Researching Elite Athletes’ Pure Experience and Consciousness

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This study sheds light on researchers’ understanding of athletes’ pure experience and consciousness with the aim of advancing the research field of pure experience and consciousness to make sport coaching more efficient in enabling high performance. To discuss questions regarding researchers’ understanding of athletes’ pure experience and consciousness, this study proposes a philosophical idea to interpret athletes’ pure experience and consciousness in performance using an ideographic approach with interviews based on phenomenology. In this approach, this research focuses on one elite high jumper who is a winner of the Japan National Championships to explore his pure experience and consciousness that have enabled his high performance.

Keywords: phenomenological psychology; qualitative research; high jump; elite athletes’ performance philosophy; idiographic approach

1. Introduction

To date, several previous studies concerning practical coaching emphasized the importance of interpreting athletes’ pure experience and consciousness\(^1\) in performance (Meinel, 1960/1981) because coaches’ advice should take into account each athlete’s individual experience and consciousness. Further, coaches are interested in understanding athletes’ experience and consciousness to help them achieve high performance. Therefore, research on elite athletes’ pure experience and consciousness in performance is relevant for coaches.

Descartes attempted to interpret the first person experience and consciousness in phenomena using the framework of subjectivity in “Cogito” and objectivity as realism based on skepticism.\(^2\) However, in the case of sport coaching, this is impossible because it requires that an athlete’s experience and consciousness be directly understood by coaches and researchers (Matsuyama and Tsuchiya, 2017). Instead, Husserl’s phenomenology offers a reasonable framework of “transcendental subjectivity” (Husserl, 1973/2012) focusing on subjective belief and “transcendence” (Husserl, 1950/2001), which does not postulate the existence of the world as objective. Using this framework, it is possible to interpret an elite athlete’s pure experience and consciousness as subjective belief. Therefore, this is the key framework used in this study.

Recently, several researchers investigated elite athletes’ experience and consciousness from the viewpoint of performance analysis. Their approaches involved two processes: (1) morphologically dividing performance into several phases and (2) analyzing athletes’ experience and consciousness during each phase using interviews or descriptions. This study, on the other hand, asks the athlete directly about his pure experience and consciousness during performance. This is because the previous approaches postulated several phases of experience and consciousness in performance before asking the athlete himself. If researchers intend to focus on an elite athlete’s pure experience and consciousness in performance, they should employ a new approach that does not presuppose the viewpoint of performance analysis (Matsuyama and Tsuchiya, 2017). This approach, however, has yet to be clarified. This study proposes a philosophical solution using an idiographic approach based on a phenomenological framework.

2. Do elite athletes have experience and consciousness in performance?

First, this study explores whether elite athletes
have experience and consciousness in performance, focusing on two contrasting opinions: (1) elite athletes carry out their performance automatically or unconsciously and (2) elite athletes carry out their performance with conceptual and thematic consciousness.

Regarding the first opinion, Dreyfus (2002) focused on the relationship motor learning and athletes’ experience and consciousness and pointed out that novices need to gain awareness of how to move their bodies to acquire new skills. On the other hand, elite athletes carry out their performance automatically, intuitively, and unconsciously. This means elite athletes have no experience or consciousness in performance. Dreyfus interpreted these phenomena from neuroscience:

As the brain of the performer acquires the ability to discriminate among a variety of situations, each entered into with concern and involvement, plans are intuitively evoked and certain aspects stand out as important without the learner standing back and choosing those plans or deciding to adopt that perspective. (Dreyfus, 2002)

This opinion is supported by experiments using functional magnetic resonance imaging (fMRI). For example, Rosset et al. (2003) and Milton et al. (2007) compared brain blood flow volume between novice and elite athletes using fMRI. Elite athletes’ brain blood flow volume was less than that of novices. This phenomenon is connected to unconscious performance in elite athletes. Dreyfus’s opinion is also supported by psychological concepts like “being in the zone” and “flow” (Csikszentmihalyi and Jackson, 1999).

However, do elite athletes indeed perform in an unconsciousness manner? The latter pointed out two questions: is there a direct relationship between neurological phenomena of brain blood flow volume and philosophical phenomena of qualitative consciousness? Is it possible to interpret qualitative consciousness through neuroscience with fMRI? Jeannerod and Frak (1999) answer that since we cannot directly interpret qualitative consciousness from brain blood flow volume, there is a logical gap between brain blood flow volume and qualitative consciousness. To fill this gap, neuroscientists should develop a new theory to directly connect qualitative consciousness to brain blood flow volume. Brich (2010) wrote, “If neurosciences want to say something about the mind of the athlete, they’ll need a base neuroscientific theory of mind. If not, it will remain just neuronal talk.” Such a theory, however, has yet to be published. Therefore, even if there are differences in the phenomena of blood flow volume in the performances of novice and elite athletes, it is impossible to directly connect these phenomena to the notion of elite athletes’ performance as automatic performance.

Furthermore, in the second opinion, Breivik (2013) discussed the experience of elite athletes’ consciousness in performance. In closed sports like high jumping and gymnastics, elite athletes tend to rehearse a few key points before their performance and then perform their task while monitoring these key points. Regarding the phenomenon of mental rehearsal, “one can observe the athlete rehearsing mentally with small bodily movement before the jump to prepare and take in the necessary cues” (Breivik, 2013). Therefore, the Breivik pointed out that since elite athletes are conscious of a few key points in their performance, the performance is not entirely automatic and unconscious.

This study advocates the second opinion and focuses on an elite athlete’s pure experience and consciousness in performance using an idiographic approach with interviews based on phenomenology.

3. Method

This study focuses on an elite high jumper who is a winner of the Japan National Championships, exploring his pure experience and consciousness in performance through an idiographic approach based on phenomenology. The research is carried out in three steps: (1) phenomenological reduction against natural attitude, (2) analyzing descriptions obtained through the idiographic approach, and (3) searching for essences using hermeneutic phenomenology.

3.1. Phenomenological reduction

Phenomenological reduction in Husserl’s phenomenology requires suspending judgment against natural attitudes (in German, natürliche Einstellung) about the world’s existence. This concept is called “epoché” (Husserl, 1913/1979). It requires putting the framework of subjectivity and objectivity into a bracket and then reducing the first person
experience and consciousness in the objective world into pure experience and consciousness as subjective belief against the phenomenon in the framework of “transcendental subjectivity” (Husserl, 1973/2012) and “transcendence” (Husserl, 1950/2001). Therefore, this reduction does not postulate objective knowledge and existence in an objective world. On the base of this reduced framework, deals only with first person pure experience and consciousness in a phenomenon.

Based on the reduction described above, this study sets aside judgments about objective knowledge and existence like the concept of phases in performance analysis. Before the interview, the author explained this to the elite high jumper, saying,*3 “This interview asks about your personal thinking regarding jump performance. Please answer based on your performance experience.”*4

3.2. Description through the idiographic approach

The idiographic approach is a qualitative research method that focuses on the first person experience as described in an interview or questionnaire with free descriptions.*5 Researchers pose semi-structured or unstructured questions. Further, interview texts are discussed using analytic induction or a “quasi-judicial method” (Bromley, 1986). The former is used for three participants or more. The experiential phenomenon is discussed through inductive inference based on shared opinions (Giorgi, 2008). On the other hand, the latter approach focuses in-depth on each individual’s belief and explores the individual’s life and world. It is also possible to inductively discuss the general or essence of the individual’s lived experience (Halling, 2008).

Since the idiographic approach provides a strong theory to interpret each athlete’s individuality, the study adopts this method. Concretely, the author prepared three semi-structured questions for the interview and interprets the interview responses from a quasi-judicial perspective.

3.3. Searching for essences through hermeneutic phenomenology

In phenomenological research dealing with an athlete’s subjectivity as other, it is inevitable that the researcher’s subjectivity is involved in the athlete’s description. This enables the researcher to access meaning in the subjectivity of the other, in this case, the athlete. In this process, hermeneutic phenomenology deals with description in relation to the researcher’s previous understandings, past knowledge, and assumptions, to explore description from the perspectives of social and individual viewpoints (Finlay, 2008; Halling et al., 2006). The researcher needs to further explore social meaning in the intersubjective relationship between researchers and athletes. In this context, Gadamer (1975) noted that “we must remain open to the meaning of the other person or text. But this openness always includes our situating the other meaning in relation to the whole of our own meanings or ourselves in relation to it.” Researchers, then, emphatically encounter a description of a phenomenon and shift back and forth between the researcher’s subjectivity and the athlete’s description. Gadamer (1975) pointed out that this process involves neither “neutrality” with respect to content nor the extinction of one’s own fore-meanings and prejudices. The important thing is to be aware of one’s own bias, so that the text can present itself in all its otherness and thus assert its own truth against one’s own fore-meanings.

Therefore, this study interprets the participant’s interview responses in relation to the researcher’s subjectivity and then interprets the athlete’s descriptions.

3.4. Environmental setting

The author held a personal interview with the participant at the high jump pit after a jump training session on November 23, 2016. The interview was held immediately after the training session so that the athlete could easily reflect on his experience and consciousness. Further, athletes may not always be able to verbalize their experience and consciousness during performance. In this case, expression with body gesture is one of the tools to support their verbalization (Van Manen, 1990). At the high jump pit, it may be more practical for high jumpers to express their experience and consciousness using gesture. In this environmental setting, the researcher made sufficient preparation to carry out the interview about the participant’s pure experience and consciousness in performance.
4. Interview questions and answers

4.1. Exploring the athlete’s pure experience and consciousness

This study explores not only the incident of a performance in a competition but also the participant’s mental rehearsal before the jump performance, awareness in training sessions, and previous competition. This is because awareness in performance is motivated by mental rehearsal that focuses on a few key points (Breivik, 2013). Further, these key points as overt intentionality are potentially motivated by experiential meaning and value as potential intentionality through multiphase experience including training sessions and previous competitions (Husserl, 1913/1979). Therefore, this study explores three questions regarding mental rehearsal before jump performance, awareness in performance, and the difference between training and competition.

The first interview question asked about the participant’s mental rehearsal before his jump performance and his awareness during performance. He answered as follows:

Answer 1: “Most of the time, I strongly focus on preventing my speed from increasing too much and on the timing of my arm and leg movements. Next, I only focus on my jump performance.”

When asked why he focuses on these key points to interpret experiential meaning and value, he said,

Answer 2: “I believe that I can absolutely perform a take-off if I can keep my comfortable power position. Though I focus on the key points mentioned as much as possible, I often cannot hold onto them because my thoughts are disturbed due to the pressure. So I try to make an adjustment (at competitions). After all, I try to keep my mind clear in competitions.”

Next, the participant was asked about his experience and consciousness of the take-off itself during mental rehearsal. He said,

Answer 3: “I am not aware at all because I can absolutely accomplish a take-off if I can correctly run the first three steps of the run-up. If I accomplish a good run-up, I can also accomplish a good take-off. But if the run-up collapses, it is impossible to perform well on the take-off no matter how hard I try.”

He explained this importance using the following example.

Answer 4: “I often hear coaches say, ‘Raise the lead leg (during take-off),’ but I believe there is no chance during competition. If jumpers want to raise their lead leg, they should perform a run-up with enough time to raise the lead leg. So we cannot simply rise the lead leg during take-off.”

When asked about the difference between competition and training, he answered with the following.

Answer 5: “In training, I always close up part. So I do not practice the whole jump very much, mainly a five-step run-up. [Regarding my focus in training], I am usually affected by my last competition performance and believe that if I perform this part better, my whole performance might improve. Therefore, I focus on such feelings and try to make achieve good performance in my training session. But even if there is a problem at take-off, my focus is always on the run-up. I only steadily perform the run-up in the short run-up. Not the whole jump but the steady performance of run-ups is important to me during training.”

On the basis of these answers, this paper discusses the participant’s pure experience and consciousness in jump performance.

5. Discussion of the athlete’s pure experience and consciousness

The participant pointed out two key points of focus during his mental rehearsal before a run-up: (1) “preventing speed from increasing too much” and (2) “timing of arm and leg movements.” He also described, “I only focus on my jump performance.” Therefore, he focuses on these two key points, not only in his mental rehearsal, but also during the jump performance. In addition, the participant was asked why he focuses on these key points to provide a lens for the researcher to interpret experiential meaning and value. The participant pointed out that optimal speed in the beginning of the run-up and maintaining a comfortable power position ensure a good take-off. In other words, a good run-up ensures a good take-off, which in turn ensures a good jump performance. It seems that the participant interprets jump performance from the relationship of the run-up as causation and the take-off as a result. This is why he chooses to focus on two key points of the run-up to achieve a good take-off and, ultimately, a strong jump performance.
However, is he aware of other factors in his mental rehearsal and jump performance? This study further investigates the experience and consciousness of take-off itself because the participant described the importance of two key points in accomplishing a good take-off. He indicated (Answer 3) was that he considers the take-off phenomenon to be the result of the run-up. Therefore, in his mental rehearsal, he focuses on two key points in the run-up and concentrates on these points during his performance.

Furthermore, this study explores the athlete’s pure experience and consciousness in the jump training session. In a jump training session, the run-up steps are decreased into short steps to allow the athletes to focus on part of the jump performance. In addition, the participant mentioned his key points of concern in the training session are shaped by his feelings regarding the last competition. Also, even if he focuses on the take-off in the training session, he does not focus on the take-off itself in his mental rehearsal and jump performance. This is because he hopes to deal with the issues of take-off during the run-up as causation. Therefore, he integrates his feelings into his focus on the key points of the run-up.

6. Suggestions for high jump coaches

Based on the participant’s pure experience and consciousness, this study discusses practical suggestions for making high jump coaching more efficient. Since his experience is just one example, the research does not reveal shared experience or consciousness among elite high jumpers. However, the participant’s individual perspective is still of significance to coaches as the viewpoint of an elite athlete. This is because his pure experience and consciousness lead to his high performance and may therefore be valuable to other athletes and coaches who would like to achieve high performance. For this reason, this study discusses suggestions for practical coaching based on his perspective.

Firstly, coaches should emphasize, not on the take-off as a result, but the run-up as a causation. Coaches often focus on the take-off itself because the role of the take-off is to convert the horizontal velocity of the run-up into the vertical velocity for the jump, as indicated by previous studies of sport biomechanics. However, the participant in this study emphasized the importance of run-up from practical experience and consciousness. Therefore, coaches should evaluate jump performance by highlighting the contents of the run-up and consider giving advice for the run-up to solve issues in jump performance. In addition, they should summarize their advice in two or three key points because over-focusing can lead to a lack of concentration on the necessary elements (Breivik, 2013). With these practical suggestions, this study contributes to making high jump coaching more efficient.

7. Discussion of the phenomenological approach

7.1. How to study the experience and consciousness of athletes in team sports

This study focuses on one elite high jumper with closed skill in an individual sport. On the other hand, athletes with open skill in team sports like football have different tasks to perform. Is it possible to interpret their performance experience and consciousness using the approach of this study? Athletes who play a team sport have to intuitively judge the game situation and move into action accordingly (Casanova et al., 2009; Baker et al., 2014). These abilities and processes are called decision-making skills and processes (Nash and Collins, 2006). Several previous studies pointed out that watching and anticipating the game situation is the base of intuitive judgments and behaviors (Zwierko, 2006; Pruna and Bahdur, 2016). For instance, if athletes do not watch the position of their opponents and teammates and anticipate their running patterns, they cannot judge the pass course appropriately or carry it out in the game. In this situation, athletes should “shift their focus from what is nearby, to what is at medium distance to the entire field” (Breivik, 2013).

Furthermore, what athletes watch and focus on is shaped by their previous experience, including previous games and training sessions. Therefore, researchers studying athletes with open skill in team sports can use this study’s approach to interpret the athletes’ pure experience and consciousness, highlighting what they are aware of in the game situation. In addition, since the athletes’ awareness is shaped by their previous experiences, it is important to investigate not only awareness in the
game but also awareness in training sessions and previous games. In this way, researchers can focus on elite athletes in team sports and understand their experience and consciousness in performance using the approach described here.

7.2. How to discuss the general structure of athletes' pure experience and consciousness

This study focused on one elite high jumper and interprets his pure experience and consciousness in performance. Ultimately, however, it is desirable to look for a general structure based on several elite athletes' pure experience and consciousness. To identify this general structure, researchers should consider the phenomenological approach.

In the phenomenological approach, even if researchers focus on the experience and consciousness of several elite athletes, it is impossible to clarify the general existence of pure experience and consciousness itself in the objective world. This is because such an action would require the researcher to generalize each subjective belief into objective truth. Then, how should researchers understand athletes' pure experience and consciousness in performance? In Husserl's phenomenology, the general existence of experience and consciousness is interpreted as “transcendence” (Husserl, 1952/2001), which means that it is impossible to understand its existence in the world by Descartes' skepticism. For instance, even if researchers focus on several elite jumpers in a country, the shared subjective beliefs may differ in another country. The same variation may be found between individual athletes. Similarly, the phenomena of cultures and religions may be shared within a country. This means that there is no absolute correct judgment. Therefore, based on the concept of “transcendence,” Husserl's phenomenology allows one to understand, not objective existence, but shared subjective belief in a limited group.

8. Conclusions

This study focused on an elite high jumper's pure experience and consciousness in performance using an idiographic approach based on phenomenology. The approach consisted of three steps: (1) phenomenological reduction, which requires suspending judgment against natural attitudes (in German, "natürliche Einstellung") about the world's existence and not postulating the existence of the objective world, (2) obtaining descriptions through the idiographic approach, and (3) discussion based on hermeneutic phenomenology. Based on this approach, this study offered philosophical ideas to explore pure experience and consciousness in elite athletes' performance.

It is pointed out that researchers needed to deal with athletes' pure experience and consciousness in performance in relation to elements such as mental rehearsal and the experiences of training and previous competitions. This is because athletes’ awareness in performance is motivated through mental rehearsal before performance and feelings experienced during training and previous competitions.

Furthermore, this study pointed out that it is possible to focus on several elite athletes in individual and team sports and interpret their pure experience and consciousness in performance. However, even if researchers focus on several elite athletes and discuss their experience and consciousness, it is impossible to clarify the general existence of pure experience and consciousness itself in the objective world. This is because phenomenology focuses not the first person's subjectivity against the objective world but on the first person's subjective belief against “transcendence” (Husserl, 1952/2001). Therefore, researchers using this approach can describe, not objective existence, but shared subjective belief in a limited group. Overall, this study sheds light on researchers' understanding of athletes' pure experience and consciousness with the aim of advancing the research field of pure experience and consciousness to make sport coaching more efficient in enabling high performance.

Note
*1 This study uses the term “pure” as “experience and consciousness in subjective belief” based on reduced framework with “transcendental subjectivity” (Husserl, 1973/2012) and “transcendence” (Husserl, 1950/2001). Further “experience” means “inner-experience in the individual incident with physical activity.” “Consciousness” means “the individual focus and awareness for high performance.”
*2 In this framework, the first person experience and consciousness is discussed through whether a person can directly understand objectivity.
*3 If coaches intend to interpret athlete’s pure experience and consciousness from phenomenological perspective, it is also important to suspend coaches and athlete general knowl-
edge like phase structure of performance.

*4 The original explanation, questions and answers of the survey are written in Japanese. They have been translated by the author into English.

*5 The human science approach can be divided into “nomothetic” and “idiographic” concepts (windelband, 2001/1907), with the former focusing on the experiiential phenomenon and examining general factors (das Allgemeine), and the latter focusing on the experiiential phenomenon as an incident (Ereignis) to explore the individual factors. Several recent studies have also interpreted the human science approach using windelband’s ideas (Schwandt, 2007; Ietaka, 2016).

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