

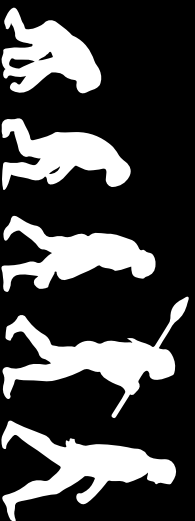
the science of

adaptability

a white paper

the science of

adaptability



If we journeyed back over 15,000 years into the Ice Age, the world would be awash with hundreds of weird and wonderful species. Some we would recognise from today, yet many would be unfamiliar to even the most hardened traveller.

Over the next 5,000 years, the world and its inhabitants faced dramatic change and a significant challenge to survive and flourish. Global temperatures started to rise, as both the Earth and its atmosphere began to change. The human population started to boom, yet the Woolly Mammoth, amongst other species, would vanish altogether and be confined to the pages of history books.

In what became his ground-breaking work, *On the Origin of Species*^[1], Charles Darwin laid out the foundations of his theory of

evolution, as he sought to explain how certain species survived and multiplied, while others perished into extinction.

As Darwin eloquently demonstrated, it wasn't the intelligence or physical strength of a species that predicted its survival. Instead, it was those species that best adapted to changes in their immediate surroundings that ultimately survived. In contrast, those that failed to adapt fizzled into extinction.

While Darwin popularised the science of adaptability, its meaning today goes beyond survival. In this white paper we will explore some of the most up-to-date thinking in this area and outline some of the ways in which Spotlight may open conversations for the development of adaptability.

What is adaptability?

Within contemporary research, adaptability has been studied within the fields of emotional intelligence^[2], personality^{[3][4]}, leadership^{[5][6]} and communication^{[7][8]}. All of these fields have shown adaptability to be critical in the pursuit of high performance, making it a much-desired trait within sport, business, politics, and education. But what do we actually mean by the term 'adaptability' and what does it look like in a modern context?

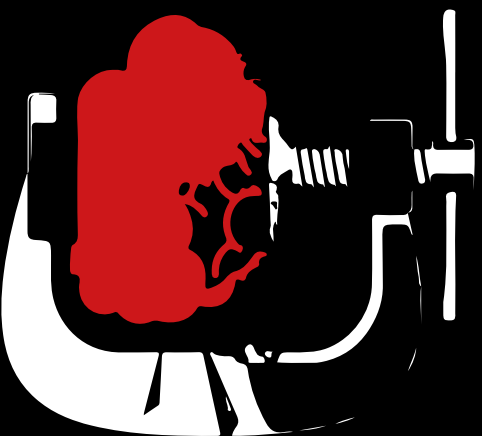
Whilst all of these fields have explored adaptability in unique ways, they have shared a focus on how we use different elements of our personality to behave effectively within the environment we find ourselves in. A recent research programme that has investigated the concept of 'personality adaptability' perhaps best represents this notion^[9]. This explored and compared differences in an individual's ability to select a personality state across

different situations, with the intention of gaining a desired outcome - which may result in behaviour that is more or less in line with an individual's personality preferences (e.g., can people with naturally low extraversion demonstrate higher levels of extraversion when a task requires?).

Building on this work, we can define adaptability as the capacity to spot a changing context and shift our behaviours or mindset to achieve a goal. It is a two-step process of first recognising when our natural personality preferences and biases may not result in us achieving a goal, before subsequently being able to tap into characteristics that would be more helpful to us in a given moment. It has many different dimensions that allow us to respond effectively to new team dynamics and organisational cultures, and different people, social groups, and physical environments^{[10][11]}.



**Adaptability
is the
capacity
to spot a
changing
context and
shift our
behaviours
or mindset
to achieve a
goal**



Interestingly, the opposite of adaptability, has also caught the attention of some researchers – a term that has been coined as ‘fixedness’ or ‘rigidity’^[14]. People who are more rigid or fixed tend not to shift their approach despite the presence of contextual cues, and are characterised by a mindset of “this is the only way”. Unlike someone who is more ‘rigid’ or ‘fixed’, an adaptable individual can flex their personality to continue to perform in a changing context. They can tap into the behaviours and mindsets needed to be both disciplined and creative, thoughtful and expressive, and spontaneous and logical.

Often characterised as agile, flexible or versatile^{[15][16]}, individuals who are highly adaptable bring benefits not only to themselves, but also to their whole team^[16]. Even more critically, studies repeatedly show that adaptability is something that we can learn, develop, and grow^[17]. However, before exploring this further, we will first investigate the evidence which illustrates the benefits of adaptability...

The benefits of adaptability

Understanding adaptability as our capacity to spot a changing context and shift our behaviours or mindset to achieve a goal, we can begin to investigate some of the specific benefits that are associated with it. For ease of reading, we have grouped these findings into five main areas. These areas, which include relationships, performance, mental health, transitions, and leadership, will subsequently be discussed in greater detail.

1.

Relationships

One area of research in the field of adaptability has looked at how it links to the quality of our relationships. This interest has particularly focused on how we adapt the way we communicate, with people viewing others who can change the way they communicate depending on their audience more favourably^[10]. This is because the ability to adapt our communication style helps to build trust, and increase understanding between individuals^[10].

To harness these benefits means to recognise another person's preferences and then shape our communication or message in a way that helps them to understand and appreciate it. By framing a message based on an individual's primary personality preferences in this way, we can increase the effectiveness of our communication and prevent messages from being lost in translation^[10].

One particular study of note that illustrates the impact of the ability to adapt our communication style focused on the interactions between doctors and their patients^[11]. This study found that through the recognition of their own personality preferences, doctors were able to identify situations in which their default communication style may not

2.

Performance

suit a patient-doctor interaction. By recognising this, they were able to flex their tone of voice, choice of words, and body language to better suit the client's own preferences, rather than their own personal biases, enabling them to quickly create a connection with their patients, and be more effective in their work.

Furthermore, better understanding the world view and perspectives of those we interact with can also enhance relationships. Indeed, adaptability is also one of the key building blocks upon which emotional intelligence rests, helping us to tune in to the needs and perspectives of others - enhancing our ability to truly understand those that we interact with^[12]. This is because, with increased adaptability, we are better able to truly see the different ways of seeing a situation, and put ourselves into the shoes of others. This, combined with a flexible communication style, allows us to better interact and empathise with other people, resulting in happier, healthier relationships both with our friends^[13] and family^[14], and also in the workplace^[15].

Alongside improving our relationships, adaptability can also increase performance in a number of different ways. Several studies have illustrated that adaptability improves an individual's ability to solve novel tasks^[16], whilst also increasing resilience^[17], creativity^[18], and problem solving^[19]. This allows an individual to creatively overcome problems, navigate adversity, and respond to unexpected and changing demands.

With increased adaptability, we are able to make better decisions because of our ability to look at a situation from multiple perspectives. We are able to appreciate different ways of solving the same problem, seeing both the opportunities and risks such solutions may pose, and also shift our focus to more relevant information in unpredictable situations. Furthermore, we are able to learn new skills more effectively, adjust our interpersonal style when working in teams, and remain calm within stressful situations in order to behave effectively^[20].

In sport, this allows athletes to change their style of play, perform under pressure, and work effectively with a number of coaches^[21], whilst in the military adaptable individuals respond calmly to ambush, working with others to make effective decisions in life-threatening situations^{[22][23]}. All of these

abilities make adaptable individuals highly valued by employers in a number of industries^[24], as they are able to consistently perform to high standards in fast-moving professions, including business^[25] and even the arena of comedy^[26]. Not only does this make them more employable, but also brings performance benefits to their teams in highly pressured situations^[27].

3.

Mental Health

With better relationships, and higher levels of performance, it is unsurprising that adaptability also benefits mental health.

A recent large-scale study of Australian secondary school students showed that not only do those who are more adaptable participate in class more, but they also enjoy school more, are more satisfied with life, have a higher sense of purpose and higher self-esteem^[26]. These findings are consistent in adult populations too, with studies linking adaptability to increased job satisfaction^{[26][27]}, as well as highlighting it as a potential protective factor against mental health difficulties^[28].

These positive mental health effects are likely to come as a result of adaptable individual's being able to recognise situations which require a change in mindset or behaviour. When this ability is absent, individuals are unable to flex their thoughts and behaviours to obtain positive outcomes from the world - which may result in a range of negative emotions^[29].

Alternatively, highly adaptable individuals often come across as resilient, a trait linked with positive mental health^[30]. This is because

4.

Transitions

In the high performance context of elite sport, athletes face numerous transitions throughout their career. From the transition between youth and senior sport, and subsequently through into retirement, how athletes respond to such changes can often determine their career success^[31]. However, it is not only sport where transitions occur, with people now changing jobs, on average, at least once every five years^[32].

For this reason, it is particularly interesting that adaptability also contributes to successful transitions, with research demonstrating this in a number of contexts, including in the case of redundancy/^{[33][34]} retirement^[35], the move from education to the workplace^[36], and even when moving to a new country^[37]. This is because

individuals with greater adaptability are better able to respond to change (e.g. the devastation of losing their jobs) by seeing opportunity where they may usually interpret only danger^[38], or respond to the demands of a new culture by recognising the need to opt for alternative behaviours in keeping with their new surroundings^[39]. This allows for a more favourable experience of the many transitions an individual may experience throughout the course of their career.

With this in mind, more adaptable individuals not only respond more positively to transitions within their industry, but they may also be more suited to moving across industries^[40]. This makes them more employable^[41], and can also lead to better mental health and career satisfaction at times in life when such things are particularly prone to suffer^[42].

5.

Leadership

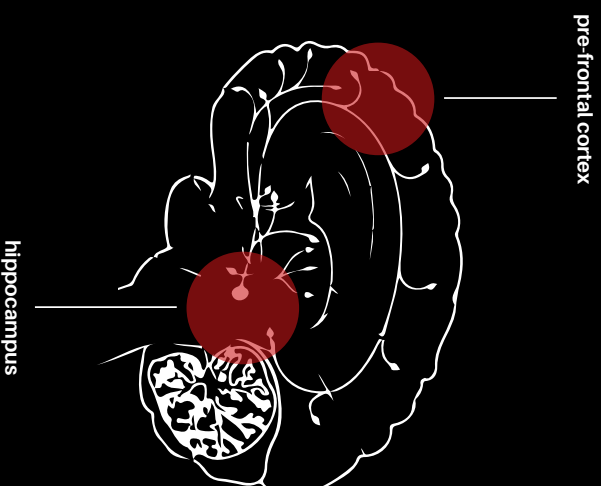
Finally, research shows that more adaptable individuals tend to be better leaders, as they are more likely to respond effectively in crisis situations.^[20] create better relationships with their workforce, and elicit better employee engagement.^[21] This is because they are able to stretch beyond their preferred methods and tap into leadership styles they may not naturally use.^[22]

A recent study of multi-medal winning coaches in Olympic sport found that behind their success was the ability to move along the continuum between 'driven-ness' (e.g. unwavering high standards) and benevolence (e.g., a people first culture)^[23]. To do this, coaches relied on being highly attuned to the needs of their athletes, and the desire to then choose to move along this continuum to meet their needs. This 'chameleon-like' ability to move between contrasting personality styles is what leaders require to get the most out of their teams, grow organisations, or, in this case, win Olympic gold.

Importantly, the ability of leaders to fluctuate and adapt between these approaches is something that can be learned^[24], allowing people to develop and grow their

ability to breed trust and confidence within others.^[25] and create a psychologically safe environment^[26]. With this in place, leaders are then able to balance some of the key dynamics observed within high performance environments, helping them to curate success within their own teams and tap into all of the benefits already outlined.

The biology of adaptability



As we have seen, adaptability is a two-step process that involves spotting a change in context, before responding by flexing behaviour or mindset. However, what does this look like within the brain?

Whilst there is a large network of regions involved, there are two key structures we are interested in - the hippocampus and the pre-frontal cortex.^[27]

The hippocampus detects changes in our environment by comparing the current situation to those we've been in before. By doing this, it spots when things may be different to what we would expect. It then communicates this information to the pre-frontal cortex, an area of the brain linked to personality and behavioural control, which then chooses whether to shift our behaviours to meet the demands of the current situation.

We know this because when these regions become damaged or impaired due to stress, we are no longer able to identify changes in context or exhibit behavioural control.^[28] This is because the hippocampus is highly sensitive to cortisol, the hormone our body releases when under stress, and when exposed to it for long periods of time the cells of the hippocampus begin to die.^[29] This means the hippocampus is less sensitive to detecting change when we are under stress, resulting in a distinct lack of adaptability. The overall message... a stressed brain is less adaptable!

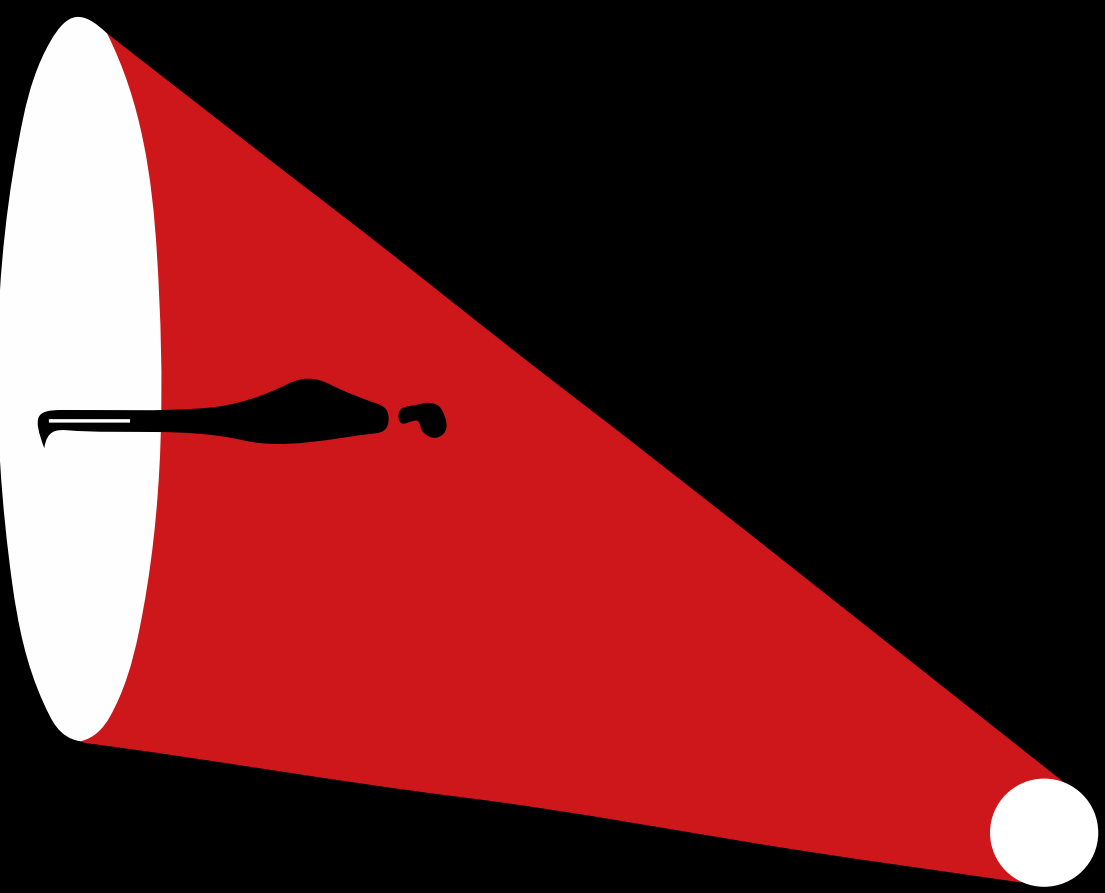
Spotlight and developing adaptability

Alongside the array of benefits outlined, one of the most critical features of adaptability is the fact that it can be developed^[2]. Research across a range of contexts^{[3][4][5][6]}, has demonstrated that adaptability is not a fixed trait, and that individuals can learn to grow and expand their ability to adapt.

Recognising the value of adaptability, Spotlight is a personality preference tool that has been developed to help individuals grow their personal effectiveness and their ability to flex their mindset and behaviour. Indeed, psychological adaptability sits at the heart of the philosophy of Spotlight, which explores an individual's mindset and behavioural preferences on two distinct frameworks. The COPE (acronym) framework helps individuals understand their own mindset preferences when there

is something to win and something to lose (based on sensitivity to reward and threat), while the FLEX (acronym) framework helps individuals understand their behavioural preferences based on extraversion and agreeableness preferences (from the 'big five' personality model^[7]).

Spotlight is aimed at providing a window for conversations to improve adaptability through first making people more aware of their personality preferences. Subsequently, it allows people to understand how they get the best out of themselves based on their preferences, and provides a simple and intuitive framework to help people flex away from their natural preferences when a different perspective is required. Specifically, Spotlight is aimed at enhancing adaptability through the three areas that follow.



Develop Self-awareness



Spotlight increases self-awareness by identifying an individual's behavioural and mindset preferences. Indeed, research has shown that adaptability and self-awareness are inherently linked^[1], and one way of helping people to develop their adaptability is to increase their self-awareness. By exploring personality preferences on the FLEX and COPE models, individuals can build the self-awareness needed to effectively recognise their own character strengths, blindspots, and biases, and begin to understand how these may affect the way they behave and the way others may perceive them.





Recognise over-played strengths

Upon discovering these preferences, Spotlight helps individuals to recognise and reflect on when these preferences serve them effectively, and also when they might start to overplay their strengths, meaning they no longer serve to be useful. This allows individuals to consider how their natural preferences may be moving them further from a specific end goal, and identify the contexts in which flexing from their preferences may bring benefits.

By understanding their preferences, individuals can recognise what the strengths of these look like in their sweet-spot, and also in what situations they might be at risk of over-playing them. This recognition is critical to effective adaptability, as fixedness results from not recognising when we are overplaying our strengths.

Alternatively, not recognising the situations when our natural preferences do serve us well can lead us to under-doing our strengths, resulting in an image of inauthenticity and inconsistency. Therefore, Spotlight aims to help individuals understand how to keep their preferences in their sweet-spot whilst avoiding over-playing these strengths by adapting when necessary.





A framework for movement

Having recognised when alternative behaviours or adopting a different mindset may bring about benefits, it is now time to move. This process of moving, which involves temporarily flexing away from our usual preferences to alternative methods, allows us to overcome immediate challenges within the environment, foster better relationships, and achieve the other benefits associated with adaptability.

Spotlight provides two intuitive frameworks, grounded in the science of personality, to help navigate people around different perspectives. By appreciating these different perspectives, individuals can gain insight and understanding about simple ways they can flex their behaviour or mindset to perform more effectively.



Final thoughts

To summarise, adaptability, the capacity to spot a changing context and shift our behaviours or mindset to achieve a goal, is related to a range of benefits that are associated with relationships, performance, mental health, transitions and leadership. As outlined, Spotlight is designed to help us be more adaptable by improving self-awareness and helping us to recognise contexts in which moving away from our preferences brings us closer to our goals. This can bring a whole host of benefits in what is an increasingly changing world. But does this mean we should be constantly changing?

To return to Darwin and his theory of evolution, if an animal were to move so far away from the traits that served its survival, it would likely lose its competitive advantage as it would be unable to benefit from alternative traits to the same extent as those it tries to emulate. This is to say that adaptability is not to completely move away

from what makes us who we are. Instead, adaptability is something that we should use alongside our unique capabilities and strengths to gain the advantages of authenticity^{[20][21]}.

To be truly authentic is not to say that we are fixed, but to behave in a way so that our needs are being met^[22]. It is the art of balancing the upside of fixedness (e.g. staying true to our values) with change (e.g. behaving in line with these values); stability (e.g. connecting to our history) with flexibility (e.g. maintaining reputation through evolving methods); malleability (e.g. behaving in line with our social roles) with strength (e.g. doing what is right in these roles)^[23]. Only by striking these balances can we be truly authentic while also harnessing adaptability in its finest form - allowing us to improve our competitive edge and really appreciate some of the personal and interpersonal benefits adaptability can offer.

summary

Adaptability is the capacity to recognise a need to change before responding to this need by adjusting our behaviours or mindset to achieve a goal

The benefits of adaptability centre around performance, mental health, relationships, leadership, and transitions

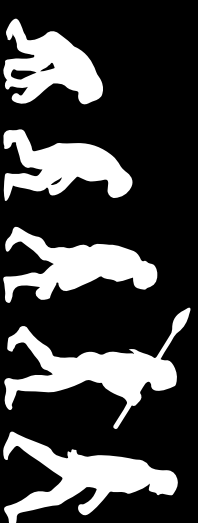
Spotlight can be used to improve adaptability because it allows individuals to understand their mindset and behavioural preferences, recognise when they might not work, and provides a framework to start developing adaptability in these circumstances

If you want to know more, check out *"Adaptability: A Primer"* by D. Coleman, R. Boyatzis, R.J. Davidson, V. Druskat, and G. Kohlfreser

References

- [1] C. Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, London: John Murray, 1859. <https://doi.org/10.59827/phil.11689094>
- [2] D. Goeman, R. Boyatzis, R. J. Davidson, V. Duskat and G. Kohlfeser, *Building Blocks of Emotional Intelligence: Adaptability: A Primer*, Florence, MA: More Than Sound, LLC, 2017.
- [3] G. T. Cook, *Is Adaptability a Personality Trait?*, Manchester: The University of Manchester, 2016. <https://www3.manch.ac.uk/mbs/bsr/academic/bsr/bsr/bsr/3602/>
- [4] P. E. Sturdivant, A. Lukaszewski, C. von Rueden and M. Carver, "Niche diversity can explain cross-cultural differences in personality structure," *Nature Human Behaviour*, pp. 1-8, 2019. <https://doi.org/10.1038/s41562-019-0780-3>
- [5] R. E. Boyatzis, D. Good and R. Massa, "Emotional, Social, and Cognitive Intelligence and Personality as Predictors of Sales Leadership Performance," *Journal of Leadership & Organizational Studies*, vol. 19, no. 2, pp. 191-201, 2012. <https://doi.org/10.1177/1548051811438783>
- [6] G. Yukl and R. Mahsud, "Why flexible and adaptive leadership is essential," *Consulting Psychology Journal: Practice and Research*, vol. 62, no. 2, pp. 81-93, 2010. <https://doi.org/10.1037/a0019855>
- [7] J. Stogdinen, M. Sculler and E. Wilhelm, *The 8 Dimensions of Leadership*, Oakland, CA: Inspire Publishing Inc., 2011.
- [8] R. L. Duran, "Communicative adaptability: A measure of social communication Quarterly, vol. 31, no. 4, pp. 320-326, 1983. <https://doi.org/10.1080/01458338308989821>
- [9] T. R. Williams, "Exploring the Impact of Study Skills on Students' Interpersonal Communication Abilities in International Education," *Journal of Studies in International Education*, vol. 9, no. 4, pp. 356-371, 2005. <https://doi.org/10.1177/1028315305277681>
- [10] E. D. Pukies, N. Schmitt, D. W. Dosey, S. Arad, W. C. Borman and J. W. Hedge, "Predicting Adaptive Performance: Further Tests of a Model of Adaptability," *Human Performance*, vol. 15, no. 4, pp. 289-323, 2002. https://doi.org/10.1207/s15327043hup1504_01
- [11] M. Sony and N. Makhth, "The relationship between emotional intelligence, frontline employee adaptability, job satisfaction and job performance," *Journal of Retailing and Consumer Services*, vol. 30, pp. 20-32, 2016. <https://doi.org/10.1016/j.jretconser.2015.12.003>
- [12] R. E. Boyatzis, "Adaptability and Leadership," in *Building Blocks of Emotional Intelligence: Adaptability: A Primer*, Florence MA: More Than Sound LLC, 2017.
- [13] R. E. Kaplan and R. B. Kiser, "Toward a Positive Psychology for Leaders," in *Oxford Handbook of Positive Psychology and Work*, New York: Oxford University Press, 2009. <https://doi.org/10.1093/oxfordhb/9780195353496.013.0009>
- [14] R. D. Rubin, P. D. Watson, M. C. Duff and N. J. Cohen, "The role of the hippocampus in flexible cognition and social behavior," *Frontiers in Human Neuroscience*, vol. 8, no. 742, pp. 1-15, 2014. <https://doi.org/10.3389/fnhum.2014.00742>
- [15] J. W. R. Burns and W. D. Freeman, "Developing More Adaptable Individuals and Institutions," *Institute for Defense Analyses*, Alexandria, Virginia, 2010.
- [16] T. Erikson, *Surrounded by Idiots*, London: Vermilion, 2019.
- [17] J. B. Hirsh, S. K. Kang and G. V. Bodenhausen, "Personality and Recipients' Personality Traits," *Psychological Science*, vol. 23, no. 6, pp. 578-581, 2012. <https://doi.org/10.1177/0956797611436349>
- [18] G. B. Clark, J. Allen, D. Cooper and J. O. Head, "Personality Differences between Doctors and their Patients: Implications for the Teaching of communication skills," *Medical Education*, vol. 38, pp. 17-186, 2004. <https://doi.org/10.1111/j.1365-2924.2004.01782.x>
- [19] P. N. Lopes, P. Salovey and R. Straus, "Emotional Intelligence, Personality, and the perceived quality of social relationships," *Personality and Individual Differences*, vol. 35, no. 3, pp. 641-658, 2003. [https://doi.org/10.1016/S0191-8869\(02\)00242-8](https://doi.org/10.1016/S0191-8869(02)00242-8)
- [20] K. G. Gardner and J. D. Moran III, "Family Adaptability, Cohesion and Creativity," in *Emment Creativity, Everyday Creativity and Health*, Greenwich, CT: Ablex Publishing Corporation, 1997, pp. 325-332.
- [21] S. M. Grover, "Shaping effective communication skills and therapeutic relationships at work: The foundation of collaboration," *Aashri Journal*, vol. 53, no. 4, pp. 177-182, 2005. <https://doi.org/10.1177/17216807980505300410>
- [22] M. D. Mumford, W. A. Baughman, K. V. Threlfall, C. E. Uhlman and D. P. Costanza, "Personality, Adaptability, and Performance: Performance on Well-Defined and Ill-Defined Problem-Solving Tasks," *Human Performance*, vol. 6, no. 3, pp. 241-255, 1993. https://doi.org/10.1207/s15327043hup0603_4
- [23] E. Grafton, B. Gillespie and S. Henderson, "Resilience: The Power Within," *Oncology Nursing Forum*, vol. 37, no. 6, pp. 998-705, 2010. <https://doi.org/10.1188/010606989705>
- [24] M. D. Mumford, M. S. Connelly, W. A. Baughman and M. A. Marks, "Creativity and Problem Solving: Cognition, adaptability, and wisdom," *Hooper Review*, vol. 16, no. 4, pp. 241-246, 1994. <https://doi.org/10.1080/00728319940955589>
- [25] M. J. G. Holland, C. Woodcock, J. Cumming and J. L. Duda, "Mental Qualities and Employed Mental Techniques of Young Elite Team Sport Athletes," *Journal of Clinical Sport Psychology*, vol. 4, no. 1, pp. 19-38, 2010. <https://doi.org/10.1123/jcsp.4.1.19>
- [26] S. C. Burke, L. G. Pierce and E. Salas, *Understanding Adaptability: A Prerequisite for Effective Performance within Complex Environments*, Bangalore: Emerald Group Publishing Limited, 2006.
- [27] S. Mcardle, L. Waters, J. P. Birtone and D. T. Hall, "Employability during unemployment: Adaptability, career identity and human and social capital," *Journal of Vocational Behavior*, vol. 71, pp. 247-264, 2007. <https://doi.org/10.1016/j.jvb.2007.05.003>
- [28] K. L. Collin, B. D. Edwards, W. C. Casper and K. R. Guie, "Employees' Adaptability and Perceptions of Change-Related Uncertainty: Implications for Perceived Organizational Support, Job Satisfaction and Performance," *Journal of Business and Psychology*, vol. 29, no. 2, pp. 269-280, 2014. <https://doi.org/10.1007/s10888-013-9312-x>
- [29] A. J. Martin, H. G. Nead, S. Colinar and G. A. D. Lien, "Adaptability: How students' responses to uncertainty and novelty predict their academic and non-academic outcomes," *Journal of Educational Psychology*, vol. 105, no. 3, pp. 728-746, 2013. <https://doi.org/10.1037/a0032794>
- [30] M. Zhou and W. Lin, "Adaptability and Life Satisfaction: The Moderating Role of Social Support," *Frontiers in Psychology*, vol. 7, no. 1134, 2016. <https://doi.org/10.3389/fpsyg.2016.01134>
- [31] M. C. Ginevra, P. Magnano, E. Lodi, C. Annovazzi, E. Carrusci, P. Parola and L. Nola, "The role of career adaptability and courage on the satisfaction in adolescence," *Journal of Adolescence*, vol. 62, no. 1, pp. 18, 2018. <https://doi.org/10.1016/j.adolescence.2017.11.002>
- [32] T. B. Kashdan and J. Rottenberg, "Psychological flexibility as a fundamental aspect of health," *Clinical Psychology Review*, vol. 30, no. 7, pp. 865-878, 2010. <https://doi.org/10.1016/j.cpr.2010.03.001>
- [33] T. Hu, D. Zhang and J. Wang, "A meta-analysis of the trait resilience and mental health," *Personality and Individual Differences*, vol. 76, no. 1, pp. 18-27, 2015. <https://doi.org/10.1016/j.paid.2014.11.039>
- [34] M. Wannop, *CHILDREN'S CONTROL BELIEFS ABOUT THEIR BEHAVIOURS IN TO STRESS RESILIENCE AND PSYCHOSOCIAL ADJUSTMENT*, University of Rochester, 1991.
- [35] G. Mcderald, D. Jackson, L. Wilkes and M. Vickers, "Personal resilience in nurses and midwives: Effects of a work-based educational intervention," *Contemporary Nurse*, vol. 45, no. 1, pp. 134-143, 2013. <https://doi.org/10.1016/j.cnn.2013.04.004>
- [36] N. Stambulova, D. Alfermann, T. Stetler and J. Cole, "ISSP Position Stand: Career Development and Transitions of Athletes," *International Journal of Sport and Exercise Psychology*, vol. 7, no. 4, pp. 395-412, 2009. <https://doi.org/10.1080/16121219.2009.9671916>
- [37] K. Hope, "How long should you stay in one job?," BBC, 1 February 2017. [Online]. Available: <https://www.bbc.com/news/business-38295811>. [Accessed 11 October 2019].
- [38] C. A. Ebbewain, T. S. Kriesch, J. C. Ulven and E. C. Pesser, "Voices in Transition: Lessons on Career Adaptability," *The Career Development Quarterly*, vol. 52, no. 4, pp. 292-308, 2004. <https://doi.org/10.1002/1522-0245.2004.000947.x>
- [39] J. Keen, U.-C. Kiehn, A. E. M. Van Varen, J. Zick and A. Neuh, "Job search strategies and reemployment quality: The impact of career adaptability," *Journal of Vocational Behavior*, vol. 77, no. 1, pp. 126-139, 2010. <https://doi.org/10.1016/j.jvb.2010.02.004>
- [40] M. Wang and L. T. Perr, "Retirement and Adaptability," in *Individual Adaptability to Changes at Work: New Directions in Research*, D. Chan, Ed., Hove, Routledge, 2014, pp. 134-155. <https://doi.org/10.1016/j.0910.4324792013465221>
- [41] J. Keen, U.-C. Kiehn and A. E. M. Van Varen, "Training career adaptability to facilitate a successful school-to-work transition," *Journal of Vocational Behavior*, vol. 81, pp. 395-408, 2012. <https://doi.org/10.1016/j.jvb.2012.10.003>
- [42] S. E. Vohet and P. D. Renshaw, "Chinese students at an Australian university: Adaptability and continuity," in *The Chinese Immigrant Psychological and Cultural Influences*, D. A. Watkins and J. B. Griggs, Eds., Hong Kong University Press, 1996, pp. 205-220.

- [43] J. Zlicak and U.-C. Klehe, "Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality," *Journal of Vocational Behavior*, vol. 69, no. 1, pp. 391-409, 2006. <https://doi.org/10.1016/j.jvb.2006.05.007>
- [44] H. G. Kaufman, "Obsolescence and Retraining of Technical Professionals: A Research Perspective," *The Journal of Continuing Higher Education*, vol. 42, no. 2, pp. 2-11, 1994. <https://doi.org/10.1080/07377386.1994.10400898>
- [45] A. Wolpin, M. Gross and E. Hong, "Depression in Athletes: Prevalence and Risk Factors," *Current Sports Medicine Reports*, vol. 14, no. 1, pp. 50-60, 2015. <https://doi.org/10.1249/RS.M.00000000000001723>
- [46] S. L. Berciel, "Leadership Lessons from Serial Winning Coaches," *Leaders UK*, 18 December 2017. [Online]. Available: <https://leadersinsport.com/performance/leadership-lessons-from-winning-coaches/>, [Accessed 11 October 2019].
- [47] J. W. R. Burns and W. D. Freeman, "Developing an Adaptability Training Strategy and Policy for the DoD Interim Report," Institute for Defense Analyses, 2008. <https://doi.org/10.21236/ada492058>
- [48] B. Staats, "The Adaptable Emphasis Leadership Model: A More Full Range of Leadership," *Servant Leadership: Theory & Practice*, vol. 2, no. 2, pp. 12-26, 2015.
- [49] A. Ortega, P. Van den Bossche, M. Sanchez-Manzanares, R. Rico and F. Gil, "The Influence of Change-Oriented Leadership and Psychological Safety on Team Learning in Healthcare Teams," *Journal of Business and Psychology*, vol. 29, pp. 311-321, 2014. <https://doi.org/10.1007/s10862-013-9313-8>
- [50] R. R. McCrae and P. T. Costa Jr., "A Five-Factor Theory of Personality," in *Handbook of Personality: Theory and Research*, 2nd ed., New York, Guilford, 1999, pp. 139-153.
- [51] A. Karatevli and D. T. T. Hall, "How career variety promotes the adaptability of managers: A theoretical model," *Journal of Vocational Behavior*, vol. 69, pp. 359-373, 2006. <https://doi.org/10.1016/j.jvb.2006.05.009>
- [52] S. Harter, "Authenticity," in *Handbook of Positive Psychology*, New York, Oxford University Press, 2002, pp. 392-394.
- [53] G. N. Rinaia, A. G. Christy, J. Kim, M. Vess, J. A. Hicks and R. J. Schlegel, "Understanding the Relationship Between Perceived Authenticity and Well-Being," *Review of General Psychology*, vol. 23, no. 1, pp. 113-126, 2019. <https://doi.org/10.1037/sgp0000181>
- [54] S. B. Kaufman, "Authenticity under Fire," *Scientific American*, 14 June 2019. [Online]. Available: <https://blogs.scientificamerican.com/beautiful-minds/authenticity-under-fire/>, [Accessed 11 October 2019].
- [55] G. E. Newman, "The Psychology of Authenticity," *Review of General Psychology*, vol. 23, no. 1, pp. 8-18, 2019. <https://doi.org/10.1037%2Fsgp00000158>
- [56] R. J. Davidson, "Training Your Brain to Be Flexible," in *Building Blocks of Emotional Intelligence: Adaptability: A Primer*, Florence MA, More Than Sound, LLC, 2017.



mindflick[®]

SpotlightPROFILE[®]
a **mindflick** brand 