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Wellbeing research in education: A critical realist perspective

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The research reported in this mixed methods study was designed to investigate wellbeing in primary school education among learners and educators who participated in a wellbeing intervention program. A critical realist perspective is embraced in the hope of searching for more insightful explanations to the complex challenges in wellbeing education. Critical Realism (CR) offers a highly-refined approach to conducting interdisciplinary research, so it is particularly useful in mixed methods explorations into wellbeing. This is because CR underpins a commitment to human emancipation, exceeding traditional disciplinary boundaries, and fixed methodological positions. Whereas theory driven research focuses primarily on epistemology (relationship between known and knower) and uses reductive methods, with CR ontology (nature of reality) is given precedence and retroductive methods are used to find possible explanations. The research aims to conduct investigations at a deeper, more authentic level by employing ontological realism, epistemic relativism, judgmental rationality, and methodological pluralism. Hence the researcher explores beyond the symptoms and concentrates on possible underlying causes. To better understand the social world three areas are astutely examined: agency (interactions-ability of individuals and groups to exercise free will and to make social change), mechanisms (underlying arrangements or causes), and structure (patterned social arrangements that influence agency and mechanisms). By doing so this research uncovers a range of underlying factors that influenced wellbeing for learner and educator participants in the study. Findings suggest that cultivating expressions of wellbeing dispositions, goes beyond learners and educators to a collective outcome, with parents, school hierarchy, stakeholders, communities, policymakers and governments all part of the equation.

Keywords: wellbeing, critical realism, laminated systems, retroduction, interdisciplinarity

Wellbeing research in education: A critical realist perspective

The research reported in this mixed methods study is designed to investigate wellbeing during an intervention program delivered to primary school learners and educators. As a critical realist perspective was employed to analyse data collected from this group of participants, the paper begins with an extensive explanation of Critical Realism (CR). This is followed by a brief selection of examples which illustrate how CR and its laminated systems work within open systems. Next the research design, data collection and analysis of the mixed method case study are explored. The paper concludes with a discussion and recommendations for further research.

Wellbeing is a complex phenomenon that cuts across many disciplines. Research into wellbeing therefore requires the use of increasingly more multifaceted approaches that have the potential to enable researchers to look beyond reductionism and embrace multiple discipline perspectives. One such approach is CR originally developed by Ram Roy Bhaskar in the late 1970's. Bhaskar went on to develop laminated systems, a method designed to ordinate the interface between the physical and social world. These laminated systems enable the researcher to shift foci through multiple layers that envelop the participant from the physiological through to the global or planetary level, thereby providing a potentially more sophisticated insight into the phenomena being studied.

Critical realism

CR is a "a meta-theoretical position" underpinning a commitment to human emancipation (Archer et al., 2016, p. 3). The first principle (tenet) of CR is that the object of one's knowledge in the natural and social world exists independent of human thought (Brown, 2009) and therefore knowing is not simply generalising (or searching for a nomothetic). Being, an interface between the natural and social world knowledge is a product of its time (historically situated) (Bhaskar, 1989). The relationship between the known and the knower is therefore relative, hence the term epistemic relativism.

The term 'critical' in CR relates to the claim that there is an epistemic fallacy. It is inaccurate to assume that one can analyse what exists (e.g., make ontological statements regarding the nature of reality) in terms of what can be known or understood (Lyubimov, 2015; Morgan, 2017; Reed, 2005). Reality is not directly accessible through our observation. Bhaskar (1993) argues that knowledge of reality is external and independent (Morgan, 2017). The 'realism' in CR focuses on the argument for the existence of real mechanisms (underlying structures or causes) which shape events (Archer, 2003; Bhaskar, 1993).

Wellbeing, CR and interdisciplinarity

According to CR wellbeing has a character of interdisciplinarity. Interdisciplinarity is an unavoidable consequence of any open systematic character within which practically all events occur (Bhaskar, Danermark, & Price, 2017) and wellbeing in education is no different. Human beings are totalities, not many parts that relate to different disciplines. Critical realists argue that humans cannot be studied as distinct and separate parts, and therefore treatments and interventions must be conducted in a thoroughly interdisciplinary way. Wellbeing is enmeshed within a range of disciplines from health, psychology, sociology, biology, spirituality, medicine to economics and education, making research in this area more demanding. In line with this proposition the major players in health and wellbeing including the World Health Organisation (WHO, 2006), The United Nations Educational, Scientific and Cultural Organisation (UNESCO) and The European Commission (2017) have discussed wellbeing as a multi and interdisciplinary research priority (Brown, 2009; Bhaskar, & Danermark, 2009; Bhaskar, Danermark, & Price, 2017). Despite this Bhaskar, Danermark, and Price (2017) contend, there is little urbane analysis in the literature that explains its philosophical necessity. Appling CR to concrete issues of interdisciplinary research, they contend, offers considerably more multifaceted insight into the issue by providing more refined methods to find possible explanations to complex phenomenon.

CR challenges reductionism in wellbeing research

Most research on wellbeing has been conducted on reductionist principles using either deductive or inductive processors (Bhaskar, Danermark, & Price, 2017). The reduction of the world to our experiences, knowledge or concepts is criticised in CR as being the privileging of epistemology. Reductive approaches to situations with social inequalities are particularly ineffective because they provide such limited insights (Price, 2015; Bhaskar & Danermark, 2006). Bhaskar (1975) asserts that ontology is structured and layered and is given precedence over epistemology, thereby offering a counter force to this privileging.

As CR research is not about finding answers, the approach avoids reductionism by embracing a retroductive process, thereby helping to provide richer explanation. Reed (2005) defines retroduction as reasoning backwards and is the mental process that takes place after the experience. For Bhaskar (1993, p. 49) "new beings (entities, structures, totalities, concepts) are generated out of pre-existing material from which they could have been neither induced nor deduced". Critical realists believe that a more complete account of an entity cannot be made at the lower levels (irreducibility), so it is important to switch between the different levels (Scott & Bhaskar, 2015) and hence the reason for laminated systems.

CR embraces a laminated system

Bhaskar (2010) argues that to explore the transformational model of social action it is necessary for researchers to elaborate on systems to ordinate the world. Human beings are evolving laminated systems within larger laminated systems (Bhaskar, Danermark, & Price, 2017). This enables the researcher to acknowledge the significance of understanding human beings as a bio-psychosocial mix. Morton (2006) reiterates this point by contending that the central idea of CR is for natural (physical, biological) and social (sociological) reality to be understood as an open stratified (layered) system of objects that make things happen (causal powers).

Critical realists view society as consisting of two theoretically distinct elements of institutions known as structures and creative individuals known as agency. Agency is described as the active changing of the course of events by causal interventions (Togo, 2017). Agency however is limited by structure (Carter & New, 2004). Structures are the patterned social arrangements that shape that agency (Archer, 2003). The ability to discuss several different levels of determination and several types of mechanisms underlying structures and agency, Baskar (2010) points out, assists the researcher to more fully understand the causation (the powers to do) of an event or its treatment.

As a result, CR provides a framework for bringing together the researcher's understanding of explanatory mechanisms (the underlying arrangements or causes), and structures (patterned social arrangements that influence agency and mechanisms) that may be operating at different levels or scales of reality. A layered ontology provides the researcher with the ability to look for regularities at the level of objects and structures and not merely at the empirical layer (what is able to be directly observed and measured). This is identified as the key to CR a methodology or alternative paradigm. The stratification of nature is based on Bhaskar's (1978) notion of depth reality or the idea that reality comprises three levels (domains): empirical, actual and real (Bhaskar, 1978). The domain of the *empirical* represents our experiences and is where our knowledge of events and objects reside. Our experiences also have an actual as well as a mental reality and together with events and things reside in the domain of the *actual*. They may or may not be observed. The domain of the *real* houses the intransitive objects of reality which are the mechanisms, events and experiences (Bhaskar, 1979; 2002). These emergent properties give rise to causal powers. The stratified ontology that differentiates CR enables investigations to be conducted at a deeper level by employing ontological realism (object knowledge), epistemic relativism (what is known), judgmental rationality (the knower), and methodological pluralism (the way it is known).

Laminated systems provide an advantage for interdisciplinarity research, because they surpass traditional disciplinary boundaries and according to Bhaskar (2010), they are characterised by the striking phenomenon emergence. These systems are dimensions of the way we interact with

the world and each layer is our transactions within the biosphere of nature and the stratification of the embodied personality (Bhaskar, 1993; 2010). Bhaskar's four-planar social being elaborates human social existence and social life as constituted by four dialectically interdependent planes which are the material or physical transactions with nature, social interactions, social structure and the layering of the embodied personality.

The seven layers of a laminated system. Modern CR refers to the seven-scalar social being through which ontology is progressively deepened. Bhaskar and Danermark (2006; 2009), discuss physical, biological (psychological, medical and clinical), psycho-social, socio-economic and cultural layers in which several distinct mechanisms combine to produce a new result at different emergent levels (Hedlund-De Witt, 2012). Bhaskar's laminated system used to explore this research is shown in Figure 1.

The three levels (black) at the top of the diagram are influenced by agency or interactions. The three levels in the bottom of the diagram (blue) are influenced by structure. The meso-level (red) emerges from the levels above it and is an important level for CR. It pre-exists individuals and is influenced by many characteristics exhibited in the earlier levels, especially in the micro-level (Price, 2010). The meso-level has a life of its own and should not be reduced to agency. CR shows its analytical strength here because it considers the structure to be emergent (reproduced and transformed) from agency (interactions) and agency to be shaped and composed by structure (Elder-Vass, 2008; Price, 2015)

Research design, data collection and analysis

In this study, learner and educator wellbeing in one primary school is explored through surveys, reflections and focus groups at an empirical level and then CR's, depth ontology and specifically its laminated system was embraced to provide a more robust understanding. CR worked as a guide with the explanations of the possible causal mechanisms that resulted in the empirical evidence.

A Mixed Method Case Study.

A multiphase mixed method (Creswell, 2011; 2012) research design was chosen with a range of different quantitative and qualitative data collection methods. This study used subjective measures such as self-reports, reflections, surveys, questioners, diary entries, classroom artefacts, focus group discussions and psychometrically-based measures such as the Australian Council for Educational Research (ACER) Social-Emotional Wellbeing (SEW) Survey (ACER, 2015) that looked at the relationship between and strength among multiple domains of wellbeing. Objective measures such as the My School website, Index of Community Socio-Educational Advantage (ICSEA) scale as well as student/teacher historical accounts and records were used to understand the school community.

The setting and participants.

This case study was conducted in one school in a metropolitan suburb of a major city in Australia. At the time of this study the school comprised of 40 educators (teachers and school personnel), a part time Guidance Counsellor, and approximately 510 students. This research site had an ICSEA value of 1046 meaning that the school is considered as having an average socio-educational advantage among other schools.

Data collection and the two Phases.

The data gathering was conducted in two phases, with 32 educators participating in the initial phase and 126 learners and six educators, from six classes ranging from year one to five, participating in the second phase. Ethics (H6367) approval was obtained from the Human Research Ethics Committee at James Cook University and Catholic Education granted approval to conduct the study in a Catholic school. Phase one was about understanding the community and the educator, their agency and the underlying structures and mechanisms. This was carried out through questioners, reflections, focus group discussions and METAS (Material Engagement Theory, The Arts and Story) pedagogy based activities (discussed below). An invitation was then extended to educators to participate in phase two with their class groups of students.

Phase two was about finding explanations to the underlying structures and mechanisms within these settings and understanding learner and educator agency. There was a specific focus on METAS pedagogy to cultivate expressions of wellbeing dispositions.

A brief overview about METAS pedagogy, (

Figure *3*).

METAS pedagogy was developed during the first authors work as a counsellor and educator. Material engagement, the arts (music, drama, media, dance, visual) and story (reading, telling) proved beneficial for learning and wellbeing. The use of sound, props, puppets, visuals, artefacts, various mediums, tools, devices etc provided the material engagement needed to cultivate wellbeing dispositions (characteristics or a frame of mind). Malafouris writes that human intelligence 'spreads out' beyond the skin into culture and the material world (2013, p. 28) and Material Engagement Theory (MET) furthers this notion specifying that prosthetic devices can extend the brains reach.

Data Analysis.

To understand this phenomenon, it was initially essential to recognise the importance of context, which is the influence that shapes the meaning of events, behaviours, words and actions. CR provides the ability to go beyond context and symptoms, to seek explanation in the history of phenomena. While the observable events and conditions are created by the researcher, the results are caused by the unobservable structures and the underlaying mechanisms. The ontological tools CR offers to investigate causal factors behind wellbeing practices were insightful.

Wellbeing is a complex phenomenon and therefore to investigate and understand its complexities, explanations must not be reduced to a single level. This analysis, demonstrated that a discussion of wellbeing-education cannot be carried out without an exploration of the many layers that form and transform, influence and hinder wellbeing-education. Wellbeing challenges need to be explored at several layers. From the individual in terms of cognitive (mind), emotional, spiritual,

physical (body), biological, quality of life, the level of society (social), general characteristics of society, interactions (personal, professional), the historical context, socio-economic, political, regional (national) and global trends (international). The hierarchy of levels ranging from the sub or intra-individual to the planetary and the dynamics between these levels assisted with understanding this social phenomenon. While the seven layers can be seen clearly in the investigation, interventions at one layer affect the other and emerge within the layers and Price (2015) cautions against becoming too attached to the layers. In is important to understand that the lower order layers reproduce and transform higher order layers and higher order layers constrain, influence and shape the lower ones (2015). Therefore, the findings of this study will be discussed as an overall explanation to the phenomena wellbeing-education. *Figure 2* presents these in the laminar system of the seven layers.

The empirical research clearly pointed out that wellbeing of the majority of participants in this setting were not at alarmingly high levels and the interventions were beneficial to enhance wellbeing further. Interventions for this group cut across the levels with the exploration of lifestyle, resilience, relationship and personal skills. CR assisted in the exploration of agency, mechanisms and structural level issues that are often overlooked because they are not observable. It was evident that these are more complex and deeper than would have been reflected by any form of deductive research, which would have been limited to the empirical level of reality (Scott, 2005).

These findings suggest that wellbeing-education is unique to each setting, classroom and individual. Each class group had their own expectations, experiences and symptoms. While some participants may have needed personal interventions, it is important to note that wellbeing should not be viewed as an individualistic responsibility. Embracing the sense of community, of being agents of change and understanding the agency, structures and mechanisms of this everyday event (phenomena) was important to cultivate expressions of wellbeing dispositions in education. In a well-functioning society, high levels of psychological wellbeing can be encouraged and individuals can achieve basic goals of material wellbeing (Price, 2015). It was clear that a range of material, cultural and social determinants play a part in wellbeing-education.

Wellbeing has materialistic properties and is a signifier of human influences and social conditions. Individuals can have a predisposition to physical and mental wellbeing and mental illness. These are generated from individual psychology, personal circumstances, biology, social, cultural, economic factors, individual, group and one-on-one interactions between humans. Wellbeing-education has causal (underlying) powers, dispositions and susceptibilities. Revealing the underlying structures and mechanisms created insight into understanding wellbeing-education and three broad themes were identified. They are discussed briefly next.

(1) Practice what you preach. In every educational setting, policy and curriculum documents, there is an overt reference to wellbeing; however, in practice wellbeing competes with education. This was evident, when the attention to wellbeing skills were sidelined and often forgotten over other educational goals and agendas. The added value of wellbeing in improving these conditions in education was overlooked or forgotten.

(2) The fear factor. The culture around mental-illness is negative and educators were not eager to discuss or be involved in these processes. While some educators were keen to be involved in the enhancement of wellbeing-education, they sometimes felt that they were not adequately equipped nor supported. The main school agendas centred around data driven tasks, literacy and visible learning. Educators rarely question subject related agendas or assessments and they placed themselves and students under undue stress and pressure to perform and keep up with new developments. Parent reluctance to consent for their children to partake in the study indicated scepticism and lack of understanding around wellbeing-education. It was insightful to experience the scepticism around understanding wellbeing, using surveys or even discussing educator and learner wellbeing. The event was amplified during group discussions especially among educators and school hierarchy. Most educators, acknowledged that wellbeing skills were taught incidentally while other learning skills were priority.

(3) The blame game. Administration, school hierarchy, parents, stakeholders, educators, learners and the wider community influence each other. The confusion over who taught these skills, power relations, lack of confidence to teach or discuss wellbeing skills, time factors, other priorities, lack of support from administration and school hierarchy and personal issues were underlying factors that hindered wellbeing explorations. Positive as well as negative (domineering, unequal or oppressive) experiences, symptoms and events were evident.

Individuals react and are influenced in different ways, and some individuals experience obvious negative or unfair treatment within social relations. It was important to realise that most individuals had the chance to access the skills themselves, however not everyone was ready to make changes at the same time. CR offers a generous rather than a harsh critique of individuals within the complexity of situations (Price, 2015). CR is not concerned with blame nor pinpointing individual actions. All human beings, at some level participate in the overall pattern and there is a belief that all actions are influenced and generated from a range of other actions and influences.

Discussion and Conclusion

Gordon Brown (2009) in his article *The ontological turn in education* alludes us to the understanding that to learn we need to look beyond the environment, to the myriad of conditions that enable and restrain learning. In education, the implementation of wellbeing legislation, regulations, curriculum frameworks and the myriad of programs, have not yet assisted in narrowing the gaps nor producing the results needed to improve wellbeing. Wellbeing-education is a phenomenon emergent from a collection of causal mechanisms. This setting was no different to any other and was influenced by a range of underlaying factors such as personal, social and material interactions, time, culture and subcultures. Agency, underlying structures and mechanisms also hinder the progression of wellbeing-education. A focus on the empirical level (observable symptoms), providing bandage solutions does not bring success or improve the conditions to wellbeing-education. Sayer (2000), states that academics constantly question rather

than improve conditions and situations. In order to understand, rather than question, we should feel compelled to find explanations and to look beyond the symptoms.

The questions we focused on when we embarked on this journey were1. How can teachers and students take responsibility and develop a sense of agency in their personal resilience and wellbeing? 2. How can teachers enhance their wellbeing (which is central to productivity, wellness and sustained teacher career) skills (reflection, relationships and resilience), to positively promote wellbeing among their students?3. How can the Arts, Material Engagement and Story assist with cultivating expressions of wellbeing in teachers and in turn, students?

It was fallible to expect educators or learners to develop a sense of agency (which is the ability of an individuals and groups to exercise free will and make social change), without exploring the underlying structures mechanisms and power relations. When educators are offered support and insight to cultivate expressions of wellbeing dispositions and they accept, these skills became part of their lives. Educators who embraced the principles of METAS Pedagogy, built and enhanced their own personal skills of wellbeing and were in turn able to positively promote and enhance wellbeing skills among their students. They began to take responsibility and developed a sense of agency in their personal resilience and wellbeing, generating wellbeing pedagogy, thereby promoting wellbeing skills among their students. Students who developed those skills, took them out of the learning space, to home and the wider community, culture and beyond. The interventions assisted with bringing about empowerment, support, physiological and psychological healing, wellbeing promotion and an understanding of a flourishing life.

The explanation for wellbeing-education drawn from this research findings was that wellbeing is a significant and central feature of personal and communal experience and practice. Wellbeing-education goes beyond the individual, to the group and their interactions, to self-understanding in relation to the world. Human beings do not exist in isolation and an individual's interactions affect their community and the world and vice versa. A collective effort, creating a sense of connectedness, belonging and agency along with understanding the power relations that hinder

and influence wellbeing-education is important. Wellbeing-education is about dealing with the past, focusing on the present and looking to the future.

Bhaskar (2000) states that in the layer of the real, where mechanisms, events and experiences happen, disunity (demi-reality) and unity (co-presence) in difference (reality) exists. Recognising and empowering a unity of difference is the value of co-presence or non-duality (Bhaskar, 2012). It is important to eradicate the demi-real levels which promote dualism, hate, alienation, split, fear, divisiveness and fragmentation (Bhaskar, 2000; 2002). "In co-presence, we are all entwined together, enabling us to view the importance of a commitment to an eudemonistic society" (Bhaskar, 2012, p. 72), which is happy, free, emancipated and flourishing.

The mid-19th century African Philosophy *Ubuntu* (pronounced uu-Boon-tuu from the Bantu dialects of Africa) claims the essence of humanity is the belief in a universal bond of sharing that connects all humanity (Eze, 2010). *Ubuntu* dictates that, being human is about understanding that a person is a person through people (*I am what I am because of who we all are)* (2010). Wholeness and compassion, the qualities of Ubuntu, create resilience and wellbeing in human beings. Ancient philosophies like Buddhism parallel this understanding. The Bodhisattva-vow of Mahayana Buddhism states that the most important fact of being (condition of our own-being) is the self-realization of others. This is the interactive structure of reality. Bhaskar states that "free development and flourishing of an individual or a group, is a condition of free flourishing for all…" (Bhaskar, 2008, p. 663; 1993, p. 202).

Further Research

Trying to integrate wellbeing into the overcrowded curriculum is not the answer to wellbeing-education. To bring positive changes to wellbeing in this group, it was important to shift the focus of cultivating expressions of wellbeing dispositions from programs to practice, curriculum (content) to pedagogy (how we teach). This is an important area for further research.

Cultivating expressions of wellbeing dispositions in education is a motivational task. It requires educators, learners, parents, institutional hierarchy, administrators, stakeholders and the wider

community to come to terms with the challenges and work collectively. As critical realists believe, individuals and groups need to ask the tough questions, reflect deeply on self in relation to others, focus on individual experiences and their effects on their present life, seek out history, look for the patterns presented by individuals and the patterns passed down from generations (Bhaskar, 2012; Price, 2015). We need to question conscious and unconscious motivations, seek out how we can be better educators, learners, parents, leaders, administrators, policy makers and community members. Merely writing policy is not sufficient, how we expect wellbeing skills to be implemented needs to be revised.

In the pursuit of robust explanation, the use of self-regulating reality, offers different ideas or truth. The explanations and solutions to the challenges of wellbeing-education steer us on different paths. In CR, the belief is that there is no assurance, that any forms of truth are the ultimate, however it provides hopefulness that research can make a positive difference to the world, resulting in emancipation (Price, 2015).

Figures

Figure 1- Bhaskar's seven laminated systems

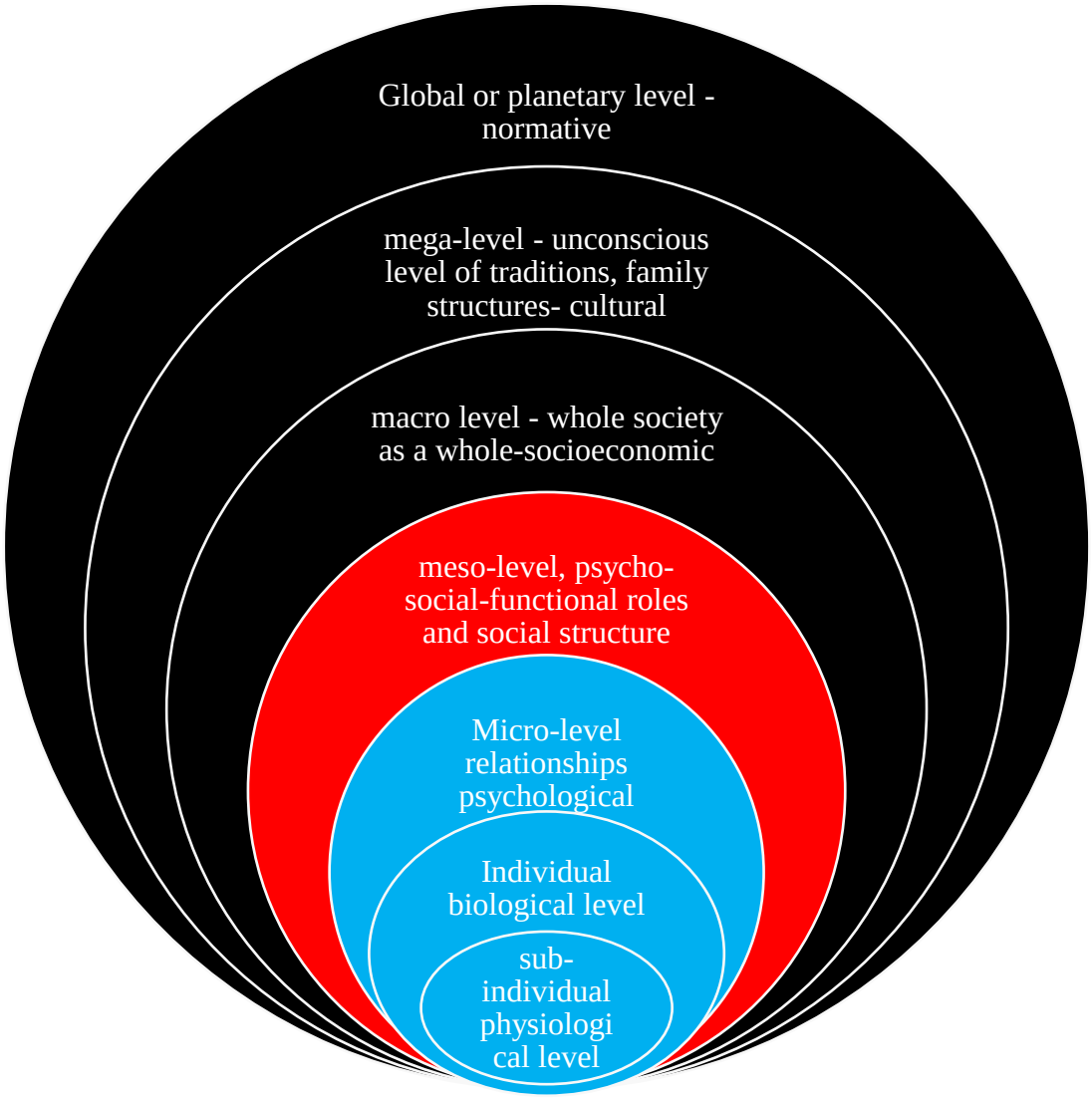
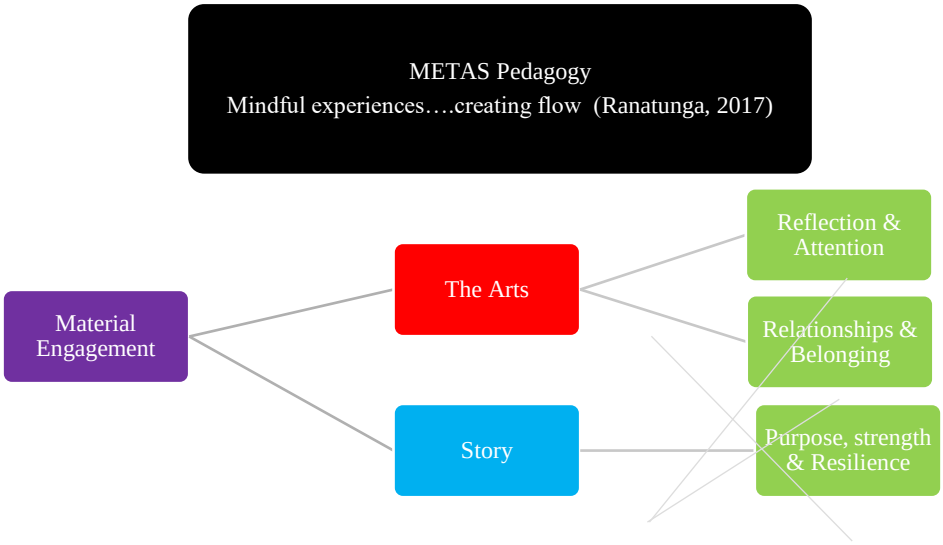


Figure 2 - Wellbeing as seen in this study

Figure 3 - METAS pedagogy - Created by Ranatunga (2017) Inspired by Malafouris, 2013; Seligman, 2011; Siegel, 2014; Smith, 2017



THE ACTIVITIES IN METAS PEDAGOGY

Material Engagement Theory	The Arts	Story
Arts equipment (pencils, brushes, paper...)	Visual Arts – paining, drawing	Books, pictures, words, reading
Prosthetic devices (props, pictures, cards, stones, beads, clay, sand, playdough, salt dough...	Media	Virtual books using media and devices
Music instruments, rain sticks, singing bowl, clap sticks...	Music – sound	Story telling, history, culture
Puppets, masks	Dance – movement – yoga Drama – play, social play	Literature Poetry

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