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Towards a framework for conceptualising holistic wellbeing in schools

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Abstract: Human wellbeing is highly interconnected with the wellbeing (and survival) of the whole Earth's ecosystem. Schools are important places in which people learn how to enhance both present and future wellbeing. To date, however, there are no school wellbeing frameworks that holistically consider the psychosocial and physical wellbeing of the entire school community and extend the concept of wellbeing beyond human boundaries. This paper focuses on the need to increase our understanding of what holistic wellbeing in schools means from a broad perspective, including not only various aspects of human wellbeing but also non-human aspects of wellbeing into a single conceptual framework. The framework was developed based on a narrative literature review consisting of 107 articles. The profound joy and happiness of both teachers and learners form the foundation of our conceptualisation of wellbeing. In addition to these core concepts, and based on the earlier conceptualisations of holistic wellbeing, our framework includes physical, psychological, social, creative and socioeconomic dimensions of wellbeing. Finally, all these wellbeing dimensions are highly dependent on planetary wellbeing. The framework is designed to serve as a basis for developing pre- and in-service teacher training programmes and to support school leaders and educational policymakers in their efforts to promote holistic wellbeing at schools.

Keywords: physical wellbeing, psychological wellbeing, emotional wellbeing, social wellbeing, creative wellbeing, socioeconomic wellbeing, planetary wellbeing, joyful learning

1. Introduction

Twenty-first-century schools are expected to promote a wide range of competences[1], including transversal 'Key competences for life-long learning' (European Union, 2018). Similarly, increased attention has been given to wellbeing at schools. For example, in the Finnish National Core Curriculum for Basic Education (Finnish National Board of Education, 2016), the wellbeing-related competence 'taking care of oneself and managing daily life' is considered a transversal competence. Wellbeing is both a prerequisite for learning and an outcome of education; that is, while wellbeing enhances opportunities to engage in education, education can promote both present and future wellbeing (Sprat, 2016). Furthermore, interrelations identified between staff and student wellbeing (Brewster et al., 2022; Harding et al., 2019) and between teacher wellbeing and high-quality teaching and learning (Dreer, 2023; Turner & Thielking, 2019) indicate that it is

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[1] Note: We have chosen to use the concept competence/competences instead of competency/competencies to align the terms with the Recommendation of 22 May 2018 on Key Competences for Lifelong Learning proposed by the European Union (2018).

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important to support the wellbeing of the entire learning community. The complex interconnections between teacher wellbeing, student wellbeing and teaching quality were also confirmed in a recent systematic review of the research on teacher wellbeing (Hascher & Waber, 2021). Therefore, teachers should be supported both in promoting learner wellbeing and in taking control of their own wellbeing (Crider, 2021).

In recent decades, humanity has faced a series of interconnected crises, including environmental, economic, social, cultural and health crises (Heikkinen et al., 2024). These challenges compel us to rethink how we approach wellbeing in schools. In addition to focusing on human wellbeing, there is a growing need to shift our perspective away from anthropocentrism towards a more-than-human approach (see Huttunen & Heikkinen, 2024). Current research increasingly emphasises planetary wellbeing, which extends the concept of wellbeing beyond humans to encompass the Earth's whole ecosystem, consisting of both organic and non-organic components whose wellbeing (and survival) are highly interconnected (Kortetmäki et al., 2021). To date, however, there are no school wellbeing frameworks that holistically address both the psychosocial and physical wellbeing of the entire school community while also expanding the concept of wellbeing beyond human boundaries. This paper focuses on the need to increase our understanding of what holistic wellbeing in schools means from a broad perspective, including not only various aspects of human wellbeing but also non-human aspects of wellbeing into a single conceptual framework.

The wellbeing framework development described in this article is part of a European Commission-funded project titled Joyful Schools: Active Learning Strategies for Health, Wellbeing and Growth Mindset (2023–2026), with participants from Austria, Finland, Luxembourg and Romania. The project is based on the broadly identified need to put a greater emphasis on wellbeing in the school curriculum. For instance, UNICEF (2020) has highlighted an urgent need for post-pandemic whole-school wellbeing interventions. The main aims of the Joyful Schools project are to a) enhance teachers' knowledge, skills, values and attitudes related to wellbeing promotion and b) improve teachers' and learners' wellbeing in schools.

The project will first create a research-based wellbeing framework that is relevant and valuable, particularly for teachers, school leaders and educational policymakers. This framework will then serve as the foundation for the development of an online blended course on the promotion of holistic wellbeing designed for primary and lower secondary pre- and in-service teacher training. In addition, curricular development recommendations for policymakers will be elaborated based on the theoretical framework, a curriculum analysis and focus group discussions in each project country.

2. Method

We chose to develop the framework through a traditional narrative literature review, which is a flexible and exploratory research method typically used to construct conceptual knowledge in various cycles of searches until there is clarity in the conceptualisation (see Jesson et al., 2011). Through this integrative review, we interpreted and synthesised diverse theoretical and empirical perspectives on wellbeing and iteratively refined the framework until it reached thematic sufficiency and structural adequacy (see Sukhera, 2022). As is typical in narrative literature reviews (Rumrill & Fitzgerald, 2001), we aimed to build a theoretical model and provide insight into a complicated topic, namely holistic wellbeing in schools. The main research questions were as follows: According to the theoretical and empirical research literature, what are the most important wellbeing components to include in a holistic school wellbeing

framework? What is the best way to categorise wellbeing components into framework dimensions?

Each project partner contributed to the literature review. The search was divided between partners based on their expertise in certain wellbeing-related concepts. An initial list of keywords was created through a collaborative effort based on the project objectives stated in the project proposal. It included the following concepts related to overall wellbeing in the educational context: wellbeing; joy, joyful learning and the joy of learning; happiness and satisfaction; self-determination theory; flow theory; the PERMA model; social and emotional competences; resilience; collaboration; prosociality; creativity; inclusion; healthy lifestyle; and planetary wellbeing. In the review process, we used common search engines such as Google Scholar, ERIC and JSTOR.

In the initial phase of the literature review, we created a database of 79 references that included the papers' keywords, abstracts, educational levels covered, key concepts and definitions and findings that could be relevant for constructing the framework. Each project partner contributed the literature related to the wellbeing concepts they had been assigned to review to the database. Although literature from authors such as Bandura, Ryan and Deci, Seligman, Csikszentmihalyi and Vygotsky served as the main theoretical pillars of this work, we were also open to other theoretical perspectives. For example, Allardt and Uusitalo's (1972) dimensions of welfare – 'having', 'loving' and 'being' – were added to the review in a second review cycle because they cohered with a holistic conceptualisation of wellbeing.

In the second review cycle, the authors of this paper, led by the first author, focused on finding literature on the wellbeing components into which the first review cycle did not provide sufficient insights. Additional literature was needed to define certain specific wellbeing-related concepts. For example, we aimed to clarify the relations between health and wellbeing, between cognitive, emotional and socioemotional wellbeing and between human and planetary wellbeing. As a result, 51 additional references were included in our review. Meanwhile, 30 references collected in the first review cycle were excluded from the final review because they were redundant or did not provide additional insights for the framework. For example, of the various articles employing Ryan and Deci's self-determination theory or the PERMA model, we selected only those articles that contributed significantly to the development of the framework. Grey literature, such as reports and webpages, was excluded from the review. As is typical for narrative reviews (Sukhera, 2022), the aim was not to be inclusive of all literature addressing the topic; we determined that saturation or thematic sufficiency for the framework's development would be reached after finding 100 references in two review cycles. Finally, seven additional references were included based on the peer reviewers' suggestions.

The conceptualisation of holistic wellbeing in schools developed through the narrative literature review consisting of theoretical and empirical articles is presented in the Results section, which starts with a definition of holistic wellbeing. The components of a) physical and psychological dimensions of wellbeing; b) social, creative and socioeconomic dimensions of wellbeing; and c) planetary wellbeing dimension are then described in the following subsections.

The wellbeing components grouped into different wellbeing dimensions or categories were not predetermined but were selected and refined during the review process. Most of the reviewed articles considered various wellbeing components and dimensions. Decisions to certain group wellbeing components under a specific wellbeing dimension were made collaboratively by the research team. Components categorised under psychological wellbeing dimension were discussed in approximately 70% of the reviewed articles. Components categorised under social wellbeing dimension were discussed in approximately 40% of the articles. Physical and creative

wellbeing were each discussed in around 20% of the reviewed articles. Socioeconomic and planetary wellbeing were each discussed in around 10% of the articles. We believe that these percentages reflect the prevalence of the psychological and social wellbeing dimensions in wellbeing research.

3. Results

3.1 Defining holistic wellbeing

Satisfying one's basic needs, as well as possessing the resources and resilience needed to face challenges, can be viewed as a basis for wellbeing. According to Ryan and Deci's (2000) widely used self-determination theory, satisfying basic physiological and psychological needs for autonomy, relatedness (i.e. a sense of belonging and connection) and competence positively influences wellbeing. Ryan and Deci (2008) argued that these basic needs must be satisfied before individuals can experience optimal development, performance and wellbeing within any domain and across cultural contexts. In line with the importance of satisfying basic needs, Dodge et al. (2012) defined wellbeing as a state of equilibrium between the individual's psychological, social and physical resources and existing challenges. In line with this reasoning, wellbeing is linked to resilience, which is defined as the capacity of a system to adapt successfully to challenges that threaten its function, survival, or future development (Barnes, 2020; Masten & Barnes, 2018). Resilience is also related to self-efficacy beliefs, which, according to Bandura (1986), help to determine persistence and perseverance in our efforts. In our conceptualisation, satisfying basic needs, as well as having the resources and resilience needed to respond to existing challenges, is connected to responding to not only individual, social, cultural, or economic challenges but also environmental challenges that can threaten the survival of the whole Earth's ecosystem.
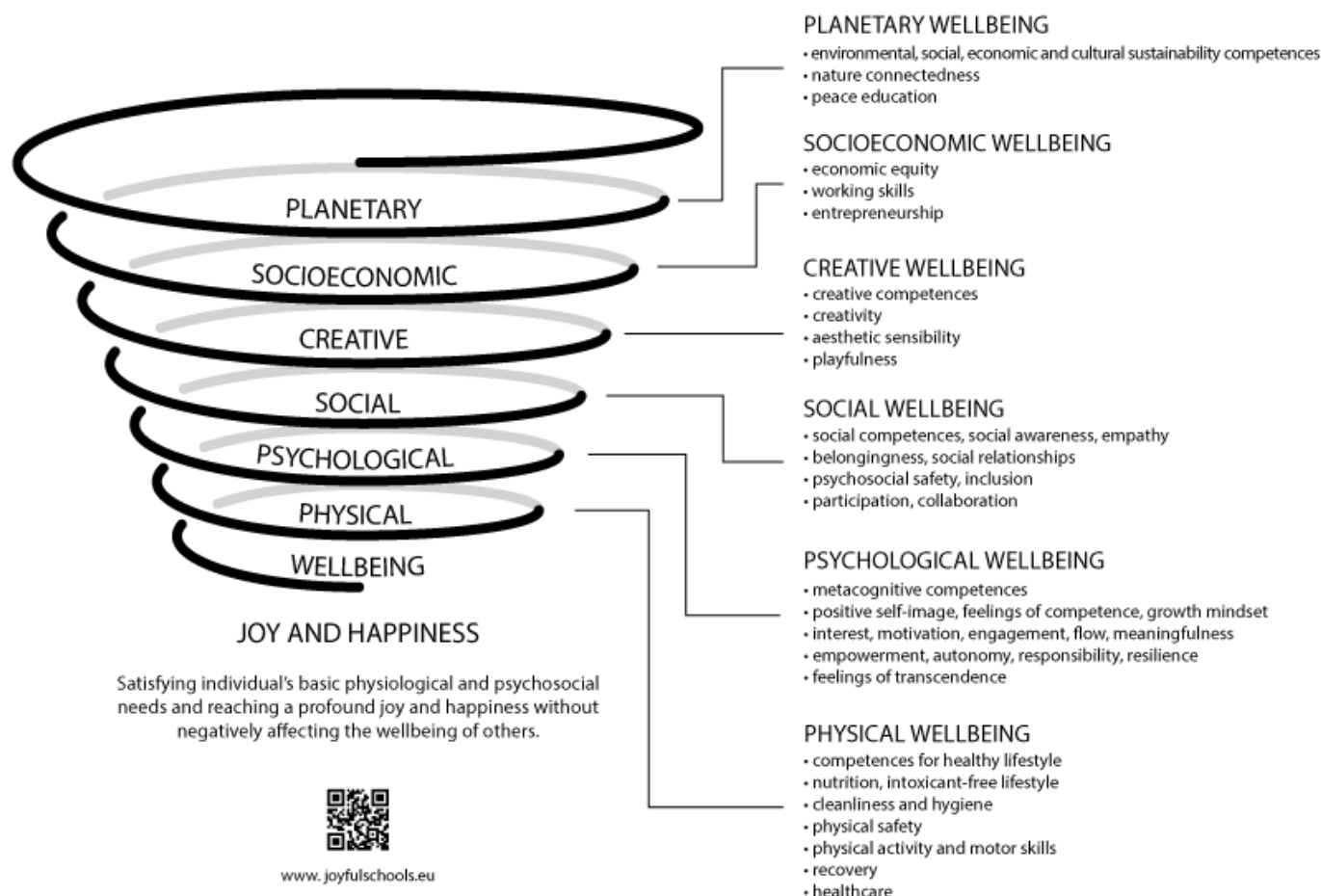
Our conceptualisation of wellbeing goes beyond the idea of satisfying basic physiological and psychological needs and responding to challenges by connecting the concepts of joy and happiness to wellbeing. This is in line with theories such as the positive psychological theory of wellbeing and flourishing (Seligman, 2011), which defines wellbeing as the combination of five elements for a life of profound fulfillment. In Seligman's (2011) theory, positive emotions (or happiness), engagement, relationships, meaning and accomplishment (PERMA) contribute to wellbeing, can be pursued for their own sake and can be independently defined and measured. Flourishing, defined as 'a dynamic optimal state of psychosocial functioning that arises from functioning well across multiple psychosocial domains' (Butler & Kern, 2016, p. 2), is closely linked to the concept of wellbeing. In their discussions of subjective experiences of wellbeing and the balance between individual and collective wellbeing, Seligman and Csikszentmihalyi (2000) frame the concept of wellbeing as influenced by past experiences of contentment and satisfaction, present experiences of flow and happiness and hope and optimism about the future. This brings us back to the idea that wellbeing, including profound feelings of joy and happiness, cannot be reached without considering the future of our planet. Our framework is human- and individual-centred in the sense that we believe that it is vital for individuals to learn to take care of themselves in order to be able to take care of other living creatures. Satisfying one's basic needs and reaching inner happiness and joy should not, however, come at the cost of the wellbeing of others and put them, in the worst case, at risk of extinction (see Kortetmäki et al., 2021).

In our framework, wellbeing is highly related to psychological (mental) and physical health. Seligman and Csikszentmihalyi (2000) associate mental wellbeing, positive emotions and optimism with better physical health. In fact, a sixth pillar, (physical) health, is often used to complement the five pillars proposed in the original PERMA model (Kern, 2022), which becomes PERMAH. In our conceptualisation, health encompasses aspects of social and mental wellbeing,

not just the absence of disease (Natvig et al., 2003). Similarly, health status is included in Konu and Rimpelä's (2002) operationalised model of school wellbeing based on Allardt and Uusitalo's (1972) sociological theory of welfare, which divides indicators of wellbeing into a) school conditions (having), b) social relationships (loving), c) means for self-fulfilment (being) and d) health status. Health status is evaluated through the learner's physical and mental symptoms, diseases and illnesses. Whereas 'disease' refers to something that can be identified by medical science, 'illnesses' refers to feelings that people experience. On one hand, health is perceived as a requisite for achieving other forms of wellbeing. On the other hand, a chronically ill person may gain wellbeing by weighing aspects of other wellbeing categories (Konu & Rimpelä, 2002.)

Figure 1 illustrates the essential dimensions and components of holistic school wellbeing identified in our review. The visualisation's spiral shape, extending from physical (human) wellbeing to planetary wellbeing, underscores the dynamic and interconnected nature of these dimensions. However, it is important to note that this representation does not imply direct causal relationships between the different wellbeing dimensions and components. Instead, it highlights their interwoven nature.

Figure 1. *Visualisation of Holistic Wellbeing and Health in Schools – Framework*

Joy and happiness are considered to form the foundation of our conceptualisation of wellbeing. In the school context, the focus is particularly on joyful teaching and learning. In line with Waterworth (2020), we define joy as a feeling, state of mind, attitude of constant inner satisfaction and comfort sustained by a sense of peace, passion, or enthusiasm. Wicaksono (2020) adds to this definition the idea of openly expressing joy. The concept of joy is closely connected to the concept of happiness. As Seligman and Csikszentmihalyi (2000) put it, happiness refers to subjective

wellbeing related to what people think and how they feel about their lives and to the cognitive and affective conclusions they reach when evaluating their existence. According to Seligman (2011), wellbeing consists of a combination of cognitive happiness (i.e. satisfaction), hedonistic happiness (i.e. feeling) and eudaimonia (i.e. meaning). Csikszentmihalyi (1990, 2000) argues that happiness does not depend on outside events but on the ability to cultivate inner harmony to determine the quality of our lives while also being strongly committed to other people and the surrounding environment. For Csikszentmihalyi (1999), happiness is not something that happens to people but rather something that they make happen; that is, a prerequisite for happiness is the ability to get fully involved in life. In our framework, joy and happiness are viewed as profound and relatively stable inner states. The problem is that although profound enjoyment is what leads to personal growth and long-term happiness, people commonly opt for more momentary pleasure over enjoyment (Seligman & Csikszentmihalyi, 2000). However, profound enjoyment, happiness and joyful learning come from meaningful and fulfilling experiences (Seligman, 2011; Yabo, 2020). According to Csikszentmihalyi (1990, 1997, 1999, 2000), happiness is typically experienced only after pushing oneself to one's limits, especially to accomplish something difficult or worthwhile and experiencing flow by being intensely involved in the activity.

As Figure 1 illustrates, our framework for conceptualising holistic wellbeing emphasises not only supporting wellbeing in schools but also developing wellbeing competences. *Physical wellbeing* and competences related to it are given an important role in our framework, as satisfying basic physical needs such as nutrition are vital to individuals' functioning, including the capacity to learn. Physical and psychological (emotional and cognitive) wellbeing are also highly interrelated. For example, Kern et al. (2015) identified correlations between physical vitality and activity and mental wellbeing elements such as life satisfaction, school engagement and having a growth mindset.

Taking care of physical wellbeing provides good conditions for taking care of *psychological wellbeing* and its related competences. Conversely, psychological wellbeing has been found to promote physical wellbeing, including enhanced exercise regularity, smoking abstinence, a healthier diet and healthy coping strategies (Hernandez et al., 2018). Given the interdependence and parallel process of cognitive and emotional development (Halse et al., 2024), as well as the difficulty in categorising many concepts either into cognition or emotion, we decided not to distinguish between cognition and emotion and instead consider them as part of overall psychological wellbeing.

We acknowledge that emotional wellbeing and emotional competences could also be considered part of socioemotional wellbeing and socioemotional competences (e.g. Jennings & Greenberg, 2009; Thierry et al., 2022) and that psychological development is strongly influenced by social and cultural factors (e.g. Vygotsky, 1978); however, in this framework, we distinguish psychological wellbeing from the *social wellbeing* dimension to emphasise the importance of taking care of a) each individual's mental health and wellbeing and b) the social wellbeing of the whole school community. The high interrelatedness of physical, psychological (cognitive and emotional) and social wellbeing indicates a need to consider overall wellbeing holistically rather than focusing on only one wellbeing dimension.

Creating, expressing, sharing and enjoying cultural creations as a community also contributes to wellbeing. In this framework, we used the concept of *creative wellbeing* and its related competences to refer to cultural interventions that enhance wellbeing (see Ganga et al., 2025), ranging from enjoying creative masterpieces to individuals' everyday creativity that are considered important for wellbeing (Kiernan et al., 2020). In their scoping review, Fancourt and Finn (2019) identified over 3,000 studies showing the health and wellbeing effects of a) the

performing arts (music, dance, theatre, singing, filming, etc.), b) the visual arts, design and craft (painting, photography, sculpture, textiles, etc.), c) literature (writing, reading, attending literary festivals, etc.), d) culture (attending museums, galleries, art exhibitions, concerts, the theatre, community events, cultural festivals, fairs, etc.) and e) online, digital and electronic arts (animations, film-making, computer graphics, etc.). Previous studies (e.g. Galton & Page, 2014) have suggested that creative initiatives at school may foster interpersonal wellbeing (e.g. feeling safe and avoiding loneliness), life satisfaction (e.g. feeling enthusiastic) and competence (e.g. feeling successful and capable of facing challenges) and reduce negative emotions (e.g. misery and stress). Creative and cultural activities, including multi/inter-cultural aspects supporting the preservation of personal identity and cultural heritage and experience, have also been identified as important factors for wellbeing (Fancourt & Finn, 2019).

Our framework also includes *socioeconomic wellbeing* and its related competences. In addition to health, physical wellbeing and education, Allardt and Uusitalo (1972) refer to individual resources related to income and employment as 'having'. While economic wellbeing can support overall wellbeing, prioritising pursuing economic wellbeing at any cost can be detrimental to overall wellbeing. Csikszentmihalyi (1999) writes about the ambiguous relationship between material and subjective wellbeing: While material rewards do not necessarily provide happiness, there is no intrinsic reason why material and socioemotional rewards would be mutually exclusive. Beyond a certain minimum threshold, which is not stable but varies with the distribution of resources in society, material rewards seem to be irrelevant. It is important for individuals not to focus solely on economic wellbeing; they should have other goals in life (Csikszentmihalyi, 1999). For instance, creative people are not driven by the desire for fame or money but rather by the opportunity to do work they enjoy (Csikszentmihalyi, 1997). In addition, economic wellbeing should be aligned with the principles of sustainable development.

Finally, *planetary wellbeing* and its related competences provide the overarching context for our framework. We argue that neither deep joy and happiness nor physical, psychological, social, creative and socioeconomic wellbeing can be achieved if we neglect other parts of Earth's ecosystem to which we belong. Ultimately, human wellbeing and survival are highly interconnected with the wellbeing of other species (Kortetmäki et al., 2021). Planetary wellbeing may increase or decline and humans are considered responsible for the impacts of their activities (Kortetmäki et al., 2021) and should thus take moral responsibility for planetary wellbeing and admit their role in maintaining the balance of the ecosystem (Heikkinen et al., 2024).

In the following sections, we describe the wellbeing components that were included under each framework dimension based on the literature review.

3.2 Physical and psychological wellbeing

Regarding the physical dimension of wellbeing (Figure 1), schools can do much to support developing *competences for a healthy lifestyle* and promoting physical health, including knowledge, skills, values and attitudes related to *nutrition*, healthy meals, an *intoxicant-free lifestyle*, good *cleanliness and hygiene* standards, *physical safety* as well as *physical activity and motor skills* (Kirkcaldy et al., 2002; Konu & Rimpelä, 2002; Ling et al. 2014; Mäkelä & Leinonen, 2021). Physical activity, in particular, prevents and reduces physical and mental health issues, obesity and other lifestyle-related diseases (Duncan et al., 2024). Engaging regularly in physical activity may prevent anxiety and depression, drug and alcohol addiction and social-behavioural problems (Kirkcaldy et al., 2002).

Likewise, sufficient *recovery*, including rest, sleep and active free time, is a prerequisite for physical wellbeing. It is important to prevent overload and ensure that both teachers and learners

have opportunities for breaks, rest, leisure time and enough sleep (Mäkelä & Leinonen, 2021). Teacher wellbeing has also been found to positively influence teachers' quality of sleep (Dreer, 2023). Optimal brain functioning requires enough breaks and stress-free environments (Willis, 2016). School breaks may also promote joyful learning, including the development of good friendships (Cronqvist, 2021). Furthermore, it is important to balance screen time and the use of social media to prevent physical health problems, such as eye conditions, obesity and sleep disorders (Qi et al., 2023; Sümen & Evgin, 2021).

Healthcare, including both preventing and treating illnesses, is an important part of promoting wellbeing (Duncan et al., 2024). Good healthcare provision and collaboration with healthcare professionals (Konu & Rimpelä, 2002; Mäkelä & Leinonen, 2021) are vital to nurturing resilience and supporting healthy development (Masten & Barnes, 2018).

As far as psychological wellbeing is concerned (Figure 1), *metacognitive competence* refers to one's awareness of and ability to monitor and control one's cognitive and affective processes (see Efklides, 2006; Efklides & Schwartz, 2024). Metacognitive competence entails the ability for both self-regulation and self-reflection (Jaleel, 2016). Self-regulation includes cognitive, affective and behavioural factors such as goal setting, intrinsic motivation, active engagement, strategic action and self-assessment (Loyens et al., 2008). The aim of self-assessment is to see oneself accurately, which can be motivated by self-enhancement and seeing oneself positively (Sedikides, 1993). Self-reflection refers to reflecting on one's personality traits, such as social behaviour, moral values, work habits or performance quality (Sedikides, 1993). Metacognitive awareness and self-awareness are also related to mindfulness, which is defined as intentionally paying attention, in the present moment and non-judgmentally, to the unfolding of experience moment by moment (Kabat-Zinn, 2003) and supports mental wellbeing by, for example, reducing stress, worry and anxiety (McKeering & Hwang, 2019).

According to Bandura's (1986) social cognitive theory, self-efficacy beliefs constitute the key factors of human agency, motivation, self-regulation, behaviour and achievement. Students' general self-efficacy has also been found to support feelings of happiness (Natvig et al., 2003). Self-efficacy beliefs influence one's self-image. *Positive self-image* – that is, a positive perception about one's own self, body, mental functioning, social attitudes and adjustment in different aspects of life (Di Blasi et al., 2015), as well as healthy self-esteem (Dalgas-Pelish, 2006) – is viewed as supportive of mental wellbeing. A positive self-image is also associated with regular physical activity (Kirkcaldy et al., 2002).

Strong self-efficacy beliefs and positive self-image are supported by *feelings of competence*, accomplishment and success. Competence positively influences self-motivation, wellbeing and mental health (Deci & Ryan, 2000). Perceived academic and social competence is a strong predictor of school satisfaction (Randolph et al., 2010) and experiences of success promote joyful learning (Rantala & Määttä, 2012). Similar to learners' wellbeing (Leskisenoja & Uusiautti, 2017), teachers' wellbeing is supported by feelings of accomplishment and achievement as well as making a difference and having an impact on learners' growth (Crider, 2021; see also Butler & Kern, 2016). Associations found between teachers' and students' mental health and wellbeing (Harding et al., 2019) further justify the importance of ensuring that teachers' psychological wellbeing is taken care of.

Positive self-image and feelings of competence should, however, be coupled with a *growth mindset* that is associated with mental and physical wellbeing, emotional intelligence, confidence and resilience (Barnes, 2020; Beese & Martin, 2019; Kern et al., 2015). Growth mindset is seen as important for both learners and teachers (Faulkner & Latham, 2016). A growth mindset is also supportive to personal growth and the satisfaction of one's growth needs included in 'being' in

Allardt and Uusitalo's (1972) sociological theory of welfare. A growth mindset motivates individuals to go beyond one's comfort zones and to take risks (Faulkner & Latham, 2016; Parson & Taylor, 2011), which is a positive characteristic associated with improved quality of life (Seligman & Csikszentmihalyi, 2000).

A growth mindset can support the development of *interest*, *motivation*, *engagement* and *flow*, all of which support learning and wellbeing (Beese & Martin, 2019; Borovay et al., 2019; Cronqvist, 2021; Jeet & Pant, 2023; Yabo, 2020). Deci and Ryan (2000) argue that satisfaction of one's basic needs facilitates natural growth processes, including interest, intrinsically motivated behaviour and integration of extrinsic motivations. Engagement refers to being absorbed, excited and interested in what one does (Butler & Kern, 2016). Both cognitive (e.g. self-regulation) and affective (e.g. enjoyment) factors of engagement are determinants of school-related wellbeing (Pietarinen et al., 2014). Student motivation and engagement are positively associated with wellbeing, mental health and resilience (Chue et al., 2024) and are enhanced when one is able to immerse oneself in an activity and feel positive emotions in a flow experience (Almetev, 2018).

Shernoff et al. (2003) included the culmination of concentration, interest and enjoyment, i.e. flow, in their conceptualisation of student engagement. Flow, as conceptualised by Csikszentmihalyi (1990) and further explored by Shernoff (2013), is best understood as an optimal state of deep engagement in which challenge and skill are balanced, leading to an immersive and intrinsically rewarding experience. Self-determination and self-efficacy are needed to experience engagement and flow (Elias et al., 2010; Shernoff & Csikszentmihalyi, 2009). Experiencing flow requires the feeling that one is able to succeed in an activity (Borovay et al., 2019). The flow also requires the right emotional mood allowing those who enjoy themselves intensely to experience the flow state (Dewaele et al., 2023). In Beese and Martin's (2019) study, participants connected flow experiences with having a growth mindset, motivation, emotional intelligence and self-actualisation.

Shernoff and Csikszentmihalyi (2009) view flow as an important theoretical pillar in positive psychology and describe how it consists of a dynamic interplay between various factors, such as enjoyment, physical activeness, psychological factors (e.g. engagement, intrinsic motivation, interest, meaningfulness and cognitive processing), social factors (e.g. collaboration and development of friendships), creativity and innovation. Flow can also be experienced regardless of the student's socioeconomic background. Furthermore, teachers' and students' flow can be positively related (Shernoff & Csikszentmihalyi, 2009). Creating school environments that support both teachers' and students' flow can, therefore, holistically improve all dimensions of human wellbeing.

A sense of meaning is also an important component of wellbeing (Seligman, 2011). *Meaningfulness* refers to the feeling that life and one's actions are purposeful, valuable and worthwhile (Butler & Kern, 2016). Meaningful learning and motivation, in particular, are increased when engaging wilfully in joyful learning (Anggoro et al., 2017; Jeet & Pant, 2023).

Self-determination and recognising one's agency and inherent authority to control one's own life also lead to both teacher and learner *empowerment* (Jones, 2006). Learners can be empowered, for instance, by promoting self-directed learning and by providing them with *autonomy* and more freedom to decide what and how to learn (Loyens et al., 2008). Providing learners opportunities to make different choices and to try out their power also promotes joyful learning (Conklin, 2014). Seligman and Csikszentmihalyi (2000) argue that autonomy, combined with self-regulation and *responsibility*, improves quality of life. Self-regulation and responsibility are also important aspects of safe and responsible technology use (Male & Burden, 2014) that can support

engagement (Parson & Taylor, 2011); however, when used excessively, they may negatively impact mental health by, for example, inducing anxiety and depression (Qi et al., 2023).

Strong self-efficacy beliefs also nurture persistence and perseverance people display when facing difficulties (Bandura, 1986). Thus, they can support *resilience* (Barnes, 2020; Masten & Barnes, 2018) as well as stress management and coping (see Crider, 2021; Hess & Copeland, 2021; McKeering & Hwang, 2019). According to Seligman and Csikszentmihalyi (2000), perseverance improves quality of life, and highly optimistic people tend to be more persevering and successful.

Finally, *feelings of transcendence*, which are often associated with religiosity or spirituality, may support happiness and wellbeing (Butler & Kern, 2016; Csikszentmihalyi, 1999; Kern et al., 2015). Ryan and Deci (2000, 2008) state that it is vital to consider psychological needs and processes concerning religiousness. Seligman and Csikszentmihalyi (2000) associate positive characteristics such as hope, future-mindedness, the capacity for love, spirituality, altruism and forgiveness with having a good quality of life. For Csikszentmihalyi (1990, 2000) 'an exhilarating feeling of transcendence' constitutes part of the flow experience, during which both one's sense of time and emotional problems seem to disappear.

3.3 Social, creative and socioeconomic wellbeing

In relation to social wellbeing (Figure 1), developing *social competence* and prosociality, which are also strongly related to emotional competence, is important for both teachers' and learners' wellbeing (Jennings & Greenberg, 2009; Thierry et al., 2022). Prosociality refers to motivation and behaviour focusing on helping or benefiting others (Yada & Jäppinen; 2019; Yada et al., 2020). Social-emotional learning aims to improve core social-emotional competences. It includes aspects such as self-regulation, self-awareness, social awareness and relationship skills. These can be supported through mindful awareness and other-focused practices such as emotion recognition in others and social perspective-taking. (Thierry et al., 2022.) Social competence also entails *empathy* and an empathic mindset in school settings (Okonofua et al., 2016; Thierry et al., 2022). Seligman and Csikszentmihalyi (2000) argue that, in general, good interpersonal skills improve quality of life.

It is generally agreed that *belongingness*, or relatedness, as well as good *social relationships*, are important for wellbeing (Ryan & Deci, 2000; Seligman, 2011). For example, Allardt and Uusitalo (1972) connect 'loving' to companionship, affection, belongingness and solidarity. Efforts should be made to foster communality, which is related not only to a sense of belongingness but also to promoting *psychosocial safety* facilitated, for instance, by transparency and openness as well as by preventing behavioural disturbances such as bullying (Mäkelä & Leinonen, 2021). 'Good relationships' can refer to helping and supporting one another and feeling loved (Butler & Kern, 2016). Having friends is also supportive to the development of good self-esteem (Dalgas-Pelish, 2006). Furthermore, good relationships have been found to promote teacher wellbeing (Dreer, 2023; Harding et al.; Hascher & Waber, 2021). In a school context, good social relations encompass relations between teachers and learners, teachers' and learners' peer relations, teacher–other and learner–other staff relations, teacher-management and learner-management relations, as well as home-school relations and wider community relations (Crider, 2021; Jennings & Greenberg, 2009; Konu & Rimpelä, 2002; Leskisenoja & Uusiautti, 2017; Mäkelä & Leinonen, 2021; Okonofua et al., 2016; Parson & Taylor, 2011; Stewart et al., 2004). Social wellbeing, prosociality, good relationships, empathy and social coping can be developed through growth mindset interventions (Dweck & Yeager, 2019).

Ensuring a sense of belonging, membership, social integration and access are also important factors promoting *inclusion* (Nelis et al., 2023). Nelis and Pedaste (2020, p. 162) define inclusive

education as 'an educational approach that takes into account human rights and provides all children with access to high quality education in a learning environment where children feel social integration and belongingness in their wider social network despite their special needs; it is achieved by the meaningful participation of all children and personalised support in the development of each child's full potential'. Boyle et al. (2020) found that relationship factors, school climate, school and system policy and practice, as well as broad community contexts, culture and legislation, can influence the success of inclusionary approaches within a school. Considering cultural factors and contextual variations, as well as promoting intercultural interaction, is thus important when promoting inclusion. Inclusion also means that bullying of any kind is not tolerated at school (Konu & Rimpelä, 2002).

Social wellbeing is also fostered by providing everyone opportunities for *participation* and shared decision-making and planning (Leskisenoja & Uusiautti, 2017; Stewart et al., 2004) and by supporting everyone's agency in participating in transforming communities and societies in which they live (Furu et al., 2023). Opportunities for participation are also important features of joyful learning (Waterworth, 2020). Various forms of *collaboration* including working together to plan, research, develop, share and implement new research, strategies and materials (Parson & Taylor, 2011), as well as distributed leadership and collaborative spirit between teachers (De Jong et al., 2023) support social wellbeing. Shared leadership and collaboration support proactive caring, psychological empowerment and group solidarity (Houghton et al., 2015). Prosociality and teacher collaboration also reduce teachers' turnover intentions (Yada et al., 2020). Instead of authoritative interaction, dialogic interaction that allows discussion among several individuals about contrasting ideas should be promoted (Howe & Abedin, 2013).

In relation to creative wellbeing (Figure 1), *creative competence* entails developing *creativity* and *aesthetic sensibility*, which, according to Seligman and Csikszentmihalyi (2000), can foster wellbeing. Creative activities are also likely to foster joy, happiness and psychological wellbeing, including experiences of flow in which one's sense of time may disappear (see Csikszentmihalyi, 2000). Csikszentmihalyi (1997) argues that, for many people, happiness comes from creating new things, making discoveries and being in a flow state during the creative process. For example, the flow state can be entered by achieving an optimal balance between challenge and skill while creating pieces of fine art (Beese & Martin, 2019). Creativity typically entails the ability to think outside the box (Baldwin, 2010).

Fostering creativity may be more challenging when the educational system focuses on curricular standards and high-stakes testing but is not, however, in opposition to teaching content knowledge (Baer & Garrett, 2010; Hennessey, 2010). Techniques such as brainstorming support the development of divergent thinking and the learning of content knowledge, balancing intrinsic and extrinsic motivation (Baer & Garrett, 2010). Baer and Garrett (2010) suggest that, at times, the focus of teaching and learning can be on content knowledge and skill development, which is evaluated (extrinsic motivation), but that there should also be occasions for free creative expressions based on one's intrinsic motivation.

Creative, critical thinking and problem-solving skills are also fostered by science, technology, engineering, art and mathematics integrating STEAM education (Erol & Erol, 2023). According to Waterworth (2020), joyful teachers are surprising and creative and thus capable of increasing the excitement and creativity of their students.

Creativity is strongly connected to imagination and play (Vygotsky, 2004). Creativity and joy can be promoted via *playfulness* in school culture. Play, including physical and playful activity, refers to engagement in creative, imaginative and joyful activities that provide a sense of purpose in learning and support social, emotional, moral, physical, creative and intellectual growth

(Conklin, 2014). Playfulness, which includes gamefulness, can be used to promote enjoyment, motivation and flow experiences by ensuring an ideal challenge–skill balance; merging action and awareness; providing clear goals and feedback; nurturing concentration, control and a loss of self-consciousness; and fostering autotelic experiences (Oliveira et al., 2022).

Imaginative play may also support mindfulness, which can reduce anxiety and increase intrinsic meaning and joy in the present moment (see Kabat-Zinn, 2003). In Jeet and Pant's (2023) study, joyful learning consisted of role playing, stories, songs, dance, recitation, games and puzzles. This activity-oriented, experiential and art-integrated learning fostered collaboration, critical thinking and creativity skills and joyful experiences led to better understanding and engagement. Faulkner and Latham (2016) relate adventurousness to playfulness, humour, imagination, wonder, curiosity and discovery. They argue that adventurous play supports wellbeing. Adventurous teachers embrace change, seek new challenges, take risks, are resilient, face fears, develop creative problem-solving skills and promote these qualities in their classrooms (Faulkner & Latham, 2016).

In our framework, socioeconomic wellbeing supports overall wellbeing (Figure 1). Schooling is a means of supporting *economic equity*, which is defined as the fair distribution of economic wealth (Chiu, 2019). It is important to ensure both equality of opportunity and equality of outcome, meaning that, as a result of schooling, everyone can have fairly equal job and income opportunities (Espinoza, 2007). Economic equity is an important pursuit that is impeded by both the economic crisis, leading to food insecurity, unemployment and poverty and the social crisis, which broadens inequalities and polarisation (Heikkinen et al., 2024). Lower socioeconomic status may also reduce cognitive wellbeing and hinder the development of resilience (Ungar et al., 2014), emotional wellbeing and self-esteem (Dalgas-Pelish, 2006). There is a need to reflect on the world's inequalities and to have compassion for those in less privileged positions (Andrews, 2017). Seligman and Csikszentmihalyi (2000) relate positive emotions to civic virtues and moving towards better citizenship, which includes civility and good work ethic. In addition to work ethic, *working skills*, which include competences related to *entrepreneurship*, are important for developing socioeconomic wellbeing. Learners should be given opportunities to become acquainted with working life and gain experience in entrepreneurship and business life, for instance, by collaborating with and visiting workplaces (Sommarström et al., 2021).

3.4 Planetary wellbeing

The concept of planetary wellbeing connects *environmental* (or ecological), *social, economic and cultural sustainability competence* to overall wellbeing (Figure 1). There is, indeed, a need to promote not only healthy but also sustainable lifestyles. In addition to fostering individual and social wellbeing, there is an urgent need to cope with environmental crises such as climate change, biodiversity loss, deforestation, pollution and resource depletion (Heikkinen et al., 2024). Furu et al. (2023) argue that the sustainability crisis has raised interest in the concept of resilience, i.e. the capacity to persist, adapt, or transform in the face of change and challenge. Promoting resilience supports children, communities and societies in meeting the challenges of a world in rapid change and facilitates the urgent transformation towards a sustainable world. Resilience should not be understood as the capacity of a single individual to persist and respond to the sustainability crisis but, rather, as a communal effort with physical, psychological and social dimensions that includes diverse voices from local communities and Indigenous groups and that recognises the interconnectedness between humans and the more-than-human world (Furu et al., 2023).

Nature connectedness entails, for example, the feeling of being integrated with nature, having sensitivity for nature protection and being engaged in nature conservation (Braun & Dierkes, 2017), and is important for both human and non-human wellbeing. In Konu and Rimpelä's (2002) wellbeing model, opportunities for the enjoyment of nature are viewed as crucial aspects of self-fulfilment. Approaches such as Forest School have been employed for developing not only nature connectedness but also confidence, emotional intelligence and resilience (Barnes, 2020) and nature pedagogy has been linked to positive psychology (Baker et al., 2018).

Planetary wellbeing, care and joy are promoted when people engage in activities such as practicing and expressing gratitude, reciprocity and compassion as well as fostering relationships among human and non-human beings in support of the greater whole (Andrews, 2017). *Peace education*, which includes non-violent communication, is also an important part of developing competences for ensuring planetary wellbeing and sustainability education. Peace education supports people in learning how to prevent and solve conflicts and meet the challenge of living as a global citizen in our changing technological, social, economic, national and global environment (see Wahyudin, 2018).

4. Conclusion

This paper focused on conceptualising holistic wellbeing, which entails a more-than-human perspective on wellbeing. The framework was developed based on a narrative literature review consisting of more than 100 articles. Based on the interrelations between teacher and learner wellbeing (Harding et al., 2019), the framework was designed to increase overall awareness of the components supporting both teacher and learner wellbeing. The profound joy and happiness of both teachers and learners form the foundation of our conceptualisation of wellbeing. Following these core concepts, and based on earlier conceptualisations of holistic wellbeing, our framework includes physical, psychological, social, creative and socioeconomic components of wellbeing. Finally, all these wellbeing dimensions are highly dependent on planetary wellbeing, which thus constitutes the outer loop of our wellbeing framework.

As a theoretical implication, this study contributes to the research on wellbeing by integrating human and non-human wellbeing into a single conceptual framework. The framework draws attention to holistic overall wellbeing and its interdependent wellbeing components and dimensions. We believe that considering different wellbeing dimensions in a balanced manner directs us towards planetary wellbeing in which human wellbeing is not pursued at the expense of the wellbeing of other living creatures.

The literature review also sheds light on the interconnectedness of both teachers' and learners' joy, happiness and holistic wellbeing in schools. For instance, engaging in playful and joyful physical activities can support physical, psychological, social and creative wellbeing (Conklin, 2014). Moreover, instead of focusing only on economic gains, having the opportunity to do work one enjoys (Csikszentmihalyi, 1997) is important for socioeconomic wellbeing. Likewise, having opportunities to enjoy nature can contribute to psychological wellbeing (Konu & Rimpelä, 2002) and enhance one's nature connectedness, which contributes to planetary wellbeing.

We did not aim to make the narrative literature review conducted to develop the wellbeing framework all-encompassing but rather to provide sufficient theoretical and empirical literature to construct a holistic framework. Based on feedback from the peer reviewers, in the future, it would be interesting to explore what could be learned from Indigenous frameworks referring to kinship, i.e. an ethic of shared responsibility and responsible relationships protecting the safety and wellbeing of peoples, animals, plants and ecosystems (e.g. Whyte, 2021). In particular,

kinship relations acknowledging interdependence between humans and beyond could serve to connect human and non-human wellbeing more deeply and, in turn, support planetary wellbeing. Additionally, the concepts related to kinship relations, including reciprocity, consent (or self-determination), trust, transparency and confidentiality (Whyte, 2021), harmonise with the school wellbeing framework presented in this article.

We acknowledge that there are many other ways to conceptualise and categorise wellbeing. The division of wellbeing-related concepts under different wellbeing dimensions is always somewhat arbitrary. For example, we united considerations of cognitive and emotional wellbeing under psychological wellbeing, as most of the mental components included in this framework are related to both cognition and emotions. Emotions could, however, also be considered a part of socioemotional wellbeing and competence.

We also limited components promoting physical wellbeing to aspects that are directly manageable by individuals exercising active agency. We are, however, aware that fostering physical wellbeing s entails various external factors related to learning environment design, such as the creation of peaceful environments by minimising noise disturbances and other types of distractions (Konu & Rimpelä, 2002; Mäkelä & Leinonen, 2021). Likewise, factors such as good outdoor environments – including the presence of nature and opportunities for physical activity – indoor air quality and temperature, luminosity and good lighting, as well as good ergonomic conditions, are important for overall wellbeing (Konu & Rimpelä, 2002; Mäkelä & Leinonen, 2021).

When reviewing the literature, we also identified papers proposing educational activities (e.g. Andrews, 2017; Ling et al., 2014; McKeering & Hwang, 2019; Pant & Rastogi, 2024; Rantala & Määttä, 2012) that can be incorporated into the online blended course developed in the Joyful Schools project for primary and lower secondary pre- and in-service teacher training. As a societal implication, the wellbeing framework developed through the narrative literature review has already served as a strong research-based foundation in the development of the blended teacher training course. The course develops participants' multidimensional understanding of school wellbeing and includes practical activities that teachers can use to integrate the framework into promoting wellbeing at school.

Following the creation of this theoretical framework, focus group discussions with educators in Austria, Finland, Luxembourg and Romania were organised to identify how educators integrate the ideas of holistic wellbeing into their everyday practices. Likewise, a curriculum analysis of the project countries was conducted to identify strengths and areas for improvement at the curricular level. The results of the focus group discussions and curriculum analysis are being transformed into policy recommendations that can be used in national or local curriculum development and to support the knowledge, skills, values and attitudes needed to promote holistic wellbeing at schools. Efforts are also being made to disseminate information internationally about the research-based teacher professional development opportunities and policy recommendations developed in this project to enhance teachers' know-how related to wellbeing promotion and to improve teachers' and learners' wellbeing at schools on a large scale.

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Conflict of interest statement

The authors report no conflicts of interest**.**

Data availability statement

The literature database (spreadsheet), including references and their keywords, abstracts, educational levels, key concepts and definitions, and findings considered relevant for constructing the framework, is available from the corresponding author upon reasonable request.

AI statement

The authors used various AI-based and AI-enhanced search engines (Google Search, Google Scholar, ERIC, JSTOR, Semantic Scholar and Keenious). While general AI (ChatGPT) and AI-assisted technologies (Grammarly) were used in the writing process to improve the language, the final manuscript was proofread by a professional proofreader. The visualisation was not AI generated; it was designed by the project consortium with the support of a professional graphic designer.

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