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CHAPTER OBJECTIVES

- Understand the different ways of defining and conceptualising resilience.
- Understand the relationship between MWB and resilience in a variety of contexts, and relate knowledge of these to the classroom.

TEACHERS’ STANDARDS

A teacher must:

5 Adapt teaching to respond to the strengths and needs of all pupils
   • demonstrate an awareness of the physical, social and intellectual development of children, and know how to adapt teaching to support pupils’ education at different stages of development
   • have a clear understanding of the needs of all pupils, including those with special educational needs; those of high ability; those with English as an additional language; those with disabilities; and be able to use and evaluate distinctive teaching approaches to engage and support them

8 Fulfil wider professional responsibilities
   • take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues
   • communicate effectively with parents with regard to pupils’ achievements and well-being

13.1 INTRODUCTION

Having considered MWB in the previous chapter, it is now possible in this chapter to explore the links between MWB, developing resilience and the role of coaching psychology in this process. In the following section, we will explore applied techniques from the realms of psychological skills training to provide guidance on the ‘how to...’ element of this section.

13.2 CONTEXTUALISING RESILIENCE

Drop-out rates in the teaching profession have become an internationally recognised problem. It has been reported that 70 per cent of Canadian teachers leave within the
first five years and 50 per cent within the first two years of service (see Carsenti and Collin, 2013). Carsenti and Collin contrast this with findings elsewhere, showing that 46 per cent of teachers in the USA leave within the first five years, while the attrition rate in the UK is 40 per cent within the first three years, with rates in France and Germany being significantly less, postulated to be due to the non-accountability of teachers for their failing pupils (cf. Carsenti and Collin, 2013). Findings such as these are now being mirrored at the beginning of the process, in the UK, where government-set recruitment targets have not been met in the last five years (House of Commons Education Committee, 2017). Female teachers between the ages of 30 and 39 are most likely to leave within two years of training, falling far short of the 5 and 8 years required to develop into an ‘experienced’ teacher (Newton, 2016).

On the flipside of the coin, 92 per cent of students entering higher education have reported experiencing what has been termed ‘mental distress’, with 20 per cent disclosing mental health issues (Macintosh and Shaw, 2017). Not only is this of concern to all higher education institutions: it is a sign of the times and perhaps provides some insight into just how resilient our early career personnel might be as they enter our challenging profession. We pick this up in more detail elsewhere in the chapter.

13.3 THE ORIGINS OF COACHING PSYCHOLOGY

As the discipline of psychology has evolved since its inception, so too have its sub-disciplines established themselves more widely. In the UK, the Special Group in Coaching Psychology (SGCP) emerged in 2004 from the previous Coaching Psychology Forum (CPF), which aimed to improve and promote standards within the profession. The SGCP provides a platform for the sharing and dissemination of research and practice in all aspects of the psychology of coaching for coaching psychologists and for those coaches who wish to use psychology in their coaching. It is one of eight internationally recognised professional coaching psychology bodies (British Psychological Society, 2017). Examples of recent research within the SGCP can be seen in the June 2017 edition of the Coaching Psychologist, which includes: an article on mindfulness in coaching (Passmore, 2017); an article on ‘conversational mapping’, which aims to simplify theory in a non-technical way, in order to facilitate effective communication between coach and client (Grant, 2017); an article on the role that coaching practitioners adopt in working with mental health issues (Corrie, 2017); followed by a book review on Gestalt coaching (Laughlin, 2017). Links have been made to show that emotion coaching as a strategy for promoting MWB in schools helps to develop empathy in the adult–child relationship, by having an awareness of a child's emotions, recognising emotion-based opportunities for teaching, utilising empathetic listening, normalising emotions and providing safe boundaries within which to operate (Gus et al., 2015).
In adopting a coaching psychology approach, we now have clarity, yet at the same time we have overlap. Or is it perceived overlap? If there is overlap, where should one draw the line? That is, at what point does a topic that is firmly within the realm of one sub-discipline become the ‘property’ of another? Let’s put it another way using the example of the following case study.

**CASE STUDY  John**

John is a 13-year-old student who has recently told his friends that he feels ‘really low, down and depressed’. He has felt like this for around three months but hasn’t mentioned it until now. He has slipped back at school and is no longer performing to his ability, according to his teachers, in most subjects. His friends have mentioned that ‘he is sick a lot’, which you now know means that he often vomits in the toilets after eating. He has started to isolate himself at school in the last two weeks and you have noticed that his appearance is more unkempt than it used to be.

Should one enlist the support of a clinical psychologist, an educational psychologist, a coaching psychologist, a health psychologist, a sport and exercise psychologist, a social psychologist or a cognitive (neuro) psychologist? The correct answer, in an ideal world, would be to enlist as many of these as is appropriate! Of course, we do not operate in an ideal world and so our guidance would be to enlist as many of these as is expedient, given the constraints of any budget. Multidisciplinary working is always more effective than working in isolation. Let us assume, at this juncture, that John is not experiencing any neurological or neuropsychological deficits. A key factor will be the point at which one becomes aware of John’s symptoms and his ensuing needs. A clinical psychologist would not be appropriate and indeed would not be available, if John was in the early stages of his situation. Similarly, an educational psychologist would only be called on at a particular point, where the school becomes increasingly concerned about John’s welfare. A sport and exercise psychologist may be available to offer guidance on MWB through the realms of sport or physical activity, and there is a wealth of research to suggest potential ways that this could help.

A brief literature search on the relationship between depression and neurotransmitters in the brain reveals a significant body of work; among these, we discovered a meta-analysis of studies examining effects of probiotic supplements on the two-way communication channel between the central nervous system and the gastrointestinal tract, known commonly as the ‘gut–brain axis’ (Wallace and Milev, 2017). Would John benefit from an intervention that adopts this approach to his issues? Would specialists in other disciplines of psychology even be aware that probiotic supplements may ameliorate symptoms of depression? How would
Coaching psychology was borne out of a need to offer expertise that was not strictly clinical, i.e., it did not require the expert knowledge of psychological disorders. It acts perhaps as the preventative measure before issues become clinical. This is reflected in the findings that 98 per cent of coaching psychologists in a recent survey stated the importance of being able to detect poor mental health in clients and 88 per cent had a desire to receive additional training related to mental health issues (Corrie, 2017). In terms of this chapter, MWB is not positive/negative, on/off, good/bad. It is a fluctuating state and every one of us will move along or around different points at different times of our lives, or even within a single day. Using the analogy of wakefulness, some days we feel more awake than others, or more awake at a certain point in one day than another point. Interestingly, even during sleep, we are all more asleep at some points during the sleep cycle than others (search engine term: ‘ultradian rhythms’). MWB is conceptually similar, insofar as neither is it possible to have none!

### 13.4 INTEGRATION OF COACHING PSYCHOLOGY WITH COUNSELLING, CLINICAL AND EDUCATIONAL PSYCHOLOGY

As there would seem to be a significant area of overlap between these sub-disciplines of psychology, pointed out above, one must consider how each sub-discipline can enmesh itself with its counterparts, in order to provide solutions to challenges. In aiming to facilitate an element of ‘protection’ or ‘protective layer’, through knowledge acquisition, one can understand how the term ‘resilience’ has emerged, especially in the realms of sport, business and in the military. We now move on to begin exploring resilience in a thematic manner, focusing on resilience as an overarching theme, followed by an exploration of resilience in teaching, in students training to become teachers and in children who are required to build resilience skills. The common factor in each of these groups is that the rigours of day-to-day life require resilience. Without it, challenges become struggles, struggles become fatiguing and ultimately there is a danger of being unable to cope, with an ensuing sense of ‘drowning’ in one’s problems.
13.5 WHAT EXACTLY IS RESILIENCE?

Such a simple question! Unfortunately, it does not have a simple answer, but then we imagine that you already knew this would be the case. Resilience means many different things to many different people. Is it being hardened to the pressures experienced in daily life? Is it being able to continue in the face of adversity? Is it taking on more and more roles and responsibilities without ‘cracking’? Is it stamina, endurance and the sheer determination to succeed? Is it the ability to bounce back after a challenge that was too large? Is it dealing with failure in a positive way? We will explore definitions shortly, but in short, yes, perhaps it is all of these, or any combination of these things. This leads us to ask the question: who is resilient, or is more resilient than other people? Elite athletes and sports performers? Military personnel in life-threatening environments and/or situations? Medical professionals carrying out life-saving procedures on patients? Business people, chasing financial rewards or securing the big deal? Teachers facing challenges linked to the education of our future adults? Did you just stop reading and wonder why the word ‘teachers’ was included in this list? If you did, you are perhaps correct in questioning its inclusion. Nevertheless, we would argue that there are huge similarities among them, to some extent or other. For instance, who spends long hours, day in, day out, constantly striving to operate at their best? Any of these groups! Who performs or adopts a role that they have trained for and who must overcome the issues faced by those who are at the other end of the performance? Any of these groups! The important point here is that there are shared qualities in each of these professions, along with many more professions (we did not wish to labour the point by creating an exhaustive list); and often, teachers do not see these qualities in themselves. If you did not possess these qualities, you would not have got to where you are today.

13.6 FACING MENTAL WELLBEING CHALLENGES BY DEVELOPING RESILIENCE

In exploring definitions of resilience, we will offer a variety, from the various fields mentioned above, in order to establish similarities, along with any nuanced differences among them. Having made the professional transition from student to qualified teacher, the following definition seems to be rather practical and useful to bear in mind. Madewell and Ponce-Garcia suggest that resilience is: ‘The capacity of an individual to maintain normative, or positive, development in the presence of risk’ (Madewell and Ponce-Garcia, 2016: 250). This infers that an element of equilibrium is necessary when choice means taking ‘risks’. Gu and Day (2013) couch their definition in terms of experiencing resilience as it relates to capacity; hence the experience of resilience is ‘perceived as being closely allied to their [teachers’] everyday capacity to sustain their
educational purposes’ and ‘successfully manage the unavoidable uncertainties which are inherent in the practice of being a teacher’ (Gu and Day, 2013: 22).

A report produced by Unite Students, in collaboration with YouGov and YouthSight, in 2017, based on 2016 data, explored key non-academic elements of student life that impact on higher education students’ studies (Macintosh and Shaw, 2017). While this report would view resilience as an element, rather than an umbrella term, it does identify both positive and negative contributory features related to life satisfaction, which are pertinent. Positive elements include confidence and support networks, i.e., friends, family and support from the university, through its support services, tutors, counsellors, etc. Acting against these positive elements are feelings of isolation and desperation, social life stress, university (study) life stress and any pre-existing MWB issues. The authors call for further urgent exploration of resilience in higher education and the implementation of a series of practical steps: embedding resilience into everyday interactions with students; creating a ‘Resilience Toolkit’, to be adopted across all higher education institutions; exploring all potential areas where resilience can be developed, such as teachers, parents, peers, the living and learning environment, as well as the more obvious teaching and support services mentioned earlier; and adopting an integrated approach that takes place in synergy with approaches developing in primary and secondary education, in order to promote resilient adults, as we outlined in Chapter 13.

The resilient student ‘embodies a set of identified characteristics (“internal factors”) and makes use of them in order to bounce back from setbacks and difficult situations’ (Macintosh and Shaw, 2017: 8). An interplay between internal and external factors exists, whereby self-management and emotional control (internal) cohabit the space with social integration, social support and support networks. The ability to bounce back emerges from the complex interplay between these factors, with willpower and self-control emerging, from the report, as noteworthy elements.

The Unite Students report acknowledges the fact that its data was concerned with non-academic issues related to student life, in a wider sense, and that little by way of literature exists that has explored the development of resilience external to the classroom context. It seems that we may all have been looking in the wrong place, or, at the very least, should explore the interplay between the academic and non-academic. The report recommends that we adopt a new perspective on resilience, and indeed this is something that has been happening at the University of Worcester in recent years (see Section 13.11 below).

Lawton-Smith (2017) provides an excellent and articulate exposition of resilience in the context of a study which combines resilience, coaching psychology and leadership. The study in itself is fascinating and provides insight into the semantics used by ‘resilient senior leaders’ and how resilience integrates into existing leadership and organisational frameworks. It is worth spending time discussing this paper here.

Smith argues that it is difficult to define and pinpoint resilience, unless one is clear about the nuances in current literature, which would appear to align with three distinct
approaches: asset approach, systemic approach and developmental approach. This is helpful in directing the reader to identify the type of approach adopted, when searching for relevant journal articles. The asset approach, perhaps the most commonly perceived and once intuitively favoured approach, sees resilience as a list, rather like a list of ingredients in making a cake, such as a Black Forest gateau. If all of the ingredients are present, the final outcome will be as intended. If the kirsch is missing, it becomes a simple matter of ensuring that kirsch is added next time. Similarly, any missing resilience ingredients can be identified, e.g., self-esteem, and can then be instilled or installed so that the gap has been filled. While this would seem to be a rational idea, it is actually less than ideal, insofar as it fails to take a wide range of internal and external factors into account. Resilience is more than simply acquiring a list of attributes. Equally, it is misleading to assume that, having acquired the attributes, that they are enduring and useable at any given point in time. In resilience terms, there must be something more. The systemic approach addresses this need to move away from assets, in the direction of dynamics, by taking internal, psychological and biopsychological factors and integrating these with exogenous factors, such as social support, Smith suggests. The developmental approach is an extension of the systemic approach, but is seen as ‘relative, emerging and changing in transaction with specific circumstances and challenges’ (Lawton-Smith, 2017: 10). What Smith is referring to here is that the person not only adapts to new challenges, but also learns to become more adaptable with each challenge. It is the learning element that takes centre stage, rather than simply adaptation. In this way, resilience is perhaps akin to flexibility in different circumstances, and flexibility leads to learning how to use transferable skills to enhance this, which then promotes ease of adaptation.

13.7 RESILIENCE IN SPORT AND BUSINESS RESEMBLES RESILIENCE IN EDUCATION

In business, resilience is perceived to be about bouncing back after setbacks and doing so with a positive mindset. This is equally the case in sport, where athletes and performers learn from failure in order to become mentally stronger in future competitions and events. People in these spheres of life talk in terms of ‘being knocked down and getting back up again’ – there is a ‘never give up’ mindset. Challenges do not sap resources, rather they fuel resources. Any student teacher or newly qualified teacher should be able to identify with this mindset, or at least should do, now that we have drawn parallels. As the equivalent to an endurance athlete, you do have the resources to deal with the challenge. Knowing how best to allocate those resources is the key to ongoing development and, ultimately, to success. We will examine these areas briefly and also delve into the literature on military psychology relating to resilience, in order to help us formulate a clearer picture of themes that emerge in each of these spheres.
13.8 RESILIENCE IN BUSINESS

In business, resilience is the domain of the individual, yet equally there is a notion of ‘organisational resilience’ (Chen, 2016), which relates to the adaptability of an organisation to the challenges it faces. This embodies a sense of personification in companies that gives them a life-force of their own. In an ideal world, educational establishments bear a strong resemblance to businesses and one would hope that the metaphor would operate equally well. Chen identified five factors of organisational resilience in R&D (research and development) teams: shared vision, willingness to learn, adaptation ability, cooperation awareness and work enthusiasm. Each of these map onto primary, secondary and tertiary education appropriately. These factors combine to produce organisational resilience and, as Chen highlights, resemble self-evaluations from individual members, contributing to the overall team (Chen, 2016). Unsurprisingly, in line with our positive attitude towards the importance of resilience, resilience training has emerged in a recent systematic review of workplace resilience training, as being beneficial to mental health, as personal resilience develops (Robertson et al., 2015).

The theme of workplace resilience emerges and there is an element of commonality among the external factors of social support, social relationships and social integration, where everyone involved is in it together. Think in terms of Seligman’s ‘learned helplessness’ (Seligman, 1973) and you will be misunderstanding our point. It is not a case of everyone experiencing what are perceived to be the overwhelming demands of the job, but rather a shared appreciation and understanding of the job that is required of us. Accordingly, the very people we work with are important in providing support because they understand too. A support network of this type is a significant contribution to resilience-building and sits nicely with the dual nature of resilience and relationships proposed by the relational coordination theory, from social psychology, which pairs up the psychosocial elements associated with support, alongside the technical elements associated with the role of the job (Gittell, 2016). It is not uncommon these days for companies in the corporate sector to employ a ‘Wellbeing Director’ or ‘Head of Wellbeing’ and this concept is being trialled by Nuffield Health Care, in the education sector (Paton, 2015).

A noteworthy study that examined the effectiveness of different resilience training delivery formats discovered that one-to-one delivery was more effective than group delivery sessions, which in turn were more effective than train-the-trainer or computer-based resilience programmes (Vanhove et al., 2016).

Wood (2016) advises that a little caution is aired while considering exactly how much ‘scaffolding’ should be put in place by institutions as support, highlighting that students of today are different from those in the past, the stressors for students have changed and that providing too much support does not necessarily help students to establish resilience and indeed independence. While this is a controversial point, we can understand that a framework of support, which facilitates flexibility
for self-discovery and self-help, may better promote resilience. Wood’s notion of a supportive learning environment echoes what many of us would argue to be of huge importance in the business of education prevalent today.

13.9 RESILIENCE IN SPORT AND PHYSICAL ACTIVITY

Sport is perhaps the most common place where one would expect to find resilience. We hear of professional sports people ‘pushing the limits’, winning gold, achieving new world records, performing feats of endurance previously unheard of and so forth. Equally, recreational sports people display levels of resilience, perhaps not to the same extent, but certainly of a similar kind. The recreational jogger who only started six months ago shows resilience in completing a half marathon. The cardiac rehabilitation patient who has taken up cycling to help with the recovery programme shows resilience. The child struggling with an obesity issue and has started using a Nintendo Wii Fit shows resilience, as does the teacher trying to balance work-life with exercise in order to keep going until the end of term.

Russell (2015) argues that resilience is a central virtue both in sport and in life. In understanding resilience, Russell suggests that the contribution of sport to wellbeing and culture becomes apparent. In adopting a philosophical perspective, he suggests that resilience is reflected in a particularly arduous, challenging and adverse set of circumstances. His paper refers to several sporting anecdotes of teams or individuals bouncing back from the significant setbacks, and it is well worth a read for those readers who may take more of a philosophical interest in this perspective on resilience. Russell highlights nine elements of adversity that help to foster resilience: training skills, performance, competitive strategy, destructive emotions, coordinating teamwork, injuries, bad luck, losses and pain, and waning capacities (2015: 168). Experiencing challenge in or through each of these serves to make the individual stronger psychologically. Resilience, Russell argues, begins in failure. Such a statement is certainly transferable to education, for students and for teachers, and should be borne in mind during times of adversity. A practical mantra is perhaps, ‘This will make me stronger, this will make me stronger’, and links nicely with the material discussed on positive psychology, in this chapter. A paper by Secades et al. (2016) echoes this, in stating that in the absence of adversity and of adaptation (coping) to adversity in a positive way, resilience cannot be expected to develop. This would suggest that seeking out adversity is a worthwhile exercise. In one sense, there is little difference between this and the fundamental principles of inoculation against disease, or even Stress Inoculation Training (SIT) (Meichenbaum, 1977) for that matter.

Gabana (2017) provides an excellent piece of advice, in saying that those people who wish to develop resilience in their sport might seek to develop it in their life.
COACHING PSYCHOLOGY AND DEVELOPING RESILIENCE

Equally those people wishing to develop resilience in their lives might seek to use sport as a vehicle to do so. The transferable nature of skills is mutually inclusive, rather than exclusively domain-specific. Similarly, Roncaglia (2017) acknowledges the role of sport psychology, not only in helping athletes, but also in the transferable skills that it can offer to other groups, in her study examining Seligman’s PERMA model (Seligman, 2011) in children with autistic spectrum conditions (ASCs). Seligman’s model refers to a set of ‘flourishing domains’ relating to positive wellbeing: positive emotions, engagement, relationships, meaning and accomplishment. Roncaglia shows how the case studies detailed in her paper have benefited from the integration of sport psychology with positive psychology for use within an educational psychology setting.

Readiness to change and engagement in training have been postulated as key elements of strengths-based approaches both in sport and in the military, with mental toughness, positive emotion, learned optimism, resilience, post-traumatic growth, and self- and emotion regulation being significant attributes of operating in extreme sporting or military situations (Wagstaff and Leach, 2015). The authors highlight the growing interest in looking to both sport psychology and military psychology for commonality. It must be pointed out that in sport psychology the favoured term previously was ‘mental toughness’, as seen in various works (e.g., Connaughton et al., 2011; Gucciardi and Gordon, 2011) and which developed in different stages of a sports performer's career. Previously, Daniel Gucciardi had examined mental toughness in cricketers, developing the Cricket Mental Toughness Inventory (CMTI) (Gucciardi and Gordon, 2009), followed by examining mental toughness profiles of adolescent Australian and New Zealand cricketers (Gucciardi and Jones, 2012). It is now widely considered that resilience is an ingredient of mental toughness. In reality, the term ‘resilience’ far better sums up the concept than the more nebulous umbrella term ‘mental toughness’. Interestingly, the emerging issue of sports officiating, where dropout rates among referees, umpires, etc. have risen and are a global trend, has led to research into resilience, motivation and perceived levels of support in this sports group. Alongside moderate to high resilience levels, thematic analysis suggested that officials’ resilience was a key factor in their effectiveness in the role, highlighting the importance of experience and support from fellow officials in bolstering resilience (Livingston and Forbes, 2017). A strong support shone through as a theme, and the protective factors necessary to undertake the role were similar to those discussed in this chapter.

Resilience in exercise, or physical activity, which for the purposes of this chapter we view as an umbrella term encapsulating all forms of non-sedentary activity, can perhaps best be inferred by examining factors that impede resilience. One such factor is depression. Arguably, an individual who is experiencing high levels of resilience will not be experiencing depression. Equally, an individual who is experiencing depression will not be feeling very resilient. In addressing the issue of depression, one should be able to establish higher levels of resilience. This subsection focuses, therefore, on physical activity and its indirect relationship with resilience. In doing so, we
have chosen to consider recent systematic reviews, which, in our opinion, hold a considerable amount of important information that can be used by teachers in a number of different ways, whether this is from a self-help perspective, or from a helping-others perspective.

Nyström et al. (2015), mentioned at the beginning of this chapter, carried out a systematic review of the literature in physical activity, examining the type of activity and the amount required (the ‘dosage’) to have an effect on reducing depression. Aerobic activities, such as walking or jogging and cycling were the most common respectively, with weightlifting among the only two anaerobic activities. The authors discovered that 30–45-minute sessions were most common, during a period of 12–16 weeks. Interestingly, they found that sessions lasting 90 minutes did not ameliorate the effects of depression any more than the shorter sessions. This is excellent news for busy teachers, who frequently say that they do not have the time for exercise. It is not about quantity! We would recommend this journal article for the reader who wishes to discover a little more about the findings outlined in this review. Rebar et al. (2015) point out that many reviews have explored depression in clinical populations. As a result, their systematic review of non-clinical populations showed that physical activity has a moderate effect in ameliorating the effects of depression, along with a less strong effect on reducing anxiety. In a separate, specific, systematic review, physical activity has also been found to have low to moderate effects on depression in cardiac rehabilitation patients, for whom depression is a potential consequence of coronary artery events (Janzon et al., 2015).

Finally, we discovered an interesting review by Li et al. (2016), who examined the literature in relation to the concept of physical activity and computer-game technology, with the enticing title: ‘Effect of exergames on depression’. The underlying message contained in this review of the literature is twofold. Firstly, exergames are a young person’s technology and can be used to improve physical activity levels, compared to baseline. Secondly, the older generation can make more use of exergames as a means of overcoming a sedentary lifestyle, or where lack of local facilities, or safety concerns, restrict or prohibit exercise. Each of these reviews has one common factor. Exercise or physical activity is beneficial in ameliorating depression and, while doing so, equally fosters a sense of resilience and a sense of wellbeing; not to mention the social support, relationships and social integration involved in many types of physical activities, with the possible exception of exergaming (although even this could possibly be linked to the multi-player idea of social integration).

13.10 RESILIENCE IN MILITARY SETTINGS

One might wonder whether there is a need to include a section on military settings in a text on psychology for teachers. We would argue that, while there are few similarities between the classroom and ‘theatres of war’, conceptually, the protective factors that
link the two are remarkably similar. We will not provide an exhaustive literature review here, but merely offer some examples that support our intentions, while at the same time perhaps asking us all to consider whether the challenges we face are indeed that big an issue in the grand scheme of things.

Resilience training is imperative in the military, in order to ensure that personnel are able to operate effectively under extremely adverse circumstances. They are trained rigorously to acquire the necessary skills before entering operational duties. The American military have implemented the Comprehensive Soldier Fitness Program (CSF) (Casey, 2011), which is based in part on the Global Assessment Tool (GAT); an internet-based psychometric tool designed to test one million respondents per annum (Peterson et al., 2011), to which we will return in the section on education; alongside the Connor–Davidson Resilience Scale (CD-RISC) (Connor and Davidson, 2003), which measures five factors: personal competence, standards and tenacity; trust, tolerance of negative affect and stress; acceptance of change and strong relationships; control; and spirituality. This psychometric tool has recently been revised for use with Chinese military personnel, for whom the original version was culturally inappropriate, leading to the formation of three factors instead of five – competency, toughness, adaptability – and showing favourable validity and reliability (Xie et al., 2016). For an alternative and extremely thought-provoking perspective on the efficacy of the CSF, we would draw your attention to an article, previously rejected for a special issue of the American Psychologist in 2011 but now published elsewhere in the interests of parity (Pilisuk and Mahr, 2015).

Cacioppo et al. (2015) highlight the focus of studies being on individual resilience, while neglecting social resilience – the development of resilience through positive relationships and camaraderie that exist in the military. Social Resilience Training (SRT) aims to reduce inappropriate social cognitions and reduce feelings of isolation and loneliness. Cacioppo et al. (2015) found that SRT did indeed improve social cognitions, increasing empathy, hardiness, adopting perspectives, belief in social skills and their use along with reduced feelings of isolation and loneliness. Each of these elements readily transfers to other occupations to some degree or other. There is much to be learned from exploring the literature involving military studies, and transfer of findings to other domains would appear to be significantly worth the foray into this fascinating field of psychology. Bryan and Heron (2015) discuss the importance of belongingness, in the context of reducing depression in military personnel. A cohesive group with common, shared goals is achieved in part through social support and this is beneficial for fostering individual resilience and social resilience.

The importance of family support under differing conditions of threat while on deployment is highlighted wonderfully in the following statement from a paper examining self-efficacy, family support and threat engagement: ‘During deployment, service members are confronted with a range of stressors. The encounter with enemy troops, incoming mortar fire, roadside bombs, and other life-threatening situations are the most conspicuous situations that come to mind. However, service members
also have to deal with boredom, restricting rules of engagement, separation from the home front and organizational bureaucracy when on deployment’ (Delahaij et al., 2016: 78). While ‘enemy troops, incoming mortar fire, roadside bombs and other life-threatening situations’ have no place in the world of the teacher, if one considers them as metaphors for education, then reinterpretation becomes rather intriguing. Delahaij et al. discovered that it is advantageous to retain high levels of self-efficacy under conditions of extreme stress, that family support is a factor in achieving this and that work-engagement (being more productive) is enhanced. This is yet another message from our foray into the military that is transferable for our needs in education. If you are single, have little or no family support, don’t worry. Our advice would be to reinterpret the term ‘family support’ to suit your own set of circumstances and create or access a support network that functions appropriately for your needs. Let’s face it: the entire teaching profession would crumble if we – none of us – was party to the ‘sharing society’ that we have created as teachers. One only needs to look at the internet to see electronic examples of this in operation.

In a qualitative study examining psychosocial adjustment to the loss of limbs in female military personnel, several protective factors were deemed to play a role in fostering resilience: positive attitude; social support, especially within a military context (similar to Wood’s (2016) comment within the medical profession); recognition of what could have happened; sense of humour; and establishing meaning from their loss (Cater, 2012). Adaptive, situation-appropriate coping strategies can be developed through self-reflection practices. Systematic self-reflection practices have been postulated as an important strategy in Australian military recruits and is viewed not as a drain on an individual’s psychological resources, but rather as something that facilitates growth and development in the individual experiencing adversity (Crane and Boga, 2017). They propose five systematic self-reflection practices: recollection of critical incidents; coping values and goals; evaluation of effectiveness; analysis of why/why not effective; approach to future stressors. By reflecting in this systematic manner, individuals should become more resilient as they deal with adverse situations and ‘engaging in self-reflection of this type is also proposed to influence the motivational system in a way that encourages stressor engagement’ (Crane and Boga, 2017: 32). There are similarities from this that one can readily transfer into the educational domain, simply by redefining what is meant by ‘recollection of critical incident’.

An interesting paper by Courtney (2015) grabbed our attention, insofar as it introduced the concept of HeartMath, an approach to stress-resilience by balancing the body’s emotional and physiological responses to stressful situations. Essentially, by changing heart rate variability, coherence is achieved as change in the body’s physiology enables stability in thinking, as emotions reach equilibrium. The aspect that struck us as interesting was mention of the need to move between ‘theatres of war’ and ‘civilian life’ in the most effective/least-destructive manner psychologically. In education, this echoes the need to transition between work-life and home-life, or between term-time and vacation-time, in order to maximise the recovery period in readiness.
for the next stint of duty. Courtney suggests that the concept should be adopted by agencies outside of the military. The education setting would seem to be the perfect opportunity to embrace this.

In finishing this section, we opted to include a paper examining the perceived barriers to initiating and continuing mental health treatment in an army cohort where a risk and resilience programme is in operation (Naifeh et al., 2016). Naifeh et al. explored perceived need, structural reasons and attitudinal reasons as perceived barriers to support. Perceived need was seen, as one might expect, as whether a need to seek support existed in participants. We would perhaps see this as analogous to a ‘burying one’s head in the sand’ approach. Structural reasons were seen as more day-to-day issues, such as appointment scheduling or financial constraints. Attitudinal reasons were seen as having negative perceptions of mental health support or a perceived stigma associated with needing or accessing it. The authors found that 70 per cent of 744 respondents perceived no need to seek support. Equally, of those 208 participants who did perceive a need, 80.7 per cent cited an attitudinal reason for not seeking support and 62.7 per cent reported a structural reason. In short, barriers prevented the participants from accessing the appropriate level of support and this is largely related to the stigma associated with mental health. As teachers, we should be aware of articles that highlight the barriers to us and we should then seek ways to overcome those barriers so that the support that is available can be used to help us on our journey through our educational careers.

13.11 RESILIENCE IN EDUCATION

Within education, it is acknowledged that resilience training is necessary in facilitating MWB, by providing adaptive coping strategies that children can use on their progress through education. The SPARK Resilience programme (Boniwell and Ryan, 2009), which also examines depression, is one such programme that has been further examined recently by Pluess et al. (2017). Participants comprised 438 girls from 11 to 13 years old, with the sample taken from among the most deprived and challenging neighbourhoods in London, deemed to be at high risk for incidences of depression. The intervention aims to combine cognitive behavioural therapy (CBT) with positive psychology over the course of 12 one-hour sessions, delivered by class teachers who had undergone two days of intensive training in SPARK. Using hypothetical scenarios, children are taught a skills-based coping strategy, based on the SPARK acronym: Situation, Perception, Autopilot, Reaction, Knowledge. Accordingly, automatic emotional responses are triggered by the child's perceptions of a situation, which require them to gain knowledge from the behavioural response to the automatic emotional response. In keeping with a context-specific element targeting this age group, the metaphor of a parrot is used and the parrot has many guises, resembling blame, pessimism, judgement; always being right; catastrophising. The parrot is 'put on trial' and
evidence is examined in support or to refute explanations. Strategies such as relaxation and deep breathing are adopted in acting as distractions. All of these cover the elements of CBT contained within the ‘hot cross bun’ concept where emotional, behavioural and physiological responses interact in a given situation. Significant and persistent improvements in resilience scores were observed post-intervention, at 6-month follow-up and at 12-month follow-up, with similar decreases in depression scores between pre- and post-intervention, but with increases shown at both 6-month and 12-month follow-up (Pluess et al., 2017).

It is worth mentioning at this point that the SPARK Resilience programme should not be confused with the health-related physical activity, Sports, Play and Active Recreation for Kids (SPARK) programme of the late 1990s in the USA and Canada (Marcoux et al., 1999; Sallis et al., 1997). A literature search revealed no other journal articles on either programme, so we eagerly await more findings from Pluess et al., along with any additional research ideas SPARK may spark (we couldn’t resist the opportunity here!).

Chris Peterson’s work in positive psychology, as applied to military settings and discussed earlier, has filtered through to education, as we postulated above. White and Waters (2015) contributed a tribute to Peterson, in a memorial edition of the Journal of Positive Psychology, applying Peterson’s approach to a large Australian school as a case study. The researchers focused on ‘enabling institutions’ and ‘character strengths’ in their case study. An enabling institution builds academic excellence, but equally builds character, morals and wellbeing, and these should be inherent not only in individuals within the institution, but also as part of the fabric of the institution as a collective. Character strengths are those inherent qualities that one would wish to possess on one’s journey through life, such as wisdom, knowledge, love, forgiveness, humility, perseverance and honesty. These examples can be explored in more detail by looking at Peterson and Seligman’s (2004) text on character strengths and virtues. By introducing a positive education curriculum into the school, character strengths can be built across curricula, depending on the needs of each child, who equally must reflect on his strengths and those of his peers and teachers (it was a private boys’ school). White and Waters (2015: 75) describe what this journey might look like for a typical boy under the positive education curriculum, and is well worth reading, although it must be borne in mind that they do not provide any data beyond simple description.

César Dias and Cadime (2017) examined the effect of school, home, community and peers (i.e., externally-driven, protective factors) on the development of self-regulation and resilience in secondary school children, finding that higher resilience levels were found in girls and in students who were on non-vocational courses.

Kotzé and Niemann (2013) examined the psychological resources possessed by 789 industrial psychology students in higher education and their academic achievement in the first year, finding that optimism did not predict success, but three factors of resilience were significant: positive interpretation, facing adversity, and religion. It must be mentioned that the authors state that the use of the Adult Resilience Indicator (ARI)
(cf. Kotzé and Niemann, 2013) was designed for use within South Africa and perhaps may be culturally specific to the South African university system.

In exploring resilience in teaching staff, Pareek and Rathore (2016) examined the character strengths and virtues, postulated by Peterson and Seligman (2004), in 60 faculty members in an Indian higher education institution using the Values in Action Inventory of Strengths (VIA-IS) (Peterson and Seligman, 2004). They found that a gender difference existed, insofar as female faculty members displayed higher character strengths and virtues, compared to their male colleagues. The VIA-IS is a 240-item questionnaire, resulting in 24 character strengths and 6 virtues. From the perspective of brevity, we have taken each of these and adapted them in Table 13.1, which also includes a practical task for you to spend a little time reflecting on.

Table 13.1 Summarising Peterson and Seligman’s character strengths and virtues

<table>
<thead>
<tr>
<th>Virtue</th>
<th>Character Strength</th>
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<th>Character Strength</th>
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<tbody>
<tr>
<td>Wisdom and Knowledge</td>
<td>Creativity</td>
<td>Justice</td>
<td>Teamwork</td>
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<tr>
<td></td>
<td>Curiosity</td>
<td></td>
<td>Leadership</td>
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<td></td>
<td>Love of learning</td>
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<td>Fairness</td>
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<td></td>
<td>Perspective</td>
<td>Temperance</td>
<td>Forgiveness</td>
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<td></td>
<td>Judgement</td>
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<td>Humility</td>
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<tr>
<td>Courage</td>
<td>Bravery</td>
<td>Self-regulation</td>
<td></td>
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<tr>
<td></td>
<td>Perseverance</td>
<td>Prudence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td>Transcendence</td>
<td>Appreciation of beauty and excellence</td>
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<tr>
<td></td>
<td>Zest</td>
<td></td>
<td>Gratitude</td>
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<tr>
<td>Humanity</td>
<td>Love</td>
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<td></td>
<td>Kindness</td>
<td></td>
<td>Hope</td>
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<td></td>
<td>Social intelligence</td>
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<td>Humour</td>
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<td></td>
<td></td>
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<td>Spirituality</td>
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Source: adapted from Peterson and Seligman, 2004

**ACTIVITY**

Look down the list of character strengths and for the purposes of brevity, rate yourself out of ten on each one. Go with your intuitive feeling for what each character strength refers to, or alternatively, if you wish to obtain a definition of each characteristic, this can be viewed online at www.viacharacter.org/www/Character-Strengths/VIA-Classification. This will give you a subjective approximation of how (Continued)
you see yourself. If you have a spare 15 minutes, we would recommend that you take the free online survey available from this link. There are ‘pay options’ should you wish to obtain a detailed report. The site is the shopfront for Peterson and Seligman’s VIA-IS and so is a trustworthy source. If you take the test, you will be able to see how accurately your original self-report was.

Next, look at your scores and consider how to develop some of the character strength where you scored lower than others. This is a perfect opportunity to explore and establish some short-term, mid-term and long-term goals. In doing so, you will be further developing resilience skills. Remember, this may be a reasonably long process, so do not expect to be resilient by the weekend!

We finish this section of the chapter by considering students as ‘professionals of the future’. In a longitudinal study at the University of Worcester examining resilience in undergraduate students, Barber et al. (2017) have mapped the five internal and external domains from Macintosh and Shaw (2017) with the four protective factors from Ponce-Garcia et al. (2015). Preliminary findings were presented at the university’s Learning and Teaching Conference in June 2017 and reflect a reduced level of resilience in incoming students compared to the sample used in the Ponce-Garcia et al. study, which focused on students in two North American universities. This issue is not restricted to our university and is an area of increasing concern in the higher education sector globally (e.g., for India: see Balgiu, 2017; for Romania: see Patil and Adsul, 2017; for Malaysia: see Narayanan and Weng Onn, 2016; for cross-cultural comparisons between USA, China and Taiwan: see Li and Yang, 2016).

Barber et al.’s study is part of a longitudinal project, tracking students as they progress through their respective degree programmes, and we aim to extend the study to PGCE cohorts of the future, by establishing strategies for embedding developmental resilience into our curricula at all levels. Of course, our natural next step will be to focus attention on developmental resilience in the education system in schools.

<table>
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<tr>
<th>Table 13.2 Resilience: combining domains with factors</th>
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<tr>
<td><strong>Internal Domain</strong></td>
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<td>Emotional control</td>
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<tr>
<td>Self-management</td>
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If we consider that resilience domains and factors are akin to the ingredients in a recipe, then building these provides the teacher with a set of resilient assets. To provide an asset-type flavour of what each cell may comprise, we discuss examples below. Internally, emotional control includes an ability to move on and not become fixated on problems. Similarly, it involves an ability to remain calm and composed in adverse situations, in order to maintain rational thought processes. The goal remains in focus throughout, hence goal efficacy is protected. Self-management both reflects persistence in pursuing and completing a task and requires goal-setting, for example, as a strategy for achieving the intended aims. This in essence is what we commonly talk about when we mention someone who is ‘driven’. Externally, social integration is the perceived ability to become part of, in this instance, a new group of students. It is, in essence, a perceived measure of a ‘good fit’, i.e., how well do I actually fit into this group of people? This can be considered in terms of other students on a degree programme, flatmates or housemates, and members of clubs and societies. The principle is similar with younger students, with the obvious exception of accommodation. Social relationships play an important part in successful integration and therefore are interrelated. Family and existing friends aid resilience, as does the formation of newly emerging friendship groups. Social skills are developed and refined as a result of this interaction, and support networks become important, especially in times of emotional hardship. Indeed, the longstanding idiom, ‘A problem shared is a problem halved’, would certainly appear to ring true in this instance.

The issue of capability versus capacity seems to be clearer now. Asset approaches focus on capabilities, lists of characteristics, ingredients, etc. and this is indeed both admirable and necessary. Capacity both is considered by researchers adopting systemic and development approaches and is an indicator of the ability to utilise capabilities at different points in time, which continually fluctuate. Lawton-Smith’s (2017) analogy of a Formula 1 car works really well in illustrating this. The car has all the necessary ‘ingredients’, all the technological advances and has been designed, constructed and driven with the ultimate goal of winning in mind. Yet it needs to come into the pits for fuel, without which it is unable to operate in the conditions for which it was designed. Viewing resilience as ‘fuel’ provides us with a totally different perspective. Do we conserve? Do we accelerate harder? When do we come in to the pits? Are we getting low on fuel? The list goes on. This essentially is a capacity issue. Now remove the Formula 1 analogy and replace it with the school calendar. How should we use our resilience resources or ‘fuel’ wisely to get us through each term, until we reach the finishing line at the end of the year? Should we hold something back? Should we pace ourselves? What happens if we begin to run out of resources? You get the picture here. We would concur with Smith, in terms of recommending that capacity should not be overlooked when considering resilience.
13.12 CONCLUSION

We are sadly mistaken if we consider resilience as a ‘have it/don’t have it’ attribute. Reflecting on the associated issues of one’s daily life should be factored in, as should fluctuations in the academic year, energy levels, sleeping patterns, nutrition and hydration, along with physical activity levels and current or recent stressors. Assembling a strong support network and relationships with family, friends and colleagues, in combination with self-management strategies, clear goals and an ability to develop emotional control skills, will provide some of the ingredients required. The research literature from the wide array of fields discussed in this chapter also suggests that it would be prudent to actively seek out challenges that will test us, and this may lead to failures. It is these failures that help to build resilience. One may need to lose some battles in order to win the war!

13.13 FURTHER READING


This paper highlights the way in which emotion coaching may be used in schools with students, and is worth reading.


This report is primarily aimed at tutors in higher education, in relation to helping students develop resilience. It is thus relevant to those currently on PGCE courses as well as newly or fully qualified teachers, since it provides an insight into tertiary education. By fostering resilience at an earlier age, those entering tertiary education will have been guided and aided by you, having read the report in conjunction with this chapter. Early intervention is the key.