# Chapter 12 Resilience to Emotional Distress in Response to Failure, Error or Mistakes: A Positive Psychology Review



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**Abstract** Perceptions of failure have been implicated in a range of psychological disorders, and even a single experience of failure can heighten anxiety and depression. However, not all individuals experience significant emotional distress following failure, indicating the presence of resilience (Johnson J, Wood AM, Cogn Ther Res, 2015). This chapter synthesised studies investigating resilience factors to emotional distress resulting from the experience of failure in organisational settings. For the definition of resilience, the Bi-Dimensional Framework for resilience research (Johnson J, Resilience: the bi-dimensional framework. In Wood AM, Johnson J (eds) Positive clinical psychology. Wiley, Chichester, 2016; Johnson J, Wood AM, Gooding P, Taylor PJ, Tarrier N et al, Clin Psychol Rev 31:563–591, 2011b; Johnson J, Jones C, Lin A, Wood S, Heinze K, Jackson C, Psychiatry Res 220:217-225, 2014) is used, which suggests that resilience factors are those which buffer the impact of risk factors, and outlines criteria a variable should meet in order to be considered as conferring resilience. This chapter introduces the impact of failure experiences and conceptualises resilience-based approaches (Bonanno GA, Am Psychol 59:20–28, 2004; Masten AS, Am Psychol 56:227–238, 2001; Masten AS, Powell JL, A resilience framework for research, policy, and practice. In: Luthar SS (ed) Resilience and vulnerability: adaptation in the context of childhood adversities. Cambridge University, New York, pp 1–25, 2003). The Bi-Dimensional Framework of resilience research is deliberated. This chapter concludes by discussing the implications for psychological resilience-building interventions in response to failure, error or mistakes for individuals and teams in organisations.

**Keywords** Mistakes  $\cdot$  Errors  $\cdot$  Failure  $\cdot$  Attributional style  $\cdot$  Perfectionism  $\cdot$  Resilience  $\cdot$  Self-esteem  $\cdot$  Stress

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### 12.1 Introduction

Jean-Paul Sartre (2010) stated, "All men are afraid of failure. Who is not afraid is not normal; this has nothing to do with courage". Like Sartre, reflections on fear have been a common denominator of many other social thinkers. Indeed, fear is a universal component of human emotion, essential for the survival of the species; its absence would mean failure to react to potentially life-threatening situations. There are many phobogenic factors – causers of fear – in the contemporary workplace. Smart Technology, Artificial Intelligence, Robotics, Algorithms and constant transformations of management systems have increased the pressures to excel and achieve better productivity, intensifying the demands of professional life (Cunha 2006). In most cases, this situation is perceived by organisational researchers as something harmful, able to compromise the psychological and even physical integrity of employees, negatively influencing organisational functioning (Suarez 1993; Applebaum et al. 1998). However, some see a positive side to fear of failure, identifying it as a useful management tool when properly used. Dejours (1992), for example, observed that fear of failure may promote productivity and is often used by managers to do so (De Souza and Tomei 2016).

Given that failure and failure-related distress have been implicated in the development of a range of mental health disorders (Bulik et al. 1990; Johnson et al. 2008a, b; Reinherz et al. 1999), a fuller and more detailed understanding of resilience in relation to failure could have important implications for psychological interventions. This knowledge could be particularly important for employees and groups likely to experience significant failure events in their occupations, for example, health professionals, most of whom will be involved in patient safety failure and clinical errors during their career (Johnson et al. 2017; Sirriyeh et al. 2010).

# 12.2 Theoretical Background of the Impact of Failure Experiences in Organisations

This section conceptualises fear and fear in the workplace as theoretical underpinning of the impact of failure experiences. It also focuses on fear of failure and how to recover from failure, error or mistakes in organisations.

#### 12.2.1 Fear

According to the Cambridge Dictionary (Cambridge University Press 2008), fear is defined as:

An unpleasant emotion or thought that you have when you are frightened or worried by something dangerous, painful, or bad that is happening or might happen.

The definition indicates that "fear" is a feeling, an emotion. Emotions are complex phenomena and have been the subject of analysis by researchers in various fields of knowledge. Emotions have an individual nature because they involve an evaluation, by the individual, of a situation experienced (Frijda 2000). However, according to Seymor (1980), emotions can be considered a socially constructed syndrome, based on the individual's perceptions of a specific situation (De Souza and Tomei 2016).

To understand how individuals react to a specific emotion, like fear, it is necessary to focus on different fields such as psychology, social psychology and even physiology. Mira y López (1972) defines fear as a series of successive phenomena of paralysis or cessation of the vital course that occurs in living things, from the simplest organism to the most complex, when subjected to sudden or disproportionate situational changes. Mira y López (1972) cites three forms of fear, instinctive, rational and imaginary, and divides its evolution in human beings into four phases. *Instinctive fear* is the most primitive kind of fear, which is characterised by the lowering of the vital metabolism in face of a direct and immediate potentially harmful situation. It is a reactive fear, perceived a posteriori, "When it reaches the cortical centres, the wave of stimulus has already determined various reflexes and inhibitions at the medullar and sub-cortical levels" (De Souza and Tomei 2016).

Rational fear is a "prophylactic" fear. The reaction to threatening situations is conditioned by prior experiences and is rationally based. It is a fear that is comprehensible, even by those who do not feel it directly. Thus, the phobogenic pattern can be transmitted, as it is logical. The individual may not fear something initially, but when the individual becomes aware of the damage that can be caused by the object, subject or situation, the individual starts to feel afraid. Finally, *imaginary fear* is considered as the most torturous. The reason is that the harmful events that would be the starting point of this type of phobia never in fact constituted a cause of organic fear itself. The individual, through a fluid and precariously structured network of associations, becomes afraid, making imaginary fear unjustified and incomprehensible (De Souza and Tomei 2016).

According to Mira y López (1972), the feeling of fear in individuals evolved in four phases. From an evolutionary perspective, he states that fear has its origin as a simple cellular reaction to stimuli, which in its last phase turned into a creative process derived from random musings. In the *first phase*, environmental changes are the trigger to a progressive decrease of vital activities. These stimuli caused by fear can result in temporary or even permanent shutdowns, only seen in extremely simple organisms, without a structured nervous system. In the *second phase*, phobic impulses inhibit the prompt response of the higher nerve centre, leaving the employee static, suspended and distressed (De Souza and Tomei 2016).

The *third phase* is marked by a first reaction of the individual intending to escape the situation that is causing the fear. However, Mira y López (1972) affirms that it is also at this stage that the fear becomes associative, which is considered a "double-edged sword". By trying to escape from the situation of fear, the individual "suffers not only for the real and absolute event but also for the signs from now on associated to it". "At every scare, a hundred new fears are created", as a result of the new refer-

ences, related to the phobic agents. The *fourth phase* is the one in which imaginary fear happens. Emerging from random and fantastic assumptions, relying on the imagination as an ally, the phobic impulses become diverse and somehow inconsistent. Mira y López (1972) draws attention to the paradox established in this evolutionary phase of fear. The more unrealistic and less attached to the reality a fear is, the harder it is to rationally fight against it (De Souza and Tomei 2016).

### 12.2.2 Fear in the Workplace

Some theoretical studies have examined fear in the organisational environment. A dialectic perspective is delineated by Koury (2002), according to whom fear, as a social construct, is one of the main structural pieces of the group experience. Fundamental for sociability processes and working as an instrument for order and disorder, fear plays a role as a social organiser in its everyday action. De Souza and Tomei (2016) state that individuals are faced with a social reality, feel fear about their adaptation and permanence, internalise the existing rules and perpetuate them.

Suaréz (1993) advocates the idea that when managed through constructive actions, fear can become a motivating agent. The possibility of transforming fear to something useful is only a matter of proper organisation. Regarding the expectations of employees, an efficient action would be to have clear and objective rules. Employees should be aware of their rights, duties and roles in the organisation. Concerning communication, it is important to establish mechanisms for constant feedback, ensuring that employees correctly understand the information received. However, the negative effects of fear and the fact that its extinction in the workplace is impossible should be acknowledged. For Kohn (1986), fear is a stimulator of competition that generates anxiety among those who experience it. It is harmful in companies, not only individually but socially as well, because it undermines the relations of trust and unleashes a series of inappropriate behaviours (De Souza and Tomei 2016).

By losing pleasure in their professional activity, employees become limited: they are content to remain in a comfort zone and avoid errors, instead of striving for the best performance possible. In the organisational context, the majority of fears are associated with a hierarchical position, authority, power and social and individual psychological factors. Applebaum et al. (1998) analysed the use of positive reinforcement and punishment. The more fear a punishment generates, the more efficient it will be, due to the influence on the resulting behavioural patterns. Fear is a reason for individuals to avoid certain behaviour (De Souza and Tomei 2016).

### 12.2.3 Fear of Failure

The first academic articles related to the fear of failure construct were behavioural theories such as those by Murray (1938). Listing 20 basic human needs, the item "infavoidance" was included, a term coined by him to define individuals' need to avoid humiliation by concealing failings. According to Lewis (1992), the effects of feelings of shame are extremely painful to people, incisively impairing their perception of themselves. The sensation of negative exposure among peers causes feelings of disparagement, belittlement and imminent abandonment (Andrews 1995; De Souza and Tomei 2016).

The unidimensional perspective of the fear of failure is demonstrated by the academic production on the feeling of shame resulting from a frustrated attempt to do something (Elliot and Thrash 2004). However, some studies take a multidimensional approach of the fear of failure. Birney et al. (1969) started from the premise that individuals perceive consequences of failure negatively. Therefore, a model was proposed that decomposes fear of failure into three dimensions: decreased self-estimates of ability, non-ego punishments and social devaluation. David Conroy (2002), based on the work of Birney et al. (1969) and with the intention of postulating an instrument to measure the fear of failure, hierarchically disaggregated the concept into five dimensions as indicated in Table 12.1.

Fear of failure, in general, is related to the negative physical and mental consequences of failure. However, it is worthwhile enumerating other "symptoms" of the fear of failure (Conroy 2002), already observed scientifically. According to Elliot and Church (2003), the fear of failure causes the appearance of a defensive/pessimistic stance and limits individuals' abilities. High levels of anxiety (Elliot and McGregor 1999), diffuse attention and discomfort, a tendency to avoid challenges and stress when relating to other people (Conroy et al. 2009) are some other indicators of the occurrence of this emotion (De Souza and Tomei 2016). Failure is one of life's most common traumas, yet people's responses to it vary widely. Some bounce back after a brief period of malaise; others descend into depression and a paralysing fear of the future (Seligman 2011).

Dimension	Description
Shame and embarrassment	The individual feels ashamed and embarrassed after the failure.
Devaluing self-esteem	The individual's self-esteem is diminished as a consequence of the failure.
Uncertainty about the future	The future becomes more uncertain after the failure.
Loss of interest by important others	People who are important to the individual lose interest in him or her because of the failure.
Upsetting important others	People who are important to the individual suffer negative

consequences of the failure and become upset.

**Table 12.1** Five dimensions of fear of failure (Conroy 2002)

A large body of research (McCarty et al. 2008; Reinherz et al. 1999) suggests that experiencing failure has marked emotional and psychological consequences across a range of individuals and settings. Longitudinal studies indicate that academic failure in adolescents increases risk for clinical depression in adulthood, and in those who are depressed, perceived failure has been associated with suicide attempts (Bulik et al. 1990). Even a single experience of failure in nonclinical groups can have significant emotional sequelae. In healthcare professionals, involvement in medical errors or patient safety failures is reported to result in feelings of shame, depression and anxiety, which can then increase the risk of further errors (Johnson et al. 2017; Sirriyeh et al. 2010; West et al. 2009).

However, not all individuals experience significant emotional distress in response to failure, and several psychological models highlight the role of psychological responses to failure in the development of failure-related distress and emotional disorder. For example, cognitive models of suicide have emphasised the role of situation appraisals, suggesting that suicidal thoughts occur when individuals appraise their circumstances in terms of failure (termed "defeat") and entrapment (Johnson et al. 2008a; Williams 1997). Yet such models have been criticised for their acceptance of an overly negative, disorder-based approach to understanding mental health (Johnson and Wood 2015). By focusing on the development of mental health problems rather than mental wellbeing, it has been suggested that such approaches fail to identify and capitalise on natural coping mechanisms (Johnson and Wood 2015). As such, they may be missing potential points for psychological interventions to target and develop (Johnson et al. 2017).

## 12.2.4 How to Recover from Failure, Error or Mistakes

The following example illustrates how to recover from failure, error or mistakes by means of resilience. Douglas and Walter, two University of Pennsylvania MBA graduates, were laid off by their Wall Street companies 18 months ago. Both went into a tailspin: they were sad, listless, indecisive and anxious about the future. For Douglas, the mood was transient. After 2 weeks he told himself, "It is not you; it is the economy going through a bad patch. I am good at what I do, and there will be a market for my skills". He updated his résumé and sent it to a dozen New York firms, all of which rejected him. He then tried six companies in his Ohio hometown and eventually landed a position. Walter, by contrast, spiralled into hopelessness: "I got fired because I cannot perform under pressure", he thought. "I am not cut out for finance. The economy will take years to recover". Even as the market improved, he did not look for another job; he ended up moving back in with his parents. Douglas and Walter (actually composites based on interviewees) stand at opposite ends of the continuum of reactions to failure. The Douglases of the world bounce back after a brief period of malaise; within a year they have grown because of the experience (Seligman 2011).

The Walters go from sadness to depression to a paralysing fear of the future. Yet failure is a nearly inevitable part of work; and along with dashed romance, it is one of life's most common traumas. People like Walter are almost certain to find their careers stymied, and companies full of such employees are doomed in hard times. It is people like Douglas who rise to the top and whom organisations must recruit and retain in order to succeed. But how can you tell who is a Walter and who is a Douglas? And can Walters become Douglases? Can resilience be measured and taught? Seligman (2011) worked with colleagues from around the world to develop a programme for teaching resilience (Seligman 2011).

It was tested in an organisation of 1.1 million people where trauma is more common and more severe than in any corporate setting: the US Army. Its members may struggle with depression and post-traumatic stress disorder (PTSD), but thousands of them also experience post-traumatic growth. Their goal is to employ resilience training to reduce the number of those who struggle and increase the number of those who grow. Seligman (2011) believe that business people can draw lessons from this approach of resilience, particularly in times of failure and stagnation. Working with both individual employees and managers, it is possible to create "Douglases" who can turn their most difficult experiences into catalysts for improved performance (Seligman 2011). Bardoel et al. (2014) propose that one of the theoretical approaches to resilience applied in the workplace is based on positive psychology and positive organisational behaviour. Positive psychology is conceptualised in the following section.

# 12.3 Positive Psychology

Organisational and management literatures (Peterson and Seligman 2003) have begun to consider the potential benefits of incorporating positive psychological principles to enhance the corporate experience. Although organisations are stereotypically concerned with maximising the financial bottom line, the best companies also seek to enhance employees' experiences of work. Unfortunately such positive organisational practices were put aside in favour of techniques that focused directly on the bottom line, often neglecting the worker. With the re-emergence of positive psychology, such a focus on the employee experience has come to the forefront. Wang (2011) recognises the business world's increasing attention to positivity in the workplace, for example, the US Army, which recently adopted a technique for increasing soldiers' resilience (Cornum et al. 2011; Mills et al. 2013).

Some research (Steele et al. 2012) has begun to highlight the importance of employee strengths and positive states on a broader level as they relate to individual- and organisational-level outcomes. Theoretical support (Fredrickson 2001) suggests that positive emotions expand thought processes (e.g. creativity and brainstorming), thereby building resources, and that the process is cyclical such that exercising some aspects of positive psychology in the workplace in turn enhances the frequency with which one is likely to experience other positive psychology facets

also. This is in line with the emotional contagion perspective (Hatfield et al. 1994), which suggests that something as simple as managers displaying positive emotions is likely to promote positivity not only in themselves but also among their subordinates (Johnson 2009). The same applies to teams, whereby one positive experience between two team members can multiply such that other team members soon share similar positive experiences (Walter and Bruch 2008). The various constructs and domains within the workplace function interrelatedly, thereby enhancing the potential power of each construct (Mills et al. 2013). Thus, in positive psychology, resilience is described as a response where an individual adapts positively to exposure to a subjectively significant threat, risk or difficulty, without losing the ability to function normally (Bardoel et al. 2014; Bonanno 2004; Meintjes and Hofmeyr 2018). Resilience is explained in detail in the next section.

### 12.4 Resilience

In recent years, researchers (Bakker and Demerouti 2007) have focused on resilience – a psychological resource capacity, generally defined as the capability of an individual to withstand hardship and, while facing adversity, continue to lead a functional and healthy life (Turner 2001). Luthans (2002) defines resilience as the positive psychological capacity to rebound, "to bounce back" from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility. Brooks and Goldstein (2004) assert that a resilient perspective is helpful in every aspect of ordinary living as it provides the strength to undertake routine challenges and sudden problems. Crisis or adversity for an employee can be any problem at a personal level related to work or family. It may be a non-congenial environment or an unsupportive manager. Similarly, a female worker may face problems such as sexual harassment, glass ceiling and lack of family support (Moran 1994), which she might be unable to express. These seemingly small but significant problems not only affect the efficiency of the worker but also change the attitude of the employee towards the company (Paul et al. 2016).

Resilience is being explored in the context of the working population as it relates to how employees deal with the challenges of the business world (Badran and Kafafy 2008; Caverley 2005). However, in an organisational context, it still remains an emerging concept (Luthans and Youssef 2004). Also, the majority of the research on resilience has been conducted with a younger and treatment-seeking population (Campbell-Sills et al. 2006). The application of positive psychology at the workplace as positive organisational behaviour (POB) (Youssef and Luthans 2007) has encouraged studies on resilience in an organisational context (Paul et al. 2016).

### 12.4.1 Conceptualisation of Resilience

There are several definitions for the term "resilience", which widen the scope of its meaning. A large number of studies have also considered different facets of resilience (personal resilience, trait resilience, psychological resilience, emotional resilience, career resilience and ego resilience) in individual and organisational contexts (Block and Block 1980; Block and Kremen 1996; Bolton 2004; Dulewicz et al. 2003; King 1997; Waugh et al. 2008). In general, authors agree that resilience is a capacity that reflects in behaviour, deals with change and relates to overcoming some unwanted situation (Paul and Garg 2012; Paul et al. 2016). Furthermore, resilience is defined as the capability to bounce back from adversity and failure - and even eustressful events such as new responsibilities (Luthans 2002); resilience is an important adaptive capacity. Yet, resilience goes beyond simply recovering from adversity, including the capacity to improve past one's previous state by harnessing the positive power of the setback by recognising and internalising lessons learned (Luthans et al. 2006). When individuals learn from failure, they develop skill repertoires enabling them to more effectively deal with future adversities – a crucial skill in employees, particularly during turbulent economic times, during which organisations often experience unforeseen hindrances preventing expected progress.

Resilience has been linked to various outcomes vital to organisational success, including effective leadership (Harland et al. 2005), successful coping with stress (Zunz 1998) and flourishing under hardship (Ryff and Singer 2003). Caza and Milton (2012) emphasised the importance of social support in enhancing resilience at the employee level, although resilience is best enhanced by cultivating it at three distinct levels: individual, group and organisational. The possibility also exist of enhancing organisational-level resilience by hiring for resilience in the selection process, but doing so would be an "impoverished viewpoint" that fails to consider the developmental possibilities of resilience interventions (Mills et al. 2013).

Additional strategies proposed to enhance resilience include those identified by Masten and Reed (2002), who proposed a three-pronged intervention utilising asset-focused tactics (e.g. modifying job characteristics, knowledge- and skill-based training and establishing mentoring relationships that allow for assistance when the need arises) and risk-focused tactics (e.g. mitigating challenging situations by eliminating performance detractors), as well as a focus on processes such as self-awareness and self-regulation to develop coping mechanisms. Of particular importance is approach-based coping (vs. avoidance-based coping), wherein the individual deals with a problem immediately and directly. Similar to the asset- and risk-focused aspects of resilience, this process aspect can be developed on an individual level as well as on a broader, organisational level, such as via strategic planning initiatives (Luthans and Youssef 2004). Sutcliffe and Vogus (2003) identified strategies to enhance resilience at the individual, group and organisational levels.

All were couched in enhancing employee competence and efficacy by increasing access to and effective use of resources (both tangible and intangible [e.g. social]), fostering a learning orientation aimed at continual training and flexible growth. Employee experiences are also structured to allow them to make autonomous decisions that are likely to lead to successes and/or successful recovery from mistakes. In essence, providing employees with personal as well as external resources with which to be flexible and adaptable, and therefore the skills to successfully improvise in the face of uncertainty, may serve to foster employee resilience (Sutcliffe and Vogus 2003). Meyer (1982) found that employee resilience was positively associated with efficacy and negatively associated with organisational rigidity that inherently stifled learning. Orzech et al. (2009) further found that fostering mindfulness can enhance resilience, a link likely to apply at the employee level given that mindfulness enhances the ability to identify and thoughtfully attend to potential threats (Mills et al. 2013).

Wagnild and Young (2009) named five essential characteristics that constituted resilience: (1) meaningfulness of life or the realisation that life has a purpose and the recognition that there is something for which to live; (2) perseverance or the act of persistence despite adversity or discouragement; (3) self-reliance or belief in oneself with a clear understanding of own capabilities and limitations; (4) equanimity or balanced perspective of life and experiences which might be viewed as sitting loose and taking what comes, thus moderating extreme responses to adversity; and (5) existential aloneness or the realisation that each person is unique and that while some experiences can be shared, others must be faced alone. Zautra et al. (2010) asserted that the personal characteristics which led to healthy outcomes after a stressful situation determined the resilience processes (Paul et al. 2016).

Recent applications of resilience in occupational literature focus on occupations associated with a high risk for experiencing acute stress and trauma, such as police officers and fire fighters (Freedman 2004; Peres et al. 2011; Vanhove et al. 2015). However, Vanhove et al. (2015) propose that resilience may also be of significance in an employment context where stress can accumulate over time because of influences such as work overload, work relationships, lack of resources and support, emotional and physical exhaustion and work-life conflict. Johnson et al. (2005) identify teachers, ambulance workers, customer and social service workers, call centre staff and prison officers as examples of jobs where the above-mentioned influences and accumulated stress can have a negative effect on employee wellbeing and organisational functioning (Vanhove et al. 2015). Although no reference is made to sales employees, the nature of sales positions suggests that the sales environment can also be viewed as an employment context where resilience is of significance. Krush et al. (2013) support this view with the observation that resilience enables positive responses towards adversity while simultaneously inhibiting nega-

tive responses. Resilience in the workplace is also defined as the "positive psychological capacity to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility" (Kotzé and Nel 2013; Luthans 2002). Thus, a key component of resilience is whether an individual demonstrates simultaneous growth and positive change following a stressful event. Although some definitions refer to positive change, most simply require successful adaptation to adversity (Bande et al. 2015; Meintjes and Hofmeyr 2018).

### 12.4.2 Resilience-Based Approaches

Resilience-based approaches have the potential to highlight skills and tendencies that individuals can develop to maintain psychological health, leading to a more positively oriented approach to wellbeing. However, this body of literature has suffered from two main limitations (Johnson et al. 2017).

First, there has been a lack of clarity concerning the criteria for identifying a "resilient" outcome. The common definition of resilience as factors which reduce negative outcomes in the face of adversity would suggest that resilience variables are those which moderate or attenuate the association between risk factors and negative outcomes. In contrast, many studies of resilience have used a correlational approach. These studies have assumed that resilience variables are those which are "positive" and have investigated whether high levels of a proposed resilience variable (e.g. high perceived social support) are directly associated with lower levels of a negative outcome (e.g. suicidal thoughts). However (Johnson and Wood 2015; Johnson et al. 2011b), every negative variable exists on a continuum with its positive inverse. Returning to the above example, using this approach, it could just as easily be suggested that low perceived social support is a risk factor for suicidal thoughts (Johnson et al. 2017).

Second, a common approach is to propose a concept of resilience, to develop a questionnaire to measure it and to investigate the association of this variable in relation to various outcome variables in different populations. This approach does not enable the proposed resilience variable itself to evolve in order to accommodate new research findings. Indeed key questions regarding the nature of resilience remain, which may be linked to the limitations of this approach. These questions are whether factors which confer resilience vary depending on the outcome under consideration (e.g. whether resilience to general mental wellbeing is similar to resilience to negative behavioural outcomes such as suicidality) and whether factors which confer resilience vary according to the risk factor/adversity individuals are facing (Johnson et al. 2017).

# 12.5 The Bi-dimensional Framework (BDF) for Resilience Research

The Bi-Dimensional Framework (BDF) for investigating resilience (Johnson 2016; Johnson et al. 2011b, 2014) addresses these criticisms of the field of resilience research and enables the development of evidence-based concepts of resilience. The BDF outlines clear criteria that a variable should meet in order to be considered as conferring resilience. In line with definitions of resilience, it indicates that resilience factors are those which interact with (or statistically moderate) the likelihood that risk will lead to negative outcomes. Individuals who are low on resilience will show increasing evidence of negative outcomes with increasing risk, but high resilience individuals will maintain low levels of a given negative outcome, despite risk exposure (see Fig. 12.1) (Johnson et al. 2017).

As such, it purports that any investigation of resilience should include three variables, (1) the risk factor, (2) the resilience factor and (3) the outcome variable, and studies directly investigating associations between a predictor variable and an outcome are insufficient to establish a resilience effect. In line with the observations that all variables lie on a continuum from positive to negative, the BDF indicates that all factors can be viewed as "bipolar" and whether they are framed in positive or negative terms is essentially arbitrary (see Fig. 12.2). As such, unlike previous resilience approaches, the emphasis of the BDF is not upon identifying "positive" factors which are inversely linked with negative outcomes but upon identifying psychological factors which can alter the impact of risk (Johnson et al. 2017).

A particular strength of the framework is that it offers a way to aggregate and review existing studies based on (1) a particular outcome of interest (e.g. emotional/behavioural outcome), (2) whether a risk factor has been included and (3) whether a psychological factor has been examined as a moderator of a risk factor. Although

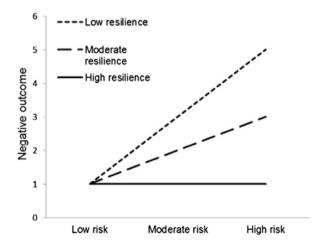


Fig. 12.1 Hypothetical resilience interaction (Johnson et al. 2017)



Fig. 12.2 Risk and resilience as separate bipolar dimensions (Johnson et al. 2017)

there have been very few studies which have explicitly aimed to investigate resilience to failure, by using the framework, it is possible to define failure experiences as the risk variable of interest, measures of emotional distress as the outcome variable and psychological factors as the potential resilience variable and to use these terms to search the literature. This approach offers a systematic route to identifying factors which confer resilience to emotional distress/dysfunction in response failure. Given the centrality of emotional distress to most mental health disorders, results from this review could have broad relevance to psychological interventions (Johnson et al. 2017).

# 12.6 Implications for Psychological Resilience-Building Interventions in Response to Failure, Error or Mistakes

The concept of building resilience has been an implicit aspect of psychological interventions. Resilience-building interventions on individual, group and organisational level will be described in the following sections.

## 12.6.1 Resilience-Building Interventions on Individual Level

#### 12.6.1.1 Cognitive Behaviour Therapy

On the individual level, cognitive behaviour therapy (CBT) aims to help clients develop skills and techniques for managing low mood and stress which they can put into practice in daily life when the need arises (Beck 1976; Tarrier and Johnson 2015). Although the focus of the therapy may be on alleviating the client's current distress, an underlying assumption has been that these skills will be a source of resilience for the client after therapy has ceased. Recent years have seen a growing focus on this element of interventions, with therapeutic approaches being developed or refined specifically to prevent subsequent relapses (Williams et al. 2014). There has also been increasing interest in resilience-focused interventions in populations which are not currently experiencing psychological disorder, but may be at heightened risk (Johnson et al. 2017).

These include children and young adults (Dray et al. 2014; Lynch et al. 2004), military families (Saltzman et al. 2011) and healthcare staff (Goldhagen et al. 2015; Mealer et al. 2014). These interventions have been designed and developed on the basis of clinical knowledge and factors which predict symptoms over time. However, there has been a lack of evidence regarding factors which can buffer individuals from emotional distress in response to subsequent stressors, such as failure, which is a strong and consistent trigger of emotional distress (Bulik et al. 1990; Johnson et al. 2011a; McCarty et al. 2008; Reinherz et al. 1999). By identifying factors that these psychological interventions can target in order to reduce risk of emotional distress in response to subsequent failure experiences, results from the review provide an evidence base for these interventions to draw on. These results are supported by the experimental and longitudinal design of most of the studies, which provide evidence that the proposed resilience variables may have a causational impact on subsequent mood. In particular, resilience-building interventions should aim to increase levels of self-esteem, develop a more positive attributional style and reduce levels of perfectionism (particularly socially prescribed perfectionism) (Johnson et al. 2017).

### 12.6.1.2 Master Resilience Training (MRT)

Master Resilience Training (MRT) can be seen as management training for teaching individuals how to embrace resilience and then pass on the knowledge. The content of MRT is divided into three parts – building mental toughness, building signature strengths and building strong relationships. Individuals receive training in the three parts in plenary lectures and breakout sessions that include role playing, work sheets and small group discussion (Seligman 2011).

#### 12.6.1.2.1 Building Mental Toughness

This segment of MRT starts with Albert Ellis's ABCD model: C (emotional consequences) stem not directly from A (adversity) but from B (one's beliefs about adversity). The individual works through a series of A's (e.g. falling out of a 3-mile run) and learns to separate B's, heat-of-the-moment thoughts about the situation ("I'm a failure"), from C's, the emotions generated by those thoughts (such as feeling down for the rest of the day and thus performing poorly in the next training exercise). They then learn D, how to quickly and effectively dispel unrealistic beliefs about adversity. The next focus will be thinking traps, such as overgeneralising or judging a person's worth or ability on the basis of a single action (Seligman 2011).

"Icebergs" are also discussed, which are deeply held beliefs such as "Asking for help is a sign of weakness", and individuals are taught a technique for identifying and eliminating those that cause out-of-kilter emotional reactions: Does the iceberg remain meaningful? Is it accurate in the given situation? Is it overly rigid? Is it use-

ful? Finally, individuals are trained how to minimise catastrophic thinking by considering worst-case, best-case and most likely outcomes. For example, an individual receives a negative performance evaluation from his supervisor. He thinks, "I won't be recommended for promotion, and I don't have what it takes to stay in the organisation". That's the worst case. Now, let's put it in perspective. What's the best case? "The negative report was a mistake". And what's the most likely case? "I will receive a corrective action plan from my counsellor, and I will follow it. I'll be frustrated, and my supervisor will be disappointed" (Seligman 2011).

### 12.6.1.2.2 Building Signature Strengths

The second part of the training begins with Peterson's Values in Action signature strengths survey, which is taken online and produces a ranked list of the test taker's top 24 character strengths. Small groups discuss the following questions: What did you learn about yourself from the survey? Which strengths have you developed through your career? How do your strengths contribute to you reaching your goals? What are the shadow sides of your strengths, and how can you minimise them? The individuals are divided into teams and told to solve a problem using the team members' character strength profiles. Finally, the individuals write their own "strengths in challenges" stories (Seligman 2011).

### 12.6.1.2.3 Building Strong Relationships

The third part of MRT focuses on practical tools for positive communication. Individuals who respond actively and constructively (as opposed to passively and destructively) to someone who is sharing a positive experience, love and friendship increase. The individuals complete a work sheet about how they typically respond and identify factors that may get in the way of active and constructive responses (such as being tired or overly focused on themselves). Individuals are also trained in effective praise and assertive communication, distinguishing it from passive or aggressive communication. What are the language, voice tone, body language and pace of each of the three styles, and what messages do they convey? Enhancing mental toughness, highlighting and honing strengths and fostering strong relationships are core competencies for any successful individual.

Leadership development programmes often touch on these skills, but the MRT programme brings them together in systematic form to ensure that even in the face of terrible failures, individuals flourish rather than flounder. Managers can change the culture of their organisations to focus on the positive instead of the negative and, in doing so, turn pessimistic, helpless Walters into optimistic, can-do Douglases (Seligman 2011).

### 12.6.2 Resilience-Building Interventions on Group Level

In addition to clinical groups, resilience-based interventions could have important implications for groups who may not currently suffer from mental health difficulties, but who are regularly confronted with failure as part of their training or work. One such group are healthcare professionals, who may undertake ongoing training and assessment alongside their practice and who may also be involved in medical errors (Sirriyeh et al. 2010). Research suggests that involvement in medical errors can cause significant emotional distress and that experiencing distress can then increase the risk of involvement in subsequent errors (Hall et al. 2016; Sirriyeh et al. 2010; West et al. 2009). In this group, resilience-based interventions could enable the development of psychological resources which may both reduce emotional distress in response to failure and errors and improve patient safety (Johnson et al. 2017).

# 12.6.3 Resilience-Building Interventions on Organisational Level

Persevering in the face of failures, error or mistakes is critical for organisations getting ahead. It has the power to take organisations farther than IQ, education or experience alone. It's applicable across all roles and all lines of business in every industry around the world. And yet, organisations do not spend nearly enough time developing resilience in their workforce. Resilience is a skill that needs to be learned and practised in organisations. Seligman (2011) studied resiliency to understand why some organisations rebound after a failure and why others fall into a state of learned helplessness. He and his team created the Penn Resiliency Program. They train businesses in resiliency and reduce the number of those who struggle in adversity and increase the number of organisations who grow (Philip 2017).

Corporate leaders must first help organisations build mental toughness. This requires recognising that employees' response to failure is based solely on their own beliefs about what it means to fail. If employees believe failure means not getting something right on the first try, they will stop trying. Being mentally tough means organisations know that this moment is temporary, and employees have the emotional sophistication to shake off negative thoughts and try again. Next, employees need to learn to recognise their unique strengths and how they make a positive contribution to the project or the organisation. This helps to give employees the confidence to innovate and push forward, even after temporary setbacks. The last step is about changing the way of communication in organisations and responding to employees. Responding in an active and constructive way versus a passive or dis-

missive way will contribute to employees becoming more resilient. For example, consider the manager that merely says, "Good work", in a performance review versus the manager that praises specific achievements, their value and a worker's personal growth. Employees of the second type of manager will rebound much quicker from a failure, error or mistakes because they have an active and engaged relationship and experience their value (Philip 2017).

Studies have shown that resilient organisations are "happier" and have a higher lifespan. In the workplace, resilient people experience less stress and are able to grow in their careers from what they have learned from their challenges or setbacks. They take less time off, are more productive and can adapt more quickly to change. The rapidly expanding global market is transforming the way we work and confronting organisations with an unprecedented pace of change. Change can be a force of good, pushing individuals to learn and develop and driving organisations to evolve and grow. It can also become overwhelming for employees and businesses, if they are ill prepared. Leaders need to focus on equipping their employees with the resilience and the mental agility to adapt and thrive in this ever-changing world. Organisations need to be "happy places", productive and successful and deliver incredible value to their customers and the people they work for. Their success is not guaranteed and their failures, errors and mistakes do not need to define their destiny. It is their optimism and resilience that will help organisations to respond positively to challenging situations and the opportunity to dream big and push forward. Leaders must contribute to creating resilient employees who can steer through change, pressure, uncertainty and ambiguity and have the coping strategies to manage stress, overcome setbacks and continue to innovate (Philip 2017).

## 12.7 Chapter Summary

This chapter focused on investigating resilience factors to emotional distress resulting from the experience of failure in organisational settings. In this chapter the parameters for the study of resilience in the workplace were set. The impact of failure experiences was described and resilience-based approaches conceptualised. The Bi-Dimensional Framework of resilience research was deliberated. This chapter concluded by discussing the implications for psychological resilience-building interventions in response to failure, error or mistakes for individuals, groups and organisations. As determinants of the demonstration of resilience in employees are uncovered, practitioners and researchers will have a better understanding of the most important attributes to select for and develop in order to maximise employees' capacity for resilience.

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