Tampere University of Applied Sciences



### In Search of Eudaimonia:

# A Human Needs Approach to Leading Cultures of Wellbeing

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#### ABSTRACT

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Driven by its mission and principles of learning, an International School in São Paulo, Brazil has undergone a change agenda to become a 'culture of learning'. Renovations, alongside the construction of a purpose-built School have taken place, designed with learner-led, participatory pedagogy in mind. The physical environment is mirrored in the architecture of time, with the school timetable remodelled into a series of 90 minute blocks of time to promote inquiry-based learning.

The school has also adapted its treatment of wellbeing. This has been most apparent in the provision of three 'wellness days' per semester for staff, first introduced to help staff manage the disorientation caused by the Covid-19 pandemic. The school seeks to build upon these changes so that 'flourishing' and 'fulfilment' become cornerstones of individual and community operating culture.

Commitment to wellbeing is a cultural imperative to achieve this. The theoretical framework of this thesis introduces different conceptualisations of the term wellbeing, connecting it to the Aristotelian concept of eudaimonia as well as to Manfred Max-Neef's Matrix of Human Needs.

The thesis analyses how theories of Eudaimonic Wellbeing can be applied in an International School context. The author conducted quantitative research with 58 participants in the form of Donaldson, van Zyl, L & Donaldson's (2022) PERMA+4 Framework questionnaire across various employee groups in the school. Results were combined in a mixed-methods manner with a series of qualitative interviews with nine participants using the author's Workplace Wellbeing Scaffold (WWS).

Results show that staff experience varying degrees of eudaimonic wellness along the nine PERMA+4 dimensions, based on which section they work in and by length of service. The findings reveal that two of the PERMA+4 dimensions, Environment and Economic Security, are least positive amongst the sample group. Conversely, participants show strong Positive Emotions, Meaning, Engagement and Accomplishment.

Findings prove that a Human Needs wellbeing strategy is a valid means to improve the workplace wellbeing when used with quantitative diagnostic measures. By using the WWS as a means to investigate individual PERMA+4 results, identify unmet human needs and create actionable plans to satisfy those needs in the form of I-Statements, people are able to identify strategies to meet their unmet human needs, in turn improving their wellbeing. It is therefore recommended that leadership adopt a longitudinal quantitative approach to determining the wellbeing of staff, as well as to adopt the WWS to support individuals in improving their workplace wellbeing.

Keywords: Eudaimonia; wellbeing; Eudaimonic Wellbeing (EWB); human needs; teacher wellbeing, positive psychology

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#### **1 INTRODUCTION**

#### 1.1 Background

To those who spend time in them, schools are well renowned as theatres of stress. With schools acting as sites of learning, this is, to an extent, inevitable. Teachers and students alike are expected to approach their school days under the spectre of a high cognitive load, as brains are coaxed into rewiring themselves, forming new synaptic connections as learning is committed to memory (Kennedy, 2016). This site of the 'learning brain' places a high cognitive load on the brains of both teachers and students. Knowing how to navigate the three types of cognitive load is just one way in which the demands of forming neural networks for learning can be eased, as can be seen in Table One:

Table 1: The 3 Types of Cognitive Load (adapted from Sweller, 1988; Shibli)
& West, 2018)

Intrinsic Cognitive Load	The inherent difficulty of a task for an individual learner, based upon prior knowledge, complexity of task, working memory of learner.
Extraneous Cognitive Load	Additional load created by poorly designed instructional material which does not aid the learner's learning.
Germane Cognitive Load	Mental load focused on new elements of learning, connecting to a learner's pre-existing knowledge, or 'schemas'.

These are by no means the only demands that the brains of teachers and students alike find themselves under. If additional stress is an inevitable byproduct of the learning process, as a consequence of the high cognitive load required to reorganise said synapses in the brain, in turn committing information from the working memory (WM) to the long-term memory (LTM) (Paas & Van Merriënboer, 2020), then it is important to teach people how to manage their stress levels. This is one of the key recommendations that Sweller, van

Merriënboer, & Paas (2019) make. In designing learning to include opportunities to manage stress, emotions and uncertainty, Sweller et. al. (2019) argue that each forms an intrinsic part of learning and cognitive load. If this is the case, it remains important to design learning that reduces extraneous load caused by undue stress, whilst also incorporating necessary stressors into the learning design. Given that schools are the site of both andragogy and pedagogy, it is important to develop different strategies that suit both adult, professional learners and novice, child learners. Sweller et. al. (2019), referencing Ginns (2005), note that being able to imagine a future outcome may not be an effective strategy for reducing stress in novice learners, as, unlike adult professional learners, they do not have the same range of lived experiences. As an alternative to this, collaboration is offered as a means to ameliorate stress levels and improve commitment of information to the LTM, due to the collective working memory effect (Sweller et. al., 2019).

In their dual role as sites of both education and employment, schools then have a responsibility to alleviate undue stress to encourage learning and promote wellbeing. This conceptualisation of wellbeing can be linked to the Aristotelean concept of *eudaimonia*. Most often translated into English as 'happiness', Aristotle himself makes it clear that he correlates pleasure (hedonism) with vulgarity (Aristotle, 350BCE, Tr. Ross, 1925; Ryan & Deci, 2001), and, as Cashen (2012) succinctly puts, " "happiness" and "happy" are used in different contexts." Therefore, this paper uses the term eudaimonia more closely in correlation with the English language term 'flourishing' as a closer conceptual translation of Aristotle's original concept. This decision is supported by both experts in the disciplines of Classics (Moran, 2018) and Positive Psychology, in particular the works of Ryff (1989; 2014) and Seligman (2011). If the pursuit of Eudaimonic Wellbeing is indeed the pursuit of the highest human good, then its pursuit and implementation comes at a timely moment.

#### 1.2 Challenges to Stakeholder Wellbeing in Context

The existence of this thesis cannot be separated from the context of its production. The COVID-19 pandemic has variously been described as a "supernova heralding the end of a largely obsolete education" (Azorín, 2020), "a

crucible exacerbating unsatisfactory working conditions" (Bartlett, 2021) and as having "shattered patterns and norms" (Zhao, 2020). The paradigmatic changes to education as a system caused by the pandemic have been fraught with difficulty and have increased the extraneous cognitive load on all stakeholders in education.

The shift to online teaching increased stress levels felt by teachers (Will, 2021) in a profession already characterised by high levels of stress (RWJF, 2016; Steiner & Woo, 2021). Klusmann, Richter & Lüdtke (2016) identify that the correlation between teacher exhaustion and student achievement is statistically significant and that effective teachers are those who show high degrees of workplace wellbeing in the form of resilience and low exhaustion levels (Klusmann et. al., 2008) it is in a school's academic and psychological best interests to propagate cultures of adult wellbeing, given it is these adults who are in turn charged with protecting the wellbeing of the students in their care. Harding et. al. (2019) have shown that there is a strong correlation between teacher wellbeing and student wellbeing, a study that proves the earlier work of Mercer (2005) to be prescient:

One cannot improve the lives of children without significantly improving the lives of those who care for them and the complex network of ideologies and structures that oppress both children and their caregivers.

In addition large, non-governmental organisations including both UNESCO (2020) and The World Bank have highlighted prioritising teacher wellbeing as a key strategy to improve educational outcomes in a post-covid landscape, with the aim of "building back better", (Giannini, Jenkins & Saavedra, 2021).

Schools must also be careful to operate to meet the wellbeing needs of their students. A 2005 report from the Harvard Center on the Developing Child makes clear the distinctions in types of stress and their importance for brain development, as summarised below in Table Two:

### Table 2: The 3 Types of Stress (adapted from the Harvard Center on theDeveloping Child, 2005)

Positive Stress	Moderate, short-lived stress responses that are essential for healthy cognitive development.	
Tolerable Stress	Stress responses that have potential to negatively affect architecture of the learning brain, but that occur over limited periods. The short time period allows the brain to recover and reverse potential harmful effects.	
Toxic Stress	Strong, frequent or prolonged activation of the body's stress management system. Can have long-term, adverse effects on brain architecture.	

This is valuable to recall as schools and society at large re-emerge from the punctuated equilibrium (Highsmith, 2020) that has taken place throughout the pandemic. The stresses that children and adolescents have felt as a consequence of school closures are different from those of adults. Magson et. al. (2020) show that mental health in adolescents has worsened compared to pre-pandemic levels, and disconnectedness from friends was the greatest stressor, whilst Zhang et. al. (2020) have shown that teenagers with less well-developed resilience experienced poorer mental health outcomes. A meta-analysis conducted by Loades et. al. (2020) into the historical correlation between enforced isolation and mental health outcomes supports both of these points, whilst also showing that the consequences could be felt up to nine years after the isolation period had ended. Fontenelle-Tereschuk's (2020) assertion that elementary-age children might not fully comprehend the sudden social changes in response to reducing Covid-19 transmission serves as a cyclical reminder that the long-term impacts of the largest experiment to fall on education will not be known clearly for years to come.

Additional Stresses have also emerged at the operational level in international schools. Freezes on fees or low percentage increases have created additional liquidity conundrums to be solved by for-profit international schools (Murray, 2020; Wood, 2021). Demographic shifts in the admissions to international schools, as the children of international workers on assignment decrease (Wood, 2021) is balanced with increased demand from non-traditional sources

(ICEF, 2021) and locally-based students (Wood, 2021), whilst an increased desire for a focus on holistic, wellness inclusive education (ICEF, 2021) from prospective students is a trend that international schools are well-placed to respond to, given the vast array of curriculum options, languages of instruction, locations and demographics the estimated 5.6 million children and teenagers enrolled in them have available to them (Doll et. al., 2021).

It is against this backdrop then that this research has been commissioned by the principal of an international school in São Paulo, Brazil. For this paper to have any legacy beyond the timespan of the COVID-19 pandemic, however, it must be able to look beyond the parapet of the present day. Equally, whilst the wellbeing landscape of international schools may appear to be preferential to schools in the United Kingdom (TES, 2022; Gordon, 2022), seeing this as a benchmark for wellbeing seems myopic when considering wellbeing in a specific workplace in its unique context. In responding to the challenges that gave rise to this paper's gestation, it must also seek to address the wellbeing needs of the school's staff as they are now so that they are given optimal conditions to work at their best, and in turn enable the students that attend the school to do the same.

#### **1.3 Research Questions**

This thesis has been commissioned by the Principal of the International School in question, located in São Paulo, Brazil, with the express purpose of providing pedagogical staff and school leaders with a series of evidence-based, usable tools and recommendations with which they can seek to improve their own wellbeing, as well as of those that they lead and manage. This thesis aims to determine to what extent creating and maintaining a whole-school culture of wellbeing can serve as a tributary for the school's stated mission: to be a unique learning adventure. The thesis is built on the hypothesis that for all students and teachers to flourish, the organisation and its stakeholders must have the capability to meet their Eudaimonic Wellbeing needs. To this end, this thesis aims to determine answers to the following central research question:

### What are the conditions required for a sustainable culture of Eudaimonic Wellbeing?

To answer this question, the below subsidiary questions must also be considered:

- What is the starting point for Eudaimonic Wellbeing in the school? (How well are we now?)
- What needs do different stakeholder groups have with regards to their wellbeing?
- What changes need to be made for a culture of wellbeing to flourish?
- What are the long-term legacies of a well-implemented Eudaimonic Wellbeing culture on learning?

The means through which answers to these research questions will be achieved draw on a range of different methods. In the first phase, data collection is to take place via the PERMA+4 framework developed by Donaldson, van Zyl & Donaldson. (2022). The benefit of this is twofold: in the first instance, it provides a clear snapshot of where individuals are regarding their wellbeing at the time of asking. In addition, such data can be aggregated to provide a broader picture of how well the staff are as a whole.

The quantitative information gathered is then supplemented via interviews, framed as one-to-one coaching sessions. Using the Workplace Wellbeing Scaffold to structure these interviews, the aim is to help each interviewee understand what unique challenges they face with their wellbeing at work, and what changes can be made to improve it, to implement a long-term culture of wellbeing in the school.

#### 1.4 Thesis Structure

From this point, this thesis will present a theoretical framework related to the research question, by first placing wellbeing within the broader area of Manfred Max-Neef's Human Needs and Amartya Sen's Capability theories, taking the perspective that wellness is a fundamental human need and that all community

members must be capable of achieving it in the ways that benefit them. From there, it is necessary to narrow down the concept and historical development of Eudaimonic Wellbeing. To do so, it is necessary to consider Eudaimonic Wellbeing as part of a broader taxonomy of wellbeing, providing insight into its counterpart, namely Hedonic Wellbeing.

From there, it is important to connect the concepts of Eudaimonic Wellbeing to relevant and appropriate frameworks for wellbeing change, notably Martin Seligman's PERMA framework and its developments by others; Carol Dweck's ideas surrounding Growth Mindset; Kurt Lewin's 3-Step Model for change, as well as to how a commitment to Eudaimonic Wellbeing can counterbalance the stresses and traumas experienced both during the COVID-19 pandemic and those still to be experienced.

The final aspect of this part of the work brings the theoretical framework together into the Workplace Wellbeing Scaffold and its use of "I-statements". To do so, Bandura's work on self-efficacy is touched upon. These I-statements aim to help each individual identify for themselves a clear, actionable roadmap that they can use to achieve prolonged periods of eudaimonic wellness.

From here, the methodologies for data collection are discussed, followed by a presentation of the data. The thesis proceeds to a discussion of the findings; what the consequences of said findings might be for the commissioning school and more broadly with regards to implementing sustainable cultures of wellbeing in international schools. Finally, the limitations of the study are discussed, along with any new questions that could potentially be developed into further research.

#### **2 THEORETICAL FRAMEWORK**

#### 2.1 Needs-Centred Wellbeing

When considering wellbeing within the context of a school-as-workplace, the needs of each stakeholder group are varied, interconnected and complex. These stakeholder groups can broadly be broken down into three categories:

- Student wellbeing
- Teacher wellbeing
- Auxiliary staff wellbeing

Both within these categories and at the individual level exist differences concerning individual needs. It should come as no surprise that the psychological and wellbeing needs of an organisation that comprises people aged 18 months to those of post-retirement age are broad and dynamic. Indeed such forms of categorising can limit the ways in which the needs of the individuals that comprise such categories are met. As Arendt (1958) notes,

Plurality is the condition of human action because we are all the same, that is, human, in such a way that nobody is ever the same as anyone else who ever lived, lives, or will live.

Consequently, whilst the types of wellbeing needs all human beings experience remain the same in terms of their broad archetypes; how they are manifested by and within individuals is the locus of plurality in this regard. Human beings can share similar needs, but they can never be the same. Both strands of wellbeing, namely hedonic and Eudaimonic Wellbeing, can be seen as means to satisfy a range of human needs. Thus, they can be seen at their broadest as two approaches seeking to satisfy the needs of the human beings concerned.

Given this, both hedonic and Eudaimonic Wellbeing strategies can be considered in light of human needs theories. Whilst the most famous of these remains Maslow's *Hierarchy of Needs*, it seems more appropriate to connect wellbeing to Max-Neef, Elizalde & Hopenhayn's Matrix of Needs and Satisfiers, given that Human needs must be understood as a system: that is, all human needs are interrelated and interactive. With the sole exception of the need of subsistence, that is, to remain alive, no hierarchies exist within the system. (Max-Neef, 1991).

These needs can be seen below in Table Three, where each of Max-Neef's Human Needs are laid out in an axiological-existential grid:

Table 3: The Matrix of Needs and Satisfiers (Max-Neef, 1991; 2001)

Neede	Needs according to Existential categories			
Needs According to Axiological (values-based) categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Subsistence	Physical & mental health / balance / adaptability	Food / shelter / work	Feed / clothe / rest / work	Living environment / social setting
Protection	Care / adaptability / autonomy	Social security / health systems / family / work	Cooperate / plan / take care of / help	Living space / social space / dwelling
Affection	Self-esteem / solidarity /respect / sense of humour / generosity	Friendships / family / relationship with nature	Share / take care of / appreciate / express emotions	Privacy / intimacy / spaces of togetherness
Understanding	Critical consciousne ss / receptivenes s / curiosity /	Literature / teachers / education policy / communicati on policy	Analyse / study / investigate / experiment / meditate	Schools / families / universities / communities
Participation	Adaptability / determinatio n / passion / respect / receptivenes s	Rights / responsibiliti es / duties / privileges	Co-operate / dissent / express opinions / agree upon	Associations / communities / family / groups /

Leisure	Imagination / curiosity / receptivenes s / tranquility	Games / clubs / parties / peace of mind	Day-dream / remember / relax / have fun / play / reminisce	Landscapes / privacy / intimacy /
Creation	Imagination / boldness / inventivenes s / passion / determinatio n /	Abilities / skills / work / techniques	Invent / build / design / compose / interpret	Workshops / audiences / spaces for expression
Identity	Sense of belonging / self-esteem / assertivenes s	Language / customs / identity / sexuality / customs / values	Commit / integrate / grow / get to know oneself	Places one belongs to / everyday settings
Freedom	Autonomy / passion / self expression / tolerance / boldness / rebeliousnes s	Equal rights / diversity, equity and inclusion	Dissent / choose / take risks / be different from	Time and space choices

This is a perspective echoed by Martin Seligman in Authentic Happiness (2002): "I wonder if Positive Psychology will only appeal to people near the top of Maslow's hierarchy of basic needs." and also by Ryan & Deci (2000), who, in conceptualising Self-Determination Theory (SDT) define a need as either a physiological or psychological need, that, if met, promotes health and wellbeing, but, if not, contributes to ill health and ill-being. For Ryan & Deci (2000), all needs are incorporated into one of three categories:

- Competence
- Autonomy
- Relatedness

If, as Max-Neef asserts, there is no hierarchy of needs beyond subsistence, then human needs move from being conceptualised as a series of preferential extras on top of the basic human experience to those that help all human beings lead lives of fulfilment and flourishing. If they are essential for all human beings to lead fulfilling lives, they should be a fundamental concern for all workplaces. This ties Max-Neef's theory of needs closely into the realm of wellbeing studies then, given that "wellbeing is not the absence of mental illness" (Ryan & Deci, 2001). We all have unique needs alongside a desire to be well, be fulfilled and flourish.

In addition to conceptualising human needs horizontally and with greater equity, Max-Neef's conceptualisation of human needs and satisfiers goes beyond an identifying matrix, to showing the different ways in which each of the satisfiers (actions) an individual can take can be used to fulfil needs either positively or negatively, as is seen below in Table Four:

Type of Satisfier	Positive / Negative	Satisfier Function
Synergic	Positive	Fulfil several human needs
Singular	Positive	Fulfil a single human needs
Inhibiting	Negative	Over-satisfy certain needs
Pseudo-Satisfiers	Negative	Generate a false sense of satisfaction
Violators	Negative	Paradoxically destroys the capacity for fulfilling a need by promising to fulfil it.

Table 4: Table of Max-Neef's Satisfiers (Adapted from Max-Neef, 1991;Guillen-Royo, 2020).

The critical thinking required to self-determine which needs in Max-Neef's matrix one might be lacking in the workplace, as well as whether potential actions could serve as (preferably) synergic or singular satisfiers of needs, or, conversely, act negatively helps justify why such a conceptualisation is fundamental for a workplace-as-system to nurture a culture of wellbeing. To

meet one's needs, it is essential to first analyse one's current conditions. This examination is what Mezirow (2006, in Illeris, 2018) terms a "disorienting dilemma". Indeed, finding and applying synergic satisfiers to one's needs can be seen as a form of transformative learning (Mezirow, 2006, in Illeris, 2018).

It is worth noting that, at the time of writing, existing literature connecting Manfred Max-Neef et. al.'s Needs and Satisfiers (1991), Amartya Sen's Capability Theory (1993) and the concept of wellbeing is limited. Where this does exist in the literature, it can be found in the works of Rauschmayer, Omann & ühmann. (2011). More closely related to this paper it can be found in the work of Jerome Pelenc (2014), who explored the two concepts in conjunction with one another as a means to understand and improve the wellbeing of vulnerable teenagers in Paris. This paper too is focused on an educational context, albeit concerned with staff wellbeing as opposed to that of students.

If good teaching is creative because education fundamentally concerns learning (Robinson, 2013) and if good teaching is a "demanding and difficult discipline" (Freire, 1996) made more difficult by the stressful nature of the job (RWJF, 2016; Steiner & Woo, 2021; Will, 2021), it is in the best interests of school administrators to nurture a working environment that conscientiously analyses the relationship between individual needs and wellbeing as a means to promote creativity in its teachers. (Max-Neef, 1992; 2001).

#### 2.2 Towards a Taxonomy of Wellbeing

Promoting staff wellbeing, with a particular focus on stress management, is recommended as a core principle for improving whole-school wellbeing and mental health in the 2016 National Children's Bureau (UK) report (Stirling & Emery, 2016). In spite of this, a 2018 (Garland et. al.) report commissioned by the Anna Freud National Centre for Children and Families found that 75% of UK based school practitioners surveyed indicated that staff wellbeing was neither measured nor monitored in their workplaces.

If the responsibility of the workplace is to know how well staff are, alongside supporting staff to understand their bespoke needs and how to satisfy them positively, then it is of the utmost importance that schools know how to effectively collect useful data about how well their staff are. To do this, it is first important to define what wellbeing *is*, as well as to be mindful and specific with regards to which area of wellbeing to focus on. At its broadest level, wellbeing is defined by the World Health Organization as:

Mental health is a state of wellbeing in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. (WHO, 2018).

Interestingly, this differs from the proposed definition that the World Health Organization themselves offered in 2012 as an alternative to the one above that remains in use:

Wellbeing exists in two dimensions, subjective and objective. It comprises an individual's experience of their life as well as a comparison of life circumstances with social norms and values. (WHO, 2012).

#### 2.2.1 Objective Wellbeing

According to Eger and Maridal (2015), objective wellbeing is concerned with social or economic factors that can be interpreted at a macro level as indicators of quality of life, a view also shared by Freimann, Ham & Mijoč (2014). Voukelatou et. al. (2020) (citing Reinhart & Reinhart, 2010) indicate that gross domestic product (GDP) has traditionally been used as a barometer of societal, objective wellbeing. Since the publishing of The Commission on the Measurement of Economic Performance and Social Progress (CMEPSP) (Stiglitz, Sen & Fitoussi, 2009), trends have emerged to move away from GDP as a reliable measure of objective wellbeing.

Given that Amartya Sen is one of the three co-authors of CMEPSP, it is unsurprising that many of the recommendations made to modify GDP as a catch-all determiner of objective wellbeing connect to Sen's Capability Approach. Capability Approach adds complexity to the GDP-as-objective-well being paradigm, in that it takes into account an individual's capacity to achieve what they choose to (Sen, 1993; Dang, 2014). The Capability Approach also seeks to highlight the importance of "ends over means" (Sen, 2000; Stanton, 2007; Garcés Velástegui, 2020). Indeed, the consequences of Sen's work can be seen in the use of both the Human Development Index and the later Gender Development Index (Stanton, 2007; UNDPHDR, nd).

One of the hallmarks of objective wellbeing is that it is third-party observed (Viac & Fraser, 2020), making it impossible at a practical level for individuals to use for self-reporting or self-evaluating purposes. For this reason, the majority of workplace wellbeing programmes focus on the branch of wellbeing related to subjective wellbeing.

#### 2.2.2 Subjective Wellbeing

Unlike objective wellbeing, subjective wellbeing is concerned with an individual's subjective experience of their own lives (Diener & Suh, 1997; Eger & Maridal, 2015). Russell (2008) shows that the relationship between subjective wellbeing and performance in the workplace is complementary, even if it remains unclear which causes the other, in chicken-or-egg fashion. One of the hallmarks of subjective wellbeing theories is that there is a distinct lack of consistency regarding how to define subjective wellbeing (Eger & Maridal, 2015; Carter & Anderson, 2019). Tang, Tang & Gross (2019) identify psychological wellbeing as containing aspects of both hedonic (pleasure) and eudaimonic (fulfilment), whilst adding the further concept of resilience to their definition. Chen et. al. (2012) liken subjective wellbeing to Hedonic Wellbeing. Eger and Maridal (2015) offer further semantic confusion with the term "affective wellbeing" in place of Hedonic Wellbeing, alongside "evaluative wellbeing" in place of objective wellbeing.

Given the confusion surrounding the nomenclature of wellbeing, which has been characterised as "blurred and overly broad" (Forgeard, Jayawickreme, Kern & Seligman, 2011; Dodge, Daly, Huyton & Sanders.2012), this paper uses subjective in the sense of being the opposite of objective; subjective wellbeing as distinct from objective wellbeing, as per Weijers (2011). The discussion of the two branches of subjective wellbeing, namely Hedonic Wellbeing and Eudaimonic Wellbeing as laid out by Ryan & Deci (2001) continue below, as, whilst both hedonic and eudaimonic elements of wellbeing remain important for understanding (Henderson, Knight & Taylor, 2013), explaining them as distinct from one another leads to an improved understanding of both, as Straume & Vittersø (2012) indicate.

#### 2.2.3 Hedonic Wellbeing

Using Ryan & Deci's (2001) conceptualisation, Hedonic Wellbeing is concerned with the happiness and pleasure an individual experiences, a belief they trace to the Ancient Greek world and the works of Aristippus, who saw pleasure as a teleological end in and of itself (O'Keefe, n.d.). Within modern wellbeing theory, Hedonic Wellbeing is concerned with more than pure pleasure-seeking. Diener & Suh (1997) caution against this conceptualisation as "frivolous hedonism", instead advocating for a sense of satisfaction from an individual's most important goals. There appears to be practical advice for workplaces here, then, as is shown in the research of O'Malley (2019), with the tenets of "help workers pursue their passions" and "empower people to own their work" linking back strongly to Diener & Suh's (1997) perspective. This takes into account Kubovy's (1999) distinction between pleasures of the body and those of the mind.

Diener & Suh (1997), Kahneman, Wakker & Sarin (1997), Ryan & Deci (2001) and Veenhoven (2016) also trace the origins of Hedonic Wellbeing to the philosophy of utilitarian Jeremy Bentham, who asserts that pleasures and the avoidance of pain are the individual's ultimate goal, and thus, the individual should be aware of the value of both in an evaluative sense (Bentham, 1789). Kahneman et. al. (1997) show that Hedonic Wellbeing can be measured, using the metrics propose of "total and remembered utility". These refer to a momentary hedonic state rather than overall life satisfaction, a form of measurement that Kahneman, Diener & Schwarz (1999) go on to describe as "formidable". This echoes the earlier work of Diener (1984), who collected a total of eighteen different wellbeing scales proposed by different researchers,

each of which is influenced by the mood of the respondent at the time of responding (Diener, 1984), thus returning to the question of "which measure to use?" (Kahneman et. al., 1999), a question that remains relevant when considering Diener, Emmons, Larsen & Griffin's Satisfaction with Life Scale (SWLS) (1985).

Veenhoven (2000; 2004; 2016) offers additional clarification regarding such needs for measurement, by breaking down wellbeing into a quadrant matrix, as is shown below in Table Five:

	Outer qualities	Inner qualities
Life chances	Livability of environment	Life-ability of the person
Life-results	Utility of life	Appreciation of life

Table 5: Veenhoven's (2000) Quality of Life Matrix

Veenhoven (2004) connects the top-right quadrant with Sen's (1993) concept of capability. This can also then be connected back to Max-Neef's Needs and Satisfiers (1991), as each of the four elements of Veenhoven's quadrant require the ability for an individual to actualise both subsistence and non-subsistence needs in order to achieve 'quality of life'.

In recent years, there has been a significant movement away from the happiness / Hedonic Wellbeing teleological end by many of its earlier researchers, with happiness / Hedonic Wellbeing being considered an aspect of life satisfaction. This can be seen in Table Six below, which includes Veenhoven's (2016) additional quadrant, showing four different satisfactions in life:

	Passing	Enduring
Life Domains	Pleasure	Domain-Satisfaction
Life as a Whole	Peak Experience	Life-Satisfaction

#### Table 6: Veenhoven's (2016) Four Kinds of Satisfaction with Life Matrix

In making this distinction, Veenhoven helps to reminds us that the responsibility of the workplace is not to create happiness-as-pleasure. Rather, domain satisfaction in the workplace is a greater concern for the workplace, given that doing work that matches a person's values can improve said person's workplace wellbeing (Bérubé et. al., 2016). That the Hedonic Wellbeing of an individual is not the responsibility of the workplace should come as comfort when taking into account Lyubomirsky, Sheldon & Schkade's (2005) research that shows that human beings have a "happiness set point", which accounts for approximately 50% of an individual's subjective wellbeing. A further 10% is accounted for by circumstances (specifically the circumstances or experiences a person has had throughout their life) and 40% by "intentional activity". It is thus only this 40% of an individual's overall happiness that has scope to be affected either positively or negatively by their workplace.

Kahneman too has shifted his focus away from pure hedonic happiness towards satisfaction with life, recognising that satisfaction with life in the experiential sense was of greater importance to most people than pure happiness (Kahneman & Mandel, 2018), in turn leading Kahneman's research in new directions (Kahneman & Cowen, 2018). Kahneman attributes this difference to the dichotomous relationship between the "experiencing and remembering self" (Kahneman & Riis, 2005; Kahneman, 2010).

#### 2.2.4 Eudaimonic Wellbeing

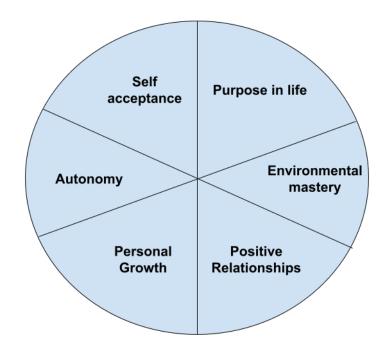
Whilst Ryan & Deci (2001) maintain the Aristotelian distinction of eudaimonia from hedonia by means of virtue, they also go further, asserting that Eudaimonic Wellbeing is concerned with the "actualization of human potentials". In this light, it is clear to see that Eudaimonic Wellbeing is distinct from Hedonic Wellbeing in

that it seeks to allow each individual to be their 'best selves'. This connects most closely with the Aristotelian concept of eudaimonia. As Aristotle states, it is: "human good turns out to be activity of the soul in accordance with virtue". (Aristotle, 350BCE, Tr. Ross, 1925)

Kraut (2015) offers sage advice when considering the concept of Eudaimonic Wellbeing:

The Greek word [eudaimonia] is unmistakably a term of evaluation, [...] To be eudaimon, then, is [...] asking whether she is living well. And that of course depends on what kind of life she has. One cannot assess how well someone's life is being lived unless one knows what good things or bad things are in it.

Eudaimonic wellbeing, then, seeks to, as Kraut (2015) suggests, evaluate how an individual might maximise their human potential. Eudaimon, then, is a state of being as much as Eudaimonic Wellbeing is a psychological school of thought. To be eudaimon requires an individual to be critically aware of what their needs are (Max-Neef, 1991), what their capabilities are (Sen, 1993), and to be able to act virtuously to achieve them (Aristotle, 350BCE, Tr. Ross, 1925; Ryan & Deci, 2001). When proposing her core dimensions of wellbeing model, shown below in Figure One, Ryff (1989) asserts in her discussion that of each of the six dimensions she identifies, it is perhaps Personal Growth that most closely resembles Aristotle's original concept of eudaimonia.



## Figure 1: The Six-Factor Model of Core Dimensions of Wellbeing (adapted from Ryff 1989; 2013)

#### 2.2.5 Eudaimonic Wellbeing in the Workplace

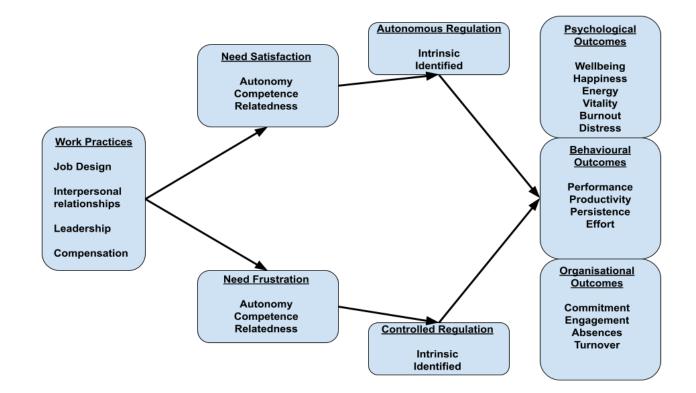
Whilst Ryff refers neither to Max-Neef (1991) nor Sen (1993) in her later works (it is important to note that her earlier work (1989) predates Max-Neef's and Sen's), synthesising the three theories of Max-Neef et. al.'s Needs and Satisfiers (1991), Sen's Capability Theory (1993) and Ryff's Core Dimensions of Psychological Wellbeing (1989; 2013), helps to create a greater understanding of Eudaimonic Wellbeing in the context of the workplace.

An important means of bridging Ryff's (1989; 2013) Six-Factor Model to the ideas of Max-Neef et. al. (1991) and Sen (1993) in a eudaimonic workplace is to consider the work of Ryan & Deci (2000). Ryan & Deci (2000) categorise all human needs into the dimensions of: Autonomy, Competence, and Relatedness. If these are umbrella categories through which Eudaimonic Wellbeing in the workplace can be understood, then the workplace must both meets these needs, as well as design a workplace environment that actively promotes autonomy, competence and relatedness. Manganelli, Thibault-Landry, Forest & Carpentier(2018) highlight three key areas for any workplace to focus on to encourage the self-determination aspects (autonomy, competence and

relatedness) of employees, namely "Job Design; Interpersonal Relationships & Leadership; Compensation". These focus areas are supported by Deci, Olafsen & Ryan's (2017) meta-analysis of the application of Self-Determination Theory in the workplace. In summarising the collective findings, they recommend improving both the workplace performance of staff and their hedonic and Eudaimonic Wellbeing via three principles:

- Allowing employees to gain both confidence and competence over time in the workplace.
- Give employees the freedom to experiment, as opposed to feeling pressured to behave as directed.
- Feel that they are respected and belong as part of the workplace, both with supervisors and peers.

Conversely, a workplace environment that implements policies and practices that do not promote these principles almost certainly either demotivates or amotivates its workforce (Deci et. al., 2017). Whether taking a net positive or negative approach, the consequences of workplace practices and policies are exemplified below in Figure Two, through Manganelli et. al.'s (2018) input-output diagram for workplace wellbeing.



### Figure 2: Framework for Processes by which Workplace Practices may lead to Outcomes (adapted from Manganelli et. al., 2018)

Another aspect of workplace Eudaimonic Wellbeing worth considering is the role that effort plays in worker satisfaction. Waterman (2005) found that people experience a greater sense of Eudaimonic Wellbeing when performing "high-effort-liked" activities, compared to "low-effort-liked" ones. This could be further linked to the work of Straume & Vittersø (2012) who assert that interest and pleasure are distinct emotions, even if they are both seen as positive ones. Straume & Vittersø (2012) refer to the positive relationship between absorption in a task and attention span, which Csikszentmihalyi (1990) terms "flow":

Most enjoyable activities are not natural; they demand an effort that initially one is reluctant to make. But once the interaction starts to provide feedback to the person's skills, it usually begins to be intrinsically rewarding.

What Straume & Vittersø (2012) describe here then, as Waterman (2005) also does is, in keeping with Csikszentmihalyi's conceptualisation, that Eudaimonic Wellbeing is best achieved when experiencing significant periods of "flow". To be eudaimon requires each individual to ask if they are living well (Aristotle,

350BCE, Tr. Ross, 1925), to consider whether they are actualising their potential as a human being (Ryan & Deci, 2001), or "self-actualising" (Ryan & Deci, 2000). Using Csikszentmihalyi's (1990; 1997) concept of flow, illustrated below in Figure Three, provides a useful means for an individual to consider if they are eudaimon at any given moment.

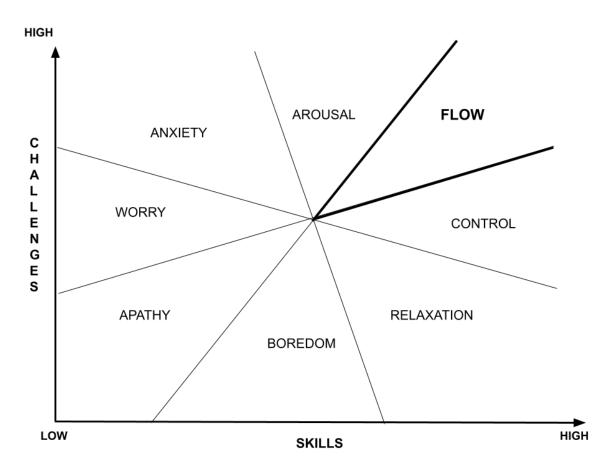


Figure 3: The FLOW Model (adapted from Csikszentmihalyi, 1990; 1997)

Seligman (2011) takes "effort", "absorption" or "flow" and incorporates it into his PERMA mnemonic for overall Eudaimonic Wellbeing, relating it to the catch-all term of "Engagement":

**P** - **Positive Emotions** - experiencing joy, gratitude, love in the present moment.

E - Engagement - being absorbed, in a state of 'flow' whilst engaged in activities.

R - (Positive) Relationships - maintaining positive relationships with others.

M - Meaning - feeling as if one is a part of something bigger than oneself.

**A - Accomplishment** - achieving a sense of mastery over a particular area of interest, or achieving one's work and life goals.

#### 2.3 Eudaimonic Wellbeing and Change

Returning to the consideration that the COVID-19 pandemic has "shattered patterns and norms" in education (Zhao, 2020), that one of the core aspects of being eudaimon is to engage in personal growth (Ryff, 1989; Ryan & Deci, 2000) serves to highlight that it is important to consider Eudaimonic Wellbeing related to change. Given that teachers have lower perceived control over their wellbeing than other professions (Grenville-Cleave & Boniwell, 2012) and that teaching is associated with high levels of stress (Skaalvik & Skaalvik, 2010), managing changes so that they are perceived as positive opportunities to grow remains an ongoing challenge in schools.

Jennings et. al. (2017) have shown that it is possible to reduce teacher stress and burnout through the application of the CARE (Cultivating Awareness and Resilience in Education) programme, whilst Carroll et. al. (2012) show that improving the wellbeing of teachers can have a positive impact on the outcomes and achievements of students. Given that Madigan & Kim (2021a) show that increased job satisfaction correlates inversely with teachers' intentions to quit teaching, administrators and teacher managers must work mindfully to reduce burnout and increase wellbeing in teachers if they are to navigate changes in the industry successfully.

#### 2.3.1 PERMA Framework

Martin Seligman conceptualises PERMA as a framework for Eudaimonic Wellbeing (2008). As such, it offers significant utility as a diagnostic factor for several aspects of Eudaimonic Wellbeing in the workplace. It is worth cautioning that significant utility is not the same as infallible utility as a wellbeing model. Since Seligman's conceptualisation of the PERMA framework (2008; 2011), additions to the model have been made. Zhivotovskaya incorporated V - Vitality into the model (Brecher, 2016); Kern incorporated H - (physical) Health into the model (Kern, 2020). The most recent iteration, developed by Donaldson et. al. (2022) proposes a more comprehensive amendment to Seligman's original model, termed the PERMA+4 Model. The four additional dimensions that Donaldson et. al. add, along with the supporting theorists, are:

- Physical Health (in a similar manner to Kern (2020))
- Mindset (drawing on Dweck's (2006) work on Growth / Fixed Mindset)
- Working Environment (Drawing on the work of Sander, Rafferty & Jordan (2021)) on the relationship between the physical working environment and one's ability to flourish.
- Economic Security or Financial Wellbeing (Zemtsov & Osipova, 2016)

The use of variations of the PERMA Framework in educational settings has shown it can have beneficial effects on the wellbeing of students (Au & Kennedy, 2018). Kern (2020) notes that the PERMA-H framework has served as a useful mechanism among many for incorporating positive psychology principles within schools. Turner & Thielking (2019) showed that incorporating PERMA practices in schools had positive knock-on effects on both teaching practices and student learning, which Turner et. al. (2021) developed further on to show that incorporating PERMA into the workplace improved teacher perception of wellbeing and improved teaching practice. A particular benefit was found related to teachers looking for positive aspects in students' work and increased perception of student learning in teachers' classes. Perhaps the most comprehensive approach taken within a school setting is that of Geelong Grammar School (GGS) in Australia, through their programme of Positive Education (Williams, 2011, Norrish, Williams, O'Connor & Robinson, 2013). The GGS Framework feeds into six different domains of positive psychology via three input processes: "Live it, Teach it, Embed it" (Norrish et. al., 2013)

#### 2.3.2 Growth Mindset & Resilience

Another important area to consider when looking at the relationship between Eudaimonic Wellbeing and change is that of Growth Mindset. First proposed by Dweck (2006), Growth Mindset advocates the belief that one's ability to achieve something can be developed over time (Dweck & Yeager, 2019). Dweck (2006) asserts that:

[when] teachers and students change to a growth mindset, they change from a judge-and-be-judged framework to a learn-and-help-learn framework. Their commitment is to growth, and growth takes plenty of time, effort, and mutual support to achieve and maintain.

Several studies have shown the positive relationship that a growth mindset in teachers can improve both teacher wellbeing along with student achievement outcomes. Shoshani (2021) has shown that a year-long growth mindset programme for maths teachers in Israel improved both teacher satisfaction and wellbeing, as well as better grades reported for the students working with teachers in the programme, as opposed to those in the control group. Nalipay, King, Mordeno & Wang (2020) have shown that a growth teaching mindset has a positive effect on the wellbeing of teachers and their perception of their teaching ability in the Philippines. Zeng, Chen, Cheung & Peng (2019) show that teachers holding a growth mindset provided a clearer predictor of wellbeing as well as of effort in a Chinese school context.

All three studies allude to the importance of perseverance as an important factor in teachers finding their work 'engaging', a state which can be seen as a synonym for Csikszentmihalyi's (1990; 1997) state of "flow". Given that significant periods of flow are closely correlated with being eudaimon, a growth mindset is an irrefutable factor in Eudaimonic Wellbeing. Shernoff & Csikszentmihalyi (2009) suggest as much in Flow in Schools:

Perhaps the most central condition for flow experiences to occur is that the challenge of the activity is well matched to the individual's skills. That is, the challenges and skills are high and in balance - individuals stretch their skills to their limits in pursuit of a challenging goal.

Paramount to achieving such periods of flow then is the idea of resilience, so that the person in question might work towards being successful at the challenging activity whilst not being overcome by the face of change. Yeager & Dweck (2012) connect resilience to the idea of Growth Mindset. Leithwood, Harris & Hopkins (2008) identify resilience as one of the core characteristics of leadership practices seen in all successful schools, whilst Di Fabio & Palazzeschi (2015) have shown that it has an overall positive effect on wellbeing. Going further, Gu & Day (2006) identify resilience as a fundamental aspect of what it means to be a teacher, adding further fuel to the claim that wellness policies must be directed toward both students and teachers if they are to be effective (Ott, Hibbert, Rodger & Leschied, 2017). McCrea, Walton & Leonard (2014) offer a useful distinction between wellbeing as a form of evaluating at a specific place in time, with resilience referring instead to the processes that may improve wellbeing over time.

#### 2.3.3 Eudaimonic Wellbeing and Lewin's 3-Step Model

When considering resilience, it is important not to just consider it at the individual level, as a characteristic that will improve the wellbeing of a person. If any wellbeing implementation programme or policy is to be successful, then it must also be resilient, i.e. resistant to, the demands placed on it by significant external changes. This is particularly important in a post-pandemic landscape, where teachers and students have lived experiences of the pre, during and post-pandemic nature of school. Zhao (2020) identifies the pause in schooling as an opportunity to reimagine education, albeit one with a limited time window before schools return to operating as they did pre-pandemic.

Highsmith (2020) likens the Covid-19 pandemic to the biological phenomenon of Punctuated Equilibrium, placing a high value on adaptability as a key requisite for future developments. Gersick (1991) gives a highly usable definition of the phenomenon as "relatively long periods of stability (equilibrium), punctuated by compact periods of qualitative, metamorphic change (revolution)." Parsons & Fidler (2005), who, building on the earlier work of Tushman & Romanelli (1985), were the first to place this concept squarely in an educational setting. They identify two different types of revolutionary change:

- External (of which the Covid-19 pandemic would be one)
- Internal (such as the installation of a new chief executive)

White & McCallum (2021) call into question whether the educational revolution brought about by the pandemic will serve as either crisis or catalyst. Teachers learned much during the pandemic. Pitt, Li & Klein (2020) rightly predicted that virtual learning, a focus on wellness and students as agents of their learning would outlast mandatory distance learning. Given that mandatory online learning negatively impacted both teachers (Reich et. al., 2020) and students (Schwartz et. al, 2021; Rao & Rao, 2021) it is little wonder that there is hope for a better normal in its aftermath.

It is to this end that Arora (2021) refers to Lewin's 3-Step Model for change management, shown below as Figure Four, as a means to adjust to life after the COVID-19 pandemic:

- Unfreeze create dissatisfaction with the status quo
- Move / Change provide solutions and a vision for a new normal
- Refreeze Secure the changes made to prevent regression to the 'old normal'

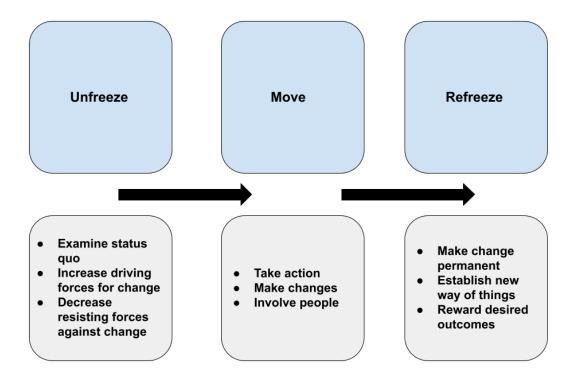


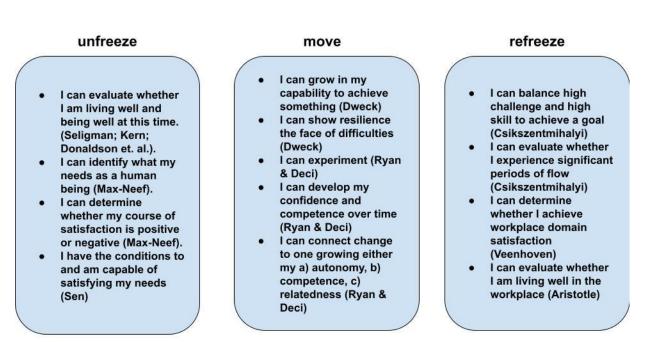
Figure 4: Lewin's 3-Step Model for Change (adapted from Lewin, 1951; Cameron & Green, 2009)

Given that the focus of this paper is to improve the Eudaimonic Wellbeing in a specific workplace, it is fair to assert that the unfreezing process has already begun. The implementation of the Lewin model requires research, as is presented within this paper, as well as performing a learning function (Batras, Duff & Smith, 2016). The Lewin model asks each individual in an organisation to question the pre-existing norms that are currently in place, as well as to reinforce new ways of doing things (Dawson, 2014), which in turn requires new attitudes to be embedded (Schein, 1996, in Dawson, 2014).

#### 2.4 Synthesis of Theoretical Framework

It is clear that there are multiple conditions that give rise to periods of fulfilment, flourishing, flow, which can otherwise be known as the state of being eudaimon. Given that each of these states, here treated synonymously, are subjective in nature, then it is important that each individual person is able to self-determine whether they have achieved these states or not. The need for such critical self-reflection to actualise such a state of being calls into mind the work of Albert Bandura and the concept of self-efficacy. This builds on the "commitment to growth" of Dweck's (2006) Growth Mindset and Csikszentmihalyi's (1990; 1997; 2009) assertion that states of flow require a balance of high challenge and high skill. Bandura's (2006a) self-efficacy principle builds on this, by determining that "self-efficacy is concerned with perceived capability." The individual in question must believe that they can achieve the thing in question in order to make the challenge feasible. Bandura goes further, connecting self-efficacy with individual agency, that is to say, the ability of an individual to take action. Bandura (2006b) argues that people need to believe in their ability to make things happen if they are to be self-incentivised to work towards them.

Skaalvik & Skaalvik (2010), citing Bandura (2006a), assert that such self-efficacy statements should be framed with I-as-object, as they (the individual in question) are of primary importance to the person to whom they are asked, as well as each statement providing a form of incremental challenge, given that "a resilient sense of efficacy requires experience in overcoming obstacles through perseverant effort" (Bandura, 1994). Applying this principle of I-statements to the theoretical framework presented, a scaffolded series of challenges to help people move to a state of flourishing, flow or being eudaimon becomes clear. Such a scaffold, along with each responsible theorist, exists below as Figure Five, in the form of the author's Workplace Wellbeing Scaffold, which is placed within a framework reminiscent of the Lewin Model of change:



#### Resilience: I believe that I can do this (Bandura)

#### Figure 5: Workplace Wellbeing Scaffold (WWS) framed as a Lewin Model

In structuring the various theories related to and designed to improve upon Eudaimonic Wellbeing in the workplace, the aim is to provide any user of the WWS a working means to improve their workplace wellbeing. Given the importance of self-efficacy for achieving a state of eudaimonia, Bandura's (1994, 2006a, 2006b) ideas permeate across the scaffold. Each stage of the unfreeze > move > refreeze model requires the individual's self-efficacy in the form of I-statements, as well as in the form of resilience running through each stage of the scaffold, as such self-examination could ultimately lead to existential "disorienting dilemmas" (Mezirow, in Illeris et. al., 2018). In the WWS, Bandura's self-efficacy is analogous to time, with each stage of the model requiring development from the preceding stage. Whilst one of the drawbacks of the Lewin Model is its linear approach to time (Dawson, 2014), the punctuated equilibrium of teaching practice (Parsons & Fiddler, 2005), best exemplified since 2020 with the Covid-19 pandemic, requires periods of stasis, punctuated by rapid reimaginings. In order to navigate such changes, a permeating sense of resilience is imperative (Gu & Day, 2006).

#### **3 METHODOLOGY**

#### 3.1 Research Method

This thesis seeks to determine how well the community of staff in the focus school are along a range of dimensions. These dimensions include the collective sense of wellbeing in the present moment (how well are we now?). A parallel dimension necessary to determine are the individual needs of each worker who combine to make the collective 'we' in a workplace domain context (Veenhoven, 2016; Berubé et. al., 2016). A final dimension to consider alongside the individual and collective dimensions are the effects that intentional, research-based change can have on Eudaimonic Wellbeing. Given that these dimensions need to be considered as interdependent, the use of a pragmatic research method is likely to help in the endeavour to gather the most useful, applicable information for this thesis. A pragmatic research method is premised on the caveats that:

- Actions cannot be separated from the situations and contexts in which they occur
- The consequences of actions can change as situations can change
- Although no two individuals' worldviews are identical, there exist shared experiences that lead to shared beliefs (Morgan, 2014).

Given that the focus of this paper is humanistic, with a stated aim to affect change in human beings by applying the research, a pragmatic research method is a suitable fit. A pragmatic research method prioritises both the usefulness of the outcome, alongside the need to build just institutions (Kaushik & Walsh, 2019). Since one of the key concepts that underpins this investigation is Manfred Max-Neef's Human Needs Theory, it is beneficial that Morgan (2014) identifies that some epistemological beliefs are more likely to meet an individual's goals and needs, echoing Max-Neef's distinction between different satisfiers, pseudo-satisfiers and violators (Max-Neef, 1991). Biesta (2010) reminds us that data, not research, can be said to be truly qualitative or quantitative, indicating that the importance is on the interpretation of said data.

Just as Morgan (2014) asserts that "actions cannot be separated from the situations and contexts in which they occur", so too the role of the researcher cannot be separated from the research conducted. Given that the research

conducted in this thesis by the researcher is centred on the workplace of the researcher, it is important to consider the guiding principles that underpin both the central research question posed (**What are the conditions required for a sustainable culture of Eudaimonic Wellbeing?**) and also the research methods undertaken to seek answers to such lines of inquiry. Teddlie & Tashakkori (2009) provide multiple, overlapping reasons for conducting research in their Typology of Reasons for Conducting Research, shown below in Table Seven.

# Table 7: Teddlie & Tashakkori's Typology of Reasons for ConductingResearch

A: Personal Reasons			
<ol> <li>To Advance your Career</li> <li>To Satisfy Your Curiosity about a Phenomenon of Interest</li> </ol>			
B: Reasons Associated with Advancing Knowledge			
<ol> <li>To Generate and Test New Ideas and Innovations</li> <li>To Develop Causal Explanations</li> <li>To Understand Complex Phenomena</li> <li>To Make Predictions</li> </ol>			
C: Societal Reasons			
<ol> <li>To Improve Society and its Institutions</li> <li>To Empower Disadvantaged Groups or Constituencies</li> </ol>			

When considering such underlying principles, it is evident that there are three key underlying reasons for the researcher to pursue answers to the central research question being asked. Wellbeing has been shown to be a complex phenomenon, with many interrelated personal, collective and workplace policy decisions interacting to ultimately influence how well people are at any given time. Given that this research has been commissioned to seek to improve the overall perception of wellbeing in the workplace, the research is guided by an underlying principle to improve the societal institution that is the school in question. The final underlying reason that underpins the research conducted is to develop causal explanations. Given that the final two subsidiary research questions asked in this thesis (What changes need to be made for a culture of

wellbeing to flourish?) and (What are the long-term legacies of a well-implemented Eudaimonic Wellbeing culture on learning?) are causal in nature, the central research question is underpinned by a need to evaluate the causal relationship between potential changes in policies implemented by the school (action) and the effects they have on workers.

Recognising that the central research question seeks to find answers that will improve the institution in question, clarify the relationship between working conditions and eudaimonic wellness and help to understand the complexities of eudaimonic wellbeing means that choosing the most appropriate form of pragmatic research method is essential. This becomes particularly difficult when recognising that although causal relationships are one of the underlying assumptions of the research question, how such causality manifests itself in individuals are subjective, not objective experiences. As Hesse-Biber (2009), notes:

one of the most common mixed methods designs is triangulation (QUAN + QUAL). This design is employed when a researcher seeks to validate quantitative statistical findings with qualitative data results. Yet the assumption underlying triangulation is the positivistic view that there is an objective reality in which a given truth can be validated.

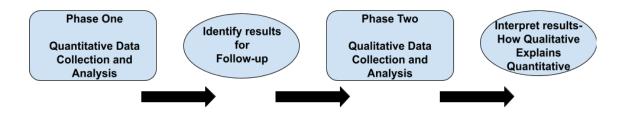
Given that it has already been established in the literature review of this thesis that eudaimonic wellbeing is both subjective to each individual and requires the self-efficacy of the individual in question to be improved, to attempt to triangulate objective truths is at best foolhardy and at worst disrespectful of the participants. Put simply, the subjective experiences of individuals cannot be triangulated into objective truths. Instead, a more just means of analysis is to use the qualitative stage as a means to identify broader recurring themes and trends, in comparison with the quantitative data (Wisniewska, 2011). This distinction is elaborated on by Johnson & Onwuegbuzie (2004) in their General Characteristics of Pragmatism. For the purpose of this research, three key tenets stand out:

• Views current truth, meaning, and knowledge as tentative and as changing over time. What we obtain on a daily basis in research should be viewed as provisional truths.

- Capital "T" Truth (i.e., absolute Truth) is what will be the "final opinion" perhaps at the end of history. Lowercase "t" truths (i.e., the instrumental and provisional truths that we obtain and live by in the meantime) are given through experience and experimenting.
- Organisms are constantly adapting to new situations and environments. Our thinking follows a dynamic homeostatic process of belief, doubt, inquiry, modified belief, new doubt, new inquiry, . . . , in an infinite loop, where the person or researcher (and research community) constantly tries to improve upon past understandings in a way that fits and works in the world in which he or she operates. The present is always a new starting point.

If Johnson & Onwuegbuzie's (2004) tenets are held to be true, then a mixed-methods research paradigm is an appropriate mechanism for first collecting, then analysing data gathered to answer the central research question. The research findings will be able to identify themes (Wisniewska, 2011), or lower-case 't' truths taking into account the ever-evolving dialectic of change in response to new situations and environments. (Johnson & Onwuegbuzie, 2004). The Qualitative analysis will therefore focus on comparison in relation to the Quantitative data, with the purpose of eliciting time-and-place dependent trends and lower-case truths in the workplace in question.

Once the need for pragmatism in the research design had been established, as well as the need for individuals to be able to have access to and to interpret their perceptions of their own wellbeing, as recorded in their individual responses to the PERMA+4 survey, it became clear that a sequential mixed-methods research design was necessary to conduct effective research. As such, the structure of the research method mirrors Creswell & Creswell's (2018) Explanatory Sequential (Two-Phase) Design, shown below as Figure Six.



# Figure 6: Explanatory Sequential (Two-Phase) Mixed Methods Design (adapted from Creswell & Creswell, 2018)

The aim of adopting such a two-phase, mixed methods design is to be able to achieve the most useful, pragmatic outcomes for both the test community-as-institution as a whole and also for each participant and their individual needs (Teddlie & Tashakkori, 2009). Given that the first stage of the Workplace Wellbeing Scaffold indicates a need to identify how well people are in a specific moment in time, quantitative data is most appropriate at this point.

Once the quantitative wellbeing data was collected, analysed and synthesised into personalised radar charts for each qualitative participant (See Appendix 5) seeking to improve the Eudaimonic Wellbeing of the participants became the focus, necessitating a qualitative data collection method. The second, qualitative phase of the research was undertaken using a narrative method in the form of semi-structured interviews. Given that each of the participants at the qualitative stage was describing a unique phenomenon, namely their sense of Eudaimonic Wellbeing in the workplace in May 2022, a narrative research method in the form of interviews was appropriate (Creswell & Creswell, 2018). To create consistency between interviews, the structure of the interviews followed a uniform model of 5 specific phases:

- A discussion of the individual's PERMA+4 scores and their perception of them.
- Identifying which of the individual's PERMA+4 dimensions they would like to focus on.
- Identifying which of Max-Neef's (1991) Matrix of Needs the individual felt were not currently being satisfied.

- Identifying what changes could be made so that their needs could be met more effectively.
- Recording the actions that could be taken in the form of I-Statements

Once the individual, qualitative interviews were completed, the final stage of the research method could be implemented. This necessitated returning to the qualitative interviews in order to first observe, then subsequently seek to understand, the emergent themes inherent within the qualitative data (Teddlie & Tashakkori, 2009). Braun & Clark (2006) outline a six-step process for the researcher to undertake in order to synthesise such information from qualitative data:

Phase 1 - Familiarising yourself with the data: until you are familiar with the breadth and depth of the content.

Phase 2 - Generating initial codes: organising data into meaningful groups.

Phase 3 - Searching for themes: reorganising codes into potential themes.

Phase 4 - Reviewing themes: considering whether coherent patterns emerge within themes, whilst also considering whether significant distinction exists between themes.

Phase 5 - Defining and naming themes: conducting and writing a detailed analysis for each identified theme.

Phase 6 - Producing the report: going beyond description of the data, and making an argument in relation to each theme and the research question.

The application of Braun & Clark's (2006) six phases to the qualitative research collected via interviews is elaborated on further in Section 3.4.

## 3.2 Participants

This study was conducted with a focus on the employees of an international school in São Paulo, Brazil. As such, the first stage was to send out the PERMA+4 Positive Functioning at Work Scale survey to all staff working for the international school in question. This was done via email, with an explanatory message in both English and Portuguese (Appendix One). Before completing the PERMA+4 survey, all participants were asked to self-identify their job title,

role within the organisation, length of time at the organisation and current role (Appendix Two). In addition, which campus the respondents principally worked at was also asked, as the international school in question operates out of two distinct sites. In total, 58 employees responded to the survey, who can be organised into the groups seen below in Table Eight:

Principal place of work	Site A: <b>55</b> (94.8%)		Site B: <b>3</b> (5.2%)			
Number of Years Working for company	0-3 <b>18</b> (31%)	4-6 <b>10</b> (17.2%)	7-9 <b>6</b> (10.3%)	10-12 <b>10</b> (17.2%)	12-15 <b>1</b> (1.7%)	15+ <b>13</b> (22.4%)
Number of Years in current role	0-3 <b>20</b> (34.5%)	4-6 <b>10</b> (17.2%)	7-9 <b>8</b> (13.8%)	10-12 <b>5</b> (8.6%)	12-15 <b>1</b> (1.7%)	15+ <b>14</b> (34.5%
Role within company	Pedagogical <b>48</b> (82.7%)		Administrative <b>10</b> (17.3%)			

 Table 8: Participant Summary (Quantitative Phase)

Given that the vast majority of participants work at Site A of the international school, the original intention of comparing the Eudaimonic Wellbeing of the two sites of the company became unfeasible due to the statistically insignificant number of participants from Site B. Therefore, the decision was made to consider all 58 respondents as representative of the employees for creating baseline wellbeing scores. This also applies to the participants in the 12-15 year bracket for both number of years working for the company and also the number of years in their current role. With only one employee self-identifying as part of this category, this group was amalgamated into the 15+ group to be of greater statistical significance. As such, this group shows up as 12+ Years in **Section 4**.

Once quantitative data had been collected from the respondents, an invitation to a follow-up coaching session was sent out to those who expressed an interest in the follow-up session (Appendix Three). Of the 47 participants who expressed an interest in a follow-up session at the end of the first stage of data collection, 9 signed up to take part in the wellbeing coaching sessions. Each participant chose a 60-minute time slot, with the coaching session scheduled to take approximately 45 minutes. A summary of the nine participants can be found below in Table Nine:

Participant	Number of Years in Company	Number of Years in Current Role
Participant A	0-3 Years	0-3 Years
Participant B	0-3 Years	0-3 Years
Participant C	4-6 Years	0-3 Years
Participant D	0-3 Years	0-3 Years
Participant E	12+ Years	12+ Years
Participant F	12+ Years	12+ Years
Participant G	10-12 Years	12+ Years
Participant H	0-3 Years	7-9 Years
Participant I	7-9 Years	4-6 Years

 Table 9: Participant Summary (Qualitative Phase)

# 3.3 Data Collection

In keeping with a pragmatic, mixed methods research method, data was collected in two stages. The first stage consisted of collecting quantitative, scalar data through the means of the PERMA+4 Positive Functioning at Work Scale. The PERMA+4 survey is scored on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale, with sets of questions related to each of the nine dimensions of PERMA+4. Before completing the PERMA+4 Survey, participants were asked a series of preliminary questions about their role within the company and how long they had worked both for the company and in their present role (Appendix Two). Following on from these questions, The PERMA+4 survey was provided to all participants simultaneously in both English (Appendix Four a) and Portuguese (Appendix Four b). At the end of the survey, participants were asked to express their interest in attending a follow-up session. This initial stage

of data collection ran for a period of one week, from Monday 02/05/22 - Monday 09/05/22.

Eight of the nine participants who replied yes, confirming interest and booking an appointment for a follow-up session subsequently undertook a one-hour session, hosted on Zoom, on the dates of Monday 30/05/22 Tuesday 31/05/22. The ninth participant arranged a session outside of this window for Monday 06/06/22, due to their scheduling commitments. In each session, the Workplace Wellbeing Scaffold was used as a framework for each participant to discuss and analyse their wellbeing needs. The Workplace Wellbeing Scaffold was provided to each participant in advance of their session, alongside their responses to the PERMA+4 survey, the whole company average score for each dimension and also the average scores for the number of years of service and which section of the company they work for. This information was provided both in the form of a numerical table and also in the form of radar charts, to visualise the comparative data. This is in line with Kaczynski, Wood & Harding's (2008) assertion that radar charts are an effective means of monitoring change across multiple datasets over time, as well as making pragmatic qualitative analysis more efficient.

The decision to provide each individual's data alongside comparative information was made so that the exploratory aspect of the qualitative phase of data collection had the greatest impact. Given that the qualitative interviews were designed with each participant's wellbeing in mind, designing them so that they revealed qualitative information in a "discovery-oriented" manner was essential (Morgan, 2014). The goal for each participant was to reveal what might be the underlying causes of their workplace wellbeing needs and what could be done to change them, whilst the goal for the researcher was to reveal what underlying causes might affect wellbeing in the workplace.

#### 3.4 Analysis Method

Adopting a two-phase, explanatory sequential method enabled the analysis of data collected to take place in two phases. The first explores the quantitative data, followed by a supplementary exploration of the qualitative interviews.

Quantitative analysis was conducted on the results collected from the PERMA+4 survey, sent out to the employees as a Google Form. This automated collection into a Google Sheet, which then enabled the creation of a series of both tables and radar charts in the same programme to be created for comparative analysis. Both tables and radar charts showed total participant wellbeing scores along each of the nine PERMA+4 dimensions. Individual radar charts were also created for each of the nine individuals who volunteered for a follow-up session to explore their own workplace needs in the one-to-one afterwards. The benefit of visualising data in the form of radar charts is that they present comparable information across multiple metrics Kaczynski et. al. (2008). A qualitative analysis of the semi-structured interviews using a narrative approach was subsequently conducted. Such qualitative analysis already has precedent in the wider field of wellbeing research, with Van Den Berg et. al. (2015) and Zutavern & Seifried (2021) having used the same method for conducting wellbeing research.

Through following Braun & Clark's (2006) six phases, it became apparent that the themes and codes closely corresponded with Max-Neef's (1991) Human Need category of Subsistence, as well as to Ryan & Deci's (2000) wellbeing categories of Autonomy, Competence and Relatedness, as shown below in Figure Seven.

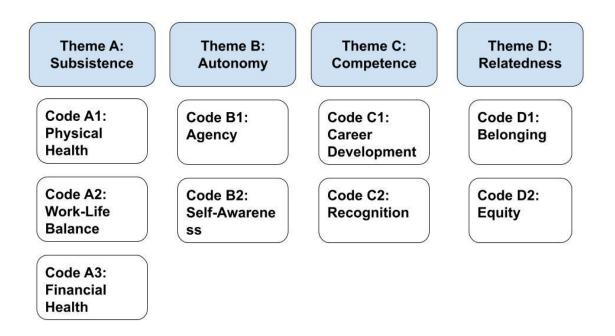


Figure 7: Four themes and nine codes for thematic analysis

## 3.5 Research Ethics

The research contained in this thesis fully adheres to the ethical requirements of the university (TENK, 2012) To conduct the research presented in this thesis, a series of ethical considerations were considered. Principle among these was the need for participant anonymity. As all participants worked in the same workplace as the researcher, the key assurance necessary was that all information volunteered at both the quantitative and qualitative stage was to be anonymised by the researcher.

At the quantitative stage, the email addresses of respondents were collected for two purposes. The first was to ensure a limit of one response per participant, via the company's Google email system, and to ensure that the only respondents to the questionnaire were employees of the company. The second reason was to ensure that those who expressed an initial interest in a follow-up, qualitative session could be contacted individually by the researcher to take part in the qualitative research. All data gathered was stored securely and confidentially.

To increase equitable access to the PERMA+4 questionnaire, it was provided to all participants in both English (the language of the company) and also

Portuguese (the language of the host country). The PERMA+4 questionnaire was reused under the rule of being under a Creative Commons Attribution Licence. (Donaldson et. al., 2022)

Further ethical measures were taken to protect the privacy and anonymity of those participants who volunteered to take part in the qualitative research stage. Not only was additional consent sought at the invitation to participate stage, but also repeated at the beginning of each interview. All participants were explicitly asked to acknowledge that the qualitative interviews would be recorded before any recording began. Qualitative interviews were conducted using Zoom, which Archibald, Ambagtsheer, Casey & Lawless (2019) have shown to be a highly suitable platform for collecting qualitative data in comparison to other Voice over Internet Protocol (VoIP) programmes. Zoom provided additional security benefits of being able to securely record and store the recordings (Archibald et. al., 2019), whilst also enabling all participants to choose a location, which Gray, Wong-Wylie, Rempel & Cook (2020) have shown can help participants feel more comfortable when discussing personal topics. Recording the qualitative interviews aided the researcher in focusing on the human beings being interviewed at that time, as well as their needs. The semi-structured nature of each interview further supported this, so that the information shared by each participant could be the focus of the researcher.

#### **4 RESEARCH FINDINGS**

The following chapter presents the findings of the quantitative and qualitative research undertaken as part of this thesis. The first stage concerns the analysis of each of the nine quantitative dimensions of the PERMA+4 Survey. This analysis first considers the results generated from the overall sample size (n=58), before continuing into further analysis according to subdivisions related to the length of service at the company, and also to which division of the school respondents work in (Admin, Early Years, Primary, Secondary). In doing so the aim is to generate an overall picture of wellness at the company at the time of surveying (May 2022), as well as to consider any differences between member groups of the company. Scores collected from the PERMA+4 survey are not just presented as aggregate scores but are also analysed with standard deviation and also the coefficient of variation taken into account. In doing so, the research findings aim to reveal how consistent the PERMA+4 responses are across the staff of the school. The lower the coefficient of variation in any dimension score or subgroup score, the more consistent the group's perception of the dimension is.

The subsequent stage considers the individual stories shared by each of the participants, as well as how the qualitative information disclosed in the interviews might help to explain the quantitative results. By organising the qualitative results into the four themes and nine codes as shown above in Figure Seven, a broader understanding of how the qualitative data explains the quantitative results (Creswell & Creswell, 2018), as well as the causal relationships between actions taken by the workplace and workplace wellbeing become apparent. Please note that all statistical data from hereon in is rounded to two decimal places.

#### 4.1 Quantitative Results

The first phase of analysis explores the data acquired from the PERMA+4 survey. The results of which help to provide explicit answers to the first of the subsidiary research questions (What is the starting point for Eudaimonic Wellbeing in the school? (How well are we now?). By breaking down the responses into subgroups, answers to the second research question (What

needs do different stakeholder groups have with regards to their wellbeing?) also begin to become apparent. The 29 questions of the PERMA+4 survey, scored along the 9 PERMA+4 dimensions, revealed an overall wellness profile of the company in May 2022, detailed below in Table 10.

PERMA+4 Dimension	Mean PERMA+4 Score
Positive Emotions (P)	5.44
Engagement (E)	5.78
Relationships (R)	5.25
Meaning (M)	6.15
Accomplishment (A)	5.49
Physical Health (PH)	5.25
Mindset (MI)	5.13
Environment (EN)	4.08
Economic Security (ES)	3.8

This profile can then be visualised into a radar chart, illustrating the overall wellbeing of the company in a visually comparative form, as is the case below in Figure Eight:

Meaning (M)

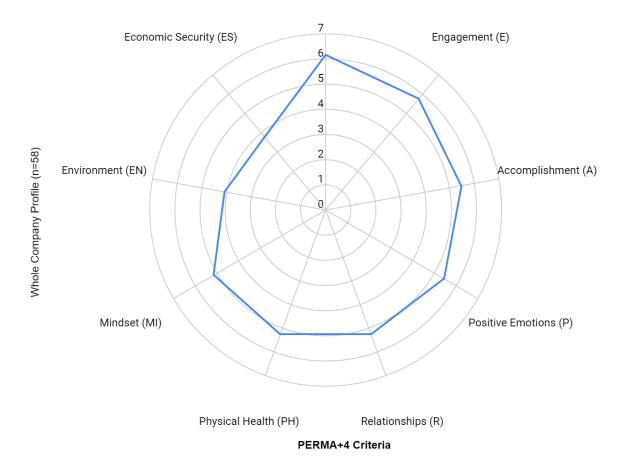


Figure 8: PERMA+4 Wellness Radar Chart for the company in May 2022 (n=58)

According to the results generated from the sample of 58 respondents, the overall wellbeing health of the company's staff is positive. With seven of the nine dimensions scoring above 5, it is clear that the respondents to the survey, on average, enjoy a largely positive relationship with their working conditions.

Within the nine dimensions, there are three that score either particularly highly or lowly. The high scoring dimension is the dimension of Meaning (Mean score: 6.15). With this dimension the only one that averages above 6, it is evident that this is a very important aspect of the company's PERMA+4 profile. This is important, as Lavy (2022) has shown that a sense of meaning at work can increase engagement and reduce burnout amongst teachers. The correlation between these two dimensions appears consistent in the results, with the next highest mean score being Engagement (5.78).

Conversely, two dimensions in the responses reveal low-scoring dimensions of note. They are Environment (Mean score: 4.08) and Economic Security (3.8). Negative experiences of the workplace environment can lead to increased occupational stress amongst workers (De Simone, 2014). Equally, Catalano (1991) showed that a lack of economic security can lead to increased psychological distress. More recently, Jebb, Tay, Diener & Oishi (2018) have concluded that an annual salary of US\$ 30 000 is on average associated with a positive effect on subjective wellbeing in Latin America. When taking into account 'high education' (education up to and including a university degree) this rises to US\$ 80 000, revealing a US\$50 000 discrepancy. (Jebb et. al., 2018). Against this research, it is worth noting that the average salary for a teacher in São Paulo in 2022 is BRL10 600 per calendar month. (approximately US\$ 2000 per calendar month; or US\$26 000 annually, as salaries in Brazil are paid across thirteen months) (SalaryExplorer, nd).

#### 4.1.1 Positive Emotions

The statements that the respondents to via the PERMA+4 questionnaire, scoring them on a 1-7 scale related to the Positive Emotions dimension were; I feel joy in a typical workday; Overall, I feel enthusiastic about my work; I love my job. Respondents agreed with these statements fairly strongly, with a mean overall score of 5.44. Within the overall respondent group, the standard deviation for this dimension was 1.28, with a coefficient of variation of 23.51%.

When breaking down the Positive Emotions dimension into respondent groups, the following differences are revealed within subsets of the respondents, as is illustrated in Tables Eleven and Twelve below:

# Table 11: Positive Emotions PERMA+4 scores by Length of Employment

Dimension: Positive Emotions		
Mean Dimension Score: <b>5.44</b> / Standard Deviation: <b>1.28</b> / Coefficient of Variation: <b>23.51%</b>		
0-3 Years	Dimension Score: <b>5.31</b> / Standard Deviation: <b>1.43</b> / Coefficient of Variation: <b>26.81%</b>	
4-6 Years	Dimension Score: <b>5.47</b> / Standard Deviation: <b>1.11</b> / Coefficient of Variation: <b>20.23%</b>	
7-9 Years	Dimension Score: <b>4.5</b> / Standard Deviation: <b>1.25</b> / Coefficient of Variation: <b>27.75%</b>	
10-12 Years	Dimension Score: <b>5.27</b> / Standard Deviation: <b>1.23</b> / Coefficient of Variation: <b>23.35%</b>	
12+ Years	Dimension Score: <b>6.1</b> / Standard Deviation: <b>0.91</b> / Coefficient of Variation: <b>14.86%</b>	

The data presented in Table 11 shows that staff in the 12+ Years category self-report significantly higher positive emotions in the workplace than any other group. Not only that, but with a coefficient of variation of 14.86%, this cohort of employees is more consistent in reporting positive emotions. Conversely, staff in the 7-9 years cohort report the lowest average positive emotions (4.5), and also the most significant coefficient of variation, indicating that the positive emotions score for this group varies most widely among individuals. This group's coefficient of variation (27.75%) is similar to that of the 0-3 years employees (26.81%)

## Table 12: Positive Emotions PERMA+4 scores by Division of School

Dimension: Positive Emotions			
Mean Dimension Score: <b>5.44</b> / Standard Deviation: <b>1.28</b> / Coefficient of Variation: <b>23.51%</b>			
Admin	Dimension Score: <b>5.17</b> / Standard Deviation: <b>1.68</b> / Coefficient of Variation: <b>32.58%</b>		
Early Years	Dimension Score: <b>6.25</b> / Standard Deviation: <b>1.03</b> / Coefficient of Variation: <b>16.51%</b>		
Primary	Dimension Score: <b>5.47</b> / Standard Deviation: <b>1.06</b> / Coefficient of Variation: <b>19.28%</b>		
Secondary	Dimension Score: <b>5.23</b> / Standard Deviation: <b>1.25</b> / Coefficient of Variation: <b>23.99%</b>		

When grouping the same results along different groups, by which division of the school employees work in, new information is revealed. Administrative staff show the most significant coefficient of variation for positive emotions, indicating significantly less consensus among this group than in the others. Equally, this group has the lowest overall positive emotion score (5.17). This is similar to the score for those employees who work in Secondary School (5.23), however Secondary School staff are more consistent in their positive emotions as a group.

Both Early Years (16.51%) and Primary (19.28%) staff are more consistent still in their expression of positive emotions. With a score of 5.47, Primary staff are closest to the mean of the respondent group, whilst with a group score of 6.25, Early Years staff express significantly greater positive emotion scores than all other groups, and are most consistent in their expression of them.

# 4.1.2 Engagement

The PERMA+4 questionnaire provided the following statements regarding Engagement: I typically become absorbed in something while working on something that challenges my abilities; I lose track of time while doing something I enjoy at work; When I am working on something I enjoy, I forget everything else around me. Respondents reported strong agreement with this statement, with a mean score of 5.78, standard deviation of 1.33 and coefficient of variation of 22.96%. How this dimension changes according to length of employment and workplace division is explored below in Tables Thirteen and Fourteen respectively.

Table 13: Engagement PERMA+4 scores by Length of Employment

Dimension: Engagement		
Mean Dimension Score: <b>5.78</b> / Standard Deviation: <b>1.33</b> / Coefficient of Variation: <b>22.96%</b>		
0-3 Years	Dimension Score: <b>6</b> / Standard Deviation: <b>1.12</b> / Coefficient of Variation: <b>18.6%</b>	
4-6 Years	Dimension Score: <b>5.6</b> / Standard Deviation: <b>1.65</b> / Coefficient of Variation: <b>29.51%</b>	
7-9 Years	Dimension Score: <b>5.67</b> / Standard Deviation: <b>1.19</b> / Coefficient of Variation: <b>20.97%</b>	
10-12 Years	Dimension Score: <b>5.33</b> / Standard Deviation: <b>1.36</b> / Coefficient of Variation: <b>24.54%</b>	
12+ Years	Dimension Score: <b>5.83</b> / Standard Deviation: <b>1.36</b> / Coefficient of Variation: <b>23.31%</b>	

Here, it is clear that Engagement is high across different cohort groups, irrespective of length of service. However, the variation apparent in the 4-6 Year group indicates that this group are the least consistent in their feelings of engagement, while those in the 10-12 group feel least engaged (5.33).

# Table 14: Engagement PERMA+4 scores by Division of School

Dimension: Engagement		
Mean Dimension Score: <b>5.78</b> / Standard Deviation: <b>1.33</b> / Coefficient of Variation: <b>22.96%</b>		
Admin	Dimension Score: <b>5.7</b> / Standard Deviation: <b>1.39</b> / Coefficient of Variation: <b>24.44%</b>	
Early Years	Dimension Score: <b>6.13</b> / Standard Deviation: <b>1.15</b> / Coefficient of Variation: <b>18.84%</b>	
Primary	Dimension Score: <b>5.47</b> / Standard Deviation: <b>1.5</b> / Coefficient of Variation: <b>27.45%</b>	
Secondary	Dimension Score: <b>5.77</b> / Standard Deviation: <b>1.25</b> / Coefficient of Variation: <b>21.75%</b>	

Engagement remains high across cohort groups when organised by divisions within the company. Again, Early Years staff experience the highest sense of engagement, with both Administrators and Secondary Staff experiencing levels of engagement close to the mean dimension for the company as a whole. The greatest variation in engagement (27.45%), as well as the lowest group score (5.47) can be found in those that work in Primary School.

# 4.1.3 Relationships

Respondents to the PERMA+4 survey scored four statements concerning relationships: I can receive support from coworkers if I need it; I feel appreciated by my coworkers; I trust my colleagues; My colleagues bring out my best self. These questions yielded an average score of 5.25, a standard deviation of 1.28 and a coefficient of variation of 24.42%. How these scores can be interpreted along section of the workplace individuals work in and how long they have done so is illustrated in Tables Fifteen and Sixteen below.

# Table 15: Relationships PERMA+4 scores by Length of Employment

Dimension: Relationships		
Mean Dimension Score: <b>5.25</b> / Standard Deviation: <b>1.28</b> / Coefficient of Variation: <b>24.42%</b>		
0-3 Years	Dimension Score: <b>5.01</b> / Standard Deviation: <b>1.49</b> / Coefficient of Variation: <b>29.66%</b>	
4-6 Years	Dimension Score: <b>5.35</b> / Standard Deviation: <b>1.08</b> / Coefficient of Variation: <b>20.1%</b>	
7-9 Years	Dimension Score: <b>5.08</b> / Standard Deviation: <b>1.02</b> / Coefficient of Variation: <b>20.03%</b>	
10-12 Years	Dimension Score: <b>5.1</b> / Standard Deviation: <b>1.19</b> / Coefficient of Variation: <b>23.41%</b>	
12+ Years	Dimension Score: <b>5.64</b> / Standard Deviation: <b>1.23</b> / Coefficient of Variation: <b>21.75%</b>	

When looking at relationship scores, length of service does not appear to affect outcomes significantly. Employees in the 0-3 Years (5.01), 7-9 Years (5.08) and 10-12 Years (5.1) groups have similar scores for relationships, with higher scores in the 4-6 Years (5.35) and 12+ (5.64) groups. In addition, all groups after 0-3 Years (29.66%) show consistent variation in their scores, indicating that the relationship dimension changes little after the first three years of employment.

Dimension: Relationships		
Mean Dimension Score: <b>5.25</b> / Standard Deviation: <b>1.28</b> / Coefficient of Variation: <b>24.42%</b>		
Admin	Dimension Score: <b>4.88</b> / Standard Deviation: <b>1.52</b> / Coefficient of Variation: <b>31.23%</b>	
Early Years	Dimension Score: <b>5.78</b> / Standard Deviation: <b>1.18</b> / Coefficient of Variation: <b>20.49%</b>	
Primary	Dimension Score: <b>5.25</b> / Standard Deviation: <b>1.14</b> / Coefficient of Variation: <b>21.7%</b>	
Secondary	Dimension Score: <b>5.09</b> / Standard Deviation: <b>1.25</b> / Coefficient of Variation: <b>24.68%</b>	

Again, Staff working in Early Years show the highest scores in this dimension, showing that staff in this part of the company experience the strongest relationships. This decreases in both Primary (5.25) and Secondary (5.09), with Administrative staff experiencing both the lowest overall relationships score, as well as the largest variation within this group (31.23%).

Remembering that all respondents fall into two of the above categories, according to both length of service and division of the company, it is clear that which part of the school employees work in has a greater impact on relationships than length of service.

#### 4.1.4 Meaning

Respondents scored the following three statements related to Meaning: My work is meaningful; I understand what makes my job meaningful; The work I do serves a greater purpose. In doing so, the respondent group generated a mean score for the dimension of Meaning of 6.15, a standard deviation of 0.96 and a coefficient of variation of 15.55%. This score was the highest average the respondent group reported, as well as the lowest coefficient of variation, indicating that the respondents of this company find their work highly meaningful. How meaningful according to length of employment and workplace section are shown in Tables Seventeen and Eighteen below respectively.

### Table 17: Meaning PERMA+4 scores by Length of Employment

Dimension: Meaning	
Mean Dimension Score: 6.15 / Standard Deviation: 0.96 / Coefficient of Variation: 15.55%	
0-3 Years	Dimension Score: <b>6.19</b> / Standard Deviation: <b>0.85</b> / Coefficient of Variation: <b>13.72%</b>
4-6 Years	Dimension Score: <b>6.13</b> / Standard Deviation: <b>0.9</b> / Coefficient of Variation: <b>14.67%</b>
7-9 Years	Dimension Score: <b>5.61</b> / Standard Deviation: <b>1.29</b> / Coefficient of Variation: <b>22.99%</b>
10-12 Years	Dimension Score: 6.13 / Standard Deviation: 0.86 / Coefficient of Variation: 14.03%
12+ Years	Dimension Score: <b>6.36</b> / Standard Deviation: <b>0.98</b> / Coefficient of Variation: <b>15.47%</b>

Whilst respondent scores in each subgroup are very high and consistent, those in the 12+ Years group scored higher than the mean score of 6.15, whilst those in the 7-9 Years group scored below the mean for this dimension (*5.61*). The 7-9 Years group also showed the greatest variation in their responses. Respondents in the 0-3m 4-6 and 10-12 Years groups scored highly similar average scores for meaning and showed very similar variation, indicating that a high sense of meaning is a consistently felt phenomenon in the workplace used as the case study.

## Table 18: Meaning PERMA+4 scores by Division of School

Dimension: Meaning	
Mean Dimension Score: 6.15 / Standard Deviation: 0.96 / Coefficient of Variation: 15.55%	
Admin	Dimension Score: <b>5.97</b> / Standard Deviation: <b>1.16</b> / Coefficient of Variation: <b>19.43%</b>
Early Years	Dimension Score: <b>6.67</b> / Standard Deviation: <b>0.63</b> / Coefficient of Variation: <b>9.56%</b>
Primary	Dimension Score: <b>6.06</b> / Standard Deviation: <b>1.09</b> / Coefficient of Variation: <b>18.07%</b>
Secondary	Dimension Score: <b>6.07</b> / Standard Deviation: <b>0.83</b> / Coefficient of Variation: <b>13.72%</b>

When considering the Meaning PERMA+4 scores along broad, team based divisions, the scores amongst Administrative, Primary and Secondary staff closely resemble one another. Again, staff in Early Years experience a significantly higher sense of meaning (6.67), as is the case with each of the preceding criteria. As the mean sense of meaning is so high in this cohort, the coefficient of variation is very low.

## 4.1.5 Accomplishment

The three statements respondents scored related to Accomplishment were: I set goals that help me achieve my career aspirations; I typically accomplish what I set out to do in my job; I am generally satisfied with my performance at work. The mean score for the respondent group on this dimension was 5.49, indicating an overall positive association between the respondents and the dimension. The Accomplishment standard deviation was 1.18 and the coefficient of variation of 21.41%. How these scores change according to length of service and division of workplace is shown in greater detail in Tables Nineteen and Twenty below.

# Table 19: Accomplishment PERMA+4 scores by Length of Employment

Dimension: Accomplishment	
Mean Dimension Score: <b>5.49</b> / Standard Deviation: <b>1.18</b> / Coefficient of Variation: <b>21.41%</b>	
0-3 Years	Dimension Score: <b>5.5</b> / Standard Deviation: <b>1.18</b> / Coefficient of Variation: <b>21.41%</b>
4-6 Years	Dimension Score: <b>5.47</b> / Standard Deviation: <b>1.2</b> / Coefficient of Variation: <b>21.87%</b>
7-9 Years	Dimension Score: <b>5.06</b> / Standard Deviation: <b>1.21</b> / Coefficient of Variation: <b>23.97%</b>
10-12 Years	Dimension Score: <b>5.27</b> / Standard Deviation: <b>1.44</b> / Coefficient of Variation: <b>27.28%</b>
12+ Years	Dimension Score: <b>5.86</b> / Standard Deviation: <b>0.84</b> / Coefficient of Variation: <b>14.39%</b>

The trend that the Accomplishment scores mirrors that of the Meaning dimension. Staff in the 12+ Years group show a significantly higher mean score for Accomplishment (5.86) than colleagues in other groups, whilst those in the 7-9 Years group scored below the mean for this dimension (5.06). With this dimension, employees in the 10-12 Years range of service showed the greatest variation in their responses.

# Table 20: Accomplishment PERMA+4 scores by Division of School

Dimension: Accomplishment	
Mean Dimension Score: <b>5.49</b> / Standard Deviation: <b>1.18</b> / Coefficient of Variation: <b>21.41%</b>	
Admin	Dimension Score: <b>5.63</b> / Standard Deviation: <b>1.22</b> / Coefficient of Variation: <b>21.61%</b>
Early Years	Dimension Score: <b>5.79</b> / Standard Deviation: <b>1.18</b> / Coefficient of Variation: <b>20.35%</b>
Primary	Dimension Score: <b>5.5</b> / Standard Deviation: <b>1.21</b> / Coefficient of Variation: <b>21.95%</b>
Secondary	Dimension Score: <b>5.36</b> / Standard Deviation: <b>1.15</b> / Coefficient of Variation: <b>21.49%</b>

Staff in Early Years once again show the highest average for this dimension, with an average score of 5.79. With this dimension, there is less variation across the different groups who responded. With very similar variation across each group, Accomplishment is the most consistent PERMA+4 dimension amongst the sample respondent group among the staff body.

#### 4.1.6 Physical Health

Respondents scored the following four statements related to their perceptions of their physical health: I typically feel physically healthy; I am rarely sick; I can typically overcome sources of physical distress (e.g. insomnia, injuries and vision issues); I feel in control of my physical health. The mean score for this dimension was 5.25, identical to the score for Relationships, though with a slightly greater standard deviation (1.56) and coefficient of variation (29.71%), indicating although the mean score was identical, the feeling of Physical Health is less consistent than that of Relationships within the company. How these scores vary according to length of employment and also by division of workplace are illustrated below in Tables Twenty One and Twenty Two below:

Dimension: Physical Health	
Mean Dimension Score: <b>5.25</b> / Standard Deviation: <b>1.56</b> / Coefficient of Variation: <b>29.71%</b>	
0-3 Years	Dimension Score: <b>5.08</b> / Standard Deviation: <b>1.64</b> / Coefficient of Variation: <b>32.31%</b>
4-6 Years	Dimension Score: <b>5.18</b> / Standard Deviation: <b>1.68</b> / Coefficient of Variation: <b>32.42%</b>
7-9 Years	Dimension Score: <b>4.5</b> / Standard Deviation: <b>1.29</b> / Coefficient of Variation: <b>28.56%</b>
10-12 Years	Dimension Score: <b>5.05</b> / Standard Deviation: <b>1.58</b> / Coefficient of Variation: <b>31.37%</b>
12+ Years	Dimension Score: <b>5.96</b> / Standard Deviation: <b>1.19</b> / Coefficient of Variation: <b>19.96%</b>

The Physical Health dimension shows greater variation between respondents than the results for the previous dimensions. Only the 12+ Years cohort show an average Physical Health score (5.96) above the whole group mean of 5.25. This group are also the only group with below 20% variation in their responses (19.96%). All respondents in the other length of service groups showed in-group variation closer to 30%, indicating less consensus in how physically healthy individuals felt at the time of response.

## Table 22: Physical Health PERMA+4 scores by Division of School

Dimension: Physical Health	
Mean Dimension Score: <b>5.25</b> / Standard Deviation: <b>1.56</b> / Coefficient of Variation: <b>29.71%</b>	
Admin	Dimension Score: <b>5.48</b> / Standard Deviation: <b>1.28</b> / Coefficient of Variation: <b>23.39%</b>
Early Years	Dimension Score: <b>5.88</b> / Standard Deviation: <b>1.54</b> / Coefficient of Variation: <b>26.21%</b>
Primary	Dimension Score: <b>5.65</b> / Standard Deviation: <b>1.45</b> / Coefficient of Variation: <b>25.7%</b>
Secondary	Dimension Score: <b>4.91</b> / Standard Deviation: <b>1.42</b> / Coefficient of Variation: <b>28.91%</b>

Looking at the Physical Health dimension scores through the lens of division reveals a different aspect of staff physical health to length of service. It becomes apparent that all groups are more consistent in their perceptions of physical health when grouped according to division-of-workplace. With the exception of the 12+ Years cohort, coefficients of variation are lower when this dimension is organised in this manner rather than by length of service.

What is also revealed is that Secondary staff perceive their physical health as significantly lower (4.91) than their colleagues working in other divisions of the company (5.48, 5.88, 5.65).

#### 4.1.7 Mindset

The 58 respondents to the PERMA+4 Survey were asked to score three statements related to their sense of their mindset: I believe I can improve my job skills through hard work; I believe my job will allow me to develop in the future; I have a bright future in my current work organisation. In the respondents' collective scoring, a mean Mindset dimension score of 5.13 was generated, with a standard deviation of 1.63 and a coefficient of variation of 31.78%. How the perception of Mindset changes according to which part of the school employees work in, as well as how long they have worked at the company for is shown below in Tables Twenty Three and Twenty Four.

Table 23: Mindset PERMA+4 scores by	y Length of Employment
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Dimension: Mindset	
Mean Dimension Score: <b>5.13</b> / Standard Deviation: <b>1.63</b> / Coefficient of Variation: <b>31.78%</b>	
0-3 Years	Dimension Score: <b>5.39</b> / Standard Deviation: <b>1.57</b> / Coefficient of Variation: <b>29.16%</b>
4-6 Years	Dimension Score: <b>5.03</b> / Standard Deviation: <b>1.5</b> / Coefficient of Variation: <b>29.74%</b>
7-9 Years	Dimension Score: <b>4.72</b> / Standard Deviation: <b>1.93</b> / Coefficient of Variation: <b>40.96%</b>
10-12 Years	Dimension Score: <b>4.6</b> / Standard Deviation: <b>1.83</b> / Coefficient of Variation: <b>39.8%</b>
12+ Years	Dimension Score: <b>5.4</b> / Standard Deviation: <b>1.43</b> / Coefficient of Variation: <b>26.5%</b>

The Mindset dimension shows a significant change in staff in the 7-9 Years (4.72) and 10-12 Years (4.6) cohorts in comparison to those in the remaining groups. In addition, these two, adjacent groups show coefficients of variation over 10% higher than those in the 0-3 Years and 4-6 Years groups, rising to a 12% difference for those in the 12+ Years cohort. This indicates that whilst the average score of these groups is significantly below the mean Mindset dimension (5.13) these Mindset scores are not universally experienced across

these groups and that broad differences exist in staff with 7-12 years of service at the company.

Dimension: Mindset	
Mean Dimension Score: <b>5.13</b> / Standard Deviation: <b>1.63</b> / Coefficient of Variation: <b>31.78%</b>	
Admin	Dimension Score: <b>4.9</b> / Standard Deviation: <b>1.92</b> / Coefficient of Variation: <b>39.15%</b>
Early Years	Dimension Score: <b>5.46</b> / Standard Deviation: <b>1.44</b> / Coefficient of Variation: <b>26.46%</b>
Primary	Dimension Score: <b>5.17</b> / Standard Deviation: <b>1.4</b> / Coefficient of Variation: <b>27.18%</b>
Secondary	Dimension Score: <b>5.08</b> / Standard Deviation: <b>1.63</b> / Coefficient of Variation: <b>32.22%</b>

Table 24: Mindset PERMA+4 scores b	y Division of School
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As with Physical Health, though with less consistency, the Mindset dimension scores appear to be more closely correlated by division of workplace than by length of service. With an average score of 4.9, Administrative staff appear to have the least strong perceptions of their mindset. Having a coefficient of variation of 39.15% shows that significant differences in perception of mindset exist in this group. With a dimension score of 5.46, Early Years staff again experience a stronger self-perception of the dimension than their colleagues in other divisions of the organisation.

## 4.1.8 Environment

The respondents scored the following three statements related to how they perceive the environment in and around their workplace: My physical work environment (e.g. office space, classroom) allows me to focus on my work; There is plenty of natural light in my workplace; I can conveniently access nature in my work environment (e.g. parks, oceans, and mountains). The Environment dimension revealed a mean dimension score of 4.08, with a standard deviation of 2.02 and a coefficient of variation of 49.61%. This

dimension was the second-lowest scoring by the 58 respondents of all nine included in the PERMA+4 survey, as well as having the second-largest coefficient of variation. This can be seen below in Tables Twenty Five and Twenty Six, which further break down this mean score by length of employment and also by division of workplace.

Table 25: Environment PERMA+4 scores by Length of Employment

Dimension: Environment	
Mean Dimension Score: <b>4.08</b> / Standard Deviation: <b>2.02</b> / Coefficient of Variation: <b>49.61%</b>	
0-3 Years	Dimension Score: <b>4.28</b> / Standard Deviation: <b>2.08</b> / Coefficient of Variation: <b>48.57%</b>
4-6 Years	Dimension Score: <b>3.5</b> / Standard Deviation: <b>1.78</b> / Coefficient of Variation: <b>50.75%</b>
7-9 Years	Dimension Score: <b>4.22</b> / Standard Deviation: <b>1.99</b> / Coefficient of Variation: <b>47.06%</b>
10-12 Years	Dimension Score: <b>3.63</b> / Standard Deviation: <b>2.11</b> / Coefficient of Variation: <b>58.04%</b>
12+ Years	Dimension Score: <b>4.5</b> / Standard Deviation: <b>2.02</b> / Coefficient of Variation: <b>44.78%</b>

It is apparent that within groups according to years of service at the company, coefficient of variation remains consistently high, indicating a broad range of responses that deviate from the mean at each length-of-employment stage. Those in the 12+ Years category show the most positive response towards the Environment dimension (4.5), with those in the 4-6 Years (3.5) and 10-12 Years (3.63) scoring significantly below the whole respondent mean (4.08).

## Table 26: Environment PERMA+4 scores by Division of School

Dimension: Environment					
Mean Dimension Score: <b>4.08</b> / Standard Deviation: <b>2.02</b> / Coefficient of Variation: <b>49.61%</b>					
Admin	Dimension Score: <b>4.1</b> / Standard Deviation: <b>2.19</b> / Coefficient of Variation: <b>53.34%</b>				
Early Years	Dimension Score: <b>4.04</b> / Standard Deviation: <b>1.99</b> / Coefficient of Variation: <b>49.2%</b>				
Primary	Dimension Score: <b>4.44</b> / Standard Deviation: <b>1.98</b> / Coefficient of Variation: <b>44.49%</b>				
Secondary	Dimension Score: <b>3.8</b> / Standard Deviation: <b>2.06</b> / Coefficient of Variation: <b>54.2%</b>				

When considering the Environment PERMA+4 scores along the lines of workplace division, the dimension scores appear closer to the Mean PERMA+4 score for Environment (4.08), than when considered along the length of employment lines. That said, with coefficients of variation remaining within 5% of the 49.61% mean coefficient of variation, it is apparent that significant differences exist in how individuals feel about the workplace environment. Primary staff are the only cohort to report a mean Environment score (4.44) above the whole-respondent mean for this dimension (4.08).

# 4.1.9 Economic Security

The final three questions that respondents to the PERMA+4 Survey scored were related to their perceptions of their Economic Security. Those questions were: I am comfortable with my current income; I could lose several months of pay due to serious illness, and still have my economic security; In the event of a financial emergency, I have adequate savings. The mean score for this dimension was the lowest of all nine PERMA+4 dimensions, with a mean score of 3.8, a standard deviation of 2 and a coefficient of variation of 52.54%. This shows that not only is this the least positive dimension among the sample group, but that there is also the largest difference between respondents. The breadth of how differently groups feel about their Economic Security, according

to where they work in the company and for how long they have done so, is illustrated below in Tables Twenty Seven and Twenty Eight.

Dimension: Economic Security					
Mean Dimension Score: <b>3.8</b> / Standard Deviation: <b>2</b> / Coefficient of Variation: <b>52.54%</b>					
0-3 Years	Dimension Score: <b>3.54</b> / Standard Deviation: <b>2.09</b> / Coefficient of Variation: <b>59.08%</b>				
4-6 Years	Dimension Score: <b>4.57</b> / Standard Deviation: <b>1.68</b> / Coefficient of Variation: <b>53.89%</b>				
7-9 Years	Dimension Score: <b>3.11</b> / Standard Deviation: <b>1.99</b> / Coefficient of Variation: <b>47.06%</b>				
10-12 Years	Dimension Score: <b>2.83</b> / Standard Deviation: <b>1.86</b> / Coefficient of Variation: <b>65.59%</b>				
12+ Years	Dimension Score: <b>4.6</b> / Standard Deviation: <b>1.53</b> / Coefficient of Variation: <b>33.32%</b>				

Organising the results by length of employment reveals significant variation in responses between respondents in each year group. With the exception of the 12+ Years cohort, there is little consensus in how respondents evaluate their economic security. Interestingly, the 4-6 Year (4.57) group have a near-identical mean score to the 12+ Year (4.6) group, albeit with a 20% larger coefficient of variation, indicating that those who have worked for twelve years and longer have the most consistent perception of their Economic Security within their group. Conversely, those employees between 7-12 years working for the company have significantly negative perceptions of their economic security.

## Table 28: Economic Security PERMA+4 scores by Division of School

Dimension: Economic Security					
Mean Dimension Score: 3.8 / Standard Deviation: 2 / Coefficient of Variation: 52.54%					
Admin	Dimension Score: <b>3.4</b> / Standard Deviation: <b>1.94</b> / Coefficient of Variation: <b>57.07%</b>				
Early Years	Dimension Score: <b>3.75</b> / Standard Deviation: <b>2.09</b> / Coefficient of Variation: <b>55.74%</b>				
Primary	Dimension Score: <b>3.58</b> / Standard Deviation: <b>2.25</b> / Coefficient of Variation: <b>62.71%</b>				
Secondary	Dimension Score: <b>3.97</b> / Standard Deviation: <b>1.94</b> / Coefficient of Variation: <b>48.86%</b>				

By organising the results of the Economic Security dimension by division of workplace, it becomes apparent that staff across all divisions are least satisfied with their economic security of all nine dimensions, with the exception of Secondary staff, who show slightly higher satisfaction with their economic security (3.97) than with their Environment (3.8). With large coefficients of variation, it is evident that the range of scores respondents gave for these three statements varies significantly. Even so, it remains the least positive of all nine dimensions as recorded in May 2022.

# 4.2 Qualitative Results

The second phase of analysis explores the data acquired from each qualitative interview with the nine volunteer participants. The data from these interviews not only helps to qualify the results generated from the quantitative stage, in which each of the participants was involved via their participation in the PERMA+4 survey. This stage also provides insights into the third (What changes need to be made for a culture of wellbeing to flourish?) and fourth (What are the long-term legacies of a well-implemented Eudaimonic Wellbeing culture on learning?) research questions.

Each participant received their PERMA+4 scores in advance of the qualitative interview stage, in the form of both a table and comparative radar charts. (See

Appendix 7.5) The quantitative PERMA+4 scores for each of the nine participants in the qualitative stage is presented below in Table Twenty Nine.

Partici pant	Р	E	R	М	Α	PH	мі	EN	EC
n=58	5.44	5.78	5.25	6.15	5.49	5.25	5.13	4.08	3.8
Α	5	5	5	7	5	6.75	6.33	5.33	3.67
В	5	6.33	4.5	5.67	6.67	2.75	6	3.33	1.67
С	6	7	4.25	6.67	6	6.25	6	2.33	7
D	5	6.67	4.5	5.67	5	4.25	5.33	3.67	4
Ε	5.67	5.33	5.75	6	6	6.25	5.33	5	5.67
F	5.67	6.67	6.75	7	6	3.75	5	5.33	5.33
G	7	7	7	7	4.33	5	6.33	4.33	4.33
Н	4	6.67	3.75	5.33	5	5.25	4.67	4.67	6.67
Ι	4	4.67	5	6	4.67	5.25	5.33	5.67	4.67

 Table 29: PERMA+4 Scores of the Qualitative Stage Participants

## 4.2.1 Unfreezing

Each of the nine participants were able to use the Workplace Wellbeing Scaffold (WWS) during their qualitative interviews to discuss their perceptions of their PERMA+4 scores, as well as to identify which of the nodes in Max-Neef's Matrix of Needs and Satisfiers they felt they were most in need of in order to redress their wellbeing in the workplace. In doing so, a wide range of PERMA+4 dimensions were drawn upon. Participants did not necessarily choose to focus on the PERMA+4 dimensions that they had scored lowest in; instead, they each selected and commented upon multiple dimensions that they felt were important to them. The only PERMA+4 dimension that no participant chose to focus on during the qualitative interview stage was Meaning. Conversely, the dimensions most frequently by participants to focus on were *Positive Emotions* and *Relationships*, which were both selected by three different participants.

Having made connections between their individual PERMA+4 scores and their perceptions of their workplace wellbeing, each participant was able to select the

axiological / existential quadrants in Max-Neef's Matrix of Needs and Satisfiers that they felt would either singularly or synergically fulfil some of their unmet needs in the workplace (see Appendix 7.6)

# 4.2.2 Moving & Refreezing

Having identified which of their needs they wished to focus on, each participant was able to identify a series of changes that they felt they were able to make to positively satisfy their needs, indicating they had been able to use the Workplace Wellbeing Scaffold to unfreeze their current status quos.

Each participant was able to create at least one I-Statement, connected to the axiological / existential quadrants they had identified as having unmet needs for in Max-Neef's Matrix of Needs and Satisfiers. Some participants were able to create these independently, whilst others were able to do so following on from the input of the researcher, in the form of *What if...* questions.

Asking such *What if...* questions to participants helps to place the Workplace Wellbeing Scaffold and its users in the *learn-and-help-learn framework* (Dweck, 2006), participants were able to conceptualise potential actions they might take to meet their own unmet needs, whilst also seeing the qualitative interview as supportive and growth-oriented. Asking *What if...* questions where required helps individual participants to make moves, in turn stretching their own skills in pursuit of a state of *flow* (Shernoff & Csikszentmihalyi, 2009).

Examples of *What if...* questions asked to participants include:

- What if I didn't work at weekends?
- What if I had more freedom to take risks from how things are currently?
- What if I had someone to help me take risks?
- What if I started planning backwards?
- What if I wrote down my thoughts and feelings?
- What would happen if I went to the gym?

All participants created I-Statements that overlapped their identified needs with Ryan & Deci's (2000) parameters of Competence, Autonomy, Relatedness. This can be seen below in the list of I-Statements that the participants collectively created, alongside a marker for which of Ryan & Deci's parameters they correspond to, as shown below in Table Thirty.

# Table 30: Participants' I-Statements, with connections to Autonomy,Competence, Relatedness

I-Statement	Autonomy	Competence	Relatednes
I can be more okay wearing my heart on my sleeve	$\checkmark$	$\checkmark$	$\checkmark$
I can change my mindset regarding how I deal with conflict.	$\checkmark$	$\checkmark$	
I can communicate with my peers to make things happen		$\checkmark$	$\checkmark$
I can consider keeping a success journal		$\checkmark$	$\checkmark$
I can consider the types of people I like to meet			$\checkmark$
I can create a community working space for my team		$\checkmark$	$\checkmark$
I can create space in my calendar to maintain relationships		$\checkmark$	$\checkmark$
I can evaluate whether time commitments are valuable to me	$\checkmark$	$\checkmark$	
I can experiment with curriculum and lesson design in the new space	$\checkmark$	$\checkmark$	
I can explain that whilst it interests me I have commitments elsewhere	$\checkmark$		
I can find a sense of belonging in any setting			$\checkmark$
I can go to the end-of-year residential trip	$\checkmark$		$\checkmark$
I can go to therapy	$\checkmark$	$\checkmark$	$\checkmark$
I can help my partner in the garden		$\checkmark$	$\checkmark$
I can implement ideas from my leadership course and assignment	$\checkmark$	$\checkmark$	
I can interact more with others		$\checkmark$	$\checkmark$
I can make an effort with leadership to form transactional relationships before issues arise.		$\checkmark$	$\checkmark$
I can make time to do nothing	$\checkmark$		
I can make time to do nothing	$\checkmark$		$\checkmark$
I can offer more help for new staff		$\checkmark$	$\checkmark$
I can prioritise getting to know my new team			$\checkmark$
I can propose activities with my peers in a leisurely context		$\checkmark$	$\checkmark$
I can read handouts instead of attending meetings not relevant to my role	$\checkmark$	$\checkmark$	
I can research the community in the city	$\checkmark$	$\checkmark$	$\checkmark$
I can say no to commitments that I feel are beyond my limit	$\checkmark$	$\checkmark$	
I can show resilience when things frustrate me	$\checkmark$	$\checkmark$	$\checkmark$
I can stop beating myself up for being emotional	$\checkmark$	$\checkmark$	
I can take time after school to relax	$\checkmark$		$\checkmark$
I can try to judge less		<ul> <li></li> </ul>	$\checkmark$
I can try to listen more		$\checkmark$	~

With all non-Subsistence / Physical Health I-Statements relating to at least one of Autonomy, Competence and Relatedness, with most relating to eat least two out of three, each participant has shown the legitimacy of analysing the individual PERMA+4 Profile as a means to identify strategies to fulfil unmet human needs. It remains to be seen whether these high-effort potential actions the participants have stated are acted upon, as well as whether acting on them

leads to pursuing these actions becoming *intrinsically rewarding* (Csikszentmihalyi, 1990).

# 4.3 Theme A: Subsistence

The theme of Subsistence related needs manifested in three distinct codes during the qualitative interviews: Physical Health; Work-Life Balance; Financial Health. It is unsurprising that this theme emerges, given that a total of seven nodes from Max-Neef's Matrix of Needs and Satisfiers were self-identified by Participant B, Participant D, Participant F and Participant H during each of their qualitative interviews. (See Appendix 6).

# 4.3.1 Physical Health

The nine participants interviewed shared a diverse range of self-perceptions regarding their physical health and the impact it had on their working patterns. What was consistent was the awareness that staff had on the relationship between their physical health and their ability to be their best professional selves:

If I'm not fully healthy, it's kind of hard to come in fully motivated to come into work. The living well part, what I try to do to make myself a wellbeing person health wise I try to do some exercise, but I haven't done that for the past three years. I don't know if it was the pandemic or not.

Staff recognise that their physical health is a contributing factor to their workplace performance, whilst also show a desire to remain on top of it. Several participants shared strategies that they already use to maintain their physical health, whilst two participants created I-Statements related to their *Subsistence / Physical Health* needs. The statements they created were:

- I can try swimming with my son
- I can walk the dog
- I can go back to the home gym
- I can cycle to work
- I can go into the 24-hour gym

What these I-statements show is that staff have an awareness of their physical health, the relationship it has to their workplace performance and that there is a desire to improve their physical health, both for their personal and professional benefit. That said, there remains a responsibility on the employer to promote physical health in the workplace. Birdee et. al. (2013) have shown that a lack of physical activity leads to increased absenteeism from work, whilst Pronk & Kottke (2009) have shown that workplaces that promote physical activity in the workplace both improve employee health and also enhance overall business performance. Hutchinson & Wilson (2011) identify that motivational interviewing is the most effective strategy to promote physical health in a workplace environment, of which the Workplace Wellbeing Scaffold is evidently one.

### 4.3.2 Work-Life Balance

Another important aspect of subsistence identified by the participants in the interviews was the relationship between perceptions of working patterns and work-life balance. As shared by one participant:

I've been feeling overwhelmed and when I get home I continue working. Working maybe 3-4 hours on the weekend, most of the time more, to make sure I'm prepared for the week. When I have to work at the weekend I have to not be with the family. It's kind of a frustration because I could spend an extra 4-6 hours with my family but I'm not because I have to work. I feel like either I'm not doing my job right because I'm taking my work home, or there is not enough time in the day.

What this reveals is that in spite of a high overall sense of Meaning within the workplace, there remain individuals who are susceptible to burnout. As such, although Lavy (2022) has shown that a strong sense of meaning can increase engagement and reduce burnout, relying on a high sense of collective meaning should not be used as a panacea, and that individuals experiencing such feelings should instead have their unmet needs met. This is because stopping burnout is a key preventative measure employers can take to prevent staff attrition (Madigan & Kim, 2021a). Madigan & Kim (2021b), have also shown that teacher burnout is associated with reduced student academic achievement and reduced student motivation. This is particularly pertinent when considering the

number of I-Statements that indicate a need for staff to find a balance in their work-life:

- I can evaluate whether time commitments are valuable to me
- I can explain that whilst it interests me I have commitments elsewhere
- I can make time to do nothing (two participants)
- I can read handouts rather than attending meetings not relevant to my role
- I can say no to commitments that are beyond my limit
- I can take time after school to relax

What was also revealed is that the perception of work-life balance is not a static feeling amongst staff. As people who undergo different changes in both their personal and professional lives, such a sense of balance changes over time. One of the trends that emerged was the desire for support and integration with wider society for new staff, connecting work-life balance to the PERMA+4 dimension of Relationships.

Another pattern was staff self-reflecting on how their work-life balance changes over time. One participant explored their PERMA+4 Engagement score, connecting it to an unmet need in Max-Neef's quadrant of Leisure-Being, drawing a correlation between their own appreciation of leisure and tranquillity and feeling engaged at work:

I really do enjoy having different roles, very much so. I would hate to give any of them up. I have to admit that 6-7 years ago I felt extremely stretched and I wouldn't nearly have been as positive in the questions asked (PERMA+4 survey) Looking at it in terms of being, for leisure, for instance tranquility, I would say that that was lacking. Because I'm always so busy, I do think that is something I need to work on. Perhaps if I did relax more, the level of engagement would still go up.

What all of these trends reveal is that staff wish to have a working life in balance with their wider identities as human beings, that they are able to reflect on what promotes or decreases their sense of balance. As such, the existence of a structured wellbeing programme helps to identify which staff are at greatest risk of burnout, enabling them to get support to get back to their best.

## 4.3.3 Financial Health

A final code related to subsistence emerged when analysing the shared perspectives of the nine participants related to financial health. Here, a clear pattern emerged, in that some of the participants felt that their financial health was entirely secure. Indicative of this were comments such as:

I could easily go an entire year without working if I needed to.

I am close to retirement; my Economic Security is supposed to be strong.

Whilst it is positive that some staff feel that they are financially secure, as it indicates that working in the workplace in question has the capacity to generate economic security over the length of a working life, this was not a universal picture. In fact, the perception of financial health is quite polarised. Within this code emerges the perception that staff must commit long-term to their chosen profession in order to generate the desired long-term financial security:

I'm the one who made the decision to take non-traditional teaching jobs for the better part of my career. Certainly the biggest positive was enjoying those jobs and having amazing experiences. But the biggest drawback was that I was pretty much working as a freelancer and in theory I knew that I should be saving a bit of every paycheck, but in reality it didn't quite work out that way.

Even though no participants created I-Statements related to this code, what this code reveals is the need all staff have to help prepare for their own financial security, irrespective of how healthy it may be at a given moment in time. Given that financial stress has been shown as a key predictor as to whether an individual is looking for a new job, as well as to negatively impact both staff productivity and engagement in the workplace (PwC, 2022), a workplace with a robust policy of financial health is likely to have a net positive effect on the wellbeing of its employees.

### 4.4 Theme B: Autonomy

Of the thirty total I-Statements identified by the nine participants not related to subsistence, a total of sixteen shared a thematic relationship to Theme, B, Autonomy. The theme of autonomy was separated into two distinct codes: agency and self-awareness.

## 4.4.1 Agency

Promoting a culture of staff agency is a fundamental aspect of meeting the autonomy needs of employees and enabling them to be at their best. During the interviews, the participants expressed a desire for greater agency, particularly in expressing a desire for how participants wish for their managers to respond to the goals they wish to set in order to effect change. As one participant shared:

I would love to have a meeting with my head of section and them ask me, 'what have you got planned for your team this year? What's it going to look like? How can we help you get there?' and that just doesn't exist.

Whilst another, when reflecting on their time in their current role, shared:

I've been in this position now for... This is my fifth year. I think that the pandemic being a significant portion of those five years has a big part in my feeling that I've been able to accomplish certain things. But there are other concrete factors like how things are structured in terms of leadership. There are external factors that have made it more difficult to achieve some of the things I've wanted to achieve.

And a third, when connecting to the PERMA+4 dimension of Mindset, stated that:

I think agency in the school is discretional. And by agency I mean the school giving you space to put your own plans into action. But it doesn't necessarily put in place the structures to allow things to happen.

The trend that emerges in this code then is that staff are able to go through a reflection cycle to identify what changes they wish to make, however that they feel that the effective changes they wish to enact are stymied by leadership structures. In particular, the desire to ask for help from leaders to become better professionals themselves indicates that these staff do not wish to be managed;

rather they are advocating for a coaching leadership style from school leaders and line managers, in order that they as individuals can improve their performance in the workplace.

The workplace in question clearly benefits from staff motivated to enact their agency in such ways as to make them better professionals, as is shown in the following I-Statements:

- I can change my mindset regarding how I deal with conflict
- I can create a community working space for my team
- I can experiment with curriculum and lesson design in the new space
- I can implement ideas from my leadership course and assignment
- I can offer more help for new staff

Such a desire for coaching and support to be directed from leaders and managers to best serve their teams has been shown to have a net positive effect on the wellbeing of working teams (O'Connor & Cavanagh, 2013). In their meta analysis on the impact of leadership styles and employee wellbeing, Skakon, Nielsen, Borg & Guzman (2010) have identified that transformational leadership styles, of which coaching leadership is one, has the capability to improve the net wellbeing of employees, whilst "abusive leadership styles were found to be related to high levels of employee burnout". This is worth considering, given that although not commonplace, aspects of such abusive leadership styles do manifest themselves as one participant shared:

A lot of my relationships are tempered by idiosyncratic individuals, who make my workplace a less helpful place to work. I find it very hard to respect somebody who starts by giving kids a bollocking. And it's very hard to talk to them about these things, because if you do they take umbrage.

## 4.4.2 Self-Awareness

Having a clear sense of self-awareness was a common trait that emerged across the qualitative interviews with the nine participants. Within this code, participants were largely positive about the relationship between their self-awareness and their wellbeing at work. Comments about self-awareness emerged when participants were discussing the PERMA+4 dimensions of Positive Emotions:

I think that positive emotions is a mental disposition. I have become more aware of my own rhythm. I am prioritising what gives me quality of life, like what time I get home from work.

And also when discussing Accomplishment:

I think that I can still negotiate more of how my time is allocated so I can focus on my main role and do it to the best of my ability.

That staff show strong self-awareness capabilities and are critically reflective about themselves, their emotions and how to bring out the best in themselves serves as employees bodes well as a means to mitigate issues of wellbeing that may arise, as such self-reflection can be harnessed by staff and leaders to critically reflect as to whether actions taken and policies implemented create additional extraneous cognitive load (and should therefore be avoided) or germane cognitive load (and should therefore be encouraged). (Sweller, 1988, in Shibli & West, 2018). Every I-Statement generated uses the requisite skill of self-awareness, and therefore can be considered one of the strongest characteristics of the participants in question.

### 4.5 Theme C: Competence

Returning to the I-Statements generated by the nine participants during the qualitative interviews, a sum of twenty two of the thirty non-subsistence I-Statements related in some capacity to the theme of competence. This is the highest of the three themes, indicating that the workplace in question has staff who show a desire to develop their knowledge and skills over time.

### 4.5.1 Career Development

One of the codes that emerged related to the theme of competence was the desire for career development. Whilst not all applicants for roles can always be

promoted each time, how an employer manages the career development of its employees is a crucial contributing factor to overall workplace satisfaction and wellbeing. As such, it is interesting that one participant decided to draw on the PERMA+4 dimensions of Engagement and Mindset as a means to show that their perceived lack of engagement was a consequence of a desire for career development:

With my mindset I'm quite a realistic person. So especially with Question 23 (I have a bright future at my current organisation), I had conversations about this before I was leaving, that certain positions won't become available in the immediate future and I felt that you could stay for five years and you might not progress really.

Another participant drew on their long-term plans leading up to retirement as a means to reflect on their career aspirations:

I plan to be working for at least twenty more years, but I'm not quite where I want to be. But certainly being there is an advantage to having a full time job with a steady income. I can plan better financially. Looking in the future I may possibly be looking to continue in these types of jobs (international teaching jobs).

What these comments have in common is that they reveal that staff in the workplace in question show an express desire for long-term development. As such, it is unsurprising that a desire for career development impacts on the perceptions of wellbeing of staff. These findings are mirrored in the literature, where Redekopp & Huston (2019) have shown that the ideal working environment is to have a good fitting role and the capacity to adapt to and create change, in doing so proving that the capacity for career development in a workplace is a form of wellbeing intervention. Steed (2021) has advocated a 'tour-of-duty' model as a means to upskill existing staff, solve career development choke points within schools and to retain staff via effective talent management.

Interestingly, although twenty two of the thirty total I-Statements can be connected to competence, very few are framed as individualistic, macro-level, career oriented statements:

- I can change my mindset regarding how I deal with conflict
- I can implement ideas from my leadership course and assignment
- I can make an effort with leadership to form transactional relationships before issues arise.

The vast majority of competency based I-Statements made by the participants remain valuable skills for the purpose of career development, just on a smaller, interpersonal scale:

- I can communicate with my peers to make things happen
- I can create space in my calendar to maintain relationships
- I can show resilience when things frustrate me
- I can try to judge less
- I can try to listen more

It is important to note that there is not a hierarchy of I-Statements here. Neither the macro-level nor interpersonal skills connected to these I-Statements would be sufficient to justify career development in the long term; rather a combination of them could accrue over time into improved knowledge, skills and competencies. As such, there is a need to show staff how they can leverage both of these types of skills when seeking career development opportunities.

## 4.5.2 Recognition

The other code related to the theme of competence is that of recognition. Participants were forthcoming in expressing their desire for greater recognition of their efforts, particularly in a top-down manner from leaders and managers.

Sometimes you can do a lot of work and everyones on the same playing field. And sometimes it does cause tension. And sometimes you do so much and it doesn't get recognised.

In other schools I've worked in I've felt valued, because there's the odd little thing they do that makes you feel valued. So in other schools there would be an end of year party. Another school I worked in where you had allowances for flights and they were always the most direct route rather than the cheapest route. And it affects your growth mindset because you wonder if you want to grow in such an environment.

These two examples make reference to both the need for leaders and managers to recognise staff efforts, as well as to actively praise for both effort and achievement of staff members. It is clear as well that staff in the workplace studied see praise not only as a verbal phenomenon but as a deep-seated values system that builds trust, respect and a desire to commit to the workplace itself.

When considering the I-Statements related to recognition, an interesting pattern emerges. Many of the I-Statements related to recognition show not recognition itself, but an implied absence of it:

- I can be more okay wearing my heart on my sleeve
- I can consider keeping a success journal
- I can show resilience when things frustrate me
- I can stop beating myself up for being emotional
- I can try to judge less
- I can try to listen more

Each of these I-Statements, although framed by an individual participant as something they could do as a strategy to improve their own workplace wellbeing, could also be used as a strategy by their leaders and line managers, if done authentically, as mechanisms to improve these employees' perceptions of their performance, in turn improving their wellbeing. By framing these I-Statements as actions for the participants' managers and leaders to take, a circular economy of responsibility could be created. Or rather, a positive feedback of genuine praise and recognition for both efforts and achievements in the workplace.

## 4.6 Theme D: Relatedness

The final theme that emerges from the qualitative interviews with the nine participants relates to Ryan & Deci's (2000) final subdivision of wellbeing, relatedness. This was again separated into two codes: belonging and equity. Of

the thirty I-Statements generated by the participants, a total of twenty one had connections to the theme of Relatedness.

## 4.6.1 Belonging

One of the codes related to the theme of relatedness to emerge from the qualitative interviews with the nine participants was belonging; both in the sense of belonging as feeling they are an active part of the institution and also an expressed desire to feel a greater sense of belonging.

One participant connected their sense of belonging to the PERMA+4 dimensions of both Environment and Economic Security:

If you're not feeling well, it's kind of hard to create a nice environment for them [students] to work. And then it connects to the economic security, because you feel like you're not doing your job. I'm feeling like I'm not myself here. I'm feeling quite retracted.

What emerges here is a deep connection to the idea of belonging as an existential phenomenon. The participant in question had begun to question whether they belong in their role as a professional as a consequence of the difficulties they were facing in the workplace. In self-describing as 'retracted', they reveal that the need to belong manifests itself in how professionals see themselves in their practice.

Other threats to belonging in the workplace were centred around the negative impact that the Relationship PERMA+4 dimension can have on the ability to belong:

I don't think I have a particularly strong relationship score and that's more to do with my department than the relationships I have across the school, because I think I have really positive working relationships with people in other departments. But I have a few key staff members that I find it quite difficult to deal with, and while I would classify our working relationships as effective, I don't enjoy working with them.

If I think about who I find it most difficult to work with it is people who readily dissent. There is no automatic assumption that they will agree, you can almost guarantee that they will disagree. I can and do value it when people disagree with me, I find it healthy. We shouldn't surround

ourselves with 'yes people'. But I feel at the moment it saps me of energy. It's like a little paper cut that saps my being. On the outside I seem like I deal with it very professionally, but on the inside I have all these papercuts.

What this reveals is that participants enter into conflict when communication strategies adopted in the workplace become overly rooted in conflict, as distinct from disagreement for the purpose of creating new ideas and change. This then places a responsibility on the school at large to develop and implement effective, non-violent communication strategies in order to ensure that all staff have the capacity to work effectively with one another, without resorting to systems of domination (Rosenberg, 2003)

For new staff in particular, a subcategory of belonging emerged related to integrating into the wider society outside of the workplace, in order to have a greater sense of workplace satisfaction:

That sense of belonging... I actually feel I have my nice group of friends, and I think that's been really important to build and that for me is still really important for me to have in the future, where I feel I can be myself.

I'm fairly good friends with X and one thing I'd like to be doing soon is going out to a party, and I was very excited to go... and then I got covid and I couldn't go. I would like to go to more of these events and to meet more people.

This serves as a reminder that belonging is not just a feeling that manifests itself in the workplace. Ozturk & Ozcinar (2013) remind us that human beings all belong to multiple communities. This is particularly pertinent when considering the workplace in question, an international school that is engaged in the hiring of individuals across a global market. Fundamental to those individuals being able to belong in the workplace is having the structures available to them to integrate with their other chosen communities that match their identities.

### 4.6.2 Equity

Whilst the code of belonging links back to the theme of relatedness by questioning whether the participant employees feel that they are a part of the work community of the company in question, equity instead considers whether participants are treated fairly within the organisation. This is distinct from equality, which manifests itself in sameness.

One participant shared the struggle of trying to 'catch up' with more senior colleagues as a professional:

I feel like I have things to prove. To myself, I don't know, maybe to the parents. To others in school. I had to prove myself. Well I'm a new teacher, I've only been teaching 3-4 years, right. And it's my first year, so I'm trying to catch up. Catch up with everybody who has been teaching for 20-30 years.

This connects to the larger code of equity, and in turn the theme of relatedness, as it calls into question the strategies put in place to support new staff to become more effective at their jobs over time, as well as those who monitor and check in on how these people are doing. The same participant shared that they found collaboration to be an effective mitigator to this catching up fallacy, enabling them instead to learn from others with greater experience:

I try to connect as much as I can with other teachers as well. And I do try to connect with them. I'm always watching, trying to improve, looking into the way they teach. I have nothing against collaborative working, I actually like it. I like how you can look into the other teacher and how they do it, so you can kind of do a self-analysis of your work and maybe I can try it when I am teaching as well.

For this to become a truly equitable solution to the participant's identified needs, their individual actions need to be considered in relation to those of their peers and colleagues; ensuring that support from others is matched with self-determination to create an equitable development plan.

For more experienced staff, equity instead manifested itself in the qualitative interviews in the expectation of increased accountability, as well as to the PERMA+4 dimension of Mindset:

I don't understand why other leaders aren't required to drive change forward in the school. If we are leading, we should be held accountable for our leadership, and if leadership is about change, then we should be bringing forward what changes we have brought forward. Otherwise we get a feeling that people aren't engaged, that people aren't accomplishing their goals. That they aren't exploring their growth mindsets.

The following I-Statements share a common theme of being connected to the code of equity:

- I can create a community working space for my team
- I can interact more with others
- I can offer help for new staff
- I can prioritise getting to know my new team
- I can say no to commitments that are beyond my limit
- I can show resilience when things frustrate me
- I can be more okay wearing my heart on my sleeve
- I can change my mindset regarding how I deal with conflict

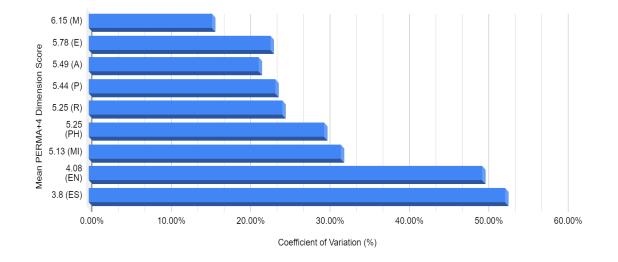
It is important here that the I-Statements related to the code of Equity function in two ways. One way is in staff recognising there is more they can do to help others to be their best selves in the workplace. Equally important is recognising the limits of responsibilities, so that neither the participants involved, nor the wider workforce are overworking.

## 4.7 Interpretation of Results

Participants who took part in the Qualitative stage of the research showed preference to focus on Positive Emotions (3 participants) and Relationships (3 participants) during the qualitative interviews. This is in spite of the workplace in question showing mean Positive Emotion and Relationships scores of 5.44 and 5.25 respectively. Indeed, the nine participants selected each of the nine PERMA+4 dimensions between them, with the exception of Meaning (6.15).

Given that participants were free to choose which aspect of their own wellbeing they wished to focus on, the lack of correlation between the mean PERMA+4

dimensions for the whole workplace cohort (n=58) and each individual may be due to coefficient of variations. A correlation exists in the data between Mean PERMA+4 dimension score and coefficient of variation, shown below in Figure Nine:



#### Figure 9: Graph showing PERMA+4 Dimensions vs Coefficient of Variation

What this correlation appears to show is consistency of feeling. The lower the coefficient of variation, the more consistent the feeling, and therefore the more representative and more united in feeling this way the cohort of participants are. This shows a clear trend in the PERMA+4 data collected: the stronger the PERMA+4 dimension, the more consistent the sample group is in feeling this level of positivity. The only outlier in this regard is that with a coefficient of variation of 22.96%, respondents are slightly less consistent in their Engagement than they are in their perception of Accomplishment (21.41%)

Comparing mean PERMA+4 scores to coefficient of variation in this manner reveals that although they have respectively high scores of 5.44 for Positive Emotions and 5.25 for Relationships, they also have coefficients of variation of 23.51% and 24.42% respectively. A 23.51% difference measured on a 1-7 scoring system is the equivalent to scoring 1.65 points below the mean (Positive Emotions). Whilst for Relationships, a 24.42% difference equates to a score difference of 1.71 points below the mean. What this may reveal then is that sitting significantly above, or significantly below the mean with one's own

PERMA+4 scores creates a sense of discomfort, resulting in unmet human needs. As such, identifying individuals who score significantly outside of the mean on any of the PERMA+4 dimensions may reveal those at greatest risk of burnout.

This would in part explain the absence of a participant choosing to focus on the Meaning dimension, which is not only the highest mean score amongst the sample size, but also has the lowest coefficient of variation (15.55%) indicates that a strong sense of meaning is the strongest PERMA+4 dimension of wellbeing felt in the workplace by its employees. The majority of employees then sit within 0.96 points of one another when it comes to Meaning in the workplace. Given that this dimension is already high scoring, it is indicative of a strong collective sense of meaning across the company.

Another, more humanistic approach to considering why the PERMA+4 dimensions focused on did not closely correlate with the mean PERMA+4 scores is also an important point to consider. That is, each participant is a human being with their own needs and those needs extend beyond the workplace. Indeed, many of the participants drew on external-to-work-factors as having significant impacts on their workplace wellbeing. This is highly understandable in the context of an international school, where employees are imported for the purpose of working. In doing so, they leave behind many of their out-of-work connections and relationships. These then become part of the responsibility of the employer, so as to keep a connected, positively minded workforce as its core.

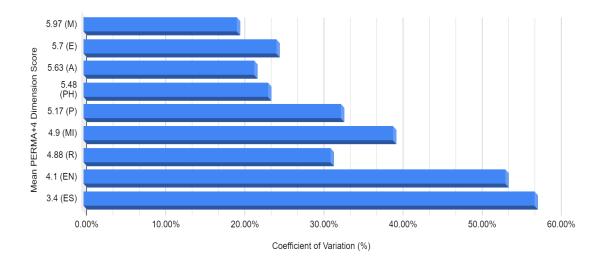
A surprising outcome at the qualitative stage was how few participants chose to discuss either Environment (4.08) or Economic Security (3.8) as part of their individual workplace wellbeing needs. Although clearly the lowest overall score amongst the quantitative survey respondents, they were commented upon once and twice respectively. This might be a question to do with sampling. Should specific data wish to be gathered about specific PERMA+4 perceptions, then it would be practical to seek out those who showed a low perception of those dimensions. Given that the design of this study prioritised participant agency and privacy, only active volunteers were interviewed at the qualitative stage.

Another potential reason for a lack of sharing needs related to Environment and Economic Security could also be down to perceived lack of control over these dimensions by the participants themselves. If one experiences a greater self perception of agency over other PERMA+4 dimensions, then it may be prudent to prioritise those in the form of I-Statements, as the Workplace Wellbeing Scaffold provides, as focusing on what one can achieve with effort is more likely to have a net positive impact on wellbeing, as well as to encourage states of workplace flow. The code of agency emerged in the qualitative analysis stage, showing that staff do wish to take control of their wellbeing in the workplace. When doing so, agency was connected back to PERMA+4 dimensions of Relationships, Accomplishment and Mindset.

That all nine participants in the qualitative part of the study were able to use their PERMA+4 Survey results, along with the comparative data according to length of service and their workplace section, as a means to investigate and analyse their own workplace wellbeing, in turn creating at least one I-Statement each (in all bar one case multiple I-Statements), this shows that the Workplace Wellbeing Scaffold is a legitimate means to support staff in improving their own sense of wellbeing, alongside quantitative measures such as the PERMA+4 Survey.

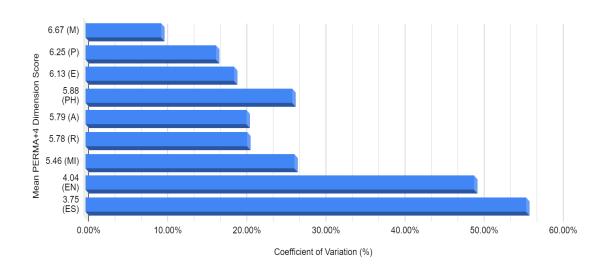
## 4.7.1 Results by Workplace Division

Exploring the results of the PERMA+4 Survey by workplace division reveals further interesting trends. In order to facilitate the exploration of such trends, each of the graphs presented in Figures Ten through to Eighteen presented below have their vertical axes organised from highest scoring PERMA+4 dimension to lowest scoring PERMA+4 dimension.



The principal trend to emerge is that different divisions of the workplace vary in their perception of the PERMA+4 dimensions and to varying strengths. This can be seen below in Figure Ten, Figure Eleven, Figure Twelve and Figure Thirteen:





## Figure 11: Graph showing Early Years PERMA+4 Dimensions vs Coefficient of Variation

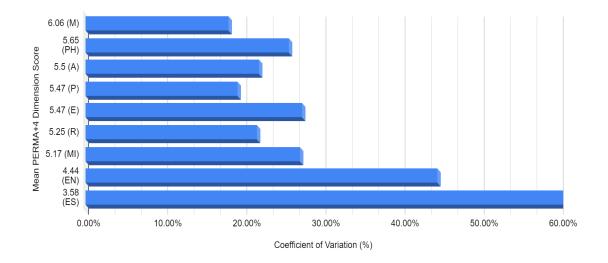
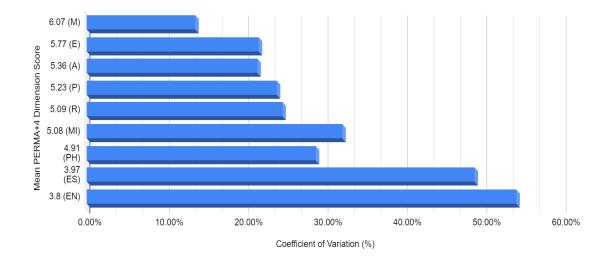


Figure 12: Graph showing Primary PERMA+4 Dimensions vs Coefficient of Variation



## Figure 13: Graph showing Secondary PERMA+4 Dimensions vs Coefficient of Variation

Although Meaning remains the strongest and most consistently felt PERMA+4 dimension across all divisions of the school, the strength to which it is felt varies, from 6.67 (Early Years) to 5.97 (Admin). Indeed, Early Years Staff experience all nine PERMA+4 dimensions more positively than all of their colleagues working in other sections of the school, with the exception of a few

outliers. Primary (4.44) and Admin (4.1) feel more positively about their environment than Early Years staff (4.04), whilst Secondary Staff perceive their Economic Security (3.8) marginally higher than Early Years employees (3.75).

Two other notable trends emerge from considering the PERMA+4 data by workplace division. Firstly, that Administrative Staff experience significantly lower perceptions of their Relationships dimension (4.88) than their colleagues who work in a pedagogical section of the company (Early Years 5.78; Primary 5.25; Secondary 5.09). In a similar trend, staff working in Secondary experience significantly lower perceptions of their Physical Health dimension (4.91) than their peers elsewhere in the company (Admin 5.48; Early Years 5.88; Primary 5.65). Both of these outliers within the data patterns indicate that senior leadership and management should make specific interventions to improve these aspects of staff wellness. These recommendations are discussed in detail in **Section 5**.

### 4.7.2 Results by Length of Service

In a similar manner as to considering the PERMA+4 results by division of workplace, looking at the responses shared, mean scores and coefficients of variation by length of service reveals new trends regarding how positive employees feel about their workplace wellbeing, as well as how consistently those feelings are within group. This is shown below in Figure Fourteen, Figure Fifteen, Figure Sixteen, Figure Seventeen and Figure Eighteen:

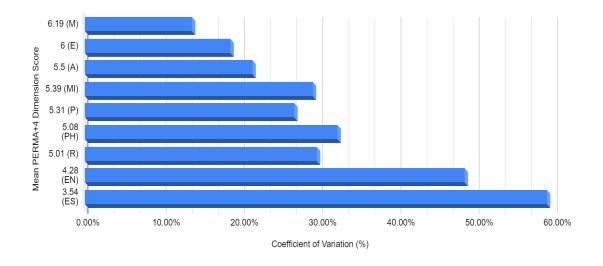


Figure 14: Graph showing 0-3 Years Service PERMA+4 Dimensions vs Coefficient of Variation

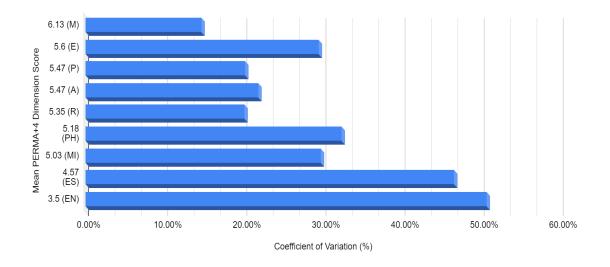


Figure 15: Graph showing 4-6 Years Service PERMA+4 Dimensions vs Coefficient of Variation

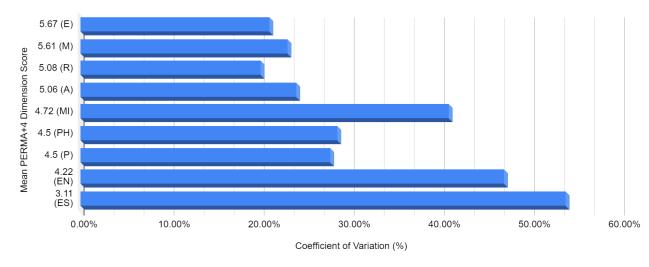


Figure 16: Graph showing 7-9 Years Service PERMA+4 Dimensions vs Coefficient of Variation

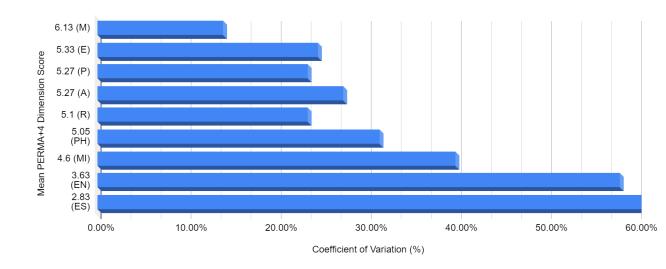


Figure 17: Graph showing 10-12 Years Service PERMA+4 Dimensions vs Coefficient of Variation

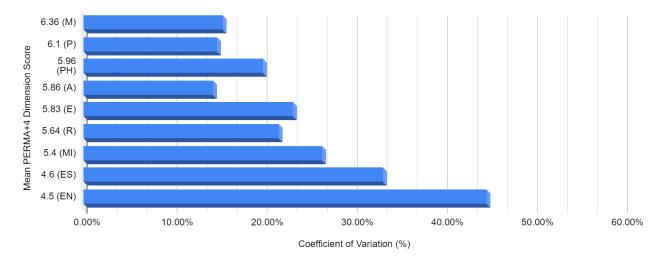


Figure 18: Graph showing 12+ Years Service PERMA+4 Dimensions vs Coefficient of Variation

Staff in the 12+ Years group tend to experience the most positive perception of each of the nine PERMA+4 dimensions, followed by those in the 0-3 and 4-6 years brackets. Where major deviation occurs from the scores in these brackets are in the 7-9 and 10-12 years of service categories. Of particular note is the decreasing perceptions of *Mindset*, where 7-9 years = 4.72 and 10-12 years = 4.6, compared with 5.39 (0-3 years), 5.03 (4-6 years) and 5.4 (12+ years). This trend is mirrored in comparative decreased satisfaction with *Economic Security*, which scores 3.11 (7-9 years) and 2.83 (10-12 years), compared to 3.54 (0-3 years), 3.5 (4-6 Years) and 4.6 (12+ years).

*Positive Emotions* (4.5) and *Physical Health* (4.5) also drop significantly in comparison to other length of service groups in the 7-9 years of service range. These decreasing trends call into question how well the employer looks after its medium service staff and whether policies can be designed to improve these dimensions, so that continued commitment to the employer benefits all staff, as is clearly the case for those who remain employed in this workplace beyond 12 years. These recommendations are again discussed in **Section 5**.

#### **5 DISCUSSION**

#### 5.1 Research Questions

The aim of this thesis was to identify specific strategies to improve the Eudaimonic Wellbeing of employees in an international school environment. To that end, the central research question posed by this thesis was:

What are the conditions required for a sustainable culture of Eudaimonic Wellbeing?

In doing so, this study aimed to present staff and school leaders with a series of usable tools and recommendations with which they can seek to improve their own wellbeing, as well as of those that they lead and manage. Given that excellent teaching requires teachers to have a safe environment, as well as to facilitate student learning through being dedicated and passionate (Hattie, 2008), it is evident that the more staff are experiencing prolonged states of *flow* (Csikszentmihalyi, 1990) the more likely a school is to provide these conditions for its students. As such, teacher wellbeing is best addressed holistically (McCallum, 2021).

Given this, adopting a mixed-methods research design was the most appropriate means to develop a holistic understanding of the Eudaimonic Wellbeing of the employees of the international school in question at the time the research was conducted. The theoretical framework and background research revealed that the PERMA+4 Survey, created by Donaldson et. al. (2022), was the most up-to-date and comprehensive iteration of various quantifying measures that exist in order to gauge how well staff are with regards to their Eudaimonic Wellbeing. By using the PERMA+4 Survey, which incorporates the additional four dimensions of Physical Health, Mindset, Environment and Economic Security, in addition to Seligman's original PERMA criteria (2011), information was revealed at the quantitative stage that would have been omitted with a less comprehensive wellbeing survey with fewer dimensions. This serves as a prescient reminder that asking the right questions is a key means to determine *how well are we now* - a key subsidiary question for understanding the core research question.

The theoretical framework also provided the background to the Workplace Wellbeing Scaffold (WWS), which was then used as a framing mechanism to gather qualitative information as to what needs participating individuals had regarding their wellbeing, as well as to help those individuals identify tangible and actionable strategies they could take to improve their overall wellbeing and life-satisfaction. By combining quantitative and qualitative measures, a more holistic approach to Eudaimonic Wellbeing can be taken.

The findings of the research indicate that, when looked at as a group, the employees of the school experience positive net-effect feelings towards the majority of the PERMA+4 dimensions. With a score of 6.15 on a scale of 1-7, employees surveyed experience a high feeling of Meaning, a feeling that is most consistently felt of all nine dimensions; a coefficient of variation of 15.55% indicating that the collective strength of feeling is most unanimous along this dimension. With high collective scores for Engagement (5.78), Achievement (5.49), Relationships and Physical Health (both 5.25) and Mindset (5.13), in addition to that of Meaning, it is clear that the baseline wellness of the organisation is largely positive. However, this feeling is not uniform across different group members within the organisation. Staff working in Early Years experience significantly higher levels of wellness according to the PERMA+4 dimensions than their peers in other parts of the school, whilst staff in both the early stages (0-3 years; 4-6 years) and later stages (12+ years) of their length of employment feel more positively about their wellbeing than those in middle length of service (7-9 years; 10-12 years). Given the variation in perception of wellness that different groups within the organisation feel, it is clear that many of the conditions needed for a sustainable culture of Eudaimonic Wellbeing already exist in places. They are not, however, transmitted universally across the organisation. The challenge that the organisation studied now faces is to implement those conditions on a consistent basis.

#### **5.2 Recommendations**

Whilst Berryhill, Linney & Fromewick (2009) rightly caution against making changes in individuals when the system itself may be part of the problem, given they are unlikely to redress the unmet needs of the individuals in question, a series of recommendations can be made based on the research and findings in this thesis. This is consistent with Schein's (2004) assertion that one of the three key sources of culture in an organisation are the learning experiences of group members as the organisation evolves.

#### 5.2.1 Surveying for Wellness as Culture

The results of the quantitative stage of this research reveal differences in how different stakeholder groups perceive their wellness in the workplace. Therefore, if the workplace in question wishes to both know how well their employees are at a given time, as well as to measure any net positive or negative effect of new policies implemented aimed at improving one or more dimensions of wellness, they must go about consistently and regularly surveying staff wellbeing in a non-judgmental manner. This recommendation is consistent with those made by Garland et. al. (2018). Given that response fatigue is a phenomenon which can cause reliability errors in collected data (Egleston, Miller & Meropol, 2011), the recommendation is that this form of surveying for wellness takes place on a once a semester basis. In implementing this as culture, more consistent, reliable, longitudinal information could be generated, as the sample size will increase from the current respondent group (n=58) to all employees.

#### 5.2.2 Employee Focus Groups

With certain groups in the workplace in question experiencing significantly higher or lower perceptions of their workplace wellbeing, groups at both ends should be interviewed and information gathered so as to improve the overall wellbeing of all staff. Given that Early Years staff show the highest PERMA+4 scores as a group, interviews should be conducted by Senior Leadership and advice sought from this cohort as to what is going right to keep them motivated, experiencing significant periods of *flow* and having a strong sense of wellbeing. Equally, with administrative staff and Secondary staff experiencing below-average perceptions of their *Relationships* and *Physical Health* respectively, focus groups from these cohorts should be organised to seek advice as to how these groups feel that their needs can be met in the workplace.

The same strategy can be applied for those staff in mid-length of service (7-9 years; 10-12 years) who experience a lower overall sense of wellbeing than their peers. In doing so, the organisation can determine which unmet needs this group experience, as well as what interventions can be made to improve this perception strategically over time.

# 5.2.3 Targeted Improvement of Environment and Economic Security Dimensions

Consistently the lowest scoring PERMA+4 dimensions across whole respondent, division of workplace and length of service subdivisions, the PERMA+4 dimensions of Environment (4.08) and Economic Security (3.8) require the most immediate employee-wide interventions. With regards to Environment, it is interesting to note that the staff working in the Primary division of the school (4.44) are the workplace division that have the most positive perception of their working environment, given that Primary staff all work in an open-plan building that was inaugurated in August 2021. Equally, staff in the 12+ years length of service have the most positive feeling towards their working environment (4.5) which may indicate that their length of service enables them to reflect on the structural improvements that have been made to the architectures of the school and workplace they have witnessed over the course of their careers at the organisation. That the school is organised around the concept of open-plan, flexible learning spaces should also indicate a focus on recruiting staff who are already comfortable with, or are willing to work in, such educational environments.

When considering Economic Security, it is important to return to the questions asked in the PERMA+4 survey: *I am comfortable with my current income*; *I could lose several months of pay due to serious illness, and still have my economic security* and *in the event of a financial emergency, I have adequate savings*. This is important to do, as current salary is not the only condition for positive PERMA+4 feelings of Economic Security. So, whilst considerations should be made as to whether remuneration can be brought in line with the recommendations made by Jebb et. al. (2018), additional considerations should be made with regards to policies aimed at financial education of staff, as well as policies aimed at helping staff to build their own financial nest eggs for times of need and / or retirement. Clearly, all of these are interlinked and should be redressed holistically.

### 5.2.4 Implementation of the Workplace Wellbeing Scaffold (WWS)

Recommendations 5.2.1 - 5.2.3 all focus on strategies that can be implemented to improve the overall wellbeing of the staff body at large. Given that staff wellbeing is best considered holistically, these group level interventions should be matched with an implementation of the Workplace Wellbeing Scaffold at an individual and team level.

The qualitative interviews in this research revealed that the Workplace Wellbeing Scaffold is a legitimate means for structuring inquiry into individual needs, as well as a reliable mechanism for individuals to identify strategies they themselves can take to improve their overall sense of wellbeing in the form of actionable I-Statements. In addition, it is feasible, with thematic analysis, to organise information from qualitative coaching interviews into themes and codes that provide further insight into the wellbeing of the employees. If the Workplace Wellbeing Scaffold were implemented as a coaching mechanism across the organisation, with Senior and Middle Leaders using it to help their team members find the interventions they can or could make to improve their wellbeing, then the strategies mentioned in 5.2.1 - 5.2.3 are more likely to yield positive wellbeing gains across PERMA+4 dimensions.

#### 5.3 Limitations

There exist limitations in the study. In spite of actions taken to ensure the reliability and validity of the research methods undertaken and the information presented. Principal among these is the relatively small sample size at both the quantitative and qualitative stage of the study. Whilst a sample size of 58 for the quantitative stage is a reasonable number to evaluate data from, it is not representative of the entire staff population in the organisation. For instance, the scope of the study needed to be scaled back when, having collected the quantitative data from participants, it was revealed that only two employees from Site B completed the survey, thus rendering the originally intended plan to compare wellness across sites unviable. In similar fashion, 29 of the total 58 participants (50%) identified themselves as being Secondary staff. Given that the researcher also identifies as part of this working group, there may have been increased trust toward the researcher on behalf of participants working in this section due to proximity of their day-to-day jobs.

This limitation may have further influenced those who chose to take part in the qualitative stage, where seven of the nine participants were from this division of the workplace. However, given that the qualitative stage involved analysis of individual PERMA+4 scores, identifying individual needs and then determining personal actions that could be taken in the form of I-Statements, this is less likely to limit the findings the qualitative interviews reveal. A final consideration to make regarding respondent group and participant size is that participants may have been reluctant to participate due to their responses being perceived in some form as a criticism of the employer. Although anonymity was guaranteed at both the quantitative and qualitative stages of data collection, and all measures have been taken to anonymise accounts represented in this paper, their may still have been a reluctance to discuss individual needs where they may have been perceived as criticism of the employer.

An additional limitation remains from those originally identified by Donaldson et. al. (2022) regarding the design of the PERMA+4 Survey, in that response fatigue can negatively impact the collection of quantitative data.

### **5.4 Further Questions**

Future questions remain to be answered as a result of the research contained within this thesis. Following on from Donaldson et. al.'s (2022) recommendation, a modified version of the PERMA+4 Survey remains to be designed for repeated use within the same organisation, so as to limit the effects of response fatigue. Whether this should involve the same questions over multiple iterations, or modified ones looking to reveal the same answers is an unanswered question at this stage. This connects to the importance of conducting workplace wellbeing research in a longitudinal fashion. To date, this study sits as a snapshot of how well staff in the international school in question were during the month of May 2022. For a culture of wellbeing to exist, this needs to be tracked and actively worked upon over time, with the net positive or negative result of any interventions made monitored. Otherwise, the research presented remains nothing more than a snapshot in the history of the school workplace.

Additional questions should also be asked about the monitoring of student Eudaimonic Wellbeing alongside the tracking and attempts to improve that of adult employees. Kern, Benson, Steinberg & Steinberg (2015) have already shown the validity of the EPOCH measure to determine the wellbeing of students in a school setting, whilst institutions such as Geelong Grammar School in Australia have shown the net benefits of implementing a Positive Education programme, rooted in Seligman's PERMA Framework for their students. (Mukhopadhyay & Panda, 2022).

It could be argued that weighting the PERMA+4 dimensions remains an outstanding question to consider. Do participants ascribe equal value to each of the nine PERMA+4 dimensions? However, given the fact that a human needs approach to wellbeing, using Max-Neef's (1991) axiological / existential Matrix of Needs and Satisfiers asserts that all Human Needs, with the exception of subsistence are equally important, this line of inquiry is likely to yield few viable results.

Through the use of Donaldson et. al.'s (2022) PERMA+4 framework, both as a quantitative diagnostic tool and also as a framework for conducting qualitative

interviews into the wellbeing needs of staff participants, a question emerges as to how effective it is at conveying time constraints on workplace eudaimonic wellbeing. As such, a question emerges as to whether a new dimension, time, should be added to the PERMA+4 framework, to factor into account whether concepts such as the working day, freedom to organise time and top-down populating schedules with meetings have positive or negative impacts on the ways in which individuals go about organising themselves to do their jobs to the best of their abilities.

A final further question remains regarding the research presented in this paper. In conjunction with The Sustainable Brain Health Project at Tampere University of Applied Sciences (TAMK), Suutari (2021) has shown the importance of community and mentorship as mechanisms to help early-career teachers foster a positive sense of wellbeing in the workplace. Given that novice teachers need all the help they can get (Suutari, 2021), it is possible that combining both self-leadership strategies with the Workplace Wellbeing Scaffold may yield the best possible outcomes for new teachers.

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#### **APPENDICES**

#### Appendix 1. Email sent out to all staff

Dear colleagues,

As part of my Master's thesis, I am investigating the role that wellbeing has on improving learning, with a specific focus on the human needs of the adults in the organisation of The aim of this survey is to establish how well we are as a collective now, so that further steps can be taken to improve both adult wellbeing and learning at

Please find questions written in both English and Portuguese for your convenience. This survey is reproduced with permission from its co-creator, Llewellyn van Zyl. All data collected will be anonymised.

The scale for all questions ranges from 1 (strongly disagree) to 7 (strongly agree).

Thank you for your help,

Jamie

Prezados colegas,

Por favor, encontre todas as perguntas em inglês e português para sua conveniência. Esta pesquisa é reproduzida com a permissão de seu co-criador, Llewellyn van Zyl. Todos os dados recolhidos serão anonimizados.

A escala para todas as questões varia de 1 (discordo totalmente) a 7 (concordo totalmente).

Obrigado pela ajuda,

Jamie

## Appendix 2. Preliminary Questions asked ahead of Quantitative PERMA+4 Survey

a: My official job title is / Meu cargo oficial é:

b: Number of years working at Company X / Número de anos trabalhando na Empresa X:

0-3
4-6
7-9
10-12
12-15
15+

c: Number of years in current role / Número de anos trabalhando no cargo atual:

0-3
4-6
7-9
10-12
12-15
15+

d: Principal place of work / principal local de trabalho:

Site ASite BOnline

e: My main role at Company X is / Minha função principal na Empresa X é:

- Administrative or Support (e.g. HR) / administrativa ou apoio (por exemplo RH)
- Pedagogical / pedagógica

f: I mostly work in / Eu trabalho principalmente em:

- □ Early Years
- Primary School
- □ Secondary School
- □ Administration / Support

#### Appendix 3. Invitation email for follow-up session

Dear colleagues,

Thank you once again for completing the PERMA+4 survey I sent to you earlier this month. It is very kind of you to share and to help me with my thesis and the concept of adult wellbeing at

As you selected 'Yes' for a potential follow-up session, I would now like to invite you to attend.

I will be running coaching sessions on Monday 30th and Tuesday 31st May. Please check this sheet as to whether there are slots available that suit you. If a cell is green, it is available. If it is black, it is black, it is booked by someone else. Please reply to this email to book one. For the purpose of anonymity, no viewers to this spreadsheet will have access and no revealing information will be shared.

Please sign up by replying to this email. Please note that these coaching sessions will take place on Zoom, will be conducted in English and that they will be recorded: Once again all of your data will be anonymised. They will be recorded for the transcription function on Zoom only. Should you not wish to conduct a session in this manner that is more than ok.

I anticipate that each session will last around 45 minutes. If I could ask that you reply to this by 13:00 Friday 27th May if you wish to participate so that I may prepare the materials I would be greatly appreciative.

Kind regards / Atenciosamente,

#### Appendix 4a. PERMA+4 Survey in English

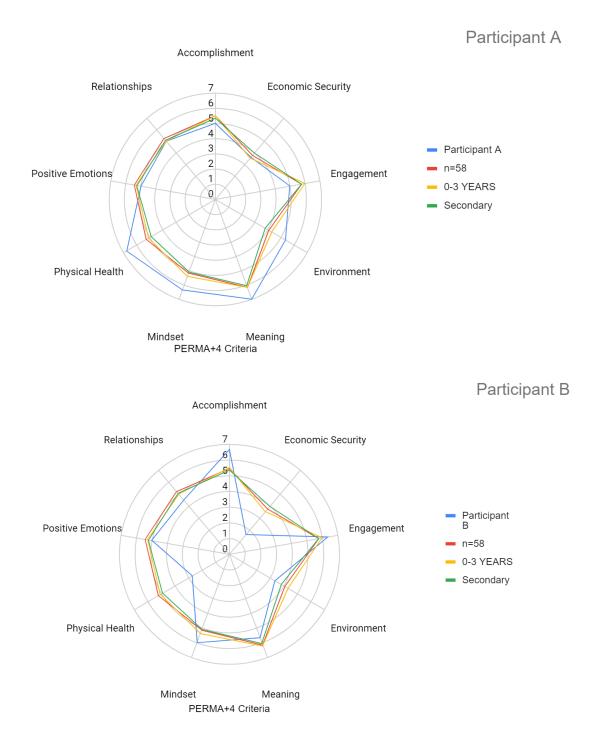
Dimension	Sub-Dimension	Question	Label
Positive Emotions	Future-Oriented and Affective	<ol> <li>I feel joy in a typical workday</li> <li>Overall, I feel enthusiastic about my work</li> <li>I love my job</li> </ol>	P1 P2 P3
Engagement	Absorption	<ul> <li>4. I typically become absorbed while I am working on something that challenges my abilities</li> <li>5. I lose track of time while doing something I enjoy at work</li> <li>6. When I am working on something I enjoy, I forget everything else around me</li> </ul>	E1 E2 E3
Relationships	Giving Perceived Shared Compassion Psychosocial	<ul> <li>7. I can receive support from coworkers if I need it</li> <li>8. I feel appreciated by my coworkers</li> <li>9. I trust my colleagues</li> <li>10. My colleagues bring out my best self</li> </ul>	R1 R2 R3 R4
Meaning	Transcendent Greater Good Motivations	11. My work is meaningful 12. I understand what makes my job meaningful 13. The work I do serves a greater purpose	M1 M2 M3

<b>.</b>			
Accomplishme nt	Goals	14. I set goals that help me achieve my career aspirations	A1
	Prove	15. I typically accomplish what I	A2
	(Performance Goal) Orientation	set out to do in my job 16. I am generally satisfied with my performance at work	A3
Physical Health	Biological	17. I typically feel physically healthy	H1
	Functional	18. I am rarely sick 19. I can typically overcome sources of physical distress	H2 H3
	Psychological	(e.g., insomnia, injuries, vision issues, etc.) 20. I feel in control of my physical health	H4
Mindset	Growth Mindset	21. I believe I can improve my job skills through hard work	MI1
		22. I believe my job will allow me to develop in the future	MI2
	Prospection	23. I have a bright future at my current work organization	MI3
Environment	Physical	24. My physical work environment (e.g., office space, classroom) allows me to focus on my work	EN1
		25. There is plenty of natural light in my workplace	EN2
		26. I can conveniently access nature in my work environment (e.g., parks, oceans, mountains, etc.)	EN3
Economic Security	Income	27. I am comfortable with my current income	ES1
	Medical Spending	28. I could lose several months of pay due to serious illness, and still have my economic security	ES2
	Financial Savings	29. In the event of a financial emergency, I have adequate savings	ES3

# Appendix 4b. PERMA+4 Survey Questions in Portuguese

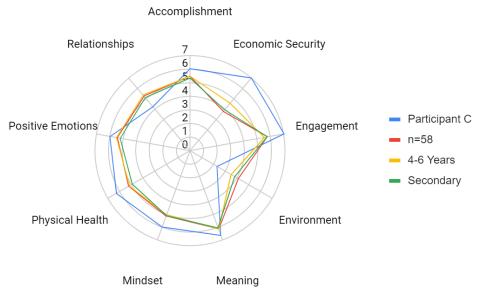
Dimension	Sub-Dimension	Question	Label
Positive Emotions	Future-Oriented and Affective	<ol> <li>Sinto alegria durante um dia de trabalho típico</li> <li>No geral, sinto-me entusiasmado com o meu trabalho</li> <li>Eu amo meu trabalho</li> </ol>	P1 P2 P3
Engagement	Absorption	<ul> <li>4. Costumo ficar imerso em tarefas que desafiam minhas habilidades</li> <li>5. Eu perco a noção do tempo enquanto faço algo que gosto</li> <li>6. Quando estou trabalhando em algo que gosto, eu esqueço tudo ao meu redor</li> </ul>	E1 E2 E3
Relationship s	Giving Perceived Shared Compassion Psychosocial	<ul> <li>7. Tenho apoio dos meus colegas quando preciso</li> <li>8. Eu me sinto valorizado pelos meus colegas</li> <li>9. Eu confio nos meus colegas</li> <li>10. Meus colegas despertam a minha melhor versão</li> </ul>	R1 R2 R3 R4
Meaning	Transcendent Greater Good Motivations	<ul> <li>11. Meu trabalho é significativo</li> <li>12. Eu entendo o que torna o meu trabalho significativo</li> <li>13. O trabalho que eu faço serve a um propósito maior</li> </ul>	M1 M2 M3
Accomplish ment	Goals Prove (Performance Goal) Orientation	<ul> <li>14. Eu estabeleço metas que me ajudam a alcançar minhas aspirações de carreira</li> <li>15. Eu normalmente concluo as coisas que eu começo no meu trabalho</li> <li>16. Estou geralmente satisfeito com o meu desempenho no trabalho</li> </ul>	A1 A2 A3
Physical Health	Biological Functional Psychological	<ul> <li>17. Normalmente me sinto fisicamente saudável</li> <li>18. Estou raramente doente</li> <li>19. Geralmente consigo superar fontes de sofrimento físico (por exemplo insônia, lesões físicas, problemas de visão)</li> </ul>	H1 H2 H3

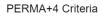
		20. Eu me sinto no controle da minha saúde física	H4
Mindset	Growth Mindset Prospection	21. Acredito que posso melhorar as minhas habilidades através do trabalho duro 22. Acredito que o meu trabalho permitirá me desenvolver no futuro 23.Eu tenho um futuro brilhante pela frente na atual empresa em que trabalho	MI1 MI2 MI3
Environment	Physical	24. O ambiente físico do meu local de trabalho (por exemplo, escritório, sala de aula) permite que eu me concentre 25. Há muita luz natural no meu local do trabalho 26. É conveniente acessar a natureza do meu local do trabalho (por exemplo o mar, montanhas, parques)	EN1 EN2 EN3
Economic Security	Income Medical Spending Financial Savings	<ul> <li>27. Estou confortável com o meu salario atual</li> <li>28.Eu poderia perder vários meses de salário por causa de uma doença grave e ainda ter minha segurança financeira</li> <li>29.Em caso de emergências financeiras, tenho economias suficientes</li> </ul>	ES1 ES2 ES3

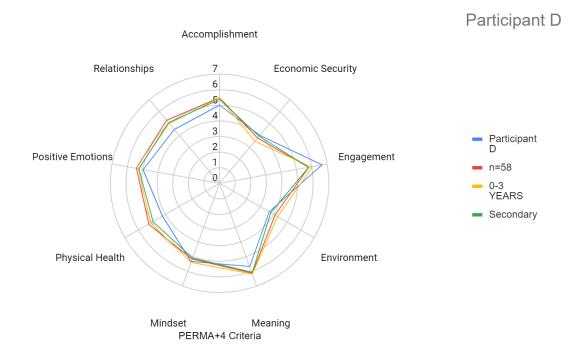


### Appendix 5. Qualitative Interview Participant Radar Charts





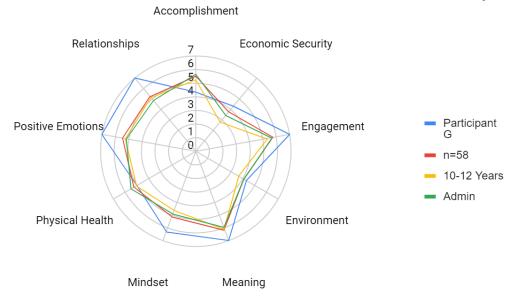


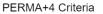


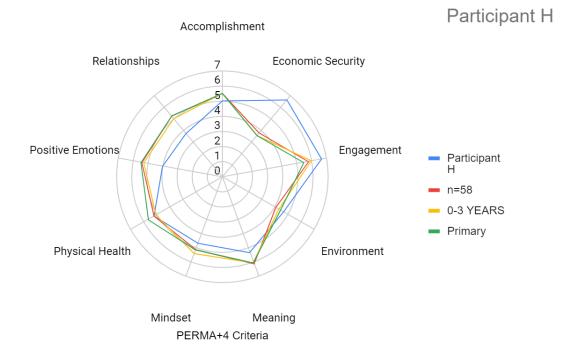


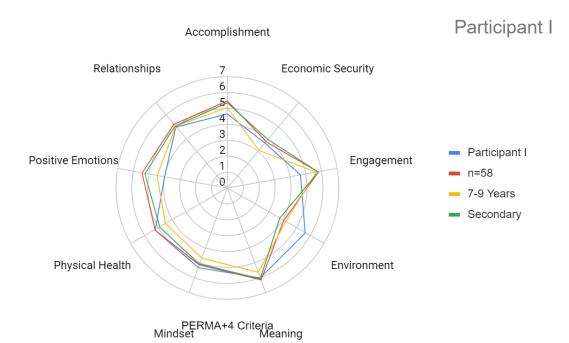
PERMA+4 Criteria











# Appendix 6. Qualitative Interview Participants' Self-Identified Workplace Needs

Participant A				
Neede	Needs	s according to e	existential cate	gories
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Affection	Self-esteem / solidarity /respect / sense of humour / generosity	Friendships / family / relationship with nature	Share / take care of / appreciate / express emotions	Privacy / intimacy / spaces of togetherness
Identity	Sense of belonging / self-esteem / assertiveness	Language / customs / identity / sexuality / customs / values	Commit / integrate / grow / get to know oneself	Places one belongs to / everyday settings

Participant B	Participant B				
	Needs	s according to	existential cate	gories	
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)	
Subsistence	Physical & mental health / balance / adaptability		Feed / clothe / rest / work	Living environment / social setting	
Participation			Co-operate / dissent / express opinions / agree upon		
Leisure			Day-dream / remember / relax / have fun / play / reminisce		

Creation	Abilities / skills / work / techniques		
Identity		Commit / integrate / grow / get to know oneself	
Freedom		Dissent / choose / take risks / be different from	

Participant C				
	Needs	according to e	existential cate	gories
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Participation	Adaptability / determination / passion / respect / receptiveness		Co-operate / dissent / express opinions / agree upon	
Creation	Imagination / boldness / inventiveness / passion / determination /			
Identity	Sense of belonging / self-esteem / assertiveness	Language / customs / identity / sexuality / customs / values		
Freedom			Dissent / choose / take risks / be different from	

Participant D	Participant D				
	Needs	s according to e	existential cate	gories	
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)	
Subsistence				Living environment / social setting	
Protection	Care / adaptability / autonomy				
Participation	Adaptability / determination / passion / respect / receptiveness				
Leisure				Landscapes / privacy / intimacy /	
Identity		Language / customs / identity / sexuality / customs / values			
Freedom			Dissent / choose / take risks / be different from		

Participant E				
	Needs	s according to e	existential cate	gories
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)
Leisure	Imagination / curiosity / receptiveness / tranquility		Day-dream / remember / relax / have fun / play / reminisce	

Identity	Sense of belonging / self-esteem / assertiveness			
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Participant F	Participant F					
Neede	Needs acc	cording to exi	stential cateç	jories		
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)		
Subsistence	Physical & mental health / balance / adaptability					
Protection	Care / adaptability / autonomy		Cooperate / plan / take care of / help			
Affection			Share / take care of / appreciate / express emotions			
Understanding		Literature / teachers / education policy / communica tion policy		Schools / families / universities / communitie s		
Participation				Association s / communitie s / family / groups /		
Leisure		Games / clubs / parties / peace of mind		Landscape s / privacy / intimacy /		

Participant G						
Needs According to Axiological categories	Needs according to existential categories					
	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)		
Participation			Co-operate / dissent / express opinions / agree upon	Associations / communities / family / groups /		

Participant H						
Needs According to Axiological categories	Needs according to existential categories					
	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)		
Subsistence				Living environment / social setting		
Affection				Privacy / intimacy / spaces of togetherness		
Participation				Associations / communities / family / groups /		
Identity	Sense of belonging / self-esteem / assertiveness					
Freedom				Time and space choices		

Participant I					
	Needs according to existential categories				
Needs According to Axiological categories	Being (qualities)	Having (things)	Doing (actions)	Interacting (settings)	
Protection			Cooperate / plan / take care of / help		
Affection	Self-esteem / solidarity /respect / sense of humour / generosity				
Participation			Co-operate / dissent / express opinions / agree upon	Associations / communities / family / groups /	
Creation		Abilities / skills / work / techniques			
Identity	Sense of belonging / self-esteem / assertiveness			Places one belongs to / everyday settings	