<u>Does Coaching Need the Concept of Antifragility</u>?

<u>Abstract</u>

The COVID-19 pandemic has illuminated how all aspects of personal and professional life can be profoundly disrupted and, in some cases, permanently changed by events that are unpredicted, unprecedented and apparently random. As the full consequences of the pandemic emerge, individuals, organisations and societies across the globe will need to evolve not only to address the impacts of COVID-19 but also to equip themselves for future challenges of an equally complex and unprecedented nature. In this context, coaches might also need to acquire novel perspectives, models and methods to optimise their contribution, both to existing clients and to new client groups. A concept that has considerable potential relevance to the issues now confronting coaches and their clients is antifragility. Introduced to professional and scholarly debate by Nassim Taleb, antifragility refers to the characteristics of systems that thrive in situations of disorder and chaos. This article defines and describes antifragility, considers its similarities and differences to the more familiar concept of resilience and examines what antifragility might contribute to coaching as the field explores its response to a future that is increasingly unknown and unknowable.

<u>Does Coaching Need the Concept of Antifragility</u>?

The COVID-19 pandemic has highlighted how seemingly unexpected and random occurrences can disrupt our professional and personal lives in profound ways. Our health, well-being and careers, alongside our communities, institutions, and economies are increasingly at the whim of events whose emergence is beyond our control, which present us with layers of challenge to which we cannot immediately respond and whose occurrence may be impossible to predict.

As societies across the world grapple with the immediate and unfolding implications of the pandemic, significant questions and opportunities arise as to how coaching positions its offering. We may find ourselves being called upon to deliver our services to new client groups and in new contexts, discover that it is necessary to adapt our models and methods to meet emergent societal need and may even wish to re-envision our contribution as agents of individual, community and global change in a post-pandemic world. It is in the context of pondering these issues that this article introduces the concept of antifragility and considers whether and how coaching might benefit from incorporating antifragility into its range of perspectives and approaches to human change and growth.

<u>What is antifragility</u>?

The term 'antifragility' was coined by the scholar, essayist and former trader Nassim Taleb (2012)[1] who sought to identify the characteristics of systems that thrive, rather than merely survive, when faced with disorder, volatility, random events and chaos. Specifically,

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[1] Taleb's preferred methods of dissemination are essays, books, presentations and the expertise located through professional practice rather than more traditional academic forms of dissemination of which he has been critical. For this reason, his academic output is relatively sparse, and the resources drawn upon here reflect his most influential contributions.

he is concerned with why and how certain systems flourish when confronted with unpredictable, destabilising and high-impact events such as market crashes and pandemics.

The essence of antifragility has been captured analogically through reference to the Greek and Roman mythological beast, Hydra. Hydra was a water-dwelling, serpentine creature infamous for its poisonous blood and breath, and multiple heads. What made Hydra apparently impervious to destruction was that when one of its heads was severed from its body, two more heads would emerge from the gaping wound. Hydra was, therefore, capable of using the shocks inflicted upon it to grow stronger and more powerful. It was, to use Taleb's (2012) language, antifragile.

The antifragile exists in all aspects of the social and natural world that undergo significant change over time. Examples include idea generation, culture, political systems and economies as well as bacterial resistance, genetic and viral mutation, and the evolution of the human race and other species. Antifragility exists at the level of the individual also. For example, imposing duress upon our muscles and joints through engaging in physical exercise results in small muscle tears. As the body repairs these tears, the muscles and joints become stronger. Similarly, by introducing (controlled) quantities of diseases into our bodies in the form of vaccination, our bodies build resistance to them.

Another quality of antifragile systems is that chaos and destabilisation are necessary preconditions for them to thrive: depriving them of disorder, randomness and shock causes damage. To return to the example of the human body, our muscles will weaken if they are not exposed to the regular small tears of muscle fibre that come with physical exercise and a sedentary lifestyle increases the likelihood of long-term physical health conditions. Equally, the pressures afforded by the cognitive challenges of acquiring mental skills

facilitate the development of new neural connections; without these opportunities our brains will atrophy.

Psychologically, also, where we are denied exposure to destabilising events, we may find ourselves ill-equipped to deal with the challenges of life. For example, the ability to work well under stress and to build effective repertoires of response are achieved not through establishing a life devoid of pressure but by actively engaging with experiences that test us. Finally, evidence of antifragility is present in psychological states such as post-traumatic growth (Joseph, 2004), where positive transformation occurs in response to a traumatic event. In summary, there appears to be reasonable evidence that human beings tend towards, or at least have the potential for, antifragility both physically and psychologically. Table 1 provides examples of how some well-documented concepts in applied psychology might be understood from the perspective of antifragility.

Table 1. Psychological Phenomena that have Parallels with Antifragility and its Counterpart (Fragility)

Insert Table 1

Antifragility and Resilience

In exploring how the concept of antifragility might be of significance to coaches and their clients, it is important to note that antifragility is qualitatively different from resilience. Resilience is concerned with remaining strong but fundamentally unchanged in the face of stress or recovering to a prior state following a negative shock. In contrast, for the antifragile, stress becomes a means through which transformation occurs rather than representing something to be endured. Whilst resilience and antifragility have contrasting

features, they exist on a continuum (along with fragility) and are not necessarily oppositional concepts.

Coaching practitioners and researchers have recognised the role that resilience can play in supporting well-being and performance (e.g. Grant et al., 2009; Sardar & Galdames, 2018) and have sought to use coaching as a means of increasing their clients' resilience. However, adding a knowledge of antifragility to the range of perspectives available to coaches can be particularly useful in a world punctuated by high-impact, volatile and random events.

Resilience may be sufficient and effective in sustaining performance and well-being when experiences fall within a normal (i.e. Gaussian) distribution, with the possible states that a system can attain being grouped around the average and therefore possible to predict. One example would be working with leaders through periods of planned organisational change. In this situation, the responses from leaders and staff to the change would likely fall within a normal distribution and therefore be mostly predictable.

Antifragility is predicated on a fundamentally different view of the world. This view recognises the limits of linear thinking and bell-shaped statistics in a world where there are many interdependencies, interconnections and interactions. In this worldview, normal distributions are not the benchmark because extreme events occur more frequently than Gaussian statistics would lead us to expect and are of vastly larger magnitude and far more consequential (McKelvey & Andriani, 2005). An example of this can be found in the financial markets. According to a normal distribution, financial market drops of 10 percent in a day should occur once every 500 years (Buchanan, 2004). However, in actuality finance crises occur around once every five years (Mandelbrot & Hudson, 2004).

Taleb (2005; 2010) calls these extreme occurrences Black Swans[2], a term which refers to those events that are unexpected, that lie beyond what is reasonable to predict in the context of regular, current systems of knowledge and which have a major, wide-scale impact. Black Swan events are also typically rationalised through the hindsight bias; that is, we fabricate explanations for their occurrence in ways that give us the illusion that these incidents are explicable and were predictable. Taleb views virtually all discoveries and major historical occurrences as Black Swans and argues that almost everything of importance which has occurred in our world, from the local and personal to the global and collective, can be understood as taking the form of Black Swan events.

Perhaps, then, resilience is no longer sufficient in this more extreme and volatile world and it is in this context that the concept of antifragility may have value for coaches and their clients. A summary of some of the principal differences of perspective between resilience and antifragility is provided in Table 2.

Table 2. Comparison of Resilience and Antifragility

Insert Table 2

The properties of antifragility and their relevance to coaching

Antifragility is vital because it enables us, individually and collectively, to manage the unknown and respond effectively even when we are unable to comprehend the situations that confront us. As Taleb (2012) explains,

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[2] Black Swan is a metaphor borrowed from ancient assertion that black swans did not exist because all observed swans to that point were white, until the first black swan was discovered. For accuracy, it should be noted that Taleb does not regard the COVID-19 pandemic as an example of a Black Swan as an occurrence of this nature had been predicted by epidemiologists. Nonetheless, at an individual level the impact of the pandemic possesses Black Swan qualities in terms of the profound and unanticipated disruptions that it has created.

"By grasping the mechanisms of antifragility we can build a systematic and broad guide to *non-predictive* decision making under uncertainty in business, politics, medicine and life in general – anywhere the unknown preponderates, any situation in which there is randomness, unpredictability, opacity, or incomplete understanding of things" (p. 4; italics in original).

What are the 'mechanisms' to which Taleb is referring? Perhaps chief amongst these is the ability to create ways through which we can regenerate ourselves (as individuals and systems) following the occurrence of high-impact complex, volatile and random events. In this context, the mechanisms that Taleb's work calls upon us to consider include:

- The significance of Black Swan events over the notion of progression as a stable, linear process of improving on what is already known;

- The fragility of any single framework of thinking and knowledge: a single, random event can disprove its central tenets;

- The illusion of predictability;

- That it is preferable to focus on identifying whether something is vulnerable to harm (i.e. fragile) rather than trying to predict harmful events;

- The relevance of cognitive biases, including the hindsight bias, and how these prevent us from recognising and responding effectively to states of uncertainty;

- That linear cause-effect relationships do not exist in complex systems and the pursuit of these is an erroneous basis for the development of our knowledge and for personal and organisational planning;

- Developments in the name of progress create complex interdependencies that increase unpredictability, randomness and, therefore, the likelihood of Black Swan events.

The mechanisms above offer a framework through which coaches can engage their clients in conversations about how to prepare for a future that is unknown, unknowable and unpredictable. This is, of course, not a new concern. In recent years, as coaches have found themselves working in increasingly complex environments, questions have arisen concerning the adequacy of existing models for navigating such contexts. While some have argued that current models remain relevant (Whybrow et al., 2012), others have claimed that novel approaches are needed. Cavanagh and Lane (2012), for example, argued that many coaching models have been predicated on the erroneous assumption that clients operate within linear systems which function in ways that are predictable. Increasingly, distinct models have been developed for working effectively within the complexity of today's business environment (see Chapman, 2010; Cavanagh & Lane, 2012; Kahn, 2014; *reference removed for review process*; Hawkins & Turner, 2020; O'Connor, 2020).

The call to 'think differently' in response to complexity is not unique to coaching. For example, the emergence of transdisciplinarity as a response to a variety of global issues whose nature and complexity defies our current approaches to problem-solving, decision-making and innovation has led to a plethora of approaches to enquiry, design and evaluation (see Gibbs, 2015). A particularly noteworthy contribution here is Patton's (2020) Blue Marble evaluation, so-called because of its reference to the iconic photographic image of the earth from space. This approach underpins its methods and innovations with a set of principles that promote looking across national borders and integrating the contributions of sectors and disciplines "…to connect the global and the local, connect the human and

ecological, and connect thinking and methods with those trying to bring about global systems transformation" (Patton, 2020; p.1).

What the concept of antifragility shares with models of complexity and transdisciplinary approaches to system transformation is the recognition that complex systems are characterised by interdependencies that are difficult to identify, non-linear and multi-layered. What, then, can the concept of antifragility offer that is distinct?

<u>What antifragility can offer coaches and their clients</u>

To the best of our knowledge, the relevance of antifragility has remained largely unexplored within coaching. As a result, there are as yet no established routes to enhancing antifragility in individuals and systems. Nonetheless, we would propose that such routes would be highly relevant. The COVID-19 pandemic has required us to navigate new forms of uncertainty and unpredictability in order to function effectively for ourselves and for our clients. Additionally, Taleb's (2012) call to develop the capacity to regenerate ourselves and our systems, Hydra-style, would seem to be consistent with the stated purpose of coaching psychology as one of deepening understanding of "….individuals' and groups' performance, achievement and wellbeing…" (British Psychological Society, 2021).

What antifragility might most usefully offer coaching at this time is a set of principles which can form a basis for designing bespoke means of regeneration for existing clients facing unprecedented circumstances and emerging client groups that are drawn to what coaching provides. These principles, with some examples of how they might be applied in practice, are presented below:

1. *Seek out exposure to risk*

The need to seek out exposure to risk has long been recognised as an important precursor to learning and development and is a well-established approach to promoting personal growth in fields of applied psychology adjacent to coaching. For example, the most effective way of helping individuals overcome phobic anxiety is through seeking out exposure to the perceived risk while overriding the instinct to withdraw from the anxiety-provoking entity (Spiegler, 2015). Antifragility encourages the removal of forms of over-protection that might appear to confer security, comfort and progress but which present obstacles to appropriate risk exposure.

Examples of the use of this principle in coaching might include:

- Identifying and engaging with risks that are appropriate to growth and development;

- Removing maladaptive forms of over-protection including 'playing it safe' behaviours, reassurance seeking and seeking out what is familiar;

- Identifying situations that are currently avoided and developing a graded approach to confronting them;

- Doing the opposite of what an aversive internal state indicates to be the right response (e.g. staying in rather than fleeing from an anxiety-provoking situation);

- Exploring how a client might choose to act in ways that are consistent with their core values which will involve having to confront a variety of internal (thoughts, feelings and sensations) and external (interpersonal, environmental) obstacles.

2. Increase tolerance of uncertainty

Certainty – actual or perceived – provides a sense of psychological security. Studies in the field of neuroscience highlight that chronic uncertainty induces a sense of being out of control which temporarily impairs the prefrontal cortex and diminishes optimal cognitive

functioning (Arnsten, 2009). However, in many situations certainty is unattainable and its pursuit is, therefore, counter-productive. In the context of generalised anxiety disorder, as illustrated in Table 1, Dugas & Robichaud (2007) propose that an intolerance of uncertainty and the misguided attempts at increasing the predictability of daily experience, drives the chronic worry that lies at the core of this presentation. Intervention, therefore, provides ways of helping individuals increase their tolerance of uncertainty.

Examples of the use of this principle in coaching might include:

- Exploring and ascertaining what, in the client's life and experience, is and is not under their direct influence;
- Identifying sources of uncertainty and any maladaptive coping behaviours that seek, inappropriately, to increase predictability, certainty and control;
- Developing 'experiments' that involve actively courting uncertainty and observing the effects;
- Identifying where over-planning is occurring and exploring other modes of preparation;
- Encouraging appropriate risk-taking behaviours (see above).

3. *Make mistakes (but only of a certain type and magnitude)*

Pursuing antifragility entails a recognition that errors are inevitable. If we live in a world that is beyond our comprehension and which comprises multiple interdependencies that we can neither predict nor control, then mistakes are to be expected. A certain kind of error is also highly beneficial. The errors that are to be encouraged are those that are small, that have no significant consequences and which, once the learning has been taken from them, can be easily forgotten.

Examples of the use of this principle in coaching might include:

- Working with clients to identify rigid and overly demanding standards – particularly relevant to clients with perfectionist needs;

- Helping clients differentiate small mistakes (that involve low-consequence risks and which are to be welcomed) and big mistakes (that involve high-consequence risks and which are to be avoided);

- Identifying appropriate types of error in the client's context that might enable optimal learning;

- Reframing clients' perspectives so that they learn to expect and allow for fluctuations in performance;

- Encouraging moving into areas that are not immediately within the client's skill set;

- Embracing experimentation (see below).

4. *Embrace experimentation to enable trial and error discovery*

Experimentation provides routes to innovation through a process of trial and error, or 'tinkering'. This often over-looked approach is argued by Taleb (2012) to be a far more effective success strategy than the development of policy, formulae or theory-based thinking. It is learning through performance, trial and error and the experience that this generates, rather than through principles, concepts and theories that individuals and organisations discover how to interact effectively with uncertainty. The process of tinkering generates options that allow for the selection of what is most advantageous. According to Taleb, this ability to filter out the bad and select the good is omnipresent in nature including in human reproduction.

Examples of the use of this principle in coaching might include:

- Encouraging 'tinkering' – small experiments that could lead to bigger changes or innovations;

- Encouraging clients to create space for activities (e.g. reading, podcasts, webinars) on topics not immediately related to current concerns or areas of focus of the coaching contract;

- Encouraging journaling, allowing the client's imagination free rein;

- Identifying opportunities for spontaneity in the client's life;

- Seeking small changes in existing circumstances that could be amplified for greater effect.

5. *Diversification of resources*

Rather than seeking certainty through striving for stability and centralising resources, a sense of strength and security is more likely to be attained through a diversification strategy, both of resources and opportunities. Applying this principle to decisions in everyday life might include organising our personal financial planning around an increasingly diversified portfolio of investments. At the level of physical health, personal fitness might be pursued through compiling a varied schedule of exercise methods rather than privileging only one. This principle also has relevance to decisions that individuals make about their careers. As individuals increasingly need to take control of their own careers rather than rely on career progression structures offered within any single organisation, greater security as well as satisfaction may be afforded through selecting self-employment, portfolio or peripatetic careers that afford considerable flexibility in the face of a changing economic and work context.

Examples of the use of this principle in coaching might include:

- Learning new skills and seeking knowledge outside the client's traditional domain of expertise;

- Creating new networks that look across silos and build new connections;

- Engaging in projects not immediately relevant to the client's direct interest, line of work or core business;

- Looking for opportunities to develop side businesses or turn hobbies into an income stream;

- Pursuing diverse interests and relationships across multiple life domains such as health and fitness, financial management, social life and hobbies.

6. Engage in strategic simplification

When complex events occur, a tendency can be to seek out a response of similar complexity which leads to building in new strategies, methods and techniques. However, antifragility also encourages a consideration of what to take out. Taleb (2012) has adopted from philosophy the term 'via negativa' to highlight this principle, which requires a focus on what to eliminate and what to avoid. For example, in improving diet, one of the first considerations is what can be removed that would immediately improve your diet, rather than thinking about what to add. In a business context, a client would be well advised to spend as much time identifying how the business could fail, and avoiding those pitfalls if possible, as they do in planning how to make it succeed. This also applies to our acquisition of knowledge. Taleb (2012) has argued that knowledge grows by subtraction as much as it does by addition; what we know today might turn out to be wrong but what we know to be wrong is less likely to turn out to be right.

Examples of the use of this principle in coaching might include:

- Identifying and eliminating what is not working in the pursuit of a goal;

- Removing activities that are not productive, are excessive, or that lead to negative mental state (e.g. excessive use of social media);

- Identifying possible risk scenarios, potential mistakes or errors of judgement and developing appropriate mitigation strategies;

- Considering if strengths are being overused and moderating their use;

- Identifying maladaptive behaviours and developing more effective responses (e.g. perfectionism).

7. *Build in redundancy*

The drive for efficiencies, optimisation and productivity can introduce a level of fragility into systems as it results in reduced capacity to adapt to unexpected shifts in conditions. Antifragility requires some level of redundancy in systems to ensure that there is enough capacity to adapt to events as they unfold. For an organisation, this means having sufficient resources (human, capital, or social) that it can survive an unforeseen shock. The same can be applied to personal circumstances such as not packing a schedule with back-to-back activity and ensuring that energy reserves are not exhausted by scheduling regular breaks.

Examples of the use of this principle in coaching might include:

- Helping clients organise downtime in their calendars;

- Encouraging regular breaks in the day as well as scheduling regular holidays;

- Identifying ways in which clients can increase redundancy in multiple life domains such as finances, health and wellbeing and career;

- In organisations, increasing networks and communication flow to ensure redundancy of information and knowledge;

- Re-organising hierarchy in order to flatten organisational structures and ensure distributed decision-making.

Antifragility as an opportunity for coaching: questions and issues arising

The principles identified above are likely to be familiar to most coaches and as such the lines of enquiry to which we suggest they give rise are not in themselves necessarily novel. Nonetheless, embracing the antifragile as a virtue for both individuals and organisations does require a change in the mindsets that we bring to problem-solving and decision-making. Likewise, we need to inculcate in ourselves and our clients an awareness of the perceptual and reasoning biases that can hamper an accurate understanding of the events with which we are increasingly confronted. We also need to recognise that while predictions may be possible when working with clients in linear systems, what is primary in a more volatile and unpredictable world, is knowing how to respond to Black Swan events.

Coaches will need training in how to manage antifragility and in thinking about how to devise interventions that enable clients to design antifragile lives – what currently exists that is relevant and useful, what can be adapted, and what needs to be created specifically for this purpose. At the very least, engaging with the concept of antifragility will likely require a higher level of facility with systems thinking, as well as undergoing training in multiple models and extending networks to promote diversification. This includes recognising areas of fragility in our existing frameworks of knowledge and reasoning. It will also require the ability to model for our clients a willingness to embrace risk, uncertainty and error.

To engage more fully with what antifragility might have to teach us, we conclude with some questions that we offer as invitations to ponder – for ourselves as individuals and for the coaching community more widely:

- What implications would there be for coaching at the levels of theory, practice and research, to promote the benefits of antifragility as part of our unique contribution to a rapidly changing world – a world that is subject to increasingly frequent random, high-impact events?

- To what extent does antifragility exist as a potential in all of us and to what extent might it need to be taught as a distinct worldview or skill? What are the factors that enable its emergence and how can coaching models and methods capitalise on these factors?

- What as yet unexamined or under-examined human attributes might antifragility lead us to explore?

- What new perspectives and mindsets will be necessary to nurture antifragility in ourselves and others?

- How best can we build antifragility into our organisations, institutions, communities and societies, and what is the role of coaching in enabling this?

- When is resilience the most appropriate focus for individuals and systems and when should we aim to cultivate antifragility?

- How can coaches be trained in antifragility perspectives and practices? What innovations in thinking and practice and methods of training might be needed to cultivate this?

- How might understanding antifragility support coaching in moving into new and emerging areas such as climate change, responding to pandemics and other global crises?

Conclusion

Antifragility is ubiquitous and easily discernible in our histories, societies and physical environments. Nonetheless, its relevance for coaching is yet to be explored. This article has proposed that the concept of antifragility might offer useful perspectives for coaching in the context of a rapidly changing and increasingly unpredictable and unknowable world.

In outlining some of its key principles, the intention has been one of considering how antifragility might support the development of coaching as it moves into new areas of application rather than as a competing paradigm to what already exists. We would not see this concept as a replacement for current models and methods but rather as a means of helping us reflect upon, critique and extend our thinking into new realms. This is important because, if Taleb (2005; 2010; 2012) is correct, we are increasingly at the mercy of events of which we will have limited understanding and which will not yield to our traditional problem-solving and change methods. As the world events which impinge upon our individual and collective realities become apparently more random, disruptive and chaotic, we need to equip ourselves for a future that is fundamentally different from the past – one where resilience building may not always be the most appropriate course of action. So, does coaching need the concept of antifragility? We would argue that it does. If we are to position ourselves as enablers of the change that societies may be called upon to deliver, we anticipate an additional and repositioned role for coaching as a means of instilling antifragility in our communities and social systems as well as in ourselves as individuals.

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Table 1. Psychological Phenomena that have Parallels with

Antifragility and its Counterpart (Fragility)

Psychological phenomenon or state	Description and/or conceptualisation within applied psychology	Interpretation from the perspective of antifragility
Post-traumatic growth (Joseph, 2004)	A situation where positive transformation occurs in response to a traumatic event.	Certain forms of duress enable growth of a transformational nature. Individuals can, in certain circumstances, respond to traumatic experiences by growing psychologically stronger.
Maladaptive perfectionism (Corrie & Palmer, 2014)	Maladaptive perfectionism (as opposed to the healthy pursuit of excellence), entails holding excessively high and rigid standards with an associated intolerance of errors. Errors are interpreted as indicators of failure and are, therefore, feared and avoided.	Maladaptive perfectionism illustrates fragility in its failure to recognise and embrace the necessity and value of small, strategic errors. Antifragility is achieved through exposure to variability which facilitates making small, focal errors that enable learning and adaptation.
Chronic patterns of over-working and habitual 'busyness' (Crabbe, 2014)	In the desire to optimise our time and resources we over-commit, over-use and fatigue our resources, including vital cognitive resources such as our attention.	Antifragility is achieved through intentionally building redundancy ('slack') into our lives and systems. Over-working is an example of over-optimisation, a highly fragile state. Building in excess capacity (e.g. 'doing nothing') enables thriving especially in the context of unknowable and unpredictable events.
Worry (Dugas & Robichaud, 2007)	Individuals who engage in excessive and maladaptive worry have a low tolerance threshold for uncertainty. Intervention, therefore, focuses on increasing the capacity to tolerate uncertainty through strategic exposure to	Maladaptive worry illustrates a state of fragility in the felt need for events to follow a predictable course. The pursuit of certainty leads individuals to engage in behaviours that seek to ensure minimum deviation from a desired course of action or outcome. In fact, the deviations encountered

	situations where outcomes are uncertain and potentially unknowable.	through tolerating uncertainty afford exposure to experiences and errors that represent valuable opportunities for learning and growth.
Intrusive thoughts and images, occurring in obsessive-compulsive disorder and post-traumatic stress (Winston & Seif, 2017)	Intrusions strengthen with every attempt to resist them, most evident in the strategy of thought suppression which increases the occurrence of these phenomena.	Intrusive thoughts and images are inherently antifragile in that they thrive (increase in frequency and intensity) with every conscious effort to eliminate or control them.

Table 2. Comparison of Resilience and Antifragility

Resilience	Antifragility
Able to withstand shocks, setbacks and disorder	Transformed through exposure to shocks, setbacks and disorder
The challenge encountered is accommodated so that the individual/entity/system remains stable	The challenge encountered provides the basis for thriving so that the individual/entity/system is transformed
Errors are understood as inevitable in the context of growth and change	Errors are actively sought out (as long as they are partial and local in nature)
Success is pursued through planning, goal setting and systematic resource installation	Success is pursued through maintaining 'optionality' (i.e. keeping options open), and through use of opportunistic decision-making in an unfolding process
Resources are added in to optimise efficiency	'Slack' is built in to create redundancy
Obstacles are predicted and plans are created to avoid or manage them	Fragilities are identified and consideration is given to how they can be strengthened or managed
The perspective adopted is likely to be: What can I build in to achieve my goal?	The perspective adopted is likely to be: What can I take out to enhance my antifragility?