

# cdr

## Mental toughness

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## **Mental Toughness**

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### **Definition**

Since the turn of the 21<sup>st</sup> Century, Mental Toughness has been defined in a variety of ways (e.g. Clough, Earle & Sewell, 2002; Coulter, Mallett & Gucciardi, 2010; Fourie & Potgieter, 2001; Golby & Sheard, 2006; Gucciardi, Gordon & Dimmock, 2008; Jones, Hanton & Connaughton, 2007). Although they differ in many respects, the conceptualisation share a number of similarities. For example, self-belief is at the core of most definitions, motivation is central to most as is persistence in achieving and the ability to deal with setbacks. As such, Mental Toughness is an umbrella term that entails positive psychological resources, which are crucial across a wide range of achievement contexts and in the domain of mental health. Clough and Strycharczyk (2015: 33) suggest that:

Mental Toughness is a narrow plastic personality trait which explains in large part how individuals respond differently to the same or similar stressors, pressures, opportunities and challenges... irrespective of prevailing circumstances.

### **Introduction**

Within the context of the psychology literature, the usage of this term can be traced back to the work of Loehr (1986) who was a sports psychologist working with athletes to improve sporting performance. The origins of the concept can be said to lie in Health Psychology where resilience and response to stress and pressure is well understood and in Sports Psychology where adopting a positive mindset is understood to be a key factor in success (ibid). Here, Mental Toughness is a universal quality, where it is present to some extent in everyone and is a factor in determining how we respond, irrespective of the domain; this could be in a work place, at home, or during a leisure activity. As such, Mental Toughness is a personality trait that helps explain *how we think* when confronted by events, and this aspect differentiates it from many aspects of personality, which often focus on how we *act* (i.e., our behaviours) and how we *feel* (our emotional responses).

As a concept, Mental Toughness sits at one end of a continuum, and at the other end (its opposite) is Mental Sensitivity (not mental weakness). The mentally tough are not tough in the “macho” sense of toughness, but they can be viewed as being comfortable with

themselves and can deal or cope with the challenging experiences of life (e.g. Clough & Strycharczyk, 2015). In this way, they are predisposed to making the most of their abilities and circumstances, and are open to learning through reflecting on their experiences, whether those experiences are understood as good or bad. Studies show that the Mental Toughness of an individual is strongly correlated with the following, which combine to describe aspects of what is commonly called ‘mindset’:

- Attainment or performance – the mentally tough appear to adopt a “can do” approach to most activities, expending greater effort, being more focused, and achieving more than those who are mentally sensitive. The difference is statistically and practically significant (e.g. Jones, Hanton and Connaughton, 2007, Crust and Azadi, 2009; Marchant, Polman, Clough, Jackson, Levy and Nicholls, 2009).
- Wellbeing – the mentally tough deal more effectively with setbacks and challenges and are better at dealing with anxiety, and generally more content (Gerber et al, 2012).
- Agility and positive behaviour – the mentally tough have a more positive outlook on life and tend to see opportunity where others may see threats, which is especially relevant in volatile, uncertain, complex and ambiguous contexts. They respond more positively when events require change, and helps individuals to thrive in periods of change.
- Aspirations – the mentally tough are more predisposed to self-improvement and development (St Clair-Thompson, Bugler, Robinson, Clough, McGeown & Perry 2015).
- Development of peer relationships – the mentally tough form relationships with peers more quickly and more effectively (St Clair Thompson et al, 2015). Mentally sensitive individuals are more sensitive to differences, mentally tough individuals appear to take these in their stride.

The literature for Mental Toughness is wide ranging, and embraces a wide range of models which recognise the impact of individual differences on stress reactions. These include (a) resilience, a dynamic process in which a number of elements, known as protective factors, are either available or unavailable for a particular person to utilise (Cowden et al 2016), (b) hardiness, which consists of three interrelated concepts, namely, control, challenge and commitment, and is considered to have a buffering effect between stressful life events and illness (Kobasa, 1979), and (c) physiological toughness, which is the relationship between arousal and physiological toughness, examining individuals’ confrontations with stress that evoke both central and peripheral physiological arousal (Dienstbier, 1989; Clough, Earle, & Sewell, 2002). Other connected concepts include Generalized Adaptation Syndrome, Catastrophe Theory, Individualized Zones of Optimal Functioning (IZOF) (Inverted U Theory), Flow Theory, and personality. Other narrower, but very relevant, constructs include Conscientiousness (e.g. McCrae and Costa, 1987), Goal setting (Locke, 1968), Achievement Orientation (Murray, 1938); Learned Helplessness (Seligman, 1972), Self-Efficacy (Bandura, 1977), Grit (Duckworth et al 2012); Attribution Theory, Emotional Intelligence (Goleman 1998), and Mindset (Dweck, 2006).

Work on Mental Toughness has been extended to look at groups, teams and whole organisations, and there has been much research focused on the underlying mechanisms behind the apparently obvious ‘Mental Toughness advantage’ found in many people (Strycharczyk and Elvin, 2014). Indeed, Mental Toughness has been found to be related to use of performance strategies in competition, namely activation, relaxation, self-talk,

emotional control and goal setting (Crust and Azadi, 2010). Similarly, Dewhurst et al. (2012) showed that directed forgetting (or cognitive inhibition) is one of the core mechanisms underpinning Mental Toughness. Other studies have provided evidence in support of the heritability of this trait in a twin study, suggesting that the expression of Mental Toughness appears to be due to a combination of genetic and non-shared environmental factors (Horsburgh et al., 2009). Later studies have found a significant positive correlation between high total Mental Toughness scores and grey matter volume values in the precuneus within the brain using MRI (Clough et al, 2010).

Evidence has shown Mental Toughness to be related to a number of psychological advantages, for example to pain tolerance (Crust & Clough, 2005), injury rehabilitation (Levy et al, 2006), managerial success (Marchant et al, 2009), and recovery from setbacks (Clough et al, 2002; Robins et al 2018). In addition evidence has highlighted health benefits, where there are positive correlations between Mental Toughness and psychological wellbeing, sleep patterns and resilience to stress as well as forgiveness (e.g. Gerber et al., 2012) and educational benefits, where there is a correlation with attainment, classroom behaviour, attendance, the development of peer relationships, with retention, and employability in higher education (e.g. St Clair-Thompson et al., 2014). Similarly, studies have found significant relationships between Mental Toughness and use of coping strategies (Nicholls et al., 2008), and higher levels of Mental Toughness seem to be associated with more problem-focused coping strategies and less emotion-focused coping strategies (Kaiseler et al., 2009).

The concept (and associated measures) has also produced insight into the capability of organisations to perform under pressure, to be positive and responsive to challenge and to develop an ethos where wellbeing is protected. As such, Mental Toughness can be described as reflective (or even an aspect) of the culture of an organisation or the environment where the individual operates, and this has been described in the context of education (Wall and Jarvis, 2015; Wall, Bellamy, Evans, and Hopkins 2017; Stokes et al, 2018) and business (Robins et al, 2018). As the development of an individual's Mental Toughness or mental sensitivity can be significantly influenced by their experiences, the environment and the individual can interplay in interesting ways and shape Mental Toughness capacities (see Wall, 2016; Wall et al., 2017; Rossetti & Wall, 2017). This chapter examines and exemplifies applications of the conceptual underpinnings of Mental Toughness and then concludes with future directions for research and practice.

### **Conceptual framework: control, commitment, challenge and confidence**

Although Mental Toughness can be understood as a narrow personality trait which addresses “how we think”, it seems to be a malleable, plastic trait, and therefore it is possible to develop it through a variety of interventions (see the chapter on *Mental Toughness Development*). The model that has been utilised most frequently outside a sporting domain is the 4Cs model initially put forward by Clough et al. (2002) and developed subsequently by Clough and Strycharczyk (2015). The 4Cs model was developed using three classic techniques: (1) theoretical derivation from the previous literature (as described and summarised above), (2) a grounded approach using interviews with performers/coaches and psychometric development, and (3) full integration into a valid and reliable psychometric measure (MTQ48). The basic approach was to write questionnaire items based on a comprehensive review of the literature and the pilot interviews. These items were then refined by a series of psychometric studies. Much of the work establishing the Mental Toughness concept and its range of applications has used the 4Cs concept which have been operationalised into two Mental Toughness Questionnaires based on the 4Cs framework (MTQ48 and MTQPlus)

(Perry et al., 2013). Here, it is used as a pragmatic exemplar of the utility of the mental toughness concept and application across domains (e.g. Robins et al, 2018).

The Mental Toughness concept brings together four independent constructs (control, commitment, challenge and confidence), each of which has two contributing factors that are also independent. Together, these represent the various aspects of the way the individual thinks about an event when it occurs (Clough & Strycharczyk, 2015). The 4Cs and the 8 factors are summarized in the table below, along with examples of associated thoughts of the mentally tough individual. More details about the 4Cs and the 8 factors are outlined.

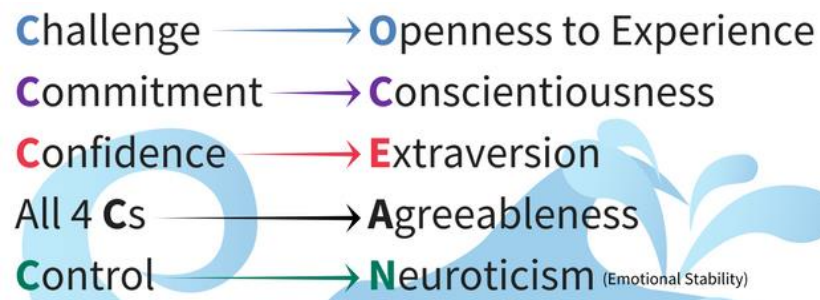
Table 1: Summary of the 4Cs and related factors

Mental Toughness Scale	The 8 Factors
<i>CONTROL</i>	<i>Life Control</i> – I really believe I can do it
	<i>Emotional Control</i> – I can manage my emotions and the emotions of others
<i>COMMITMENT</i>	<i>Goal Orientation</i> – I set goals – I like the idea of working toward goals
	<i>Achievement Orientation</i> – I’ll do what it takes to keep my promises and achieve my goals
<i>CHALLENGE</i>	<i>Risk Orientation</i> – I welcome new and different experiences – I stretch myself
	<i>Learning Orientation</i> – I learn from what happens - including setbacks
<i>CONFIDENCE</i>	<i>In Abilities</i> – I believe I have the ability to do it – or can acquire the ability
	<i>Interpersonal Confidence</i> – I can influence others – I can stand my ground if needed.

In practice, it is also possible to understand the complexity of the relationship between Mental Toughness and behaviour through applying the 4Cs to the behaviours of a hypothetical individual. This individual is underperforming in a role which is project based. Too often, they fail to deliver on time and to the standard required. The behaviour is fairly clear. Assuming that there are no other confounding (environmental) factors and others with similar abilities are delivering high performance, what might be the explanation in terms of the 4Cs? Informed by the 8-factor model identified in Table 1, we could attribute this to any of, or more likely, a combination of the factors. The individual may think they cannot adequately do the role, or they respond poorly emotionally when problems arise (*Control*). They may not be *Committed* to the goal and may not feel they want to make the effort. In terms of *Challenge*, they may see the projects as stretching them too far or not enough (they may not be learning from their experiences and so could be repeating errors). They may not have *Confidence* in their abilities to do what is required or lack the confidence to engage with others for support when needed. Indeed, the relationship between Mental Toughness and

behaviour can be understood through the most widely accepted behavioural personality model, the Big 5 model, which identifies 5 behavioural factors (McCrae & Costa, 1987): openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (or emotional stability), and is shown in the table below. This is an area which, at time of writing, is being explored to understand its full implications, but there is a clear theoretical synergy (e.g. Polman, Clough, & Levy, 2010) and ongoing empirical research is beginning to establish sustained and verified linkages.

Table 2: Relationship between the 4Cs and the Big 5



## Control

Control describes the extent to which a person feels they are sufficiently in control of their life and their circumstances to be able to do what they need to do (Clough and Strycharczyk, 2015). Mentally tough individuals believe that they can exert considerable influence over their (working) environment and that they can make a difference to events and they can change things. In contrast, the mentally sensitive in this regard feel that the outcome of events is outside their personal control and they are unable to exert any significant influence over the situation, themselves, or others. This example presents two opposite ends of a scale; at one end, individuals feel their input really matters and are motivated to make a full contribution, and at the other end, they may feel that their contribution is of little value and become withdrawn (Crust and Swann 2013). An implication may be that one can handle lots of things at the same time and the other cannot (ibid). Ongoing development has enabled the identification of 2 factors contributing to this construct: *life control* and *emotional control* (Crust and Clough, 2011)

*Life control* is often described as where the sense of “can do” sits; those scoring highly on this scale are more likely to believe they control their lives and will tend attempt most things; they feel that their destiny is in their own hands, that their plans and activities will not be thwarted, and that they can make a difference (Clough and Strycharczyk, 2015). Responses often associated with this include (ibid):

- They have a strong sense of self-worth – they believe they make a difference
- See the solution rather than the problem
- Are comfortable with multi-tasking
- Tend to be good at prioritising, planning & organisation
- They behave as if their cup is half full, everything is possible.

Those who are mentally sensitive on this scale are more likely to believe their contribution to events and to making a difference is limited and will make little or no difference. Responses associated with this include (ibid):

- They tend to believe things happened to them, they can be fatalists
- Tend to wait for things to happen rather than take the initiative
- Find it hard to do more than one thing at a time
- Will not see opportunities within their own skill and knowledge set
- Will adopt the use of cautious language and phrases - when asked to do something will use conditional or negative language “I could have a go if .... (or but ....)”.

***Emotional control*** describes the extent to which the individual is able to mentally manage their emotional responses to events, and individuals scoring highly on this scale are better able to control their emotions (Crust and Swann 2013). They are able to keep anxieties in check and are less likely to reveal a negative emotional state to other people; they may be anxious but will be able to mask that when needed. It is important to recognise that a host of varying emotions are experienced simultaneously to varying degrees of intensity; some of these are positive (excitement, joy, pride) and some are negative (fear, frustration, anger) (Wall et al 2017). In this context, individuals with high emotional control are better able to conjure the emotions they feel will be of benefit and dampen those negative emotions that inhibit their ability to perform (Clough and Strycharczyk, 2015). Responses associated with this include (ibid):

- Reveal to others only the emotions and feelings they want to show – they manage what they show
- Difficult to provoke or annoy
- Stay calm in a crisis – maintain poise
- Maintain a calm exterior when criticised or confronted aggressively
- Tend to have high levels of self-awareness
- Often influence the mood around them.

The mentally sensitive in this regard are much more likely to reveal their emotional states to others without being able to manage or control that. Responses associated with this include (ibid):

- They can let everyone know exactly how they are feeling
- Show their emotions when provoked or challenged
- Show a reaction when criticised
- Sulk when things do not go their way
- Freeze in a crisis, as fear takes over
- Can be affected by the mood of the people around them.

## **Commitment**

This construct describes the extent to which an individual is minded to think in terms of goals and objectives and to persist with a goal or work task (Killy et al 2017). Individuals differ in the degree with which they remain focused on their goals; some may be easily distracted, bored or divert their attention to competing goals, whereas, others may be more likely to persist. A mentally tough individual in this regard set goals for key activities from which they may derive motivation and will be able to handle and achieve things when faced with tough and unyielding deadlines (Powell and Myers, 2017); whereas a mentally sensitive individual is unlikely to set goals and may even avoid them in order to reduce pressure on themselves.

Ongoing development has enabled the identification of two factors contributing to this construct: *goal orientation* and *achievement orientation* (Crust and Clough, 2011).

***Goal orientation*** describes the extent to which the individual visualizes what they need to achieve. Goal orientated individuals are focused towards setting targets for activities. They are minded to visualize the goal, what success looks like and will often get a sense of what achieving the goal will feel like (Powell and Myers, 2017). Responses associated with this include:

- Like working to goals and measures – these describe what success looks like
- Goals are translated in their heads into something which is achievable
- Like being judged or assessed
- Like the repeated opportunity to measure & prove themselves
- Will often set high standards for self and others
- Like the objectivity of goals and measures – avoids being subject to others opinions
- Will often use the notion of “personal bests” – setting intermediate targets which they beat and then set higher (Clough and Strycharczyk, 2015).

Those who are mentally sensitive in this regard will normally avoid setting goals and thinking in terms of goals. Goals might, for them, be a source of potential failure, and it might be that this is a quality they have not developed; they may not see the point, and some may even described them as aimless (ibid). Responses typically associated with this include:

- May feel intimidated by goals and measures – especially examinations, tests, SMART projects
- May feel inadequate or “stupid” when asked to do something specific
- May lack a sense of purpose – they can think “win-lose”
- Goals appear overpowering to them
- May resent the imposition of goals and targets
- More likely to be late for things
- May feel that goals are unrealistic (ibid).

However, observation and evidence show that not everyone who sets goals and objectives will then achieve them; depending on the reflective tools that are adopted, reflective individuals may be better able to adjust goals as conditions change and original goals may need scaling back, withdrawing, or stretching (Wall 2016b, c; Wall and Meakin, 2019, forthcoming).

***Achievement orientation*** describes the extent to which an individual is prepared to make the mental effort to deliver what is expected from them (Crust and Clough, 2011). Those who are mentally tough in terms of achievement orientation are more likely to deliver what they have committed to, and they are likely to “do what it takes” and gain satisfaction (and perhaps relief) from its achievement (Clough and Strycharczyk, 2015). Responses typically associated with this include:

- Will break things down into manageable pieces of work – adept at setting milestones
- Generally prepared to do what it takes – will work long and hard if needed
- Maintain focus and concentration for longer
- Diligent about activity – will usually deliver on time and to the required standard
- Tenacious – dealing well with obstacles and problems
- Will prioritise effort and activities

- Will do things even if they do not like doing them for the satisfaction of achieving something
- Find working to a goal exhilarating (ibid).

One particular notion of resilience (amongst many - see other chapters about resilience in this encyclopedia) is sometimes confused with Mental Toughness, but can be seen as largely resting on the two constructs on *Control and Commitment*. Here, resilience can be described in terms of recovering quickly from adversity (Stokes et al 2018), which can be explained in terms of Control “I can still do it and I can manage my emotions in a difficult situation” and Commitment “I still want to pursue and achieve some or all of my goal”. However, there is a subtle and important difference in being resilient as a necessity (coping and surviving) and being resilient as a desire (dealing with challenge and thriving). Indeed this reflects the empirical work of Kobasa (1979), who observed that *some* resilient individuals thrived because they saw the situation as a challenge full of opportunity rather than as a situation dominated by threat, and conceptualized this as the notion of ‘challenge’. Examination of this insight and further development led to the third construct of Mental Toughness – *Challenge*.

## Challenge

Individuals differ in their approach to challenges that they encounter; some will envisage challenges and problems to be opportunities, whereas others may be more likely to envisage a challenging situation as a threat. Challenges here represent events and situations that arise; many can be everyday events, some can be exceptional events proactively sought out, such as climbing a mountain (Stokes et al 2018). This construct describes the extent to which an individual is likely to view a challenge as an opportunity; those who are mentally tough in this regard have a tendency to actively seek out such situations for self-development, whereas low scorers may avoid challenging situations for fear of failure or aversion to the effort that might be involved (Clough and Strycharczyk, 2015). They may also fail to see the opportunity for learning. For example, those who are challenge orientated, are those who thrive in continually changing environments and enjoy dealing with difficulty (ibid). Ongoing development enabled the identification of two factors to this construct: *risk orientation* and *learning orientation* (Crust and Clough, 2011).

***Risk orientation*** describes the extent to which individuals will be open to change and new experiences as well as the extent to which they are prepared to stretch themselves. Those who are mentally tough in this regard are prepared to take risks and to manage that risk, and are likely to be happy to try new things, for example, may feel comfortable working with new people and in new settings (Montgomery et al 2018). Typical responses associated with this include:

- Easily bored – will seek activities that bring something new
- Provoke change – especially when bored
- Like problem solving – and adopt a solution focused approach
- Happy to commit to projects, studies etc
- Often amongst the first to volunteer self and others for projects
- Enjoy competition and show it
- Can become restless with daily life & routines
- Welcome change – enjoy the VUCA world
- They may try anything... once (Clough and Strycharczyk, 2015).

At the other end of the spectrum, those who are mentally sensitive in this regard, prefer to minimise exposure to difficulties and to change and the kind of problems that come with that - and will strongly prefer to work in unchanging stable environments. Responses associated with this include (ibid):

- Do not like shocks and surprises
- Fear of failure preferring to stay with what they know and can do well
- May avoid making an effort – especially when required to pick up on new things
- Intimidated by challenges – becoming anxious
- Dislike being in new situations – new colleagues, new bosses, new premises etc.
- Strong preference for routine
- Risk averse (especially when failure can be personally detrimental)
- Uncomfortable with competitive settings (ibid).

The nature of risk orientation is such that there is a greater likelihood of failure. The response to this differs; some will take the view that “This didn’t work, it was uncomfortable but I learned something .... I may even want to try again”, and others may reflect that “This didn’t work, I didn’t like it. I never want to do that again. I will avoid that kind of situation”. The difference in response can be explained through the second factor, *Learning Orientation*.

**Learning orientation** describes the extent to which the individual is minded to reflect on their experiences and to extract the learning to be gained from this (Rossetti and Wall, 2017; Wall, Russell and Moore 2017). Those who are mentally tough in this regard are more likely to take the view that life is full of “ups and downs” and that this is normal; they will see the opportunity for learning and development from all of their experiences – whether these are good or bad. Learning Orientation is very much about being past focused but taking away the emotional attachment to an event – negative emotions have more valence/feel stronger and are easier to remember than positive ones. The mentally tough individual can reflect without this cognitive bias and take lessons from the good and bad things from a recent event, and this is key because it may be a more significant driver of subsequent motivation than future-focused approaches such as goal setting (Clough and Strycharczyk, 2015). Responses associated with this include:

- See the positives in most outcomes
- Enjoy learning – reading, meeting others, and listening to others experiences
- Motivated to apply what they know to the next challenge
- Aspirational – interested in self actualisation and being the best that they can be
- When set backs occur, will often like to have another go, applying what they have learned and seek do it better next time
- Can be competitive – using learning to gain an advantage (ibid).

Those who have comparatively low levels of learning orientation are likely to see little value in learning (and perhaps education). They may be more fatalist in approach and may not see that a negative outcome had anything to do with them and therefore there is little to be learned from it. Typical responses include:

- May get things out of perspective
- Tend to be content with achieving minimum standards
- Respond poorly to competitive people
- See failure and setback as terminal

- Poor or negative outcomes switch them off learning
- Stressful situations and failure makes them more likely to avoid those situations or situation like them again
- Can be slow to adopt new skills, knowledge etc
- Can approach development activity with a closed mind (ibid).

The Challenge construct is significant in that it builds on Commitment and Control to introduce a more positive and proactive element to the notion of resilience mentioned earlier, and it is consistent with other ideas such as Learned Optimism and Learned Helplessness developed by Seligman (1975) amongst others.

## Confidence

This construct describes the extent to which individuals have the self-belief to see a difficult task, which can be beset with difficulties and complexities, through to a conclusion – or having the strength to stand one's ground when needed, particularly when there is a need to influence others (Clough and Strycharczyk, 2015). Overall it describes how individuals deal with events and situations that might threaten setback and whose success cannot depend significantly on skills, knowledge and ability (ibid). These can be physical, mental, or they can be oral (such as oral challenge or criticism from others), and introduces another positive element into the model linking it to developments in positive psychology (Montgomery et al 2018). For example, individuals who have high levels of confidence will be able to take difficulty, complexity and perhaps uncertainty (externally or self-generated) in their stride. They keep their heads when things go wrong, and it may even strengthen their resolve to achieve a successful outcome. Individuals with low levels of confidence are more likely to be unsettled by setbacks and will feel undermined by these; they will question their ability to deal with difficulty, and their heads are said to "drop" when the going gets tough. Again, continuing research has identified two sub-scales for this component: *confidence in abilities* and *interpersonal confidence* (Crust and Clough, 2011).

*Confidence in abilities* describes the extent to which the individual believes that they are a truly worthwhile person, including the extent to which they are dependent on external validation and reflects their degree of optimism about life in general. Those with a significant level of Confidence in their abilities will adopt a positive approach to work, to life and to study and adopt behaviours which encourage them to believe they can achieve (Clough and Strycharczyk, 2015). They will tend to the view that they are skilled and knowledgeable and can apply these when needed; where they do not have an ability, they will also generally be confident about acquiring that ability. An important point to note here is that this does not necessarily mean that the individual has ability, but they perceive that they do. Abilities are a key factor in performance alongside Mental Toughness, however, it is possible to have an individual who believes they are able and yet may only possess moderate amounts of ability (Clark et al 2014). They may claim or attempt to do things for which they are ill equipped. Similarly, there are those who are able but do not think they are able; they may well underachieve. Typical responses associated with high levels of Confidence in abilities include (Clough and Strycharczyk, 2015):

- Do not need others to tell them they can do it or to encourage them
- Have an inner belief in their abilities
- Will use their abilities
- Happy to provide full responses to questions
- May believe they are right about a subject ... even when they are wrong.

- Will be comfortable about handling difficult tasks – especially in a VUCA setting.

*Interpersonal confidence* describes the extent to which the individual believes they can influence others and deal with others influence on them, and can include things like the extent to which they may be intimidated in social settings and are likely to promote themselves in groups (Strycharczyk and Clough, 2018). This can also determine to what extent they are able to handle difficult or awkward people; those with a high level of Interpersonal Confidence will tend to be assertive and may be less concerned with how they come over to other people. If they have a position on a subject they will want others to know about it. Typical responses associated with these include (Clough and Strycharczyk, 2015):

- Will not allow others to orally dominate them in a conversation
- Will provide a full response to questions
- Will talk about their abilities and be prepared to use them
- Will stand their ground when needed
- Will deal effectively with criticism
- Happy to ask questions to check understanding – rarely feel embarrassed in doing this
- Comfortable addressing groups in formal and informal settings (ibid).

Those with low levels of Interpersonal Confidence are more likely to be concerned about how they appear to others and will lack that inner belief that they can persuade or influence others to their point of view. They may think that what they have to offer is unlikely to be valued by others, and this may typically manifest itself in these behaviours, amongst others:

- Easily intimidated – will not express themselves in class/debate even when they know they are right
- Lack the confidence to express what they know in writing – will understate a position.
- Will not ask questions– sometimes for fear of looking stupid
- Will accept criticism and ridicule even when not warranted
- Will back down quickly when challenged
- Will allow others to dominate debates – even when they are more knowledgeable
- Will have difficulty dealing with assertive people (Clough and Strycharczyk, 2015).

## **Conclusions and future directions**

The Mental Toughness concept is an important development in understanding how individuals (and organisations) approach events in their life and work. The Mental Toughness framework provides a well evidenced and practical framework through which individuals and organisations can be understood and through which a number of valuable benefits can be achieved in terms of performance, well-being, agility and aspirations (Strycharczyk and Clough, 2018). It is possible to find mentally tough individuals who do achieve and it is possible to find mentally sensitive individuals who are successful but experience life in a more problematic way. However, it is also important to recognise that there are potential strengths and weaknesses at both ends of the scale, and there remains a scarcity of evidence which explores or demonstrates the problems or issues in these extremes of the scale. For instance, some potential downsides for those with high levels of Mental Toughness can include:

- Control – believing that you can do everything, being intolerant of others who are less mentally tough and masking emotions to the point you are difficult to read
- Commitment – overcommitting especially when others are involved; setting too many goals and perhaps focusing on the wrong goals
- Challenge – taking too many risks and being easily distracted by something “more interesting”; creating “initiative overload” with being engaged with too many opportunities, and sometimes overthinking what has happened and not applying learning
- Confidence – overconfidence in abilities, as those with strong interpersonal confidence can also, without realising it, shut down the opportunity for those around them to contribute their ideas.

These potential downsides can often be particularly relevant for leaders and managers, who have a pivotal role in organisations or wider communities in creating spaces for others’ health and wellbeing (Stokes et al 2018). The evidence shows that the mentally tough will generally be the people who reach senior positions (Marchant, Polman, Clough, Jackson, & Nicholls, 2009) and this can be part of the explanation why some may be personally successful but may be less successful at engaging with others which impacts on organisational or group success. For the mentally sensitive, potential downsides may be more obvious, and are often the reverse of the mentally tough strengths. However, they too can reveal strengths, such as creativity and artistic creativity in particular; they can see the world from a different perspective and channel that into their work. They can also be sensitive to the stressors and pressures that the mentally tough can ignore, and as such, can be positive in creating awareness about these wider influences in a team. Similarly, they can be less prone to fatigue because they can remove themselves from activities which would create excessive pressure and stress for them and others. There may be an advantage for a wide diversity of people in learning how to be more mentally tough, that is, adopting a mindset which can be fundamentally rooted in self-awareness and reflection (Wall and Meakin, 2019 forthcoming). Whether mentally tough or mentally sensitive, knowing one’s self is crucial in optimising experience and playing to strengths whilst dealing or coping with circumstances. As such, developing Mental Toughness has emerged as a route to the development of health and wellness outcomes in a broad sense and can therefore have a role in tackling sustainable development issues across the globe.

### **Cross References (to other entries)**

*Mental Toughness Development*

*Individual resilience*

*Organisational resilience*

*Resilience education and training*

*Stress management*

*Stress management training and education*

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