**The Covid-19 pandemic, political polarisation, climate change and the useless class:
Why fostering wellbeing capacities should be part of the solution**

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Abstract

Worsening of mental health and wellbeing has been symptomatic of a range of current societal crises - including the Covid-19 pandemic, political polarisation, climate change and the threat of useless class resulting from automation driven by fast artificial intelligence developments. The intertwined nature of these crises in terms of their causes and impacts on mental health and wellbeing is rarely acknowledge. This paper highlights the shared underlying sources of declines in mental health and wellbeing associated with these crises in terms of two wellbeing capacities – the self-regulatory capacity and the self-world capacity. Focus on these capacities can enable development and implementation of effective interventions and strategies across society which may significantly contribute to addressing the current mental health and wellbeing challenges associated with the societal crises.

Introduction

The current and impending crises - including the Covid-19 pandemic, climate change, political polarisation and artificial-intelligence (AI) revolution - are creating new unprecedented challenges for human mental health and wellbeing. Mental health worsened during the pandemic; for example, rates of adults in Britain with moderate to severe depression symptoms doubled in comparison to pre-pandemic rates (How has coronavirus affected mental health?, 2021). Political polarisation impacted adherence to public health advice during the pandemic, such as social distancing (Barbieri & Bonini, 2020), and has been an additional source of worsening in mental health (Saville, 2020).

The environmental crisis has also been a major contributor to mental health decline. Indeed, extreme weather events linked to climate changes are associated with worsening of mental health (Watts et al., 2020). And in 2017, 20-40% of Europeans said that they were very worried about climate (Steentjes et al., 2017); in one of the nations most at risk 95% of population reported distress due to climate change (Gibson et al., 2020). Climate change has also been impacting negatively on health and wellbeing through, for example, decreased nutritional quality of food and pollution (Bradshaw et al., 2021).

In addition, the fast developments in AI and biotechnologies will, in the next couple of decades, most likely create a whole useless class of workers replaced by more efficient machines (Harari, 2017). This will further undermine mental health and wellbeing for a large portion of population given the well-documented links between unemployment and decreases in mental health (Paul & Moser, 2009).

It is rarely acknowledged that these crises are interconnected. The pandemic has its links to climate change, with reductions in natural habitats resulting from deforestation leading to increased risk of spread of new viruses (Austin, 2020). The climate change response has been undermined by political polarisation (Nature, 2018), which diverts political, economic and individual resource focus away from long-term solutions and towards short-term political

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gain (Bradshaw et al., 2021). In addition, the attention economy, particularly social media, catalysed by the fast developments in information technology, can facilitate misinformation about the pandemic and climate change, hence enable political polarisation (Cho et al., 2020).

History shows that major societal changes, such as the ones we are currently facing, place new requirements on human minds, and their adaptation typically lags behind the speed of the changes (Schleicher, 2021; Weber, 2017). To address these new demands, we need to look deeper into psychological, cognitive, affective and neural sources of mental health and wellbeing. Identifying and fostering these sources - considered here in terms of *two key wellbeing capacities* - may help us adapt to these crises faster and reduce the harm to mental health and wellbeing of individuals, nature and societies.

The self-regulatory capacity

Having to work from home during the pandemic, behaving sustainably to reduce own environmental footprint, recognising and resisting polarising political views, or being unemployed as a result of automation – these circumstances all share some common psychological demands. These involve being able to stay focused in the face of distractions; monitoring and managing one's attention, emotions and behaviour in an adaptive way; being self-motivated; and able to follow-through on one's goals. Collectively these abilities can be described as the first wellbeing capacity - *the self-regulatory capacity*.

There is robust research evidence indicating that better self-regulation predicts a range of outcomes: including better mental health and academic performance, higher income and lower crime engagement (Moffitt et al., 2011; Woodward et al., 2017). Managing mind wandering (task-irrelevant thoughts) skilfully is an essential component of the self-regulatory capacity associated with mental health: higher mind wandering has been linked to unhappiness (Killingsworth & Gilbert, 2010) and more habitual mind wandering about positive content (rather than negative content) with better wellbeing (Wang et al., 2018). At

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the neural level, the SRC is linked to increases in activation of cognitive control areas such as the anterior cingulate cortex (Posner et al., 2007), and parts of the prefrontal context (particularly dorsolateral PFC; e.g., Forster et al. (2015)), as well as flexible regulation of the hypothalamic-pituitary-adrenal axis (Blair & Raver, 2015; Lupien et al., 2009).

During the pandemic, mental health advice from the World Health Organisation (Mental health and covid-19, n.d.) included a range of recommendations targeting the self-regulatory capacity, such as carefully choosing and limiting exposure to pandemic-related information, and setting and following through with one's schedule. Indeed, research shows that those with better self-regulation were less likely to suffer from mental distress resulting from Covid-19 related stress during a lockdown in Germany (Schnell & Krampe, 2020).

Political polarisation is also linked to lower self-regulatory capacity. For example, higher authoritarianism and nationalism has been associated with less flexibility in following change of rules in a card-sorting cognitive control task (Rollwage et al., 2018). In addition, reduced ability to monitor one's decisions (metacognitive insensitivity), which is also part of self-regulation, has been linked to intolerant political beliefs (Zmigrod et al., 2018).

Similarly, our difficulty in addressing the climate change crisis has also been connected to aspects of poor self-regulation - particularly the bias towards decisions favouring short-term unsustainable benefits at the cost of decisions encouraging more modest and equitable living standards that would result in future-oriented benefits of mitigating climate change (Weber, 2017; Bradshaw et al., 2021). This 'deficit' in the self-regulatory capacity is further exacerbated by profit-oriented encouragement of overconsumption as a source of happiness, despite research indicating that materialists have lower happiness, lower life satisfaction and are less likely to engage in environmentally-friendly behaviour (Chancellor & Lyubomirski, 2011).

Finally, self-regulation focused interventions have been shown to improve life-satisfaction and happiness in those who are unemployed (Koopman et al., 2017). This is pertinent to the

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treat of increases in unemployment resulting from automation (Harari, 2017) and links between unemployment and worsening of mental health (Paul & Moser, 2009).

Cumulatively, this evidence shows that across the current crises, better self-regulatory capacity seems to be a key correlate, or determinant of, positive mental health outcomes. Thus, the self-regulatory capacity should be fostered to address the negative wellbeing implications of these crises.

The self-world capacity

The second wellbeing capacity these crises are taxing involves our sense of connection with others and nature, sense of purpose and meaning in life and its locus (self or world), agency etc. This capacity is termed here '*the self-world capacity*' and considered as an integrated state or trait of cognition, affect and awareness underlying our sense of self and reality. The self-world capacity integrates the following five dimensions: self-other-world focus (extent to which one primarily focuses on oneself as a source of self-understanding, or alternatively has a wider more inclusive sense of self); connection or disconnect (having a sense of connection with others and the world more broadly); solidity of self (fixed inflexible sense of self, or a flexible changeable sense of self); agency (being able to control who one aspires to be) and sense of purpose locus (having a sense of purpose focused on oneself or a wider self-transcending locus). At the neural level, the self-regulatory capacity is likely linked to global dynamic pattern of brain activity, such as increases in gamma frequency oscillations associated with diminished sense of self, connection with others and compassion (Fitzgerald et al., 2014; Lutz et al., 2004).

The self-world capacity provides overarching context to most higher-level psychological processes via modulation of one's goals, motivation and sense of self; in this way the self-world capacity strongly determines mental health and wellbeing. For example, a person whose self-world capacity has a wider focus on others and the world, rather than predominant self-focus, greater sense of connection to family/friends/community/world, more

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flexible sense of self, greater sense of agency and self-transcending locus of purpose in life would be expected to have better mental health and wellbeing. Indeed, maladaptive self-focus as well as reduced empathy and emotional disconnect are associated with depression and worsening of its symptoms (Watkins & Teasdale, 2004; O'Connor et al., 2002).

Increases in qualities that are likely to have common grounding in the self-world capacity have also been strongly positively linked to mental health and wellbeing - such as greater sense of purpose in life (e.g., Kim et al., 2014; Steger, 2012), reduction in self-focus and self-transcendence associated with awe (Shiota et al., 2007; Anderson et al., 2018), or compassion (Singer & Klimecki, 2014).

The Covid-19 pandemic seems to have impacted the self-world capacity in many people; during the pandemic there have been self-reported increases in the time spent in silence and in reflection (including also time in nature), as well as increases in connectedness in relationships. From among these changes, increases in silence/reflection were the strongest predictors of participant's wellbeing (Bussing et al., 2020). In another study, greater meaning in life had a protective effect against general mental distress associated with high Covid-19 related stress during lockdown (Schnell & Kraske'20).

Decreases in the self-world capacity can be linked to political polarisation. For example, those with a lower sense of being valued by the society, and thus having a sense of social disconnection, are more likely to support radical parties (Gidron & Hall, 2020). In contrast, compassion may enhance the perceptions of connection to others in terms of self-other similarity (Oveis et al., 2010), and thus should be encouraged in political messages.

Links between the self-world capacity and political polarisation also impact on environment-friendly prosocial consumer behaviour. Those with conservative political views, and particularly those with higher income, are less likely to purchase Fairtrade products due to lower Fairtrade perspective-taking (ability to consider the perspective of those producing Fairtrade goods) (Usslepp et al., 2021). In addition, feelings of responsibility for mitigating

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climate change have been positively linked to self-transcendence rather than self-focused values (Boto-Garcia & Buccioli, 2020).

Finally, unemployment resulting from the AI revolution will most likely negatively impact on the sense of purpose in life, agency and self-esteem of those unemployed and in turn worsen their mental health. Indeed, unemployment is linked to decreases in a sense of purpose in life and agency and greater sense of purpose predicts better wellbeing during unemployment (Van Hoye & Lootens, 2013). Hence, fostering the self-world capacity should be a priority for policies aiming to address the threat of useless class as well as the other crises.

Implications for addressing the current crises

The current and impending crises will no doubt necessitate new socio-economic models (Harari, 2017). Such models should take into account fostering of the self-regulatory capacity and the self-world capacity across societal sectors to support mental health and wellbeing of the population and mitigate the impacts of the crises. The term '*capacity*' is used here to allude to the skill-based trainable nature of these sources of mental health and wellbeing to encourage development of effective interventions that can enhance these wellbeing capacities across the lifespan.

In the context of education, the crises create a pressing need to revise the goals and content of school curricula (Harari, 2017), which needs to move from emphasis on subject-knowledge focus to emphasis on skills-for-the future focus. This new direction of education could centre around supporting development of the two wellbeing capacities in children and adolescents. There already is established evidence on the importance of fostering self-regulation in education from early years as a means to improving long-term educational and health outcome prospects (Moffitt et al., 2011; Woodward et al., 2018). However, current self-regulation interventions implemented in schools (e.g., Pandley et al., 2018) need to be expanded further towards cultivating the self-world capacity alongside self-regulation. This is

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because self-regulation alone does not address the application of self-regulation skills for greater good and does not include cultivation of related protective factors of wellbeing, such as compassion, sense of purpose, connection with others and the world etc. In a positive development in this direction, latest guidance from UNESCO on social emotional learning encourages development of mindfulness, empathy, compassion and critical thinking as part of social-emotional learning in schools (Duraiappah et al., 2020). School programmes based on this model are very likely to foster both the self-regulatory capacity and the self-world capacity. If such programmes are implemented effectively, this approach to education will enable students to develop into well self-regulated, cognitively flexible, environmentally aware, compassionate, prosocial and active citizens with a strong sense of positive purpose in life.

Similarly, healthcare and social care should consider how they can best support development of the two capacities within their remits across the lifespan. As a result of increases in mental ill-health in young people generally and worsening of mental health due to the Covid-19 pandemic, there already are calls for mental health prevention and interventions to be directly informed by understanding of capacities (mechanisms) underlying mental health (Gunnell et al., 2018; Holmes et al., 2020). It may also be advantageous to move away from quick-fix short-term solutions to mental health difficulties and towards longer-term support empowering the wellbeing capacities. Indeed, interventions reducing mind wandering and increasing self-regulation have been shown to improve mental health and wellbeing (e.g., Gu et al., 2015; Mrazek et al., 2012; Pandley et al., 2018). And cultivation of qualities such as sense of purpose (Kim et al., 2014), awe (Anderson et al., 2018) and compassion (Engen & Singer, 2015) has also been linked to better mental health and wellbeing. Grounded in this new focus, development of an integrated perspective on the links between mental health, physical health and their interconnectedness with environmental sustainability, socio-economic and political changes needs to be part of the solution.

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A greater emphasis on wellbeing capacities will also catalyse a shift from an overgrowth economy towards more sustainable models; a shift towards a gross national happiness as a key societal metric (rather than GDP) has been suggested as an alternative (Verma, 2017). Whether this might be a viable alternative is to be seen, but greater transparency about what makes humans happy might be a starting point. Research shows that consumption (Chancellor & Lyubomirsky, 2010) and pleasure-based happiness is less likely to lead to life satisfaction than happiness based on engagement and a sense of purpose in life (Huta & Ryan, 2010). Other studies showed that mental health is the strongest determinant of happiness (Clark et al., 2018). Yet, current marketing strategies mostly focus on pleasure-based happiness driven by profit focus. This further highlights the need to re-invent the economy in a way that can foster wellbeing capacities underlying mental health.

Changes to policy will be needed to enable such educational, social, and socio-economic modifications. A shift towards politics that encourages social integration and connection, rather than exploits social marginalisation and existential fears, will be instrumental in finding effective solutions to the current and impending crises.

Conclusion

Attempts to mitigate the negative impacts of the current societal crises on mental health and wellbeing have been mostly fractionated by discipline-specific and crisis-specific focus. While such approaches are undoubtedly needed, greater focus on the bigger picture of shared and intertwined impacts of the current crises on mental health and wellbeing may catalyse new effective approaches to addressing the current challenges. Fostering the self-regulatory capacity and the self-world capacity as sources of mental health and wellbeing is one possible integrative approach to this. Hopefully, this proposal will stimulate further research into how to make the development of these wellbeing capacities part of the efforts to support mental health and wellbeing in the midst of the current crises.

References:

Anderson, C. L., Monroy, M., & Keltner, D. (2018). Awe in nature heals: Evidence from military veterans, at-risk youth, and college students. *Emotion, 18*(8), 1195.

Austin, K. F. (2021). Degradation and disease: ecologically unequal exchanges cultivate emerging pandemics. *World Development, 137*, 105163.

Barbieri, P., & Bonini, B. (2020). Political Orientation and Adherence to Social Distancing during the COVID-19 Pandemic in Italy. *Available at SSRN 3671018*.

Boto-García, D., & Buccioli, A. (2020). Climate change: Personal responsibility and energy saving. *Ecological Economics, 169*, 106530.

Bradshaw, C. J., Ehrlich, P. R., Beattie, A., Ceballos, G., Crist, E., Diamond, J., ... & Blumstein, D. T. (2021). Underestimating the challenges of avoiding a ghastly future. *Frontiers in Conservation Science, 1*, 9.

Chancellor, J., & Lyubomirsky, S. (2011). Happiness and thrift: When (spending) less is (hedonically) more. *Journal of Consumer Psychology, 21*(2), 131-138.

Cho, J., Ahmed, S., Hilbert, M., Liu, B., & Luu, J. (2020). Do search algorithms endanger democracy? an experimental investigation of algorithm effects on political polarization. *Journal of Broadcasting & Electronic Media, 64*(2), 150-172.

Clark, A., Flèche, S., Layard, R., Powdthavee, N., & Ward, G. (2018). *The origins of happiness*. Princeton University Press.

Societal crises and wellbeing capacities

Dahl, C. J., Wilson-Mendenhall, C. D., & Davidson, R. J. (2020). The plasticity of well-being: A training-based framework for the cultivation of human flourishing. *Proceedings of the National Academy of Sciences*, 117(51), 32197-32206.

Duraiappah, A., Mercier, J., Chatterjee Singh, N. (2020). Rethinking learning: A review of social and emotional learning for education systems. Retrieved March 21, 2021, from <https://mgiep.unesco.org/rethinking-learning>

Engen, H. G., & Singer, T. (2015). Compassion-based emotion regulation up-regulates experienced positive affect and associated neural networks. *Social cognitive and affective neuroscience*, 10(9), 1291-1301.

Fitzgerald, P. J., & Watson, B. O. (2018). Gamma oscillations as a biomarker for major depression: an emerging topic. *Translational psychiatry*, 8(1), 1-7.

Forster, S., Nunez Elizalde, A. O., Castle, E., & Bishop, S. J. (2015). Unraveling the anxious mind: anxiety, worry, and frontal engagement in sustained attention versus off-task processing. *Cerebral Cortex*, 25(3), 609-618.

Gibson, K. E., Barnett, J., Haslam, N., & Kaplan, I. (2020). The mental health impacts of climate change: Findings from a Pacific Island atoll nation. *Journal of Anxiety Disorders*, 73, 102237.

Gidron, N., & Hall, P. A. (2020). Populism as a problem of social integration. *Comparative Political Studies*, 53(7), 1027-1059.

Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A

Societal crises and wellbeing capacities

systematic review and meta-analysis of mediation studies. *Clinical psychology review*, 37, 1-12.

Gunnell, D., Kidger, J., & Elvidge, H. (2018). Adolescent mental health in crisis. *British Medical Journal*, 361, 1-2.

Harari, Y. N. (2017). Reboot for the AI revolution. *Nature News*, 550(7676), 324 – 327.

Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., ... & Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*.

How has coronavirus affected mental health? (2021, February 11). Retrieved March 14, 2021, from <https://www.bbc.co.uk/news/explainers-55957105>

Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of happiness studies*, 11(6), 735-762.

Kang, Y., Gray, J. R., & Dovidio, J. F. (2014). The nondiscriminating heart: lovingkindness meditation training decreases implicit intergroup bias. *Journal of Experimental Psychology: General*, 143(3), 1306.

Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science*, 330(6006), 932-932.

Kim, E. S., Strecher, V. J., & Ryff, C. D. (2014). Purpose in life and use of preventive health care services. *Proceedings of the National Academy of Sciences*, 111(46), 16331-16336.

Koopman, M. Y., Pieterse, M. E., Bohlmeijer, E. T., & Drossaert, C. H. (2017). Mental health promoting Interventions for the unemployed: a systematic review of applied techniques and effectiveness. *International Journal of Mental Health Promotion*, 19(4), 202-223.

Lupien, S. J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behaviour and cognition. *Nature reviews neuroscience*, 10(6), 434-444.

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the national Academy of Sciences*, 101(46), 16369-16373.

Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the national Academy of Sciences*, 108(7), 2693-2698.

Mental health and covid-19. (n.d.). Retrieved March 14, 2021, from <https://www.who.int/teams/mental-health-and-substance-use/covid-19>

Mrazek, M. D., Smallwood, J., & Schooler, J. W. (2012). Mindfulness and mind-wandering: finding convergence through opposing constructs. *Emotion*, 12(3), 442.

Nature (2018). Brazil's new president adds to global threat to science. *Nature*, 563(7729), 5-6.

O'Connor, L. E., Berry, J. W., Weiss, J., & Gilbert, P. (2002). Guilt, fear, submission, and empathy in depression. *Journal of affective disorders*, 71(1-3), 19-27.

Oveis, C., Horberg, E. J., & Keltner, D. (2010). Compassion, pride, and social intuitions of self-other similarity. *Journal of personality and social psychology*, 98(4), 618.

Posner, M. I., Rothbart, M. K., Sheese, B. E., & Tang, Y. (2007). The anterior cingulate gyrus and the mechanism of self-regulation. *Cognitive, Affective, & Behavioral Neuroscience*, 7(4), 391-395.

Rollwage, M., Dolan, R. J., & Fleming, S. M. (2018). Metacognitive failure as a feature of those holding radical beliefs. *Current Biology*, 28(24), 4014-4021.

Rollwage, M., Zmigrod, L., de-Wit, L., Dolan, R. J., & Fleming, S. M. (2019). What underlies political polarization? A manifesto for computational political psychology. *Trends in cognitive sciences*, 23(10), 820-822.

Saville, C. W. (2020). Mental health consequences of minority political positions: The case of brexit. *Social Science & Medicine*, 258, 113016.

Shiota, M. N., Keltner, D., & Mossman, A. (2007). The nature of awe: Elicitors, appraisals, and effects on self-concept. *Cognition and emotion*, 21(5), 944-963.

Schleicher, A. (2020, December 11). TECH 2020: Keynote 'Learning for an interconnected world: The role of social and emotional skills' [Video file]. Retrieved March 21, 2021, from <https://www.youtube.com/watch?v=cn48mYZujQ0>

Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, 24(18), R875-R878.

Societal crises and wellbeing capacities

Steentjes, K., Pidgeon, N. F., Poortinga, W., Corner, A. J., Arnold, A., Böhm, G., ... & Tvinnereim, E. (2017). European Perceptions of Climate Change (EPCC): Topline findings of a survey conducted in four European countries in 2016.

Steger, M. F. (2012). Experiencing meaning in life: Optimal functioning at the nexus of spirituality, psychopathology, and well-being. *The human quest for meaning*, 2, 165-184.

Usslepp, T., Awanis, S., Hogg, M. K., & Daryanto, A. (2021). The Inhibitory Effect of Political Conservatism on Consumption: The Case of Fair Trade. *Journal of Business Ethics*, 1-13.

Van Hoye, G., & Lootens, H. (2013). Coping with unemployment: Personality, role demands, and time structure. *Journal of Vocational Behavior*, 82(2), 85-95.

Verma, R. (2017). Gross National Happiness: meaning, measure and degrowth in a living development alternative. *Journal of Political Ecology*, 24(1), 476-490.

Wang, H. T., Poerio, G., Murphy, C., Bzdok, D., Jefferies, E., & Smallwood, J. (2018). Dimensions of experience: exploring the heterogeneity of the wandering mind. *Psychological science*, 29(1), 56-71.

Watkins, E., & Teasdale, J. D. (2004). Adaptive and maladaptive self-focus in depression. *Journal of affective disorders*, 82(1), 1-8.

Woodward, L. J., Lu, Z., Morris, A. R., & Healey, D. M. (2017). Preschool self regulation predicts later mental health and educational achievement in very preterm and typically developing children. *The Clinical Neuropsychologist*, 31(2), 404-422.

Societal crises and wellbeing capacities

Watts, N., Amann, M., Arnell, N., Ayeb-Karlsson, S., Beagley, J., Belesova, K., ... & Costello, A. (2020). The 2020 report of The Lancet Countdown on health and climate change: responding to converging crises. *The Lancet*, 397(10269), 129-170.

Zmigrod, L., Rentfrow, P. J., & Robbins, T. W. (2018). Cognitive underpinnings of nationalistic ideology in the context of Brexit. *Proceedings of the National Academy of Sciences*, 115(19), E4532-E4540.