

Developing resilience in sport



This item contains selected online content. It is for use alongside, not as a replacement for the module website, which is the primary study format and contains activities and resources that cannot be replicated in the printed versions.

About this free course

This free course is an adapted extract from the Open University course E312 *Athletic development: a psychological perspective*: www.open.ac.uk/courses/modules/e312 .

This version of the content may include video, images and interactive content that may not be optimised for your device.

You can experience this free course as it was originally designed on OpenLearn, the home of free learning from The Open University –

www.open.edu/openlearn/health-sports-psychology/developing-resilience-sport/content-section-over-view

There you'll also be able to track your progress via your activity record, which you can use to demonstrate your learning.

Copyright © 2022 The Open University

Intellectual property

Unless otherwise stated, this resource is released under the terms of the Creative Commons Licence v4.0 http://creativecommons.org/licenses/by-nc-sa/4.0/deed.en_GB. Within that The Open University interprets this licence in the following way:

www.open.edu/openlearn/about-openlearn/frequently-asked-questions-on-openlearn. Copyright and rights falling outside the terms of the Creative Commons Licence are retained or controlled by The Open University. Please read the full text before using any of the content.

We believe the primary barrier to accessing high-quality educational experiences is cost, which is why we aim to publish as much free content as possible under an open licence. If it proves difficult to release content under our preferred Creative Commons licence (e.g. because we can't afford or gain the clearances or find suitable alternatives), we will still release the materials for free under a personal end-user licence.

This is because the learning experience will always be the same high quality offering and that should always be seen as positive – even if at times the licensing is different to Creative Commons.

When using the content you must attribute us (The Open University) (the OU) and any identified author in accordance with the terms of the Creative Commons Licence.

The Acknowledgements section is used to list, amongst other things, third party (Proprietary), licensed content which is not subject to Creative Commons licensing. Proprietary content must be used (retained) intact and in context to the content at all times.

The Acknowledgements section is also used to bring to your attention any other Special Restrictions which may apply to the content. For example there may be times when the Creative Commons Non-Commercial Sharealike licence does not apply to any of the content even if owned by us (The Open University). In these instances, unless stated otherwise, the content may be used for personal and non-commercial use.

We have also identified as Proprietary other material included in the content which is not subject to Creative Commons Licence. These are OU logos, trading names and may extend to certain photographic and video images and sound recordings and any other material as may be brought to your attention.

Unauthorised use of any of the content may constitute a breach of the terms and conditions and/or intellectual property laws.

We reserve the right to alter, amend or bring to an end any terms and conditions provided here without notice.

All rights falling outside the terms of the Creative Commons licence are retained or controlled by The Open University.

Head of Intellectual Property, The Open University

Contents

Introduction	5
Introduction	5
Session 1: Understanding resilience	7
Introduction	7
1 Defining resilience	9
2 Resilience in action: resilient athletes	12
3 Resilience in action: resilient coaches	14
4 Investigating team resilience	16
5 Resilience at the extremes of sporting performance	18
6 Resilience in the early stages of the athletic development journey	20
7 Summary of Session 1	23
Session 2: Developing resilience	25
Introduction	25
1 Building resilience: getting it right	26
2 The role of the environment	28
3 Approaches to building athlete and coach resilience	30
4 Building team resilience	35
5 Developing resilience for the athletic development journey	38
6 Summary of Session 2	41
Where next?	42
References	42
Acknowledgements	45

Introduction

Introduction

This free course, *Developing resilience in sport*, explores how the concept of resilience can support athletes on their athletic development journey. Resilience can act as a buffer to protect against the challenges that might be faced by athletes.

The course is divided into two sessions:

In Session 1 you'll investigate the concept of resilience, identify the characteristics of resilience and explore resilience in differing social contexts. Throughout, you will consider why resilience is an important psychological skill for athletic development.

In Session 2 you'll examine how we might build resilience, looking at the role of the environment, reviewing several interventions and considering how best to support both athletes and coaches to develop resilience.

Within both sessions you'll be directed to a number of fascinating resources, including research articles to support your learning. While you will see that the majority of the research into resilience in sport has been completed in elite sport, you will reflect that it is a concept that impacts across all levels of sport, in different athletic contexts.

By the end of this course, you should be able to:

- describe the features of resilience in both individual and team contexts and understand why it is important for athletic development
- critically discuss the role of the environment in the development of resilience
- examine how to build resilience in a range of sport settings and apply this knowledge to real world scenarios.

Moving around the course

In the 'Summary' at the end of each session, you will find a link to the next one. If at any time you want to return to the start of the course, click on 'Full course description'. From here you can navigate to any part of the course.

It's also good practice, if you access a link from within a course page, to open it in a new window or tab. That way you can easily return to where you've come from without having to use the back button on your browser.

This OpenLearn course is an adapted extract from the Open University course [E312 Athletic development: a psychological perspective](#).

You can now go to [Session 1](#).

Session 1: Understanding resilience

Introduction



A Japanese proverb ‘Fall seven times, stand up eight’ effectively captures the essence of psychological resilience. We know that athletes will face highs and lows and will constantly withstand a wide range of pressures to attain and sustain high performance (Howells and Fletcher, 2016; Sarkar and Fletcher, 2013). This is not only the case for elite athletes and could also be the case for you in your own sport and exercise pursuits, or if you support the performance of others. Indeed, understanding resilience is vital for those involved in an athlete’s journey ‘as it may be fundamental in facilitating ongoing success and positive mental wellbeing’ (Howells, 2022, p. 203).

Before you explore what research tells us about resilience, look at an introduction to resilience more broadly in Activity 1.

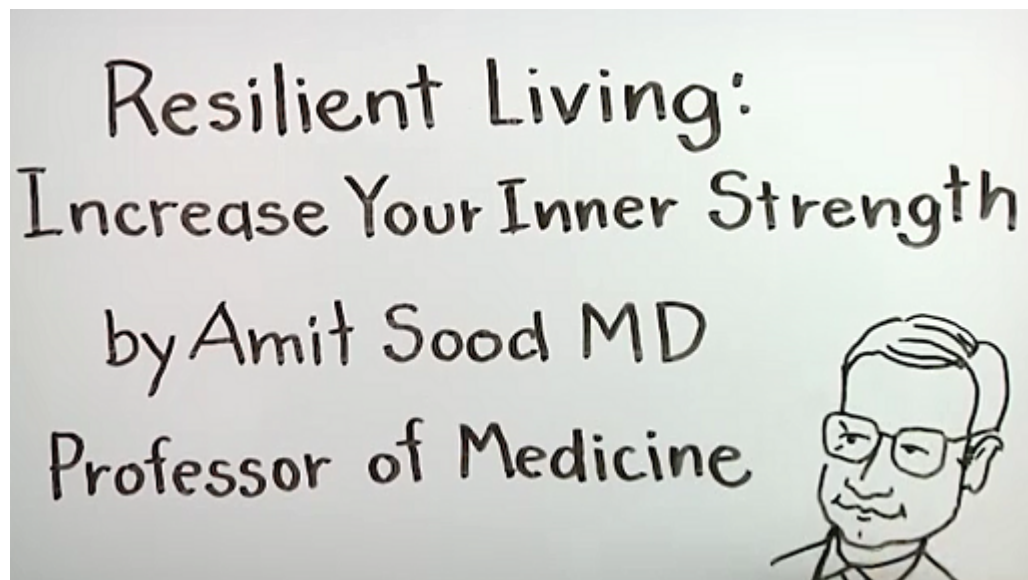
Activity 1 Reflecting on your own resilience

Allow approximately 10 minutes

First, watch the video ‘Introduction to resilience’ and identify the key points raised.

Video content is not available in this format.

Introduction to resilience



Having viewed the content, reflect on when and how you, or someone you know, have shown resilience.

Note your thoughts in the box below.

Provide your answer...

Discussion

You might have noted down that resilience is an inner strength that helps us to withstand and bounce back from adversity, allowing us to 'get the most mileage from our brain'. You might have reflected on one or more times in your life when you have shown resilience.

As noted on the video – our genes, all aspects of our lives, and the experiences that we have, influence our ability to be resilient.

It is important to emphasise that resilience is a psychological skill that can be learned, and that we can all demonstrate resilient qualities and behaviours. This is critical when we consider that resilience can aid us in our everyday life.

Before you can think about how we might build resilience in Session 2, you must first fully understand what resilience is, and what being resilient might look like.

1 Defining resilience



In a seminal paper on resilience in human development, Masten (2001, p. 235) argues that resilience comes from 'the everyday magic of ordinary, normative human resources' and not from rare or special qualities, suggesting that it is attainable for all of us.

Originating from the Latin phrase to rebound or recoil (Masten, Gewirtz and Sapienza, 2013), the term 'resilience' has had many definitions proposed over the years (Sisto et al., 2019).

Despite the use of multiple terms to describe resilience, there is consensus among researchers that resilience is best understood when examined in a particular context as models of resilience developed in other domains, such as business, might not be transferable, for example to sport (Wagstaff et al., 2017).

In simple terms, resilience is 'the ability to use personal qualities to withstand pressure' (Fletcher and Sarkar, 2016, p. 136).

In the sporting context, resilience relates to an athlete's ability to manage daily stressors, where stressor is defined as 'the environmental demands (i.e., stimuli) encountered by an individual' (Fletcher, Hanton and Mellalieu, 2006, p. 359) and could include training and competition.

Evidence suggests that resilience is one of the key psychological characteristics for athletic success (Rees et al., 2016). In Activity 2 you will investigate resilience in a sporting context in more detail.

Activity 2 But what does it all mean? Making sense of resilience

Allow approximately 60 minutes

Read the reading at the link below, which is a section of a chapter called 'Developing resilience on the athlete's journey' (Howells, 2022).

[Reading: What is resilience?](#)

Then complete the following tasks:

1. What are the two fundamental components of resilience agreed by researchers?

Provide your answer...

Discussion

The two fundamental components of resilience are:

- adversity (perceived negative experience)
- positive adaptation.

2. Match the correct definition to the terms: 'robust' and 'rebound' resilience.

Robust

Rebound

Match each of the items above to an item below.

Refers to resilience providing protection to an athlete which supports wellbeing and performance levels when under pressure.

Refers to the bounce-back qualities that are reflected in the minimal impact that adversity has on an athlete's wellbeing and/or performance.

3. From your reading, complete interactive Figure 1 below. Click on the image or 'View interactive version' to access it.

Interactive content is not available in this format.

Figure 1 A grounded theory of psychological resilience and optimal sport performance (Fletcher and Sarkar, 2012, p. 672).



4. Why are these five psychological factors (Figure 1), evident in the elite athletes who were interviewed in Fletcher and Sarkar's (2012) research, important for withstanding the pressure of performance?

Provide your answer...

Discussion

Fletcher and Sarkar (2012) argued that these factors could protect athletes from the potential negative effects of stressors by using positive evaluations, or challenge appraisals, and meta-cognitions (the evaluation of their own thoughts). Figure 1 is helpful to see the relationship between the five factors and challenge appraisal and meta-cognition.

As you have seen in Activity 2, researchers suggest that resilience isn't a trait (Galli and Vealey, 2008) but it is thought that athletes high in resilience possess certain psychological characteristics, such as confidence, that 'protect' them and enable them to withstand the potential negative effect of stressors (Fletcher and Sarkar, 2012).

It is also worth noting that these protective factors (referred to as psychological factors in Figure 1) are often referred to as the third component of resilience, to add to adversity (or stressor) and positive adaptation as you will see as you move through the course.

Now you have started to explore resilience as a concept, you'll now look at what a resilient athlete and a resilient coach might look like.

2 Resilience in action: resilient athletes

So far, you have looked at research relating to elite athletes, but the findings can be applied to other contexts, as you will see in Activity 3.

Activity 3 Resilient athletes

Allow approximately 30 minutes

First, watch the video 'The Merthyr mermaid' which follows Cath Pendleton completing some incredible feats, arguably demonstrating high levels of resilience.

Video content is not available in this format.

[The Merthyr mermaid](#)



Then consider the following:

- Identify an individual athlete, that you know personally or from elite sport, that has demonstrated resilience.
- Why have you chosen this example – can you draw on your developing knowledge of resilience to justify your choice?

Provide your answer...

Discussion

You may have found it hard to come up with just one example, as it could be argued that there are a number of athletes that have demonstrated resilience along their journey. Your justification might have considered robust or rebound resilience or you might have reflected on how the athlete demonstrated one or more of the five psychological (protective) factors that were highlighted by Fletcher and Sarkar (2012), and was able to overcome significant challenges.

Athletes are not the only performers in the sporting context, and coaches need to be able to draw on their own resilience to positively evaluate the 'plethora of stressors' (Olusoga et al., 2012, p. 230) that they could experience, including preparing for events and managing their own wellbeing (Sarkar and Hilton, 2020). Olusoga et al. (2012) examined factors that coaches perceived as enabling them to coach in stressful environments and identified eleven psychological attributes including focus, confidence, commitment, and support; similar to the five psychological factors highlighted by Fletcher and Sarkar (2012) in their research on athlete resilience.

3 Resilience in action: resilient coaches

You should now be able to build a picture up of what a resilient individual in sport might look like. In Activity 4 you'll look further at what a resilient coach might look like by hearing from one of the leading academics in this field and his co-researcher.

Activity 4 Exploring coach resilience

Allow approximately 30 minutes

First, watch 'Coach resilience (Part 1)', which introduces research by Sarkar and Hilton (2020) exploring resilience in swimming coaches.

Video content is not available in this format.

[Coach resilience \(Part 1\)](#)



Now, having watched the video, answer the following questions:

1. What was the aim of the research and why did the researchers feel that coach resilience was an important area to study?
2. What were the key findings of the research?
3. The research examined 'super-elite' Olympic medal-winning coaches. Do you think any of the stressors or protective factors identified in the findings could be applied to non-elite coaches?
4. Can you recognise some of the features described in yourself (if you are a coach or teacher) or in coaches that you know?

Provide your answer...

Discussion

1. Dr Sarkar highlighted that coaches are performers in their own right and they will face numerous stresses and pressures in their own coaching career. As such, it was argued that it was important to understand coach resilience from two angles: how coaches can enhance their own resilience and how can they develop resilience in their athletes.
2. There were three main findings identified in the research:
 - a. four themes of stressors experienced by the coaches
 - b. six themes of protective factors (the psychological qualities that protected coaches against the potential negative effects of these stressors)
 - c. factors that coaches used to develop resilience in athletes.
3. You may have reflected that several of the stressors and/or protective factors could be applied to non-elite coaches. For example, of the stressors identified, you may have considered that coach wellbeing would apply to any level of coach and that there would be an element of managing an organisation, albeit perhaps on a different scale. For example, a coach might have assistants and volunteers working with them that they manage.

In terms of the protective factors, non-elite coaches could take a progressive approach, try to maintain a work–life balance and have a focus on motivation and effective decision-making. However, a non-elite coach might not always have access to a coach support network nor function in a secure work environment.
4. You may have reflected on a number of the research findings, including any potential stressors that you might face in your role or perhaps some protective factors (psychological qualities) that you recognise in coaches that you have observed. For example, you may have reflected that coaches/teachers you work with have a real love for their role, with clear enjoyment – evidence of intrinsic motivation (part of durable motivation).

So far you have considered what a resilient athlete and coach might look like, but would these features apply to a team situation? You will explore team resilience in the next section.

4 Investigating team resilience



Whether from your own experience as an athlete, or from watching a sports team that you follow, the highs and lows of team sport cannot be ignored. For athletes and coaches to be able to face these challenges and positively adapt is not an easy task. West, Patera and Carsten (2009, p. 254) argue that team resilience could be of importance for teams to 'repair and rebound' from experiencing these stressful situations.

In Activity 5 you will examine team resilience in more depth, in addition to hearing again from Dr Mustafa Sarkar on the differences between individual and team resilience.

Activity 5 Investigating team resilience

Allow approximately 45 minutes

There are two parts to this activity.

First, read the reading at the link below, which is part of an article called 'Recent developments in team resilience research in elite sport' (Morgan, Fletcher and Sarkar, 2017):

[Reading: Recent developments in team resilience research in elite sport](#)

Identify the key features of team resilience that are discussed.

Provide your answer...

Discussion

Having read the reading, you might have noted down that there is 'some consensus about the protective nature of team resilience from the potentially harmful effects of stressors' (Morgan, Fletcher and Sarkar, 2017, p. 159). Furthermore, the authors highlight that team resilience is a dynamic process and is a shared or collective phenomenon, comprising both psychological and social elements (psychosocial).

You might have summarised the findings from the two research articles discussed; one that collected primary data through the use of focus groups and one that analysed written narratives of athletes from autobiographies.

Then listen to the following audio recording, 'Developing resilience in sport', in which resilience researcher Dr Mustafa Sarkar explains what team resilience comprises.

Audio content is not available in this format.



[Developing resilience in sport](#)

Finally, make a note of how team resilience differs from individual resilience.

Provide your answer...

Discussion

From the audio recording, you might have noted that, unlike individual resilience, team resilience involves relationships and requires a different set of qualities including group structure, importance of collective confidence, deep emotional bonds and social identity.

So far, you have seen differences between individual and team resilience. In the audio, Dr Sarkar acknowledged that while there were some nuances in team resilience across sports, there were some key similarities. In the next section, you will look at how resilience applies to the extremes of sporting performance.

5 Resilience at the extremes of sporting performance



‘Resilience’ as a term is perhaps more widely used in environments where the human body is tested to its limits, such as performing in extreme temperatures (e.g., the desert ultramarathon, Marathon de Sablé), and attempting solo challenges where isolation can play a significant role (Leach, 2016). MacIntyre et al. (2019, p. 3) argue that the interaction with nature that occurs in extreme sports ‘offers an opportunity to explore how stress, psychological resources, coping and psychological growth interact’.

To explore this further, in the next activity you will read a short article written by a researcher who is investigating resilience in extreme sports.

Activity 6 Investigating the cluster effect

Allow approximately 45 minutes

First, read [Dave Harrison’s \(2020\) blog post](#) where he discusses resilience in extreme environments.

Next, having read Harrison’s post, answer the following:

1. Identify what a cluster effect is and why it is of interest when studying resilience.
2. Why is a challenge mindset important and how can it be developed in an extreme environment?

Provide your answer...

Discussion

1. A cluster effect occurs when an individual experiences an accumulation or grouping of stressors, rather than experiencing just one. In the blog, Harrison

refers to dealing with wet kit while mountain climbing, with no time to address this before the next day's travel begins. If we are to fully support the development of resilience in extreme sport athletes, we need to understand how they experience stressors, and if groups of stressors can have an accumulative effect, it is crucial that this is considered when preparing the athletes for their events and challenges.

2. It is important to develop a challenge mindset as it allows an individual to see situations as a challenge and not as a threat. It is important that this mindset is adopted and then maintained within an extreme environment to buffer against the potential negative impact of a cluster effect of stressors. Increasing an individual's experience can allow them to slowly build up exposure to stressors and reduce the potential negative effect of stressors.

You will explore the challenge mindset concept further in Session 2, where you look at how we might develop resilience. Before you do this, the final section in this session considers another point raised by Harrison (2020), that our past experiences can help us to respond positively to the given demands of a situation.

6 Resilience in the early stages of the athletic development journey



If we consider Harrison's (2020) article and apply it to early experiences on the athletic development journey, it could be argued that positive experiences in school sport and physical education (PE) are more likely to result from young people adopting a challenge mindset and having the ability to 'buffer' the potential negative effects of stressors that they might encounter.

Research to examine potential stressors experienced by young people in PE was conducted by Tudor, Sarkar and Spray (2019), to explain patterns of motivation and engagement in the subject. Stressors for the students were identified as:

- the social environment, including interactions between peers
- the physical and organisational environment, including the changing facilities
- the performance environment, including situations where physical appearance and physical competencies were exposed.

Having gained an understanding of the stressors experienced in PE, Tudor, Sarkar and Spray moved their focus to exploring the protective factors that alter the student response to the identified stressors associated with PE participation – investigating student resilience in the PE context. This resulted in a second article being published, which you will see being applied to a case study in Activity 7.

Activity 7 Examining resilience in PE

Allow approximately 30 minutes

First, read this summary of the research by Tudor, Sarkar and Spray (2020):

Research summary

Tudor, K., Sarkar, M. and Spray, C.M. (2020) 'Resilience in physical education: A qualitative exploration of protective factors', *European Physical Education Review*, 26(1), pp. 284–302.

Aim: to explore protective factors that alter secondary school students' responses to common stressors associated with PE participation.

Method: Interviews and focus groups (group interviews) were conducted with six teachers and 54 students. Transcripts were analysed using thematic analysis.

Findings: The study identified individual assets and environmental factors that may buffer the impact of stressors on positive adaptation.

Individual assets identified as potential protective factors comprised of cognitive factors (e.g., perceived competence), personality trait (e.g., extraversion) and behavioural factors (e.g., approaching challenge).

Environmental resources that influenced the impact of the stressors experienced comprised of peers (e.g., being with friends), teachers (e.g., reinforcing resilient behaviour) and parental factors (e.g., reinforcing the value of PE).

Conclusion: The study identified and explored unique protective factors that teachers may target to facilitate resilience in the PE context.

Secondly, read this short case study about Efia, and consider how the research findings were able to support her in her role.

Case study: Efia (PE teacher)

Efia is a newly qualified PE teacher and has just started a new position in a large secondary school. Like you, she was introduced to the topic of resilience in her studies and she is keen to continue to learn how she can integrate this knowledge and understanding into her practice. She has read the research article and is going to try to implement a number of the practitioner implications that are suggested by the researchers.

Specifically, Efia is going to ensure that she can cater for the needs of all of her students by using differentiation, manage the use of competition appropriately and consider techniques that can improve student engagement following a poor performance. She will try and encourage students to embrace challenge and offer a choice of activity where possible. Building strong relationships with students is a key buffer to stressors encountered, and Efia will focus on an equal relationship with all students, regardless of their levels of motivation and behaviour.

Finally, if you are a coach or work with children in a different setting reflect on how this might be applied to your own role. If this does not apply to you, think back to your own PE experiences and how the changes that Efia intends to make might have created a different environment for your PE experience.

Provide your answer...

Discussion

One of the key takeaway messages from the research examined in this activity, is that PE teachers – and therefore arguably coaches – can play a significant role in facilitating the development of resilience. This will be explored further in Session 2.

7 Summary of Session 1

This session has introduced you to the concept of resilience through an examination of a number of research studies of resilience in different sporting contexts.

The main learning points of this session include the following:

- Resilience is a skill that can be developed, although there are factors that can influence an individual's ability to be resilient.
- Resilience consists of three components: adversity (stressor), protective factors and positive adaptation.
- Team resilience differs from individual resilience in that it involves relationships and requires a different set of qualities including group structure, importance of collective confidence, deep emotional bonds, and social identity.
- A cluster effect is when there is an accumulation, or grouping, of stressors, rather than experiencing just one which can impact on our ability to be resilient.
- Students can experience a number of stressors in the PE environment. Research informs us that there are strategies that PE teachers can implement to buffer against these to facilitate the development of resilience.

You can now go to [Session 2](#).

Session 2: Developing resilience

Introduction



The aim of this session is to develop a deeper understanding of resilience and for you to consider how to build resilience in sport settings. How can an athlete or coach develop these skills, and how can we be proactive to support athletes, and coaches, to prepare for any challenges that they might face along their athletic journey?

To address these questions within this session you will reflect on the optimum conditions in which resilience can be developed. You will also examine the role of the environment (e.g., organisation or team) that surrounds the athletes as they develop resilience, including how coaches can facilitate the development of these skills. Finally, you'll look at what a programme to develop resilience might look like for athletes and coaches, alongside evidence-informed considerations required when implementing such interventions.

1 Building resilience: getting it right

Before you consider *how* we might develop resilience, both in ourselves and in others, it is important to have an understanding of the features of a specific sport environment. While a focus on developing an individual's ability to withstand pressure might seem a logical step when working with athletes, it is important to create environments in which people can thrive both as a person and a performer (Sarkar, 2018).

Indeed, if an athlete found themselves in a toxic organisational culture or a power imbalance in the coach-athlete relationship, we would not want to focus on building resilience in the athlete to enable them to 'cope'. Instead we would need to consider the wider issues. In Activity 1 you will read another reading from Howells (2022) and apply the content to a case study organisation to help you further understand how best to prepare for building resilience.

Activity 1 Preparing to build resilience

Allow approximately 60 minutes

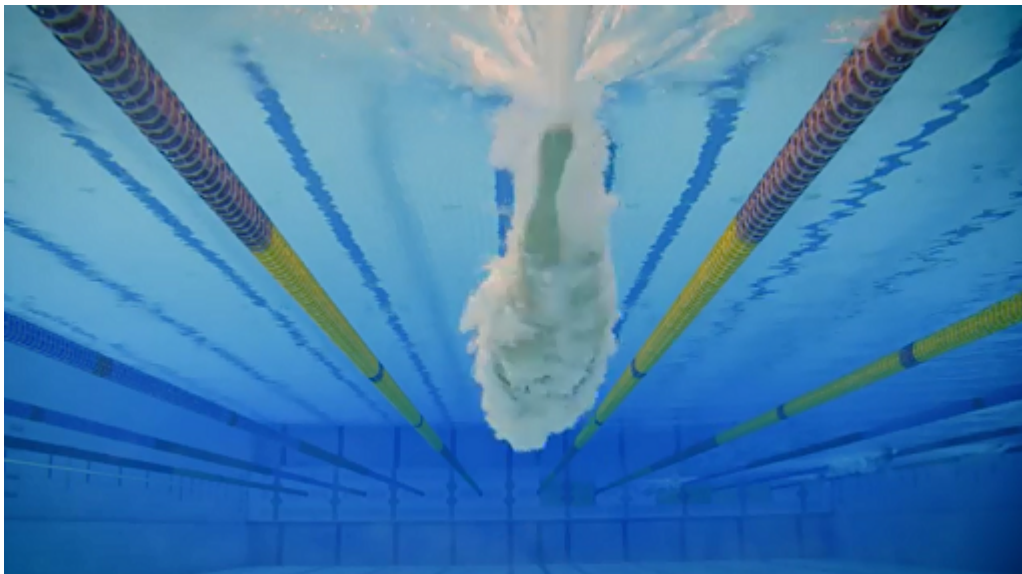
First, read the reading at the link below, which is a section of a chapter called 'Developing resilience on the athlete's journey' (Howells, 2022).

[Reading: Building resilience](#)

Next, watch the video 'Athlete wellbeing and engagement' from the Australian Institute of Sport (AIS).

Video content is not available in this format.

[Athlete wellbeing and engagement](#)



Finally, consider the second question posed by Howells (2022, p. 205): What is the motivation for building resilience? Do you feel that the AIS address the issues raised that would enable them to embark on a programme to develop resilience?

Provide your answer...

Discussion

Howells (2022) highlights three issues that should be addressed before embarking on an approach to building resilience.

1. Fletcher and Sarkar (2016) argue that any programme to build resilience should be **part of a wider holistic programme** to support the development of well-adjusted performers. You might have identified that the AIS strongly promote such an approach with reference made to the five aspects of athlete wellbeing and engagement, including mental health and personal development.
2. There should be considerations of the **reasons for proposing an intervention to build resilience**. For the AIS, it could be argued that the purpose of introducing an intervention to develop resilience could be both to enhance performance (personal development) and to protect the athlete from potential negative impact of stressors (mental health).
3. A decision to introduce a resilience programme should be made while **being mindful of the dynamics of an organisation**, such as how open it might be to sport psychology. You might have considered that with the AIS promoting a holistic development programme, that the AIS would be 'open' to sport psychology support.

It is important to note that the term 'thrive' was referred to by one of the athletes in the video. To make the distinction between the two terms, Brown, Sarkar and Howells (2020) posit that resilience does not lead to thriving but can result in its maintenance. Furthermore, the authors offer that if an athlete is thriving (i.e., fully functioning) they are better able to demonstrate resilience if they experience stressors.

In this section you have started to consider the environmental conditions that would best facilitate the development of resilience. As touched on in Session 1, the environment itself can create a number of stressors for the athlete, coach and team, so getting this element 'right' is crucial and is the focus of the next section.

2 The role of the environment



To help us to understand the role of the environment when considering the development of resilience, Sarkar (2019) uses the analogy of a flower. If a flower is not blooming, we do not look to the flower for a reason but, instead, we focus on its environment; we examine the volume of water, the quality of the soil, and the amount of sunlight available.

In Activity 1, you reflected on the environment created by the AIS to support its elite athletes. This approach has also been committed to by UK Sport who seek to create the 'right environment, providing equal levels of support and challenge while also being extra vigilant in caring about the well-being of athletes' (Nicholl, 2017).

The notion of challenge and support is highlighted in the UK Sport statement. You will look in more detail at these concepts in Activity 2.

Activity 2 What is the 'right' environment for building resilience?

Allow approximately 45 minutes

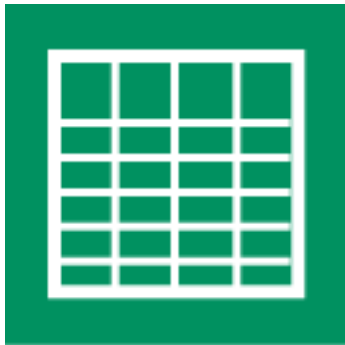
First, read the short article

['Developing resilience in elite sport: the role of the environment'](#) (Sarkar, 2018) which introduces mental fortitude training. Central to this is the role of the environment in developing resilience and the challenge-support matrix.

Now, based on the reading, complete interactive Figure 1.

Interactive content is not available in this format.

Figure 1 A challenge–support matrix for developing resilience (Fletcher and Sarkar, 2016).



Research indicates that a facilitative environment for the development of resilience can be achieved through offering high levels of challenge and support. Fletcher (2020) highlighted that the nature, and level, of challenges faced by an individual, both athlete and coach, will change over time. As such, the associated support for each challenge must accommodate this. For example, more support might be required in the final stages before a major competition or following an injury.

Having established the importance of creating a facilitative environment, you'll now turn your focus to the development of resilience in individuals, from both an athlete and a coach perspective.

3 Approaches to building athlete and coach resilience

Mental resilience is not something that all participants and coaches automatically have and this should be developed with the same consideration that physical resilience is built.

(Grey-Thompson, 2017, p. 23)

This quote is taken from a UK government independent report by Baroness Grey-Thompson looking into the issues surrounding the Duty of Care that sports have towards their participants. The review examined aspects of elite sport ranging from personal safety and injury, to mental health issues, and the support provided to those involved. What is interesting here is the equal value given to both physical and mental resilience and the reference to both sport participants and coaches.

As a result of the growing awareness of the importance of building resilience in sport, there are increasing numbers of resources being published to support the development of resilience in athletes, such as the [Resilience Building Toolkit](#) from UK Coaching. A second example is presented in Figure 2, with an infographic developed for a coach audience to offer tips for building resilience.



Figure 2 An infographic aimed to support coaches to develop resilience in their athletes (BelievePerform, 2020).

While such resources are a positive step, researchers call for other considerations to be made when planning interventions, for example, the timing of an intervention to develop resilience is critical and both robust and rebound resilience should be considered (Fletcher and Sarkar, 2016). Furthermore, an intervention should be grounded in theoretical and conceptual advances (Fletcher and Sarkar, 2012).

In Activity 2, you were introduced to mental fortitude training (Fletcher and Sarkar, 2016) to support the development of resilience. Howells (2022) discusses two further interventions: planned disruptions and rational-emotive behaviour therapy (REBT), which you look at next.

Activity 3 Investigating resilience interventions

Allow approximately 45 minutes

First read the reading at the following link, which is a section of a chapter called 'Developing resilience on the athlete's journey' (Howells, 2022).

[Reading: Planned disruptions and REBT](#)

Then complete the 'Key features' column in the table below to summarise each intervention appropriately.

Table 1 Planned disruptions and REBT

	Aim	Key features
Planned disruptions	Involves the exposure of athletes to specific training activities that increase/change demands placed on them.	<i>Provide your answer...</i>
REBT	Works on the assumption that many of the problems faced by an athlete can be caused by irrational thinking.	<i>Provide your answer...</i>

Discussion

Table 1 Planned disruptions and REBT

	Aim	Key features
Planned disruptions	Involves the exposure of athletes to specific training activities that increase/change demands placed on them.	Research has identified a number of types including competition simulation. Involves encouraging the athletes to reflect on their responses to build self-awareness.
REBT	Works on the assumption that many of the problems faced by an athlete can be caused by irrational thinking.	Uses the ABC(DE) framework. Does not dispute that stressors/adversity exists but works to change the athlete's perception by replacing their beliefs.

Watch the video 'Coach resilience (Part 2)', which revisits the research from Sarkar and Hilton (2020). In the video, the protective factors (identified by the coaches in the research) are discussed along with practical implications from the research findings in terms of building coach resilience.

Video content is not available in this format.

[Coach resilience \(Part 2\)](#)



Now, having watched the video, answer the following questions:

1. How might the research findings help a coach, to support them to build their own resilience?
2. How could the practical implications of the research inform the organisation that the coach works for to support the development of their own resilience and other coaches' resilience?

Provide your answer...

Discussion

1. You might have noted that Dr Sarkar emphasises the importance of a coach understanding their own protective factors. The coach could reflect on the six protective factors discussed and consider their own strengths in these areas and identify where they might need to develop further. For example, they might perceive that they have a sound coach support network and have durable motivation but might acknowledge that they could improve their work-life balance.
2. The research highlighted that an organisation could support coaches in developing resilience. It identified education and support regarding the stressors that might be experienced and the protective factors that could buffer against these factors. For example, organisations such as English Athletics could provide coach education on resilience that a coach could access to help them become more aware of the possible stressors in their role and how they could develop skills to protect themselves from the potential negative effects of these stressors. There could be workshops and resources to help them to develop leadership and management skills, as well as mechanisms to support their wellbeing.

It is clear that education is a core element in the development of resilience to support impactful interventions, and here you have considered how a coach might support the facilitation of an individual athlete, alongside the development of their own skillset.

In Session 1, you examined the difference between individual and team resilience. It is important, then, for the coach to consider each separately when looking to develop resilience. You will investigate developing team resilience in the next section.

4 Building team resilience



It benefits both coaches and sport psychologists to understand how teams should collectively perform when under pressure and in the face of setbacks (Morgan, Fletcher and Sarkar, 2017). You read in Session 1 that team resilience is a shared experience and, as such, research suggests that a programme aimed to build resilience in teams should open by involving team members in conversations about their own team's resilience (Morgan, Fletcher and Sarkar, 2013). This might also involve using measures such as the [Characteristics of Resilience in Sports Teams \(CREST\) questionnaire](#) (Decroos et al., 2017; the questionnaire is in the appendix of the article).

In Activity 4, you will hear further input from Dr Mustafa Sarkar on building team resilience and examine research that followed a rugby union team throughout a season (an example of longitudinal research design) to study how they were able to promote the development of their resilience.

Activity 4 Working with teams to build resilience

Allow approximately 60 minutes

First, listen to the second extract from the podcast that you first accessed in Session 1. In this part of the audio, Dr Mustafa Sarkar outlines the importance of leadership in building team resilience.

Audio content is not available in this format.



The importance of team resilience

Next, having listened to the audio, note down your understanding of 'shared leadership' and reflect on the findings of resilience across a variety of sports.

Provide your answer...

Discussion

In the second extract from the podcast, Dr Sarkar highlights the importance of sharing leadership throughout the team in order to support the development of resilience. He uses the example of the World Cup winning Rugby Union coach, Clive Woodward, who stressed the need for an exceptional leader among a group of great leaders. Dr Sarkar noted that by having a leadership group there are more people to be accountable when setbacks occur, to share the responsibilities of the outcome of the performance.

As highlighted in the podcast, although there are consistencies between the resilience found in teams across a variety of sports, there will be some contextual differences.

Now read the reading at the following link, which is a section from an article called 'Developing team resilience: a season-long study of psychosocial enablers and strategies in a high-level sports team' (Morgan, Fletcher and Sarkar, 2019). It explores the enablers and strategies that promote the development of team resilience.

[Reading: Developing team resilience](#)

Finally, drawing from the key points raised in both the podcast and the article, consider how you might apply these to **one** of the following:

- your own team, or one that you work with or follow, or
- the relay coach that works with the women's Team GBR 4 x 100m squad.

Provide your answer...

Discussion

If you chose to apply the key points from the resources to your own examples, there are likely to be some variations.

If you chose to apply the key points from the podcast to the relay coach, you might have reflected that they might face a potential challenge of having a leadership group in such a small team but that as each sprinter had responsibility for each leg of the relay, you could argue that there was a natural sharing of responsibilities. This is supported by the findings of Morgan, Fletcher and Sarkar (2019) who call for the development of a team regulatory system founded on this ownership and responsibility. The relay coach should also emphasise the importance of cultivating team identity (e.g. all athletes wear team kit) and create a selfless culture, as opposed to a blame culture. The coach should pose challenges to the team during training but maintain the importance of enjoyment, and a positive outlook when faced with adversity.

Looking more broadly than the team, research findings from Fasey et al. (2021) indicate that organisations such as schools, clubs and governing bodies approaching the development of resilience can look to their own structures, in addition to focusing on the creation of an environment that balances appropriate challenge and support for athletes and coaches, as has been discussed in this session.

You'll now turn your attention to how the development of resilience can be supported as an athlete navigates through their athletic development journey.

5 Developing resilience for the athletic development journey



As highlighted by Tudor, Sarkar and Spray (2020) in Session 1, the supported development of resilience could start in childhood, for example in the school PE setting. Although it is important to highlight that our resilience levels will fluctuate over time and, indeed, often be specific for particular aspects of our lives, it could be of benefit to consider the development of resilience in the early stages of an athlete's life. Arguably, an athlete's family are an influential factor in creating opportunities to develop resilience. Watch the video 'Building children's resilience' which is an example of a resource aimed at offering parental guidance on children's resilience.

Video content is not available in this format.

[Building children's resilience](#)



As highlighted in the video, participating in physical activity and exercise can facilitate the development of resilience. In their research examining young gymnasts and their coaches, White and Bennie (2015) found that resilience can be cultivated through participation in sport. The research, focusing on athlete and coach perceptions on the development of resilience in community-level gymnastics, highlighted that gymnastics participation resulted in the development of life skills, self-efficacy and self-esteem, in addition to resilience. Where much of the research into resilience in sport has focused on elite sport, this community-level research allows us to see the benefits of sport participation more widely.

We could conclude, therefore, that particularly with young athletes, the development of resilience can be facilitated by participation in sport and physical activity, but as you have seen this should be within an effective environment. Such experiences could support the young athlete as they continue on their athletic development journey.

In the last activity of this course, you are encouraged to reflect on your learning.

Activity 5 Reflecting on your own learning

Allow approximately 30 minutes

At this point, take some time to reflect on the topics covered in this course by considering:

- your thoughts on resilience as a mechanism for supporting athletes and coaches on their athletic development journey
- any planned action that you have as a consequence of your learning, from your perspective as a coach, a parent with sporting children, as an athlete yourself or within your life more widely.

Provide your answer...

Discussion

Hopefully you have reflected not only on how your learning from this course could be applied to your own sporting practices and interests, but also enabled you to reflect on your own levels of resilience. Having this increased self-awareness can support you to

be mindful of the environments in which you function, both in sport and more widely in your life. For example, do you have appropriate challenge and support?

6 Summary of Session 2

In this session you have explored how to support the development of resilience in athletes and coaches. With reference to research, you have examined the optimum conditions or the facilitation of resilience and considered a number of interventions to build resilience. Some of the key learning points of this session are:

- It is important to consider the purpose of implementing a programme to develop resilience.
- The role of the environment is a key factor for the development of resilience. An environment that offers a high level of challenge and support is identified as being most facilitative.
- Mental fortitude training, planned disruptions and Rational-Emotive Behaviour Therapy (REBT) are examples of interventions for building resilience.
- The development of team resilience differs from building resilience in individual athletes and coaches.
- Supporting the development of resilience in young athletes can aid them as they navigate the athletic development journey. This support can come from education settings and sports clubs.

Congratulations on finishing this free course on resilience in sport.

This OpenLearn course is an adapted extract from the Open University course [*E312 Athletic development: a psychological perspective*](#).

Where next?

If you've enjoyed this course you can find more free resources and courses on [OpenLearn](#).

You might be specifically interested in these free badged courses:

- [Communication and working relationships in sport and fitness](#)
- [Exploring sport coaching and psychology](#)
- [Learning from sport burnout and overtraining](#)
- [Coaching others to coach](#)
- [The athlete's journey: transitions through sport](#)
- [Exploring the psychological aspects of sport injury](#)

There is also a [page of sport and fitness courses on OpenLearn](#).

You might also be interested in registering for this course's related OU course [E312 Athletic development: a psychological perspective](#), which is part of our [BSc \(hons\) Sport, fitness and coaching](#).

References

Fletcher, D., Hanton, S. and Mellalieu, S.D. (2006) 'An organizational stress review: conceptual and theoretical issues in competitive sport' in Hanton, S. and Mellalieu, S.D. (eds) *Literature reviews in sport psychology*, Hauppauge, NY: Nova Science, pp. 321–73.

Fletcher, D. and Sarkar, M. (2012) 'A grounded theory of psychological resilience in Olympic champions', *Psychology of Sport and Exercise*, 13, pp. 669–678.

Fletcher, D. and Sarkar, M. (2016) 'Mental fortitude training: An evidence-based approach to developing psychological resilience for sustained success', *Journal of Sport Psychology in Action*, 7, pp. 135–157.

Galli, N. and Vealey, R.S. (2008) "'Bouncing back" from adversity: Athletes' experiences of resilience', *The Sport Psychologist*, 22, pp. 316–335.

Harrison, D. (2020) 'The importance of psychological resilience in extreme environments', *OU Sport Blog*. Available at: <http://www.open.ac.uk/blogs/OU-Sport/?p=2480> (Accessed: 17 September 2021).

Howells, K. and Fletcher, D. (2016) 'Adversarial growth in Olympic swimmers: Constructive reality or illusory self-deception?', *Journal of Sport & Exercise Psychology*, 38, pp. 173–186.

Howells, K. (2022) 'Developing resilience on the athlete's journey', in Heaney, C., Kentzer, N. and Oakley, B. (eds) *Athletic Development: A Psychological Perspective*. London: Routledge, pp. 202–213.

Leach, J. (2016) 'Psychological factors in exceptional, extreme and torturous environments', *Extreme Physiology & Medicine*, 5(1), pp. 1–15.

MacIntyre, T.E., Walkin, A.M., Beckmann, J., Calogiuri, G., Gritzka, S., Oliver, G., Donnelly, A.A. and Warrington, G. (2019) 'An exploratory study of extreme sport athletes'

nature interactions: From well-being to pro-environmental behavior', *Frontiers in Psychology*, 10, p. 1233.

Masten, A.S., Gewirtz, A.H. and Sapienza, J.K. (2013) 'Resilience in development: The importance of early childhood', in Tremblay, R.E., Boivin, M., Peters De. V.R. (eds) *Encyclopedia on Early Childhood Development*. Available at: <http://www.child-encyclopedia.com/resilience/according-experts/resilience-development-importance-early-childhood> (Accessed: 17 September 2021).

Masten, A.S. (2001) 'Ordinary magic: Resilience processes in development', *American Psychologist*, 56(3), pp. 227–238.

Morgan, P.B., Fletcher, D. and Sarkar, M. (2013) 'Defining and characterizing team resilience in elite sport', *Psychology of Sport and Exercise*, 14(4), pp. 549–559.

Morgan, P.B.C., Fletcher, D. and Sarkar, M. (2017) 'Recent developments in team resilience research in elite sport', *Current Opinion in Psychology*, 16, pp. 159–164.

Olusoga, P., Maynard, I., Hays, K. and Butt, J. (2012) 'Coaching under pressure: A study of Olympic coaches', *Journal of Sports Sciences*, 30(3), pp. 229–239.

Rees, T., Hardy, L., Güllich, A., Abernethy, B., Côté, J., Woodman, T., Montgomery, H., Laing, S. and Warr, C. (2016) 'The great British medalists project: a review of current knowledge on the development of the world's best sporting talent'. *Sports medicine*, 46(8), pp. 1041–1058.

Sarkar, M. and Fletcher, D. (2013) 'Psychological resilience: A review and critique of definitions, concepts, and theory', *European Psychologist*, 18(1), pp. 12–23.

Sarkar, M., and Hilton, N. K. (2020) 'Psychological resilience in Olympic medal-winning coaches: A longitudinal qualitative study', *International Sport Coaching Journal*, 7(2), pp. 209–219.

Sisto, A., Vicinanza, F., Campanozzi, L.L., Ricci, G., Tartaglini, D. and Tambone, V. (2019) 'Towards a transversal definition of psychological resilience: A literature review', *Medicina*, 55(11), p. 745.

Tudor, K., Sarkar, M. and Spray, C.M. (2019) 'Exploring common stressors in physical education: A qualitative study', *European Physical Education Review*, 25(3), pp. 675–690.

Tudor, K., Sarkar, M. and Spray, C.M. (2020) 'Resilience in physical education: A qualitative exploration of protective factors', *European Physical Education Review*, 26(1), pp. 284–302.

Wagstaff, C.R.D., Sarkar, M., Davidson, C.L. and Fletcher, D. (2017) 'Resilience in sport: A critical review of psychological processes, sociocultural influences, and organizational dynamics', in Wagstaff, C.R.D. (ed.) *The organizational psychology of sport: Key issues and practical applications*. London: Routledge, pp.120–149.

West, B.J., Patera, J.L. and Carsten, M.K. (2009) 'Team level positivity: Investigating positive psychological capacities and team level outcomes', *Journal of Organizational Behavior*, 30, pp. 249–267.

BelievePerform (2020) *10 ways coaches can build resilience when coaching*. Available at: <https://believeperform.com/product/10-ways-coaches-can-build-resilience-when-coaching/> (Accessed: 17 September 2021).

Brown, D.J., Sarkar, M. and Howells, K. (2020) 'Growth, resilience and thriving: A jangle fallacy?', in Wadey, R., Day, M. and Howells, K. (eds) *Growth following adversity in sport*. London: Routledge, pp. 59–72.

Decroos, S., Lines, R.L., Morgan, P.B., Fletcher, D., Sarkar, M., Fransen, K., Boen, F. and Van de Broek, G. (2017) 'Development and validation of the characteristics of resilience in

sports teams inventory', *Sport, Exercise, and Performance Psychology*, 6(2), pp. 158–178.

Fasey, K.J., Sarkar, M., Wagstaff, C.R. and Johnston, J. (2021) 'Defining and characterizing organizational resilience in elite sport', *Psychology of Sport and Exercise*, 52, p. 101834.

Fletcher, D. and Sarkar, M. (2012) 'A grounded theory of psychological resilience in Olympic champions', *Psychology of Sport and Exercise*, 13, pp. 669–678.

Fletcher, D. and Sarkar, M. (2016) 'Mental fortitude training: An evidence-based approach to developing psychological resilience for sustained success', *Journal of Sport Psychology in Action*, 7, pp. 135–157.

Fletcher, D. (2020) 'How should we create environments that promote psychological resilience?' [Webinar]. PQ (Lboro) Ltd. 9 December 2020.

Grey-Thompson, T. (2017) *Duty of Care in Sport Review*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/610130/Duty_of_Care_Review_-_April_2017_2.pdf (Accessed: 17 September 2021).

Howells, K. (2022) 'Developing resilience on the athlete's journey', in Heaney, C., Kentzer, N. and Oakley, B. (eds) *Athletic Development: A Psychological Perspective*. London: Routledge, pp. 202–213.

Morgan, P.B.C., Fletcher, D. and Sarkar, M. (2013) 'Defining and characterizing team resilience in elite sport', *Psychology of Sport and Exercise*, 14(4), pp. 549–559.

Morgan, P.B.C., Fletcher, D. and Sarkar, M. (2017) 'Recent developments in team resilience research in elite sport', *Current Opinion in Psychology*, 16, pp. 159–164.

Morgan, P.B.C., Fletcher, D. and Sarkar, M. (2019) 'Developing team resilience: A season-long study of psychosocial enablers and strategies in a high-level sports team', *Psychology of Sport and Exercise*, 45, pp. 101543.

Nicholl, L. (2017) *Better culture creates a stronger system*. Available at: <https://www.uksport.gov.uk/news/2017/10/24/uk-sport-statement-on-culture> (Accessed: 17 September 2021).

Sarkar, M. (2018) 'Developing resilience in elite sport: The role of the environment', *The Sport and Exercise Scientist*, 55, pp. 20–21.

Sarkar, M. (2019) *How to create psychological resilience* [podcast]. 1 July. Available at: <https://athletedevelopmentproject.com/2020/01/ep-72-mustafa-sarkar-how-to-create-psychological-resilience/> (Accessed: 17 September 2021).

Sarkar, M. and Hilton, N. K. (2020) 'Psychological resilience in Olympic medal-winning coaches: A longitudinal qualitative study', *International Sport Coaching Journal*, 7(2), pp. 209–219.

Tudor, K., Sarkar, M. and Spray, C.M. (2020) 'Resilience in physical education: A qualitative exploration of protective factors', *European Physical Education Review*, 26(1), pp. 284–302.

White, R.L. and Bennie, A. (2015) 'Resilience in youth sport: A qualitative investigation of gymnastics coach and athlete perceptions', *International Journal of Sports Science & Coaching*, 10(2–3), pp. 379–394.

Acknowledgements

This free course was written by Nichola Kentzer.

Except for third party materials and otherwise stated (see [terms and conditions](#)), this content is made available under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 Licence](#).

The material acknowledged below is Proprietary and used under licence (not subject to Creative Commons Licence). Grateful acknowledgement is made to the following sources for permission to reproduce material in this free course:

Text

Session 1

'What is resilience?' reading: © The Open University

'Recent developments in team resilience' reading: 'Recent developments in team resilience research in elite sport', *Current Opinion in Psychology*, Elsevier

Session 2

'Building resilience' reading: © The Open University.

'Planned disruptions and REBT' reading: © The Open University.

'Developing team resilience' reading: Morgan, P.B.C., Fletcher, D. & Sarkar, M. (2019).

'Developing team resilience: A season-long study of psychosocial enablers and strategies in a high-level sports team'. *Psychology of Sport and Exercise*. Elsevier

Images

Introduction

Course image: © Delly Carr/Getty Images

Session 1

Introduction image: © Ruslan Sitarchuk/Dreamstime.com

Section 1 image: © Vitezslav Vylicil/shutterstock.com

Figure 1: Adapted from Fletcher, A., and Sarker, M. (2012) 'A grounded theory of psychological resilience in Olympic champions' Vol 13, Issue 5. *Psychology of Sport Exercise*. 2012 Elsevier

Section 4 image: © Belish/Shutterstock

Section 5 image: photobac/123RF

Section 6 image: © Shestock/Getty

Session 2

Introduction image: © mrgao/iStock

Section 2 image: © AlessandroZocci/iStock

Figure 1: adapted from Fletcher and Sarker 2016

Figure 2: © BelievePerform

Section 4 image: © Patrik Giardino/Getty

Section 5 image: © FRANCK FIFE/Contributor/Getty

Audio-visual

Session 1

'Introduction to resilience' video: Courtesy of Resilient Option, www.stressfree.com

'The Merthyr mermaid' video: © BBC

'Coach resilience (Part 1)' video: © The Open University. Female swimmer in pool: WK-Production/Creatas Video+/Getty Images Plus

'Developing resilience in sport' audio: Courtesy of BelievePerform.com

Every effort has been made to contact copyright owners. If any have been inadvertently overlooked, the publishers will be pleased to make the necessary arrangements at the first opportunity.

Session 2

'Athlete wellbeing and engagement' video: Swimming Australia, <https://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en>

'Coach resilience (Part 2)' video: © The Open University.

'The importance of team resilience' audio: Courtesy of Believeperform.com

'Building children's resilience' video: used with the permission of Home-Start Central Bedfordshire.

Every effort has been made to contact copyright owners. If any have been inadvertently overlooked, the publishers will be pleased to make the necessary arrangements at the first opportunity.

Every effort has been made to contact copyright owners. If any have been inadvertently overlooked, the publishers will be pleased to make the necessary arrangements at the first opportunity.

Don't miss out

If reading this text has inspired you to learn more, you may be interested in joining the millions of people who discover our free learning resources and qualifications by visiting The Open University – www.open.edu/openlearn/free-courses.