

The impact of training environment on Tokyo Olympic athletes' wellbeing: a qualitative multiple case study

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This study explores the influence that the training environments have on the wellbeing of Tokyo Olympic athletes. The staff/athlete relationships and the Olympic Organizations can influence the sport performance and the athletes' wellbeing. A qualitative multiple case study was conducted on an anonymous sample of six Olympic level female athletes through the web software Chatplat. Reflexive thematic analysis was employed to analyze the data. Results were categorized into the following three general dimensions: training environments, relationships' influence on well-being, and organizational environments. The results are presented to demonstrate the negative and positive factors that affect the performance and the psychological well-being of the athletes. The current study offers an original and significant contribution to the sport psychological literature by providing a unique methodology in addition to real time insight into the dynamic nature of well-being in Olympic athletes. Limitations and recommendations of the study are discussed for future research.

KEY WORDS: Olympic, female, athletes, training environment, wellbeing.

Studies on mental health and psychological wellbeing of elite-level athletes has grown rapidly in recent years (Rice et al., 2016; Baron et al., 2013). Galderisi, Heinz, Kastrup, Beezhold, & Sartorius, (2015), describes mental health as a 'Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium' (p.231-232). However, the severe mental and physical demands imposed on elite athletes (i.e., those competent of participating at

the Olympic/Paralympic level or professionally, see Swann, Moran, & Piggott, 2015) are a distinctive element of their career, and may make them more vulnerable to mental health issues, risky behaviour (Hughes & Leavey, 2012) and so could lead to disrupt their state of internal equilibrium.

Mental health indicators and disorders are common in elite athletes, affecting from 5 to 35 % on a yearly basis (Maia et al., 2019). The repercussions of injury, overtraining, and burnout; intense public and media scrutiny; and handling constant competitive demands to succeed are all crucial factors that can impact the athlete's mental health (Rice et al, 2016). The review made by Peluso & deAndrade (2005) showed how overtraining has been estimated to impact 20% to 60% of athletes, with distance runners being the most impacted. Furthermore, burnout, which is one of the most severe forms of overtraining, has been observed in 10% of elite athletes (Cresswell & Eklund, 2007). Yang et al. (2007) observed that among a sample of 257 Division I collegiate athletes, female athletes reported the greatest levels of depression. These results are in line with general population statistics, which consistently shows that women have greater rates of depression than males. In all, 21% of the athletes polled said they had depressive symptoms (Yang et al., 2007). Also, Hammond et al. (2013) identified that a major depressive episode was diagnosed in 68% of athletes, with female athletes being more likely than male athletes to be depressed.

Moreover, eating disorders (ED) like anorexia nervosa and bulimia nervosa can have a negative impact on athletes' health and performance (Joy et al., 2016). Both female and male athletes have a greater chance of having an ED than non-athletes, in particular for those where a competitive advantage is conferred by a low body weight or body fat (Joy et al., 2016). A qualitative study supported these results, between the 7 female athletes some identified elite sport as the origin of their ED (de Bruin and Oudejans, 2018). The research also showed several variables brought up by the female athletes that triggered disordered eating behaviors, all of which were connected to environmental weight-related demands, such as exposing sports clothing, public weigh-ins, and remarks from coaches or family members (de Bruin and Oudejans, 2018).

Because of the stigma and other hurdles that surround mental health, research into this topic is difficult. Athletes and coaches are reluctant to come out (Gulliver, Griffiths, & Christensen, 2012), although, a scattered body of research, unique to elite athletes, is forming. The results from 12 Olympians indicated that mutual respect, trust, care, concern, support, open communication, shared knowledge and understanding, as well as clear, matching responsibilities and tasks, define the connection between coaches and athletes

(Jowett & Cockerill, 2003). So, when one of these characteristics is missing the relationship may falter. In the ten major prevalence studies reviewed by Rice et al. (2016), it was shown that, in addition to the environmental stressors, a lack of social support was a risk factor, as was the coaching environment and coach demands, which limited athletes' coping mechanisms. Rice et al. (2016) emphasized the importance of the coach-athlete relationship in mental health care, stating that 'coaches are critical to setting the organizational climate-in turn, impacting on the level of stress experienced by athletes' (p16). Biggin et al. (2017) through questionnaire analyzed that the concerns, regarding the diagnosis, development, and management of mental health issues in elite athletes, exist for both athletes and coaches. Moreover, athletes reported a higher prevalence of mental illness between elite athletes, than coaches reported witnessing it among athletes (Biggin et al., 2017).

Sport psychologists have long acknowledged this. Fletcher and Wagstaff (2009) recently underlined the need of get a better understanding of the organizational impacts on athletic performance. Fletcher and Wagstaff (2009) stated after evaluating the outcomes of the study that, 'the way individuals are led and managed will become an increasingly important factor in determining NSO's [national sporting organizations] success in Olympic competition' (p. 433). Despite a number of high-profile breakdowns and deaths among athletes, sports regulatory organizations and executives continue to underestimate or disregard the relevance of mental illness in this population (Reardon and Factor, 2010). This has severe consequences if elite athletes in such organizations do not receive timely or effective mental health care, or do not feel safe discussing their mental health concerns due to the environment of the organization (Rice et al, 2016). The results from Mountjoy et al. (2019) show that medical representatives from the International Federations reported fewer/inadequate programs for a variety of crucial, high-priority health-related topics, such as 'team physician certification,' 'protection of athletes from harassment and abuse,' 'eating disorders/disordered eating,' 'mental health of athletes,' and 'injury surveillance during International Federations championships/events.'

Feddersen et al. (2020) conducted a longitudinal study on the macro-cultural changes in the Governing Sports Organizations (GSOs) and National Governing Bodies (NGBs) of the United Kingdom's Olympic sports, as well as the factors that influence these variations. The results revealed that the organizational culture is becoming insufficient and requires severe adjustments as a result of macro cultural alterations in social expectations and the strength of athletes (Feddersen et al., 2020). Due to the dominant position of CONI (Comitato Olimpico Nazionale Italiano) and its relationships with

other parties, the Italian sports system is considerably different compared to the United Kingdom. In this light, the system may be viewed as a mixture of two distinct subsystems from a sociological standpoint; one is linked to the Olympic Sport Movement, with CONI as a point of comparison and Federations playing a critical role in identifying and encouraging, above all, elite and competitive sport; the other is linked to the domain of sport for all and inspired by the principles of subsidiarity, adequacy, and differentiation (Borgogni, et al., 2015).

Moesch et al. (2018) analyzed six countries' (including Italy and Great Britain) models of service provision for elite athletes with mental health disorders. Clinical support services are provided outside of the athletic setting in Italy and the United Kingdom are provided by private hospitals that are associated with the public health care system. Furthermore, neither the United Kingdom nor Italy have a standardized diagnostic assessment process in place for elite athletes (Moesch et al., 2018). So, taking into account the differences (organizational sporting environment) as well as the similarities (models of service for mental health disorders) between the two countries, it was deemed appropriate to investigate them further in this study.

Within this context, the aim of this study was to explore athletes' opinions regarding their well-being and feelings in the proximity of the Olympic Games. A secondary aim was to investigate how the coach/athlete relationship and the sporting environment were having an impact on the wellbeing of athletes participating in Olympic high-performance programs. To investigate and develop an in-depth knowledge of participants' "at the moment" impressions, semi-structured, qualitative interviews were performed.

Methods

PHILOSOPHICAL ORIENTATION AND DESIGN

The interviewer and the interviewee co-constructed reality in this study, which was addressed from a social constructivist viewpoint (Bunniss & Kelly, 2010; Green & Thorogood, 2009; Gergen, 2015). Because the aim of this study was on understanding athletes' subjective experiences within their environment and their opinions on the culture inside their sport, this viewpoint was suitable. A qualitative procedure was judged the best approach because the goal was to better comprehend a phenomenon such as the human condition in many contexts and scenarios (Bengtsson, 2016). Qualitative research emphasizes the investigation of diverse realities derived from various social world perceptions. As a result, gathering rich data from a variety of viewpoints will aid in the advancement of performance well-being in elite sport. Furthermore, the unique interview approach encourages participants to offer detailed information that strikes on a personal level and captures the personal experience in

contextual settings (Kvale & Brinkmann, 2008). This research used multiple cases to comprehend the variances and the similarities between the cases (Baxter & Jack, 2008; Stake, 1995). This methodology allows to either predict opposing results for predicted causes or predict comparable results in the trials (Yin, 2003). As a result, multiple cases research allows for a more in-depth examination of research problems and theoretical development (Eisenhardt & Graebner, 2007).

Participants. Through using the researchers' existing contacts and social media (e.g., Twitter and Instagram) participants were recruited. Then it was asked to all the Italian and English Olympic Sport Organization to share the study with their athletes (i.e., those capable of partaking at the Olympic/Paralympic level or professionally, see Swann, Moran, & Piggott, 2015). Participants were six elite athletes, consisting of three female athletes from Italy, between 26 and 28 years of age ($M= 27,33$; $SD= 1,15$), and three British female athletes, around 26 and 30 years of age ($M= 27,66$; $SD= 2,08$). Each athlete competed internationally in their respective sport, more specifically they participated in judo ($n= 1$), artistic swimming ($n=2$) and rowing ($n=3$). Most of the participants were European and World's medallist and all of them were going to take part in the delayed Tokyo Olympics Games. In order to protect the athletes' anonymity, information that may lead to their identification are withheld or altered.

Procedure. Following institutional ethical approval (University of Essex, ETH2021-0815), prospective participants received an invitation through social media that included brief information explaining the purpose of this project and inviting them to take part in the present study. Participants meeting the inclusion criteria and expressing an interest in taking part in this study were invited to contact the first researcher, who had a role to organize the participants' information and assign them to the other two researchers that carried the interviews. This was done to maintain the athletes' anonymity. Given the timing of the Tokyo Olympic Games, which had taken place from July 23 to August 8, the study team interviewed participants as close to the games as possible without becoming a distraction and at a convenient time for them. Because the participants were anonymous to the two researchers, sufficient time was required to allow the athletes to come forward, given the nature of the study. To keep participants anonymous from the researchers who carried the interviews, the discussions were conducted via the web software Chatplat (Chatplat, 2021), which allowed the athletes to use a username without showing their face or voice. Due to the that interviews were typed, researchers lead the interviews in their primary language. The first author interviewed the Italian participants whilst the second author interviewed the British participants.

Interview. To guarantee continuity between the interviews, all participants were given a semi-structured interview guide. As McArdle, McGale, and Gaffney (2012) point out, semi-structured interviews, which are one of the most common data collection techniques in qualitative research, are ideal for gathering detailed accounts of "personal experience," they are one of the most popular data collection techniques in qualitative research. The initial interview will be conducted according to Rubin & Rubin (2012)'s guidelines, with the following interview questions tailored to each participant's specific replies to the original interview. The interview guide contained questions enabling us to gain more insight into the athletes' mental well-being within an Olympic training environment (see appendix 1). The interview started by inquiring about the participants' background in their sport. Following this introductory phase, the first section of open-ended questions explored their training environment, their relationship with the staff, especially with their coach. These are some example of the questions asked by the interviewer:

- 1) How do you feel the training environment has changed in your time in the programme?
- 2) How would you describe your relationship with your coaches and management?

The second section inquired more in detail about the athletes' well-being and how the Olympic Sport Organization deals with it. These questions included:

- 1) Are you aware of any athlete well-being issues that currently exist within the training environment?
- 2) How proactive do you feel your NGB/CONI are in tackling abusive and bullying behaviors that may exist?

Participants were given probes and prompt to aid them to clarify and/or expound on their responses (Jones et al., 2013). All the archives of the interviews were saved in the University of Essex Box folder kept in the university network.

Data Analysis. Reflexive thematic analysis (Braun & Clarke, 2021) and the guidance of Braun et al. (2019) were used on the data. This type of analysis was found coherent with our constructivism viewpoint (Braun & Clarke, 2021; Byrne, 2022; Nowell et al., 2017). Initially the first author translated the transcript from Italian to English. In line with Braun et al.'s (ibid) suggested process for reflexive thematic analysis, the first and second authors read and re-read the transcripts, generating observational notes which were then synthesized into the questions posed within our research. Once we were familiar with the data, we engaged in an iterative and systematic, paper-and-pencil coding process. Through this process, meaningful labels were created and attached to specific segments of the dataset. Through this process, we were able to collaboratively compile a list of codes that highlighted similarities and patterns within the dataset (Smith, 2011). We then began to inductively construct themes whilst continually reflecting upon the research focus, the relevance of the data and the coherency of the generated themes, see table 1. All the time, constructing more meaningful patterns and

TABLE I
Example Of How We Constructed Our Themes

Original Transcript	Codes	Themes
<i>Interviewer: Could you please describe an area you feel the NGB does well with regards to athlete well-being within the Olympic training environment and one that you feel they could do better?</i>		
I think they are really good with the psychology stuff, we have a great psychologist who is always on hand to talk to about whatever we want. But I think they could maybe do a better job at requiring us to go, a lot of the time we have to take it upon ourselves and I think there could be a better culture of leadership pushing us to explore that avenue, or even requiring psych/lifestyle meetings. Even if we don't think we need them. If that makes sense. I think a lot of people don't go because they don't really know how or don't want to or it's got a bad stigma, but if it was required then it might make people realise how much they can get out of it if they do.	Positive aspects National Organization Psychological support Negative aspects National Organization Suggestion for the future Suggestion for the Organizations Personal thoughts	Positive and Negative Organizational Environment

clarifying the underlying concepts within each theme and its respective codes. As themes were generated, we began to revise and question their distinctiveness and relationship to the research question. This process was iterative and where necessary, we re-immersed ourselves into the data to re-analyze our previous thoughts and assumptions. Finally, higher themes and the general dimensions were defined and named accordingly (see table 2).

TABLE II
Defined Themes And General Dimensions

Higher themes	General Dimensions
<ul style="list-style-type: none"> • Positive training environment • Negative training environment • Impact of COVID-19 	Training environments
<ul style="list-style-type: none"> • Staff relationship • Teammates' relationship • Support for the well-being 	Relationships' influence on well-being
<ul style="list-style-type: none"> • Positive organizational environments • Negative organizational environments 	Organizational environments

Credibility and Trustworthiness

As the researchers are generating themes, it is useful to include information regarding the authors background so that interpretations made can be appropriately judged. The first and second authors conducted all of the interviews and undertook preliminary analysis of the data. At the time of writing, the first author was a 23-year-old, female, MSc candidate. She is a native Italian speaker and is also fluent in English. Her academic background was a MSc in Sport and Exercise Psychology and she has been a swimming athlete for 10 years. The second author was a 34-year-old, male, PhD candidate in the second year of study. He is also a full-time Head of Rowing and has 15-years' experience of working at a National and International level in Great Britain, Denmark, and Australia. Throughout his career, he has worked with a range of Olympians. Given their backgrounds, the first and second authors were knowledgeable of the demands of Olympic Sport, and the terminology used by the respondents. This prior experience assisted with the initial access to (i.e., by posting on social media), and also in building a rapport with the participants via the online text-based chat software. The third author is a 38-year old, male, UK-based University Lecturer. His academic background is in psychology and he has experience within a range of professional coaching environments (e.g., football/soccer). The third author has published numerous qualitative studies and provided guidance and assistance in the research design and analytical processes used throughout.

The research team worked on the principle of peer-debriefing, (Jones et al., 2013), within the authors providing feedback to each other and outlining relevant challenges as they arose. This was especially important during the data processing phase. To protect the athletes' anonymity, the last author actively withdrew from discussions where identifying information may be shared. The first and second authors then discussed the data analysis, allowing them to evaluate each other's interpretations of the data. Following these procedures, the third author acted as a critical friend, reviewing the pseudo-anonymised codes and themes constructed during the preliminary data analysis (Jones et al., 2013). To protect participants' privacy,

no information that could be used to identify them will be provided, and when referencing quotations from participants, numbers will be used in the results section. Further, to allow thorough inspection of recruiting, data production, and analysis development, a detailed record of progress was preserved (Peters, 2010). Finally, the generalisability of the results was achieved through presenting actual quotes from participants, where appropriate, offering extensive description, and writing in an accessible manner (Ungar, 2003).

Results and Discussion

The purpose of this study was to identify and examine well-being in Olympic athletes related to their overall environment. Athletes were encouraged to discuss the potential effects of these areas on their well-being, as well as the potential effects on their lifestyle and performance in sport. The results derived from data analysis procedures represent the collated interview responses from all six Olympic athletes. The interview data yielded eight higher-order themes, which were categorized into the following three general dimensions: training environments (TE), relationships' influence on well-being, and organizational environment, such as NGBs and CONI. Drawing directly from the experiences of the participants across the six interviews, each general dimension will be illustrated by direct quotations from the transcripts, with the aim of providing an insight into how the mental well-being of world-class athletes unfolded closer to the Tokyo Olympic 2020.

TRAINING ENVIRONMENTS

Three higher order themes were constructed in this general dimension namely positive training environment, negative training environment and the impact that COVID-19 had on their wellbeing and environment. The constant pursuit of achievement in a highly competitive and stressful workplace is entrenched in the elite athlete's lifestyle. Furthermore, a major amount of an athlete's life is devoted to achieving extremely speculative long-term outcomes. As a result, high-level competitive sports can have a negative or positive impact on players' well-being and health (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011). The well-being perspective of elite athletes is generally more complicated and varied and influenced by the setting in which they compete (Lundqvist & Sandin, 2014). According to Brady and Shambrook (2003), the personal experience of elite athletes on a contextual level must be taken into account in order to avoid the danger of misinterpreting research citations or connecting outcomes to criteria that apply to a normal population but not to elite athletes.

Positive TE. All the athletes said that they find themselves in a positive environment right now. Especially the Italian ones highlighted the fact that they were happy to be able to spend time with people that shared the same goals and professionalism. As stated by the First Italian Participant, “(the sporting context gives) the opportunity to compare myself with people who do this sport at a high level and to work with professionals”. Moreover, the Second Italian Participant added how “an environment more suited to our sports characteristics would help us improve faster and be more stimulated”. On the other hand, the British Participants appreciated the increase of autonomy given to them, as stated by the First British Participant:

I am happy. I now feel as though I am trusted by my coach. I feel like an adult. [...] Now we are given options, so we can decide what we think is best for our bodies. We are also able to do these sessions in our own time. This is a huge difference and makes me feel far more autonomous.

The Second British Participant affirmed the importance of having a psychology team, which made a difference in their lifestyle as they are now viewed with “more of a focus on ‘person not athlete’, although definitely a long way to go still”.

Because of an athlete’s long engagement to sport excellence at the highest level, some athletes rarely investigate other roles and contexts, resulting in identity foreclosure and an extremely narrow, singular identity (Nesti & Littlewood, 2011), which is counter-productive during a pandemic due to social isolation. Anxiety, depression, addictions, and other mental health issues can all arise as a result of an excessively weighted athletic identity (Henriksen et al. 2019). Identity loss may be triggered on athletes even from the coaches and the manager when they start to consider the players as instruments, as stated from a Participant in this study. Moreover, with autonomy-supportive environments favourably impacting athletes’ motivation and well-being (Gagné, Ryan, & Bargmann 2003), the quality of the interpersonal environment is frequently highlighted as a primary contributor (Mageau & Vallerand 2003). The importance of autonomy matched with the results of the study, as it was considered one of the major contributors on building a good relationship with the coaches. ‘The concept of autonomy support means that an individual in a position of authority (e.g., a coach) takes the other’s (e.g., an athlete’s) perspective, acknowledges the other’s feelings, and provides the other with pertinent information and opportunities for choice, while minimizing the use of pressure and demands’ (Black & Deci, 2000, p. 742).

Negative TE. This higher theme focused on the issues that are currently in the training environment. Some athletes were unaware of some issues that

may arise in their sporting context, while others stated that they had heard of the incidence of “anorexia, bulimia, and depression” from other athletes and that this could be due to the fact that their sport requires them to maintain a certain body image. Another Participant stated:

that many times we athletes can be compared a bit to pawns. Everything is fine as long as they are needed and then they disappear at any moment.

Later she explained that the coach, and the overall staff, could stop paying the same amount of attention as before if the athletes were not able to meet the expectations. When asked if she saw it only within the Olympic environment, she answered saying that it was a general occurrence.

An unexpected theme was the similarity of the interviewees' opinions regarding that many athletes struggled with “selection decisions”, but because the Participants had not experienced it themselves, they could not guarantee whether it was true or not. A British Participant explained that her team:

Struggled a lot with overtraining and not that much is done about it. Something has been tweaked on the programme, but it's essentially stick[sic] to the programme or you'll be punished for not being able to make it through the training.

She also added that in the past two years she has “pretty much been surviving”. This created a lot of anxiety and stress making her “counting down the days until the seasons over”.

The citation showed that the Participant experienced first-hand, or heard from someone else, issues related to the sporting context that were already observed, such as: anorexia, bulimia, depression, loss of identity, overtraining. Athletes who compete in individual (Nixdorf, Frank & Beckmann, 2016) sports that require a specific (lean) body type (Coyle, Gorczynski & Gibson, 2017) have a higher incidence of depression symptoms. According to Schaal et al. (2011), there are gender variations in the incidence of eating disorders across different sports genres. Females were found to have the highest frequency in endurance and aesthetic sports (Schaal et al., 2011). This is consistent with the results from elite Norwegian athletes (Sundgot-Borgen & Torstveit, 2004). The results of this research were coherent with these studies stating that there was a prevalence of anorexia, bulimia and depression in the sporting context which demanded for a slim body type.

Hammond et al. (2013) discovered that the top quartile of elite performance had a two times greater risk of elevated depression scores, compared to the 34 % of athletes that resulted in an increase of depression on the BDI-II following an athletic competition. Considering the fact that the Olympics only happen every four years may explain this impact, it is still essential to note that there was a substantial link between the athlete's performance and

depressive symptoms among this high performer group. This research shows that some high-performing athletes may be more prone to depression when their performance results fall short of expectations (Hammond et al., 2013). Moreover, it was observed in the current study how overtraining negatively affects psychological and physical well-being. Overtraining is the product of excessively rigorous physical practice, can exhibit itself in similar symptoms to depression (Schwenk, 2000) and can increase emotional anxiety and irritability (Budgett, 1994). The prevalence of this disorder among athletes is estimated to be between 7% and 20% every training season (Morgan et al. 1987, Hooper 1993, Raglin and Morgan 1994), and it is thought to be much greater in endurance sports (Mackinnon, 2000) and between elite athletes owing to their intensive training regimen. Considering that the best treatment for overtraining is resting, which, though could interfere with the athlete with the training, the best solution to deal with the disorder is to prevent it (Peluso and Andrade, 2005). Furthermore, a main citation generating from the data was the unfairness of the ‘selection decision’ in the sport environment, this was also supported by Joseph et al. (2021), however further studies are required to observe this aspect especially within elite athletes.

COVID-19 impact. When discussing mental health in recent years, we must consider the impact that the epidemic has had on athletes. According to some studies, when an athlete moves out of the sport due to reasons beyond their control, the risk of psychological anguish increases (Erpic, Wylleman Zupancic, 2004; Kuettel, Boyle & Schmid, 2017). Physical, technical, and psychological harm is inevitable as a result of the COVID-19 epidemic, which prevents the athlete from experiencing the beneficial consequences of sport involvement. An athlete said that struggled a lot on the psychological side, saying:

We had so many down moments, we came to think that the only thing we wanted was to finish everything... instead of enjoying this moment.

Another athlete explained that “the delay was awful. It was the right decision, but I really struggled training through lockdown”. A Participant was particularly stressed with the pandemic in the Olympic village because she was not “able to walk quietly in the village, always be monitored to be sure that you have not been in contact with a positive”, she concluded by stating that “the Olympics must be a joyful moment... not a source of anxiety”.

While, on the other hand, some Participants, one Italian and two British, had a similar reaction by saying that “due to covid we all had to train at home, this enabled a fresh start”, and that “the pandemic was great! It gave me space to start loving the sport again”. This lead to the conclusion that

these athletes were able to see in the pandemic an opportunity to start over, as stated also from the Italian one:

For me it was also a blessing because maybe there hadn't been COVID now I wouldn't be here ready to go.

The current psychological crisis has the potential to be a defining moment in our lives, allowing us to reflect on what matters most to us.

Exactly in some ways it's made it harder but in others given us another chance. I was in a boat with no medal potential getting slower and hating rowing. Now the boat is fast and I'm really enjoying it.

Research observed the impact of COVID-19 on elite athletes' wellbeing (Taku and Arai 2020, Şenışık et al. 2021), but the current study is the first to analyze the influence that it had on Olympic athlete as the Olympic Games approach with a focus on their training environments' changes. One athlete interviewed was in the Olympic village when the interview happened. She described it as a source of anxiety because of the constant control and monitoring that they had to go through. A sudden interruption, often known as a crisis transition, is known to put athletes and coaches under psychological and emotional strain. Nevertheless, the results reported here highlight the fact that three Participants found with the pandemic the opportunity to start over and to find enjoyment in their sport again. This positive attitude towards COVID-19 has yet to be analyzed in the psychological field, so future research is needed.

RELATIONSHIPS' INFLUENCE ON WELL-BEING

The higher themes were divided into: staff relationship (e.g., coach and manager), teammate's relationship (including the athletes' representative), support for the well-being. Regarding athlete's mental health, the relationships could either be a facilitator or a barrier. Coaches, managers, teammates, and the athletes' representatives are all individuals who have an influence on the athletes' mental development and wellbeing. It was observed in this study the importance of the relationship with the staff, relationship with teammates and athletes' representatives, and lastly their support given for the well-being.

Relationship with the staff. All of the athletes said they still get along with their former coaches. However, other Participants described harmful, even abusive, behavior from the prior coach. An Italian athlete had her father as a coach and described it as:

It was positive because it gave me a solid foundation and great confidence; negative because it is difficult to break away and rely on other people.

The Second Italian athlete described the differences between the national coach, describing it as a relationship that remains ‘athlete-coach’, versus the company one with whom she has “an excellent relationship that goes outside athlete coach relationship and this is really inspiring”. She explained, in the same way, the relationship with the managers, where she had a better relationship with the society’s manager. Almost all of the Participants cited the coach’s approach and mutual trust as crucial in the interaction.

It was found a similarity of the interviewees’ opinions regarding the importance of trustworthiness placed upon the athlete. The Second Italian Participant quoted that the difference between the current coach and the past one is “simply the current one believes in me... the one before no”. The Second British Participant quoted:

Things that would positively impact would definitely be listening and taking on board what we’ve said that we want and need.

While the things that negatively impact the relationship with the coaches are:

White lies from coaches, telling us what they want us to hear in the moment and then later on finding out that that’s not the case. That has made me not really trust anything they say afterwards.

The coach must be honest in giving his opinion since, as stated before, the white lies could lead the athlete to “second guess it” and could lead to being “very harsh on myself”. Moreover, a past coach was described to have abusive behavior which consisted in:

Just how she spoke to people, serious lack of respect, very rude and blunt, had his favourites.

The First British athlete talked about how in the past the coach did not put trust in her and therefore she was afraid that by asking “for any flexibility I would be ridiculed by the head coach and maybe have a black mark against my name”. The Participant described how she felt during those times:

In the past I felt like a cog in a machine, but now I feel like a valued person.

Relationship with teammates and athletes’ representatives. Friendship networks often replace the support network of the family when the athlete is required to move away from home. Furthermore, all Participants emphasized the necessity of their entourage’s emotional support (e.g., friends; Rickwood & Thomas, 2012). The two Italian athletes that are part of a team sport

(artistic swimming) repeated many times how they depended on each other, especially since they had to live together during the pandemic. They stated:

The period of coexistence could kill us, instead it fortified the group. [...] If one has figured out how to approach the other. How to be important for a group, what could make it unique and indispensable.

While regarding the athletes' representative there were some different experiences. In most of the cases the representative was still competing and part of the team, but it was not for one athlete who participated in an individual sport (judo). She reported that the representative had a low authority and if she would have reported an issue there were not going to be great consequences. The two Italian Participants, who are in a team, stated that for the athletes' representative:

It was even harder for her... as being just the reference point she could never collapse... so she had even more weight on her shoulders... I can say that she made the days lighter and lighter for us.

This feeling was not shared with the British Participants who overall stated that "the athletes rep are more of a spokesperson for the coaches and management than for us". However, later explained that they feel like even if the representative brought up something to the management, they would be disregarded as "usually have already made up their minds about things. It tends to be that the most interaction we have with the reps (in their roles) is to give us news from the management". So, the problem seems to lay even on the manager, who already take action disregarding the athletes' opinions. This would lead to the fact that:

The communication with the reps is mostly one way.

Support for well-being. Given the current circumstances that the athletes are recently facing, the COVID-19 pandemic, and the ongoing difficulties, such as bulimia and depression, we wanted to observe the support that the Participants got in their training environment. During the lockdown the Italian athletes have been followed meticulously regarding the physical aspect, however "we have been neglected for the mental part, we are not followed by a psychologist or by a mental coach and perhaps in this period it would have helped us to face some things in a different way". The Third Italian athlete specified how she talked about her problems with her coaches and teammates and when she had some problems the staff would make "the sports psychologist available to us". Later it was asked her if she had a psychologist on her staff team and she answered:

Yes, but there has never been a real path. We did a few years ago a few sessions all together... and that's it. If one of us needs to talk to us individually they make it available to us, but there must be reasons.

When inquired if there was anything else she wanted to add about her well-being within the Olympic TE, she stated:

A path with the psychologist that lasts the whole season and not only when you need it. Of which also sessions with athlete and coach because it happens that sometimes we do not understand some of their behaviors and vice versa but only because we do not know what is behind that gesture / behavior.

Even the Third British Participant shared her opinion on the presence of a counsellor in the team and the procedures required to disclose an issue on their well-being:

Honestly I don't like the fact we use the same counsellor. I don't think it makes things confidential if they know who you are talking about.

She also stated the fact that she preferred an external psychologist on the team which would make her willing to talk to them. Moreover, the Third Participant agreed to disclose an issue she lived first-hand regarding her level of ownership on her well-being in the TE. In the past she sometimes felt like "I was being gaslighted by members of the team' and the 'coaches fuelled it". She affirmed that it felt like it came "from a lack of leadership". This would explain the discomfort that she could feel on disclosing her personal issue with someone who is part of the team.

It was asked to the Second British Participant if she thought it would be a positive thing to spoke beforehand to the staff about the issues she observed:

It probably would be a positive thing to do beforehand but I would be too scared that it would be too risky. Also wouldn't want to raise any issues when there's so little time left (to the Olympics).

Moreover, this athlete was the only one that had no problem with the support she received and was "really impressed with the amount the coaches were meeting with us. The lifestyle team and psych team were also always on hand". While she was dissatisfied in terms of training where she said: "I feel like I have very little ownership of my well being". Even, regarding the psychological support it was mentioned the importance of autonomy concerning the well-being within the Olympic TE:

So I think centralised training needs to have athlete welfare at the forefront. Athletes need to be trusted. We commit so much to sport because we love it and want to win. If we are ever suggesting changes, or wanting to spend time training el-

sewhere, it's because we truly believe it will help us be faster in the long run. Not because we are looking for an easy way out.

An Italian Participant emphasized the difference between her society coach and manager with the national ones, describing the latter as a 'athlete-coach' relationship that does not go outside from the training environment. With the company staff she spent many years together so it is understandable that she could have a better relationship with them. This result was found also in Gould et al.'s (2001, p. 26) research where the Olympic coaches interviewed stated the importance of incorporating personal coaches by gaining access to locations and arranging their presence and interactions with official team coaches. Moreover, the Participants listed behaviors that influence their relationship with their coach: trustworthiness (both trusting and being trusted by the coach), paying attention to the athletes' opinion, and giving them the opportunity to express their opinion.

Two Italian and two British Participants highlighted the importance of their teammates on their well-being. During the period of distress, they were able to find in them support and strength. This feeling of unity and bonding certainly helps the performance and in creating an atmosphere of harmony in the training environment, as observed in Gould et al.'s (2001, p. 26). Moreover, this research analyzed even the communication between the athletes' representatives with the team and the rest of the organization. It was observed how two Italian Participants had a good opinion regarding them and considered this figure with utmost respect. However, all the other Participants considered mostly poor communication with the manager and regarded them with a low level of authority. So, to improve the relationship between the manager and the athletes more interventions are needed.

One British Participant disclosed how she was psychologically manipulated by her teammates and coach in the past. In an environment such as the one where you usually spend more time in your training environment than with your family, that could be a source of distress and could lead to more serious psychological illness. This athlete stated her opinion on preferring having an external psychologist on the team, someone who would not be related to the other teammates. Nevertheless, it was considered important by all six Participants having a sport psychologist on the team. The Third Italian athlete stated how she would like to have a longer session with the sport psychologist that would last the whole season. Considering the opinion of a British Participant, the athlete's well-being and welfare should be at the forefront of the training. Given the results of the current study and according to a recent assessment of elite athletes' mental health and well-being, more research is required to promote the development of suitable mental health support systems in elite sport (Rice et al. 2016).

ORGANIZATIONAL ENVIRONMENT

This section was divided into two higher themes: positive organizational environments and negative organizational environments. In this section we analyzed the influence that the Sport Organizations could have on the well-being of the athletes and how the NGBs and the CONI handled the possible issues that the athletes have faced. This is the reason why we divided it into positive organizational environment and negative organizational environment.

Positive Organizational Environment. The Participants stated the areas that the Organizations well managed, such as the “protection of physical health”, “good at taking an interest in other parts of your life and supporting it”, and “they are really good with the psychology stuff”. One athlete specified how the Italian Olympic organizations (CONI) helped them on trying “to bring together all the athletes, as for the delivery of the flag, or by the president, to stimulate even more the athletes”. Moreover, it is worth mentioning how the CONI gave the chance to some athletes to take part in the Olympic Games, allowing them on being paid:

The possibility through the Olympic club for an athlete like me who is not part of a sports group and therefore salaried is fundamental.

Another noteworthy feature is the NGBs foresight in taking action in response to a coach’s abusive behavior. As the Second British Participant quoted:

I think people were really happy that something had actually been done. Actions like that had never really been taken before, so the athletes really felt like they were being listened to.

Negative Organizational Environment. However, except for the statement cited prior, almost every Participant said that they did not know how proactive the Olympic organizations in taking actions for the abusive or bullying behavior are, and usually if they have to discuss some issues then the “coaches are used as mediators”. An Italian Participant asked for more effort on “trying to boost more minor sports”. The First British Participant requested more honesty from the Organizations, as she specified:

I think they are improving. I don’t think they are really proactive, but I think that if action needs to be taken they will take it. Unfortunately, I think in the past they have swept things under the rug for a long time and tried to hide problems. Now we have a person who is in charge of our welfare.

Moreover, it was observed from a study that analyzed the experience of Olympic athletes and coaches, who stressed the necessity of having a strategy

in mind for connecting with athletes' and staff's families and friends throughout the Games (Gould et al., 2001). This opinion was supported from the First British Participant:

I think they could be better at allowing people more time with their families.

However, it is also important to add that the need to educate family and friends about the rigours of an Olympic Games atmosphere was critical to achieving the settled goal (Gould et al., 2001). Furthermore, the Participant also affirmed the relevance of "be a better culture of leadership pushing us to explore that avenue, or even requiring psych/lifestyle meetings. Even if we don't think we need them". She then proceeded to add:

I think a lot of people don't go because they don't really know how or don't want to or it's got a bad stigma. But if it was required then it might make people realise how much they can get out of it if they do.

This supports what the Third Italian Participant stated, on how "for fear maybe" many athletes are missing a healthy conversation with their coach, to avoid the confrontation with their issues and so to seek professional help. A great statement on the sporting context was made by the Third British Participant who observed the gap in having "a basic understanding of how much women need to eat/ periods and training load". So, later, when asked if there was something the NGB could improve upon with regards to your mental health, she mentioned:

General well-being. Yeah just a greater awareness that these issues aren't a sign of a good athlete would be a start. For example there is an idea that you are an elite athlete when you stop having your period when really your under recovered under fuelled and underweight.

As Hardy, Jones, and Gould (1996) noticed, sport psychology research has a propensity to ignore climatic and cultural elements that are linked with optimal athlete development, comparable to their counterparts in sport management. They observed that 'elite athletes do not live in a vacuum; they function within a highly complex social and organizational environment, which exerts major influences on them and their performances' (Hardy, Jones, and Gould 1996, pp. 239-240). As a result, it was deemed necessary to examine these aspects when evaluating the athletes' well-being. The current study is the first research to observe how the Italian organizational environments affect the well-being of Olympic athletes and to compare them with British organizational ones. Participants found that the following aspects were well managed by the Olympic Organization (CONI, NGBs), like the protection and management of the psychophysical health.

Only one British Participant, out of all six, stated that the organizations were quite proactive towards the abusive and bullying behavior, all the others did not know because, as stated by three of them, did not have any reason to look into it. Stirling and Kerr (2008) described emotional abuse as ‘a pattern of deliberate non-contact behaviors by a person within a critical relationship that has the potential to be harmful’ (p. 178). Since coaching careers are dependent on performance outcomes, coaches may justify emotionally abusive behavior by saying it is part of the “win at all costs” philosophy (Jacobs, Smits, & Knoppers 2017). Coaches’ behaviors have a vast impact on the well-being of the athletes, who find in their coaches a figure to rely on.

One Italian and one British Participant emphasized the importance of needing a psychological meeting as mandatory. They stated establishing necessary will assist individuals who don’t want to go because of the bad stigma associated with attending. Gulliver, Griffiths and Christensen (2012) observed how one of the most prominent barriers preventing athletes seeking help was the stigma and embarrassment that surrounds it. Their conclusions showed how the players would not want their coach, teammates, or rivals to find out if they were seeking assistance for mental health issues. As a result, several Participants believed that telling their friends about the issue could help them get through it, as the support network of their friends might be able to aid them (Gulliver, Griffiths and Christensen 2012, p. 10). As in previous studies (e.g. Mazzer and Rickwood 2015), the two Participants thought that mental health education and awareness needed to be improved.

Conclusion

In conclusion, this paper has investigated the influence that training, organizational environments and relationships have on the Olympic athletes’ well-being. Perhaps the most significant conclusion to be drawn is that, although there are many beneficial elements to the training, there are also many negative ones that may be seen. There are several obstacles that elite athletes may face, one of which is the rising awareness about mental health issues (World Health Organization, 2020). While some athletes are able to strengthen their existing coping strategies, others may experience a negative reaction that lasts weeks or months (Mehrsafar et al., 2020). Because high levels of stress can harm daily life as well as mental and physical health, it’s important to study and identify psychological disorders and poor mental health among elite athletes during the Olympic Games. The anonymous methodology provided participants with the opportunity to speak freely about their experiences and their impacts.

Limitations. The use of the platform 'Chatplat' ensures the anonymity of the Participants, however the research team was unable to identify if the Participants were agitated or disturbed during the interview because of the use of this program. A face-to-face interview would have allowed us to gauge the Participants' moods and adjust our questions accordingly. Considering the relatively small number of Participants, it should be considered observing the well-being of a more varied and larger sample of Olympic athletes. Moreover, it is suggested that further studies on the organizational environments' influence, with a focus on whether it would be better to include an internal or external sport psychologist in the team, will be conducted in the future. It is recommended that greater attention should be put on the issues regarding menstrual and nutritional problems on Olympic athlete women. Finally, future research on abusive and negative training environment's impact on athletes' performance and well-being should be analyzed.

Data Availability Statement

Data available on request due to privacy/ethical restrictions.

Appendix 1 – Interview Guide

The research shall consist of Participants being interviewed via an online app – Chatplat (2021). The Participants will be anonymous to the researchers carrying out the online interviews.

The initial interview questions shall follow the guide by Rubin and Rubin (2012).

The initial interview shall include the following semi-structured questions for each Participant:

- (1) How do you feel the training environment has changed in your time in the programme?
 - (2) How aware are you of the procedures required to disclose an issue of athlete well-being?
 - (3) What level of ownership do you feel you have for your own well-being within the training environment?
 - (4) How would you describe your relationship with your coaches and management?
 - (5) What do you feel positively and negatively impacts these relationships?
 - (6) How happy are you currently with the training environment?
 - (7) What level of authority do you perceive the athlete rep to have with regards to speaking with coaches and management about athlete well-being?
 - (8) Are you aware of any athlete well-being issues that currently exist within the training environment?
 - (9) How proactive do you feel your NGB are in tackling abusive and bullying behaviors that may exist?
 - (10) Could you please describe an area you feel the NGB does well with regards to athlete well-being within the Olympic training environment and one that you feel they could do better?
 - (11) Lastly, is there anything else you feel you would like to add about your well-being within the Olympic training environment?
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