicholls A, Levy AR. The ups and downs of coping and sport achievement: an episodic process analysis of withinperson associations. *J Sport Exerc Psychol.* 2010;32(3):298-311. doi:10.1123/jsep.32.3.298
- 8. Nicholls AR, Polman RCJ, Levy AR. A path analysis of stress appraisals, emotions, coping, and performance satisfaction among athletes. *Psychol Sport Exerc*. 2012;13(3):263-270. doi:10.1016/j.psychsport.2011.12.003
- Woods A. Subjective adjustments to objective performance measures: the influence of prior performance. *Accounting, Organizations and Society.* 2012;37(6):403-425. doi:10.1016/j. aos.2012.06.001
- Arnold R, Fletcher D, Daniels K. Organisational stressors, coping, and outcomes in competitive sport. *J Sports Sci.* 2017;35(7):694-703. doi:10.1080/02640414.2016.1184299
- Nicholls AR, Polman RCJ. Coping in sport: a systematic review. J Sports Sci. 2007;25(1):11-31. doi:10.1080/02640410600630654
- 12. Davies T, Collins D, Cruickshank A. This is what we do with the rest of the day! Exploring the macro and Meso levels of elite golf performance. *Sport Psychologist*. 2017;31(2):117-128. doi:10.1123/tsp.2016-0049
- Johles L, Gustafsson H, Jansson-Fröjmark M, Classon C, Hasselqvist J, Lundgren T. Psychological flexibility among competitive athletes: a psychometric investigation of a new scale. *Front Sports Act Living*. 2020;2:110. doi:10.3389/ fspor.2020.00110
- Bell AF, Knight CJ, Lovett VE, Shearer C. Understanding elite youth athletes' knowledge and perceptions of sport psychology. *J Appl Sport Psychol.* 2022;34(1):155-177. doi:10.1080/10413200 .2020.1719556
- Allen-Collinson J. Sporting embodiment: sports studies and the (continuing) promise of phenomenology. *Qualitative Research in Sport and Exercise*. 2009;1(3):279-296. doi:10.1080/19398440903192340
- Cuthbertson LM, Robb YA, Blair S. Theory and application of research principles and philosophical underpinning for a study utilising interpretative phenomenological analysis. *Radiography*. 2020;26(2):e94-e102. doi:10.1016/j. radi.2019.11.092
- Calman L, Brunton L, Molassiotis A. Developing longitudinal qualitative designs: lessons learned and recommendations for health services research. *BMC Med Res Methodol*. 2013;13(1):14. doi:10.1186/1471-2288-13-14

- Carduff E, Murray SA, Kendall M. Methodological developments in qualitative longitudinal research: the advantages and challenges of regular telephone contact with participants in a qualitative longitudinal interview study. *BMC Res Notes*. 2015;8(1):142. doi:10.1186/s13104-015-1107-y
- Farr J, Nizza IE. Longitudinal interpretative phenomenological analysis (LIPA): a review of studies and methodological considerations. *Qual Res Psychol.* 2019;16(2):199-217. doi:10.1080/147 80887.2018.1540677
- 20. Smith JA, Flowers P, Larkin M. *Interpretative Phenomenological Analysis: Theory*. Method and Research; 2009.
- 21. Nizza IE, Farr J, Smith JA. Achieving excellence in interpretative phenomenological analysis (IPA): four markers of high quality. *Qual Res Psychol*. 2021;18(3):369-386. doi:10.1080/1478 0887.2020.1854404
- 22. Etikan I. Comparison of convenience sampling and purposive sampling. *AJTAS*. 2016;5(1):1. doi:10.11648/j.ajtas.20160501.11
- Bartholomew TT, Joy EE, Kang E, Brown J. A choir or cacophony? Sample sizes and quality of conveying participants' voices in phenomenological research. *Methodoll Innov.* 2021;14(2):205979912110400. doi:10.1177/20597991211040063
- 24. Polit DF, Beck CT. Essentials of Nursing Research: Appraising Evidence for Nursing Practice. Ninth edition; 2018.
- Larkin M, Watts S, Clifton E. Giving voice and making sense in interpretative phenomenological analysis. *Qual Res Psychol*. 2006;3(2):102-120. doi:10.1191/1478088706qp0620a
- 26. Smith JA. Interpretative phenomenological analysis in sport and exercise. Getting at experience. In: Smith B, Sparkes AC, eds. *Routledge Handbook of Qualitative Research in Sport and Exercise*. Routledge international handbooks, Taylor & Francis; 2019:219-229.
- 27. Smith B, McGannon KR. Developing rigor in qualitative research: problems and opportunities within sport and exercise psychology. *Int Rev Sport Exerc Psychol.* 2018;11(1):101-121. doi :10.1080/1750984X.2017.1317357
- Rajasinghe D. Interpretative phenomenological analysis (IPA) as a coaching research methodology. *Coaching: An International Journal of Theory, Research and Practice.* 2020;13(2):176-190. do i:10.1080/17521882.2019.1694554
- 29. Stenling A, Ivarsson A, Lindwall M. The only constant is change: analysing and understanding change in sport and exercise psychology research. *Int Rev Sport Exerc Psychol.* 2017;10(1):230-251. doi:10.1080/1750984X.2016.1216150
- Hanin YL. Emotions in sport: current issues and perspectives. In: Tenenbaum G, Eklund RC, eds. *Handbook of Sport Psychology*. 1st ed. Wiley; 2007:31-58. doi:10.1002/9781118270011.ch2
- Goldspink S, Engward H. Booming clangs and whispering ghosts: attending to the reflexive echoes in IPA research. *Qual Res Psychol.* 2019;16(2):291-304. doi:10.1080/14780887.2018.1543111

How to cite this article: Furre R, Johansen BT, Knight CJ, Mosewich AD, Solstad BE. A longitudinal interpretative phenomenological analysis study of athletes' lived experiences in elite disc golf competitions. *Scand J Med Sci Sports*. 2024;34:e14556. doi:<u>10.1111/sms.14556</u>