LEARNOVATE
Leading Learning Innovation

Wellbeing: an ongoing balancing act

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June 2021

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Introduction

Wellbeing at work is a hot topic for organisations as the percentage of employees who experience stress and burnout steadily increased over the last four decades as well as the associated costs for organisations and governments to battle the decline in positive wellbeing and mental health in the western world.

According to a recent blogpost by Bersin[1], there are currently 55,000 open positions globally for wellbeing directors, VPs and managers across industries as organisations are attempting to create a wellbeing culture in a bid to attract the best talent and secure its success going forward.

One thing is certain: wellbeing is a complex topic. It covers health, mental health, financial health, and family health to begin with. It gets even more complex if you consider that employee needs are expanding the definition of wellbeing by looking for a culture of trust, transparency and psychological safety. This means diversity, inclusion and culture should also be considered. We won't consider these aspects of wellbeing in this report, but it is worth exploring in more detail in the future. This report focuses on the concept of wellbeing at work.

Workplace wellbeing has a long tradition stemming from the industrial revolution when reformers like John Ruskin and Henry David Thoreau recognised the necessity of employers looking after their workers. In 1968 Bobby Kennedy delivered a speech on the campaign trail in which he alluded to the concept of a Gross National wellbeing as a measure of the nation's wellbeing. And indeed, nowadays, national happiness is measured and reported on every year[2].

In today's world, there is interest from workers, managers and HR professionals in wellbeing and mental health. These changes were influenced by broader social shifts in perspectives,

[1] https://joshbersin.com/2021/04/the-secret-to-wellbeing-at-work-is-leadership/#:~:text=Leadership%20is%20key%20to%20well,impact%20on%20the%20entire%20organization.

[2] https://worldhappiness.report/archive/

which have identified sexism and racism, for example, as experiences which should no longer be practiced or tolerated. Recognizing the importance of mentally healthy has also been influenced by recent reductions in the negative stigma commonly associated with experiencing mental ill-health and has become much more widely accepted.

However, a key reason for the recent interest in wellbeing and mentally healthy workplaces is an economic one. As levels of perceived wellbeing decrease, the cost of managing mental health and wellbeing are continuing to rise, costing organizations and economies tens of billions per year (Brough et al, 2020).

Workplace and wellbeing programs are instigated primarily in response to these economic costs. And there is a lot of work to be done before we can ensure mental health and safety for all workers (Brough et.al, 2021).

What is wellbeing?

Wellbeing is present when a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life. (WHO, 2001)

Executive Summary

Wellbeing is a very broad and complex topic that has been the subject of much research for decades. The goal of this report is to try and provide a general overview of the topic of wellbeing in the context of:

- its theoretical constructs
- stress and resilience
- the economics of wellbeing
- wellbeing in the workplace
- the role of technology in wellbeing

The objective of this report is two-fold:

1. To provide the Learnovate Centre team with a foundational knowledge of the topic of wellbeing, its constructs and manifestation in organisations
2. Explore if and how learning and technology play a role in supporting and improving individual and organisational wellbeing

The next step for Learnovate upon completion and review of this research report, is to explore potential research through a research question workshop.

Key learnings & takeaways

Some of the key insights and takeaways from the research that informed the suggestions for further research are:

- Levels of wellbeing are continuously decreasing as economic prosperity is gained due to demographic, economic and industrial changes along with the world becoming increasingly fast-paced, volatile, uncertain, complex and ambiguous.
- As the (developed) world is heading into the 'Future of Work' where technology and change will play an increasing role in our personal and working lives, organisations have a vested interest in having a workforce with enhanced wellbeing.

- Employees with good wellbeing are more engaged with the organisation and more productive in their jobs, thus offering a competitive advantage as well as ensuring continuity of business
- The vast majority of organisations(80%) recognize investing in wellbeing is an important strategy for business success for the next 3-5 years, yet only 12% feel comfortable they have the right plan or strategy in place.
- There is a shift from work/life balance to work/life integration, particularly as remote work is quickly becoming the norm. This has both a positive and negative impact on wellbeing and organisations have to change their practices and policies to allow for greater flexibility for its workforce to achieve wellbeing. 'Designing wellbeing into work' appears to be the objective to lead to success.
- Individual wellbeing consists of a number of tenets that find its origin in psychological and subjective wellbeing (or hedonistic and eudaimonic traditions). All contribute to our overall wellbeing and all draw from our resources to manage our wellbeing. They are:
    - Physical wellbeing
    - Psychological wellbeing
    - Financial wellbeing
    - Societal wellbeing
- Wellbeing is achieved if all the resources we have for our individual wellbeing are balanced with the challenges we face to achieve our wellbeing. Achieving positive wellbeing is an ongoing balancing act that needs constant investment in (new) resources as the balance gets disturbed by the challenges we face. This elasticity or 'bounce back' quality is described as resilience.
- Resilience is widely considered to be the antidote to stress and burnout, the manifestations of bad wellbeing. The natural solution is to increase resilience. The key contributing needs to develop and increase resilience and enhanced wellbeing to realize human potential are:
    - Autonomy
    - Competence
    - Relatedness

- Self-esteem

(Deci & Ryan's Self-determination theory, 2000)

- This research report provides limited insight in the role of learning in improving resilience with mixed research outcomes showing either positive, no or negative impact of learning interventions on enhancing wellbeing. The consensus is that learning has a role to play and that skills contributing to wellbeing can be learned and developed. This is arguable the most interesting space for Learnovate to further explore.
- Literature on the future of work highlights the increased importance and reliance on transversal/soft/21stCentury skills with an expected skills gap of 50% of people worldwide by 2025. In the context of wellbeing, resilience is the standout skill to learn as it is considered to be the antidote to stress; the main cause of bad wellbeing. It could be interesting to explore how transversal skills development can be supported in the work setting of the future.
- As technological advances are made at rapid speed, technology is both contributing to improved wellbeing (through automation and digitization of skills) and compromising wellbeing (our increasing dependence on technology leading to technostress, blurring of boundaries and threatening manual and lower order cognitive skilled tasks).
- In relation to well-being, technology can be used to gain insights in employee wellbeing leveraging Machine Learning and AI. There is also lots of scope for technology to be more focused on wellbeing through the nature of its design.

Questions and suggestions for further research

1. How do you design wellbeing into work in a way that is authentic, engaging and useful? Who plays what role? What does authentic look like? What organisational development dynamics need to be considered?
2. To what extent is wellbeing a learning challenge (as opposed to an organisational development or behavioural psychology challenge?)
3. Wellbeing is compromised by stress and the antidote for stress is resilience. Resilience is widely regarded as one of the transversal skill for the future. What is the

role of L&D in improving resilience of workers so that they are better able to manage their personal wellbeing in the future of work?

4. Wellbeing is something that is personal and looks different from person to person. Organisations cannot possibly be this specific as they implement solutions in work. How can wellbeing be supported and managed in a way that is generic and personal at the same time?
5. Key to organisational wellbeing is understanding the needs of your employees. How can organisations leverage people analytics and technology to facilitate a conversation about needs and measure and support wellbeing of its workforce?

1. An introduction to wellbeing

Wellbeing has been a topic of research for a long time with the debate about what the Optimal experience or 'the good life' is developing for a long time. Not surprising according to Ryan and Deci (2001), because 'how we define wellbeing influences our practices of government, teaching, therapy, parenting and preaching as such endeavours aim to change human s for the better, and thus require some vision of what "the better" is. The purpose of this section is not to provide a detailed overview of the vast bank of research on the theoretical concepts of wellbeing, but it is important to share a little more detail on the major schools of thinking and paradigms to better understand the concepts surrounding wellbeing.

1.1 A definition of wellbeing

A frequently cited academic article on wellbeing is one by Dodge et al, (2012) which concentrates on defining wellbeing in the workplace. They offer a multi-disciplinary article that explores past attempts to define wellbeing and provides an overview of the main theoretical perspectives on wellbeing from Aristotle to our current times. They present an easy to understand definition of wellbeing that is not a mere description of what wellbeing is, but also what the meaning of the term is. We have included the definition in figure 1. This definition focuses on three key areas of wellbeing:

1. a 'set point' for wellbeing
2. the inevitability of equilibrium/homeostasis and
3. the fluctuating state between challenges and resources.

Their proposed definition of wellbeing is:

Wellbeing is the balance point between an individual's resource pool and the challenges faced

(Dodge et al, 2012)

In essence, stable wellbeing is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenges.

When individuals have more challenges than resources, the see-saw dips, along with their wellbeing and vice-versa.

Dodge et al stress that finding the balance of the wellbeing equilibrium is dynamic and that a lack of challenges leads to 'stagnation' which impacts levels of wellbeing negatively. They quote Nic Marks on his interpretation on BBC Radio 4's *'Reasons to be Cheerful'* which rings true for our ever changing world:

" Wellbeing is not a beach you go and lie on. It's a sort of dynamic dance and there's movement in that all the time and actually it's the functionality of that movement which actually is true levels of wellbeing"

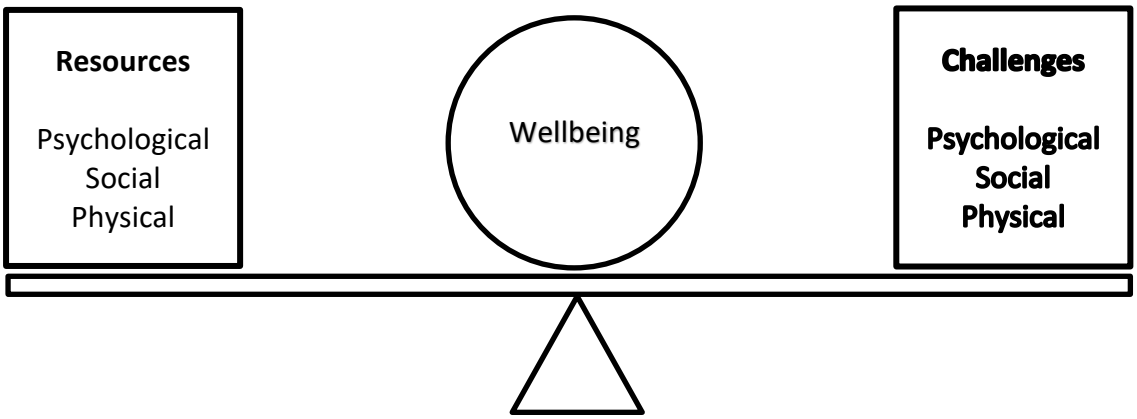


Figure 1: Graphic representation of Dodge et.al. (2002)'s definition of wellbeing.

The definition and graphic represent some of the core viewpoints on wellbeing from several scholars.

The seesaw represents the drive of an individual to return to a set-point for wellbeing (Brickman and Campbell, 1971; Headey and Wearing 1989, 1991, 1992) as well as the individual's need for equilibrium or homeostasis (Herzlich, 1973; Cummins, 2010). Now. However, the stocks and flows of Headey and wearing (1992) have been replaced by the

resources and challenges of Hendry and Kloep (2002) and are the elements that can affect the individual's equilibrium; tipping the seesaw from side to side, supporting Csikszentmihalyi's (2002) updated concept of 'flow'.

This is the most complete definition we came across, encompassing the concepts of balance, resources & challenges and flow. In the next section we discuss some of the most common theoretical constructs of wellbeing in some more detail in a bid to provide a more solid understanding of the topic.

2. Theoretical constructs of wellbeing

2.1 Hedonism vs. Eudaimonism

The field of wellbeing research revolves around two paradigms: Hedonism, the view that wellbeing consists of pleasure or happiness, and Eudaimonism, the belief that wellbeing consists of fulfilling or realizing one's *daimon*, or true nature and purpose.

Hedonism

Kahneman et.al (2009) defined hedonic psychology as the study of "what makes experiences and life pleasant and unpleasant" Within this paradigm, the terms wellbeing and hedonism are essentially equivalent, and focused on maximizing human happiness. Most research within the hedonic psychology uses assessment of Subjective Wellbeing (SWB) (Diener & Lucas, 1999) which consists of 3 components:

1) life satisfaction

2) the presence of positive mood, and

3) the absence of negative mood.

This is often summarized as happiness.

Eudaimonism

The term eudaimonia refers to wellbeing as distinct from happiness per se. Eudaimonic theories maintain that not all desires – not all outcomes that a person might value, would yield wellbeing when achieved. Even though they are pleasure producing, some outcomes are

not good for people and would not promote wellness. Therefore, from the eudaimonic perspective, subjective happiness cannot be equated with wellbeing.

The eudaimonic concept of wellbeing calls upon people to live in accordance with their daimon, or true self. Eudaimonia occurs when people's life activities are congruent or meshing with deeply held values and are holistically or fully engaged. Under such circumstances people would feel intensely alive and authentic, existing as who they really are – a state labelled personal expressiveness (PE). (Waterman, 1993).

Singer (1998, 2000) and Ryff & Keyes (1995) described wellbeing not simply as 'the attaining of pleasure', but as 'the striving for perfection that represents the realization of one's true potential' and considers psychological wellbeing to be distinct from subjective wellbeing.

Ryan and Deci conclude (2000) the debate on hedonism vs eudaimonia by pointing out that the differing definitions of wellness have led to quite different types on inquiry concerning the causes, consequences, and dynamics of wellbeing. Confirming the complexity of the research into wellbeing.

2.2 Self-determination theory

Ryan and Deci's Self-determination theory (SDT), (2000) offers a perspective that has embraced the concept of eudaimonia, or self-realization as a defining aspect of wellbeing. This theory is based on three basic psychological needs:

- Autonomy: the need for self-governing and independence
- Competence: the need to be effective in dealing with the environment
- Relatedness: the need to have close, affectionate relationships

They argue that fulfilment of these needs is essential for psychological growth, integrity and wellbeing. Need fulfilment is seen as a natural aim of human life that delineates many of the meanings and purposes underlying human actions (Deci & Ryan, 2000).

According to Ryan & Deci (2000), SDT posits that satisfaction of the basic psychological needs typically fosters SWB (being satisfied with life) as well as eudaimonic wellbeing (striving to reach potential).

Skills to realize human potential

Deci & Ryan conducted further studies into the conditions that foster positive human potential (Deci & Ryan, 2000) and added self-esteem to autonomy, relatedness and competence as the core skills needed to realize human potential.

Developing these skills along with critical thinking are important for forming an independent mind that will enhance wellbeing.

Lopez-Garrido (2021) explains: People who are high in self-determination tend to:

- Believe in their own innate ability and that they have control over their own lives
- Have high self-motivation
- Take responsibility for their behaviours

2.3 Positive Psychology - Components of Happiness

Studies have shown that once a certain level of basic needs has been met, economic prosperity is not an accurate measure of wellbeing and therefore other parameters were sought and the quest for happiness ensued.

Seligman (2002), who is widely regarded as the founder of the positive psychology movement, claimed that humans are not looking for short-term feelings of happiness, but rather for a long-term feeling of wellbeing. He developed the PERMA model which consists of five measurable elements that make up wellbeing and that have to be in place for lasting wellbeing:

- Positive Emotion
- Engagement
- Relationships
- Meaning
- Accomplishment

In order to achieve happiness and flourish in life, all of these elements need to be represented in a person's life to a level of satisfaction. Each of the components represent positive psychology interventions that help make life worth living and define, quantify and create wellbeing (Rusk & Waters, 2015).
The model includes both eudaimonic and hedonic components, which sets it apart from other wellbeing theories that only focus on one or the other.
Research has shown significant associations between each of the PERMA components and physical health, vitality, job satisfaction, life satisfaction and commitment within organisations (Kern, Waters, Alder & White, 2014).

Now that we have briefly discussed some of the main theoretical constructs of wellbeing, the next two sections go in into a little more detail on how wellbeing is integrated in our personal and working lives and explain what dynamics are at play as we attempt to balance our psychological needs and resources in real life.

2.4 JD-R Model of engagement

Bakker and Demerouti (2006) developed the JD-R model which put working conditions in two categories: job demands and job resources, similar to the challenges and resources mentioned in our wellbeing definition in section 1.1

Job demands	Job resources
The physical or emotional stressors in your role. These included time pressures, a heavy workload, a stressful working environment, role ambiguity, emotional labour and poor relationships.	The physical, social or organisational factors that help you achieve goals and reduce stress. They include autonomy, strong work relationships, opportunities for advancement, coaching and mentoring, and learning and development.

The JD-R model states that when job demands are high and job positives are low, stress and burnout are common. Conversely, good job positives can offset the effects of extreme job

demands and encourage motivation and engagement. This dynamic is displayed in Figure 2 below.

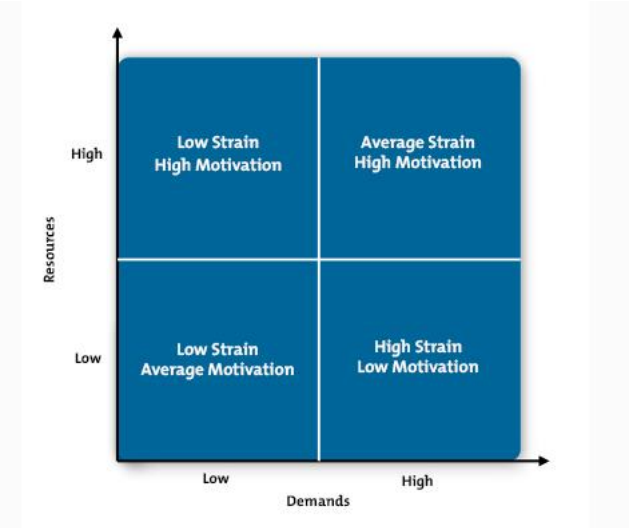


Figure 2: The JD-R model (Bakker and Demerouti, 2006)

The model can be applied by following a few simple steps:

Step 1: Identify job demands.

Step 2: Address job demands

Step 3: Identify possible job resources / positives

Step 4: Promote job resources / positives

In the next section, we zoom in a little further into how individuals can manage the demands and challenges of work and personal life.

2.5 Wellbeing and work-life boundaries and interfaces

Merton's role theory (Merton, 1957), theorized that each person plays multiple roles in work and life, and that of these roles comes with a set of rights, obligations and expectations. For example, a person may be a manager, daughter and community volunteer. Some roles we play in life, others we play in work.

Crossover and spillover of resources between work and life

Sonnentag (2015) points out that wellbeing is a dynamic construct and there are dynamics within the work-life system to consider. Changes in one component of the system have an impact on other component of the system. The critical resources to consider to create and maintain balance within the work-life system include time, energy, information and stress. Crossover and spillover of these resources between a person's work and life can either have a positive or negative effect on wellbeing. Managing the effects of crossover and spillover are key to managing the work-life system to mitigate negative impacts on wellbeing while maximising the positive impacts (Bakker, 2009). Understanding the processes is a key to enhancing the vitality of the system.

Boundaries and interfaces to regulate work-life systems

Quick (2020) continues to explain that boundaries and interfaces regulate work-life systems in a way that enhances wellbeing. Boundaries and interfaces are regulatory mechanisms for work-life in order to enhance wellbeing. Work-life systems need structure and regulation, which boundaries and interfaces provide.

Clear boundaries can create work-life balance and improve wellbeing of the whole work-life system for everyone concerned. Boundaries, barriers and fences have at least four functions within the work-life system:

1) provide structure,
2) insure identity,
3) underpin integrity and
4) provide security.

The identity as well as integrity of the individual, family and workplace proceed from what is within bounds as well as what is out of bounds.

Interfaces, bridges and gateways

Interfaces, bridges and gateways have at least three functions within the work-life system, which are:

1) to provide support,
2) enable psychological exchanges and

3) enable material exchanges.

Interfaces are the essential elements of social support, which is one of the most robust positive forces in insuring positive wellbeing, provided the relationships are positive. Compromising interfaces within the work-life system (e.g. Between spouses, between leaders & followers or between co-workers) can cause harm to the wellbeing not only of the individuals involved, but of the entire system.

Quick argues that defining a successful work-life-balance system is not solely up to the individual. Rather, they must negotiate within a work structure and within a family or life system to what extend the two are either segmented or integrated or anything in between. The key is the negotiating dimension of working out the strategy that best suits the individual and the work-family system with the best interests of all concerned in mind.

Now that we have explored some of the theoretical concepts around wellbeing, we will look more closely into the relationship between wellbeing, stress and resilience in the context of work in the next chapter.

3. Wellbeing, Stress and Resilience in the context of work

3.1 The four key tenets of wellbeing in the workplace

In their handbook, 'Wellbeing at work', Hesketh & Cooper (2019) have established four tenets of wellbeing that are needed to create a conducive working environment in which employees feel trusted, engaged and motivated to work hard. This will lead to satisfaction with work and an increased sense of meaning and purpose from their lives. If organisations are able to get wellbeing right in an authentic, sustainable and genuine manner, it can result in huge returns.

The four tenets of wellbeing are defined as:

1. Psychological wellbeing
2. Physiological wellbeing
3. Societal wellbeing
4. Financial wellbeing

Hesketh & Cooper state that 'it is rare to see any one of these aspects impacting on individuals in isolation. What you would usually see – and for those charged with people responsibilities, what to look out for – is that they conspire, collude and round up on an individual.' As work is positioned in a VUCA (Volatile, Uncertain, Ambiguous and Complex) world, these tenets can help organisations understand and frame sources of stress for its workforce and range of responses to possible scenarios in this context.

3.2 Stress and wellbeing

Job related stress is defined as 'the adverse reaction people have to excessive pressures or other types of demand placed on them'. There is a distinction between pressure, which can create a "buzz" and be a motivating factor, and stress, which can occur when this pressure becomes excessive (HSE, 2020). This was already documented by Selye (1984), who identifies two types of stress: good stress, called Eustress and bad stress, called Distress.

Work as a social function

In the context of work, the extent to which either type is experienced comes down to the person's view on work as work impacts greatly on ow they function. Wrzesniewski and

Dutton (2001) refer to this as 'work as a social function'. Some people focus on the financial rewards of working, rather than pleasure or fulfilment; those with careers focus primarily on advancement; and those with callings focus on enjoyment or fulfilling, socially useful work. Hesketh (2021) points out that this intersects with the notion of flow, as described by Seligman in this description of positive psychology in the workplace, "engagement is about flow: being one with the music, time stopping, and the loss of self-consciousness during an absorbing activity (Seligman, 2011)

The distinction is really important in how stress and personal resilience are considered in the workplace. The way someone personally considers work, impacts greatly on how they function.

The successful recognition and management of stress is critical to employee wellbeing. As noted in a quote by Maureen Killoran. 'Stress is not what happens to us. It's our response to what happens. And response is something we can choose'[3].

Physiological reaction to stress

Selye (1936), who is commonly attributed to the origin of the concept of stress, researched the physiological reaction to stress, which can be viewed in 3 stages:

1. The Alarm stage: when the stressor triggers the hypothalamic pituitary adrenal axis (HA), activating the sympathetic nervous system and arousing the body's defences (i.e. fight or flight response)
2. The Resistance stage: Adaptation and attempt to regain internal balance
3. The Exhaustion stage: Occurs only if the stress continues and the adaptation stage (2) is not successful, leading to depletion of the body's energy reserves due to the persistence of stressful events. This can lead to stress-related disorders.

In its very simplest form, a person experiences stress when their ability to cope (their resilience) is exceeded. Prolonged exposure to stress is undesirable and leads to the

[3] https://stressless2015.wordpress.com/2015/10/23/maureen-killoran/

exhaustion stage as identified by Selye. This is now more commonly referred to, in terms of work, as burnout.

It is now generally accepted that the same occurs with psychological stressors as it does with physiological stressors, which are far more common in modern living environments for humans.

What is critical, in response this knowledge and understanding is how organizations, managers and individuals can recognize, control and even reduce stress and stressors in the workplace, or stressors attributed to work or the workplace (which now may very well be at home). This I achieved by looking at the antidote to stress, which is commonly accepted to be personal resilience.

4. Resilience, Learning and Wellbeing

Personal resilience is broadly viewed as an antidote to stress. Researchers like Zander et al. (2013) argue that strong personal resilience can mitigate the effects of stress. For this report, we are using the following definitions of resilience:

"Personal resilience is the capacity to bounce back from adversity, conflict, failure or even positive events, progress and increased responsibility (Luthans, 2002: 702).
Haglund et al. (2007) refer to resilience as 'the ability to successfully adapt to stressors, maintaining psychological wellbeing in the face of adversity.

So what makes a person resilient?
Southwick and Charney's resilience factors (2012) suggest ten areas that impact of personal resilience that we've added to Figure 3 below.

Optimism	Facing Fears	Moral Compass	Drawing of Faith	Supportive Networks
Role Models	Regular Training	Brain Fitness	Cognitive & Emotional Flexibility	Meaning, Purpose & Growth

Figure 3, Resilience Factors (Southwick & Charney, 2012)

The question remains if and how people learn these coping mechanisms and tweaks to lifestyle that can improve personal resilience. Something that is explored next.

4.1 Can resilience be learned?

An article from The New Yorker[4] highlights some key pieces of research that contributed to the evidence that resilience, or rather positive construal (how individuals perceive,

[4] https://www.newyorker.com/science/maria-konnikova/the-secret-formula-for-resilience

comprehend and interpret the world around them and the event happening to them) can to some extent be learned.

Garmezy (1990) discovered through his work with children from low socioeconomic status and challenging home conditions that there are personal factors that could enable success despite the challenges these children faced. He called these *protective factors.* Researchers who continued from his work identified these elements into two further groups: individual, psychological & external, environmental factors on the one hand, and luck on the other hand.

Werner (1989) discovered though a longitudinal research project that children react to stress in a different way. She found that this has to do with how they respond to their environment and found that several elements predicted resilience. Resilient children tended to 'meet the world on their own terms'. They were autonomous and independents, would seek out new experiences and had a 'positive social orientation'. They also had an internal locus of control, believing that they, and not their circumstances affected their achievements.

She also discovered that resilience can change over time and that it is a constant calculations: which side of the equation weighs more: resilience or stressors. The change can be negative, with people reaching a breaking point, but can also be positive where previously it was not. This suggests that resilience can be learned.

Bonanno researched why it is that some people are more resilient than others and concluded that perception is a central element of resilience. It is the difference between whether we view an event as traumatic, or as an opportunity to learn and grow. He claims that every event is a potentially traumatic event. However, the experience isn't inherent in the event; it resides in the event's psychological construal. The predictive power when it comes to life outcomes, is only predictive if there is a negative response.

The good news is that positive construal can be taught. We can teach people to think in a different way and reframe events in positive terms or train people to better regulate their emotions so they control their reaction to an emotional event.

Through his work in the field of positive psychology, Martin Seligman found that training people to change their explanatory styles from internal to external ('Bad events are not my fault', from global to specific (This is a small thing and not a massive indication something is wrong with my life') and from permanent to impermanent (I can change the situation, it is not fixed) made them more psychologically successful.

The conclusion is that the cognitive skills that underpin resilience can be learned over time, creating resilience where there was none before.

4.2 Wellbeing and Learning

Training is a tool for organisations to support its employees to do the work that is expected of them. Whether or not resilience training is effective has been the source of some debate, with some studies not finding any evidence of improvement of personal resilience (Robertson, 2015), while others show that training does have an impact on improving personal resilience, particularly to those in high-risk professions (for example resilience training for Police officers in the UK) (Hesketh et al., 2015, 2018; 2019); (Hesketh & Cooper, (2020); Smith, (2015); Brassington & Lomas (2020).
Resilience training has centred on the assumption that resilience is based on personal characteristics and skills that can be learned and developed through appropriate and professionally delivered training.

Watton et.al (2018) evaluated a large amount of studies concerned with the connection between learning through formal interventions and wellbeing and identified ways in which different forms of learning in the workplace can have a positive impact on wellbeing. They researched studies of learning inventions that focus on improving wellbeing both directly and indirectly. They categorised the studies according to their intended purpose and

research approach. What is interesting for this report is that they proceeded to attach evidence statements to the impact the learning interventions to increased wellbeing. The categories and evidence statement are summarized in Table 1.

Table 1: Learning intervention categories and associated evidence statement to the impact of increasing wellbeing levels. (Watson et.al., 2008)

Learning Intervention Category	**Associated evidence statement on the impact on wellbeing**
Personal resources interventions	Interventions focused on developing personal resources for wellbeing are effective regardless of the specific focus of the training.
Professional learning interventions	Training focussed on developing professional capabilities can produce positive wellbeing effects. Although training focussed on developing professional capabilities may be more likely to have no impact rather than a positive impact on wellbeing, training focussed on developing professional capabilities is unlikely to have a negative impact.
Leadership interventions	Leadership training can be effective in improving wellbeing, and group-based learning which is more interactive is most likely to be effective for this form of training.
Organizational interventions	There is insufficient evidence to conclude how organizational-level learning interventions impact on wellbeing.
Learning process features	Learning processes that are predominantly online tend to be less effective than more extensive forms of learning in producing positive wellbeing outcomes.

While the report and evidence statements above are getting a bit closer to determining high-impact learning interventions to improve wellbeing, the main finding of Watson et al.'s research is that there is a further need for more and better evidence on the relationship between learning and wellbeing in the workplace. Especially as the need for training, upskilling and reskilling will become increasingly important for the sustained performance of

the workforce as we are living our work lives in Industry 4.0 and are heading into the era of Industry 5.0, as stated in a recent EU Commission report published in January 2021.[5]
It would be interesting for the Learnovate Centre to explore the topic of workforce reskilling further a part of the research agenda that looks at transversal skills and whole-person learning.

Something that has become clear from exploring if and how wellbeing and resilience can be learned, is that it has become evident that wellbeing is not something for which responsibility lies solely with the individual. Economic and societal influences impact on individual wellbeing in addition to psychological and physiological aspects. In the next paragraphs, we will look more closely at the role of economics, organisational development and technology in establishing wellbeing of individuals and what responsibilities lie within these areas to ensure not only individual wellbeing, but the continued success of organisations, economies and humanity.

In the following chapters, we will look more closely into some of the environmental influences on individual wellbeing to provide the full context in which individuals are continuously trying to find a balanced level of wellbeing.

[5] https://op.europa.eu/en/publication-detail/-/publication/468a892a-5097-11eb-b59f-01aa75ed71a1/

5. The Economics of Wellbeing

Now that we have provided an overview of the theory surrounding wellbeing and its evolution over time and looked at what skills individuals need to develop resilience to cope with and relieve stress, we focus in on employee wellbeing and the impact it has on organizational performance next.

In a recent podcast for Learnovate[6], Ed Hess said: " Every business will be in the business of human development on top of their core business", claiming that your employee's wellbeing will be as much of an organisation's business as selling its products or services.

A Gallup report on the economics of wellbeing (Rath & Harter, 2014) states that: 'Your workforce's wellbeing has a direct impact on your organization's bottom line. Each person's wellbeing is critical to achieving an organization's goals and fulfilling its mission. And it can be measured, managed and quantified.'

Gallup conducted research to construct a comprehensive measure of individual wellbeing and found five distinct statistical factors that they define as the universal elements of wellbeing that differentiate a thriving life from one spent suffering. They are:

1. Career wellbeing: how you occupy your time and liking what you do each day.
2. Social wellbeing: having strong relationships and love in your life.
3. Financial wellbeing: effectively managing your economic life to reduce stress and increase security.
4. Physical wellbeing: having good health and enough energy to get things done on a daily basis.
5. Community wellbeing: the sense of engagement and involvement you have with the area where you live.

The key takeaway is that the economic differences between those who are thriving and those who are struggling or suffering are substantial and have practical relevance to any organization. The Gallup report shares more examples of how each element of wellbeing can impact employee's overall wellbeing along with some recommendations of what employers

[6] https://learnovate.podbean.com/e/inside-learning-ed-hess-ep-1/

can do to improve their employee's wellbeing that are worth a read but too detailed for this report.

6. Wellbeing and work

Fostering employee wellbeing is good for people and the organisation. Promoting wellbeing can help prevent stress and create positive working environments where individuals and organisations can thrive. Positive wellbeing can be a core enabler of employee engagement and organisational performance. But how can organisations go about wellbeing in the workplace? In this chapter we look discuss a strategy for designing wellbeing into the workplace, explore what work/life integration looks like, provide context on the different wellbeing needs of the generations that currently make up the workforce and provide a quick look into the future of work and wellbeing.

6.1 A foundational strategy for wellbeing in the workplace

A recent CIPD report (CIPD, 2021) argues that an effective employee wellbeing strategy needs to go far beyond a series of standalone initiatives and must instead offer a holistic solution that addresses a multitude of the elements of wellbeing discussed in the previous chapter: : Health, Good work, Values and Principles, Collective/Social relations, Good lifestyle choices and Financial wellbeing.
The article emphasizes that there is no 'one-size-fits all' approach to designing a health and wellbeing strategy; its content should be based on the unique needs and characteristics of the organisation and its workforce.

To build a healthy workplace, employers need understand the underlying factors, such as unmanageable workloads, that are driving unhealthy working practices and the complexities people face beyond the workplace. If employers place employee wellbeing at the centre of their business model and view it as the vital source of value creation, the dividends for organisational health can be significant. However, as stated by Hesketh & Cooper (2019): if you want employees to engage with a wellbeing strategy, it has to be authentic and required genuine interest from leadership in order to be successful.

The solution offered by CIPD is the wellbeing pyramid model (Figure 4) for an effective employee wellbeing model that is at the core of how an organisation fulfils its mission and

carries out its operations and is strategic. It is about changing the way business is done. It shows that to create a healthy workplace, an employer needs to ensure that its culture, leadership and people management are the bedrock on which to build a fully integrated wellbeing approach.

Figure 4: Wellbeing pyramid model, CIPD (2021)

Adapting an organisational approach to wellbeing means taking a holistic approach to addressing needs in probably all of these areas, which brings distinct responsibilities for particular employee groups.

- **People Professionals**: Lead role in steering the health and wellbeing agenda in organisations and integrate wellbeing practices into the organisation's day-to-day operations.
- **Senior Managers**: Crucial roles models to engage with health and wellbeing interventions and leverage their authority and influence to ensure wellbeing is a strategic priority.
- **Line Managers**: Role models in fostering healthy behaviour at work and understand the impact of their management style on employees and the organisational culture.
- **Occupational Health professionals**: Specialized expertise focused on health in the workplace
- **Employees**: Look after their own health and wellbeing and communicate their needs

6.2 From work/life balance to work/life integration

The term work/life balance has been a topic of much discussion for a long time and is not likely to become any less prominent when managing and developing both personal and

organisational wellbeing. As mentioned earlier in this report, finding a balance between personal challenges and personal resources to manage these challenges is an ongoing process. What is very important to remember in addition is that different people have different resources and challenges, and every person's definition of what wellbeing is, is different from person to person. Organisations are beginning to realize they need to provide a flexible work environment to meet the needs of its workforce, so they are happy and productive employees and can build and sustain business success into the future

The Deloitte Human Capital trends report (Deloitte, 2020) highlights that 'designing work for wellbeing aimed at living and performing at your best' is instrumental to create a culture and employee engagement experience that gives employees purpose and ensure belonging and individuality. The report also shows there is a readiness gap, because while 80% of organisations report to perceive Wellbeing and Belonging as the top-2 most important areas of focus to get ready for the 'future of work', only 12% feel very ready to address it for their organisation.

According to a recent Forbes article by Volini and Fisher[7], executives have long recognized that wellbeing is important, the COVID-19 pandemic brought home how significant it really is. Organisations suddenly found themselves called upon to prioritize workers' physical and mental health and alleviating their stress became critical to operations. Work and life, health, safety and wellbeing became inseparable.

However, there is a continuing disconnect between employers and employees when it comes to prioritizing wellbeing with employees stating it is one of the most important outcomes they hope to achieve over the coming 1-3 years, whereas for executives it was the second-to-last outcome identified.

[7] https://www.forbes.com/sites/deloitte/2021/03/08/how-to-integrate-wellbeing-into-work-so-employees-perform-and-feel-their-best/?sh=6bfbfe5ecb87

This poses a challenge because integrating wellbeing into the workplace takes a collective effort from leaders, HR and employees alike in order to be meaningful. Organisations looking to build wellbeing into work should consider actions, policies and mandates at three levels: individual, team and organizational. And they should take into account five environments in which they are designing work: cultural, relational, operational, physical and virtual.

The design of wellbeing into work is a practice that must be developed over time. It is no longer about achieving work-life balance, but work-life integration. When an organisation is able to successfully design wellbeing into work, wellbeing becomes indistinguishable from work itself.

6.3 The different wellbeing needs of a multi-generational workforce

A Forbes article from 2016[8] highlights that the current 2020 workforce is made up on one-third of Millennial generation workers. By 2025, Millennials will make up 75% of the workforce. Organisations are shifting their business strategies to attract this latest generation making up a large amount of the workforce, but with people living longer and working longer, the reality is that workforces will be made up of workers from a multitude of generations. Generation X and Baby-Boomers are still active participants in the labour force and Generation Z (5 – 19 year olds) are just about ready to enter the workforce. It is fair to assume that different generations have different needs and requirements to manage their wellbeing. To increase the number of thriving employees in your organization, it's worth understanding wellbeing the way your employees do.

A 2019 Gallup article[9] explains at a high level what the specific needs for the current generations that are in the workforce are and what they might struggle with. We have highlighted some of these differences in table 2 below.

[8] https://www.forbes.com/sites/workday/2016/05/05/workforce-2020-what-you-need-to-know-now/?sh=6c8f812f2d63

[9] https://www.gallup.com/workplace/268025/wellbeing-generation-thrive-others-struggle.aspx

It is important for organisations to approach their wellbeing strategy and planning with support and sensitivity to those generational differences. Leaders who recognize that different generations have different wellbeing issues support employee wellbeing in an especially sensitive way. That sensitivity and care increase the likelihood of successful wellbeing initiative outcomes – and the number of thriving employees.

Table 2: Generational wellbeing needs & characteristics (Gallup, 2019)

Characteristics	Challenges
Millennials: Born between 1980 and 1996	
• More likely to thrive in their physical wellbeing • Appreciate experiences more than things	• Higher debt-income ratio and lower net worth than previous generations • Look for employers that don't draw a line between life and work
Generation X: Born between 1965 and 1979	
• High earnings • It's a small generation • Feel they need to step up to contribute to or lead community activities	• More deeply in debt, but different kind of stress • Take on additional debt for children and aging parents. • Caring for others can seem more important than their own physical wellbeing
Baby-boomers: Born between 1946 - 1964	
• Moving to into the tail end of their careers • Loyal to employers and teams and want to contribute until they are done, ie. Financially secure to afford it.	• May not understand millennial culture or Gen Xers' approach to parenting, but they do know how to conduct a career.

6.4 A glimpse into the future of work

While the COVID-19 crisis is presenting a huge challenge for the world, there are also some new possibilities arising from it. A near-seamless shift to remote work has been established and a discussion for continued flexibility is well and truly underway with organisations and individuals working to define the 'new normal' and 'future of work'. This is an important development to consider in the context of wellbeing as the speed of predicted change brought on by the pandemic impacts every organisation and employee.

Possibilities arising from the pandemic

A special report by Deloitte[10] highlights a few possibilities they see arise from the COVID crisis that can positively impact people's wellbeing. They are:

- Purpose: An organisation that doesn't just talk about purpose, but embeds meaning into every aspect of work, every day through developing a culture of belonging, designing work for wellbeing and using data to better understand employee needs
- Potential: An organization that is designed and organised to maximize what humans are capable of thinking, creating and doing in a world of machines by thinking about using technology complementary to human skills and build a resilient adaptive workforce.
- Perspective: An organisation that encourages and embraces a future orientation, asking not just how to optimize for today, but also how to create value tomorrow

According to the Deloitte report, organisations face an important choice between returning to a post-COVID world that is simply an enhanced version of yesterday or building one that is sustainable version of tomorrow. The risk is bigger than that of falling behind – it's the possibility never catching up at all.

A multi-stage life

Gratton and Scott (2018) offer an interesting perspective on how work and life will dramatically change as people are living longer than they ever have before. Their research into life expectancy shows that Children born in the West in 2016 have a 50% change of living to the age of 105 and the first person who will live to be 150 has likely been born already.

They argue that the necessary options for longer lives, people must replace the model of the 'three-stage' life – education, work and retirement – with a 'multistage' life.

Making a multistage life work requires flexibility and changed use of time. Some companies will redesign policies to promote increased employee longevity, and some companies will resist meeting the demands of the longer-lived workforce.

[10] https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/human-capital/deloitte-cn-hc-special-report-returning-to-work-in-the-future-of-work-en-200527.pdf

Grattan and Scott have identified the need to redesign policies in the following areas:

- Expand the employer-employee relationship beyond tangible assets, and design jobs to enhance people's intangible assets such as productivity or vitality.
- Support personal transitions by providing training, helping employees develop diverse networks and offering constructive feedback.
- Shift practices built on the perspective if a three-stage life to a multi-stage model
- Consider men's and women's varying needs at different stages in their lives, and provide flexibility in their hours, scheduling and deadlines.
- Shed policies, both written and unwritten, that promote ageism
- To encourage people to take time for experimentation and renewal, stop penalizing applicants for time gaps in their resumes.

At an individual level, the focus of a longer life will be increasingly more on the 'Intangible Assets'; things like family & friends, knowledge & skills and good physical & mental health. They make life more enjoyable and help develop tangible assets (e.g. knowledge & skills lead to better job opportunities).

A long well-lived life will require lots of flexibility and openness to new experiences, and re-evaluation in needed at multiple points along the way.

7. The role of technology in wellbeing

In this chapter, we specifically look at the role that technology plays in individual and organisational wellbeing. Calvo and Peters (2014) highlight that technology can have both a negative and positive effect on our lives and wellbeing. Sometimes the effects are intended and sometimes unintended, but the fact is that technology plays a ubiquitous and evolving role in our lives and will continue to do so even more in the future.

Calvo & Peters (2014) write that there is a desire to 'do good with technology' as we have a shared experience that technology has a major impact on how we live and that we recognize technology 'has the capacity not only to increase stress and suffering, but also to improve lives individually and en masse'.

7.1 The impact of technology on wellbeing

Every technology can deliberately or inadvertently impact psychological wellbeing. Beyond unintended effects (for example, a diminished face-to-face interaction because of the mere presence of a mobile phone! Przybylski and Weinstein, 2013), technologies can also be consciously designed to enhance or regulate people's emotions (Norman, 2005). In recent times, the focus has shifted from just usability to also making products enjoyable and engaging. This is generally with a view to increase usage. Engagement and enjoyment do not necessarily contribute to sustainable wellbeing. According to Peters, Calvo and Ryan (2018), the larger question remains:

' How can technology be designed to support wellbeing that encompasses more than just immediate hedonic experience, but also its longer term eudaimonia, or true flourishing? (Ryan and Deci, 2001), (Sirgy, 2012).

7.2 Wellbeing focused technology design

A desire to design for deeper meaning, happiness and human flourishing has gained momentum in the area of Human-Computer Interaction (HCI) research over the past decade,

though researchers and practitioners have struggled to bridge the momentum to actionable practice (Peters et al., 2018).

There are a number of research approaches that progress the human centred research field and provide pathways to technology design that is based on psychological factors that have shown to contribute to wellbeing. These are:

- Positive Technologies (Riva et al., 2012)

  Argues for the benefits of using technology to influence the affective quality, engagement/actualization and connectedness of experience. E.g. Virtual reality environments and other software designs as interventions for mental health and wellbeing.
- Experience Design (Hassenzahl, 2010)

  An experience focused approach centered on 'fulfilling psychological needs' as a method for inscribing meaning and happiness into products. Hassenzahl proposes to do this by uncovering "experience patterns" in human activities that distil the essence of certain need-fulfilling practices.
- Positive Design (Desmet & Pohlmeyer, 2013)

  Focuses on how the design of an artifact, built environment or service might foster flourishing. Desmet and Pohlmyer's framework requires that a product is designed for virtue, pleasure, and/pr meaning where none of these components interfere with the others.
- Positive Computing (Calvo & Peters, 2014)

  Focused on wellbeing-supportive design for all technology by targeting wellbeing determinants (i.e., self-awareness, compassion, gratitude, motivation etc.) and by leveraging the research and measure for these constructs for design and evaluation.

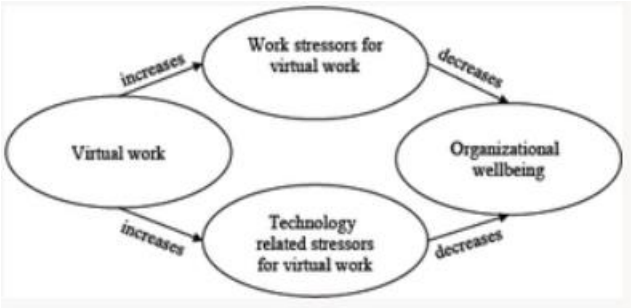
It would be worth it for Learnovate to explore these human centered research fields in more detail as it continues to develop its thinking about wellbeing and learning.

7.3 The impact of virtual work on organizational wellbeing

Virtual work is defined as work that through the use of Information Technology (IT), enables employees to work and interact across geographical and temporal boundaries (Raghuram et al., 2019). Tarafdar (2021) defines virtual work as 'the commonly understood work arrangements that are not accomplished in the physical office (e.g., remote work, telecommuting) and that are made possible through a range of IT such as computers, smartphones, email, video-conferencing tools and intranets.'

According to Tarafdar, stress is caused because of the relentless dependence on IT and stress caused by the nature of virtual work. As stressors increase in either area, organizational wellbeing decreases. This effect is displayed in figure 5 below. Virtual work stress and Technostress can lead to a plethora of negative outcomes that are detrimental to both the individual and the organisation of which there is widespread awareness.

Figure 5: The impact of virtual work on organizational wellbeing (Tarafdar & Stich, 2021)



Virtual work stress

Trafadar & Stich (2021) suggest that **virtual work** causes stress in three ways

1. By affecting work relationships, for example because of isolation of remote workers, emotional exhaustion from communicating via technology and the risk of 'electronic incivility and bullying.
2. By changing the work-life balance when the interface between home and work gets blurred, flexibility comes with constant connectivity and autonomy might be counterbalanced by work pressures that constrain that autonomy
3. By impacting workload: when it is present in either excess (leads to overload) or deficit (leads to boredom) or the extra demands on employees that virtual work brings.

Technostress

Technostress has been defined as the negative psychological link between people and the introduction of new technologies. Stress caused by technology presents itself in three ways:

- Techno Invasion: when someone faces the demand from IT use of always being connected to work and feels invaded and overwhelmed by it.

- Techno overload: when IT forces the pace of work and creates a heavy work excess caused by the use of technology. It Is associated with working longer and faster than normal because of information overload and constant availability of information.

- Techno complexity: stress caused by having to understand and learn how to use technology in the virtual world as not doing so adversely impacts on the ability to get the job done. It places demands on the employee to learn complex things that are not directly part of their actual work.

What can organizations do to help?

Very often, and in the absence of clear organizational expectations and guidelines employees do make themselves available and do respond immediately, even if they experience for example, techno invasion. It is necessary that organizations frame explicit guidelines for technology use. Guidelines with a dual objective: to help employees take advantages of the capabilities of IT and at the same time to avoid technostress. For example, recognizing the flexibility that is possible from virtual work, such policies can encourage employees to shape their own work patterns and at the same time adjust to their colleagues' work patterns.

Employees are increasingly deciding to set their own boundaries and expectations in relation to work in order to find a work-life balance that works for them and aims to keep stress to a minimum. Coping with technostress is a matter of individual action and one size does not fit all (Tarafdar et al., 2021).Therefore, organizations can make stress worse if they mandate how IT should be used and disregard the flexibility offered by IT and the individual's productive appropriation of its features.

8 Strategies and Best practice for employee wellbeing

As discussed there are plenty of opportunities to redesign work where wellbeing takes central stage. It is no longer a future-focused aspiration, but the reality of the here and now. (Deloitte, 2020). The challenge is of course how to do this in a way that brings sustainable and meaningful change. In the next paragraphs, and to conclude this report, we briefly discuss some strategies are currently receiving attention and provide pathways into realizing the changes in the workplace that are necessary to support wellbeing.

8.1 A strategy for embedding Wellbeing at work

Hesketh & Cooper (2019) developed a multiplication equation as the basis of developing and implementing a wellbeing strategy in the workplace that combines the efforts of both the organisation and the individual employee and positions them as being interdependent for good wellbeing (Figure 6). Hesketh and Cooper argue that leadership, and how leaders create an environment in which work can be conducted in a way that the employee extracts meaning and purpose from it is vital for happiness and success in the workplace. Add the influence of personal resilience to that and you have a formula for wellbeing at work where all variables are interdependent. If one element is near to zero, the outcome will be low. This equation is a simple way to understand that achieving organisational wellbeing is a responsibly for the organisation and the individual.

Figure 6: Basic equation for wellbeing (Hesketh & Cooper, 2019)

8.2 Job crafting

Traditionally, job design (How jobs, tasks and roles are structured, enacted and modified and what the impact is on the individual, group and organisational outcomes) was of great practical significance to organisations (Tims & Bakker, 2010). A well-designed job may lead to increased employee wellbeing and set the stage for thriving, which is when individuals surpass the challenges at work and personally grow from them. Job design is usually seen as

a top-down process in which the organisation creates jobs and in turn selects people with the right knowledge, skills and abilities for the job.

Job redesign is however also done at the individual level whereby employees adapt to changes in the work situation and change aspects of their work environment themselves. This is called Job Crafting. Job crafting Is about taking proactive steps and actions to redesign what we do at work, essentially changing tasks, relationships, and perceptions of our jobs (Berg et.al., 2007). By doing this, we can stay in the same role while getting more meaning out of our jobs.

Harvard Business Review[11] describe Job as 'Changing your job to make it more engaging and meaningful' and describe three main forms these changes can take:

- Task crafting: changing up responsibilities
- Relational crafting: changing up interactions
- Cognitive crafting: changing up your mindset

Through job crafting, employees can 'craft' a job that they love. 'One where an employee can still satisfy and excel in our functions, but which is simultaneously more aligned with our strengths, motives, and passions' (Wrzesniewski et. al., 2010). Job crafting has been better linked to better performance (Caldwell & O'Reilly, 1990), intrinsic motivation, and employee engagement (Halbsleben, 2010; Dubbelt et.al., 2019). In a keynote presentation for RE:Work[12], Wrzesniewski, shares what organizations can do to support job crafting

8.3 Wellbeing Diagnostics and Measurement

Having some instrument to assess employee attitudes towards and experience with stress in the workplace is a first step in understanding employee wellbeing needs and essential to having a wellbeing strategy and culture that is integrated into the work itself in an authentic way rather than being a 'tick of a box' which employees ultimately don't buy into.

[11] https://hbr.org/2020/03/what-job-crafting-looks-like

[12] https://www.youtube.com/watch?v=C_igfnctYjA&t=737s

There are a number of instruments and tools out there that help organisations gain insights into the physical and mental health of its workforce as well as tools and applications focused on individual behaviours in relation to their wellbeing.

An example of a wellbeing psychometric instrument we came across in our research is the ASSET tool, which stands for A Short Stress Evaluation Tool that was developed by Faragher et al (2004).

ASSET is a wellbeing psychometric instrument that captures attitudes and perceptions that are known to cause stress in the workplace, commonly referred to as the six essentials (Cooper et al., 2005) and are:

- Resources & Communications
- Control
- Work Relationships
- Balanced Workload
- Job Security and Change
- Job Conditions

The ASSET instrument could be a useful tool to explore for organizations that are looking to develop training interventions for their staff to improve personal resilience. In the study we read, the ASSET evaluation tool provided the foundation for a curriculum of training interventions developed to support the wellbeing of the UK Police force with encouraging results.

It is beyond the scope for this report to dive further into this area, but it might be worth considering in the context of furthering the Learnovate Centre's research of wellbeing in the workplace.

References

Articles & Books

Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work.

Brough, P, Wall, T & Cooper, C. (2021) The SAGE Handbook or Organizational Wellbeing

Brough, P., Raper,M., and Spedding, J.(2020). 'She'll be right, mate!' Occupational stress research in Australia. In: K.Sharma, C.Cooper, and F.M. Pesntonjee (Eds). Organizational stress around the world: Research and practice. (pp. 1-27).

Caldwell, D. F., & O'Reilly III, C. A. (1990). Measuring person-job fit with a profile-comparison process. *Journal of applied psychology*, *75*(6), 648.

Calvo, R. A., & Peters, D. (2014). *Positive computing: technology for wellbeing and human potential*. MIT Press.

Cooper, C. D., & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *23*(4), 511-532.

Desmet, P. M., & Pohlmeyer, A. E. (2013). Positive design: An introduction to design for subjective wellbeing. *International journal of design*, *7*(3).

Deloitte (2020). The Social enterprise at work: Paradox as a path forward, 2020 Deloitte Global Human Capital Trends.

Dubbelt, L., Demerouti, E., & Rispens, S. (2019). The value of job crafting for work engagement, task performance, and career satisfaction: longitudinal and quasi-experimental evidence. *European Journal of Work and Organizational Psychology*, *28*(3), 300-314.

Faragher, E. B., Cooper, C. L., & Cartwright, S. (2004). A shortened stress evaluation tool (ASSET). *Stress and Health: Journal of the International Society for the Investigation of Stress*, *20*(4), 189-201.

Halbsleben, J. R. (2010). B (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources and consequences. *Work engagement: A handbook of essential theory and research*, 102-117.

Hassenzahl, M. (2010). Experience design: Technology for all the right reasons. *Synthesis lectures on human-centered informatics*, *3*(1), 1-95.

HSE (2020) [accessed 28 May 2021] Work-related stress depression or anxiety statistics in Great Britain 2020 [Online] https://www.hse.gov.uk/statistics/causdis/stress.pdf

Hesketh, I., & Cooper, C. (2019). *Wellbeing at work: how to design, implement and evaluate an effective strategy*. Kogan Page Publishers.

Ter Hoeven, C. L., van Zoonen, W., & Fonner, K. L. (2016). The practical paradox of technology: The influence of communication technology use on employee burnout and engagement. *Communication monographs*, *83*(2), 239-263.

Lopez-Garrido, G (2021, Jan 04). *Self-determination theory and motivation*. Simply Psychology

Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *23*(6), 695-706.

Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, *2*(4), 425-444.

Haglund, M. E., Nestadt, P. S., Cooper, N. S., Southwick, S. M., & Charney, D. S. (2007). Psychobiological mechanisms of resilience: Relevance to prevention and treatment of stress-related psychopathology. *Development and psychopathology*, *19*(3), 889-920.

Peters, D., Calvo, R. A., & Ryan, R. M. (2018). Designing for motivation, engagement and wellbeing in digital experience. *Frontiers in psychology*, *9*, 797.

Quick, J. C. (2021). Wellbeing and Work–Life Boundaries/Interfaces. *The SAGE Handbook of Organizational Wellbeing*, 89.

Raghuram, S., Hill, N. S., Gibbs, J. L., & Maruping, L. M. (2019). Virtual work: Bridging research clusters. *Academy of Management Annals*, *13*(1), 308-341.

Rath, T., & Harter, J. (2010). The economics of wellbeing. *Gallup Consulting*.

Riva, G., Banos, R. M., Botella, C., Wiederhold, B. K., & Gaggioli, A. (2012). Positive technology: using interactive technologies to promote positive functioning. *Cyberpsychology, Behavior, and Social Networking*, *15*(2), 69-77.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American psychologist*, *55*(1), 68.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic wellbeing. *Annual review of psychology*, *52*(1), 141-166.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.

Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of occupational and organizational psychology*, *88*(3), 533-562.

Selye, H. (1936). A syndrome produced by diverse nocuous agents. *Nature*, *138*(3479), 32-32.

Selye, H. (1976). Stress without distress. In *Psychopathology of human adaptation* (pp. 137-146). Springer, Boston, MA.

Sirgy, J. (2012).The Psychology of Quality of Life: Hedonic Wellbeing, Life Satisfaction, and Eudaimonia. New York, NY: Springer

Southwick, S. M., & Charney, D. S. (2012). The science of resilience: implications for the prevention and treatment of depression. *Science*, *338*(6103), 79-82.

Tarafdar, M., & Stich, J. F. (2021). Virtual Work, Technology and Wellbeing. *The SAGE Handbook of Organizational Wellbeing*, 159.

Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, *36*(2), 1-9.

Watson, D., Tregaskis, O., Gedikli, C., Vaughn, O., & Semkina, A. (2018). Wellbeing through learning: a systematic review of learning interventions in the workplace and their impact on wellbeing. *European Journal of Work and Organizational Psychology*, *27*(2), 247-268.

Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American journal of Orthopsychiatry*, *59*(1), 72-81.

World Health Organization. (2001). The World Health Report 2001: Mental health: new understanding, new hope. World Health Organization.

Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of management review*, *26*(2), 179-201.

Wrzesniewski, A., Berg, J. M., & Dutton, J. E. (2010). Turn the job you have into the job you want. *Harvard Business Review*, *88*(6), 114-117.

Zander, M., Hutton, A., & King, L. (2013). Exploring resilience in paediatric oncology nursing staff. *Collegian*, *20*(1), 17-25.

Notes

1. https://joshbersin.com/2021/04/the-secret-to-wellbeing-at-work-is-leadership/#:~:text=Leadership%20is%20key%20to%20well,impact%20on%20the%20entire%20organization.
2. https://worldhappiness.report/archive/
3. https://stressless2015.wordpress.com/2015/10/23/maureen-killoran/
4. https://www.newyorker.com/science/maria-konnikova/the-secret-formula-for-resilience
5. https://op.europa.eu/en/publication-detail/-/publication/468a892a-5097-11eb-b59f-01aa75ed71a1/
6. https://learnovate.podbean.com/e/inside-learning-ed-hess-ep-1/
7. https://www.forbes.com/sites/deloitte/2021/03/08/how-to-integrate-wellbeing-into-work-so-employees-perform-and-feel-their-best/?sh=6bfbfe5ecb87

8. https://www.forbes.com/sites/workday/2016/05/05/workforce-2020-what-you-need-to-know-now/?sh=6c8f812f2d63
9. https://www.gallup.com/workplace/268025/wellbeing-generation-thrive-others-struggle.aspx
10. https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/human-capital/deloitte-cn-hc-special-report-returning-to-work-in-the-future-of-work-en-200527.pdf
11. https://www.aspeninstitute.org/blog-posts/thomas-friedman-human-interaction-digital-age/
12. https://hbr.org/2020/03/what-job-crafting-looks-like
13. https://www.youtube.com/watch?v=C_igfnctYjA&t=737s