



# Harnessing the science of human flourishing to accelerate sustainable development

Working paper for discussion  
October 2021



TEMPLETON WORLD  
CHARITY FOUNDATION

*The Future of*  
**HUMAN FLOURISHING**



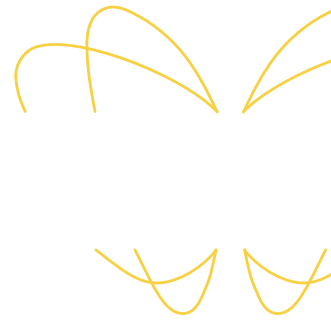
**This working paper is intended to provoke discussion and debate among policymakers, philanthropists, researchers, and others concerned about the flourishing of humanity. We plan to revise the paper in response to feedback and new research findings.**

Templeton World Charity Foundation (2021). Harnessing the science of human flourishing to accelerate sustainable development.

[templetonworldcharity.org](https://templetonworldcharity.org)

Copyright © Templeton World Charity Foundation

# Harnessing the science of human flourishing to accelerate sustainable development



<b>Introduction</b>	2
<b>I. Why human flourishing matters for sustainable development</b>	
Human flourishing: beyond survival	4
Links between flourishing and development progress	5
Pathways to flourishing in a state of flux	6
Introducing the Inner Development Goals	8
Encouraging global partnership in a creative process	9
<b>II. How new investments in human flourishing can have impact</b>	
Nurturing a young, still-emerging field	10
Examples of research at the discovery stage	11
Examples of research at the development stage	12
Public database of human flourishing ideas	14
Research ready for launch—forgiveness innovations	14
Fostering interdisciplinary approaches to big questions	15
<b>III. Addressing areas of neglect in human flourishing research</b>	
Insights from a global call for ideas	17
Increasing geographic and cultural representation	17
Understanding human flourishing amid adversity	18
Developing, validating, and sharing new research methods	19
Templeton World Charity Foundation’s commitment	20

# Introduction

2

When the history of the COVID-19 pandemic is written, it may be that one of its longest-lasting impacts is the way in which it has forced us all to ask big questions. What makes life worth living? What should I live for, and why? What should I believe and why should I believe it? What makes us feel truly alive? How can we flourish instead of merely surviving?

Human flourishing in all its dimensions can accelerate progress toward the Sustainable Development Goals and other major public policy priorities.

Scientific studies over the past few decades have begun to revolutionize our understanding of human flourishing, moving it from a quaint scholarly niche to the subject of significant scientific importance. Researchers across a range of disciplines have shown it is possible to reliably measure different dimensions of human flourishing—such as a sense of meaning, purpose, and truth; character and virtue; fulfilling and affirming relationships; and agency. Early pioneers are beginning to translate knowledge of how and why people flourish into practical tools that can be thoroughly tested so we know whether they work, for whom, and under which circumstances.

But there has been a major oversight in the global conversation about the big picture of human flourishing: its importance to global institutions, particularly those that advocate for and set policy. Drawing on published research, this paper argues that the science of human flourishing in all its dimensions can accelerate progress toward major public policy priorities such as the Sustainable Development Goals (SDGs) and other global agendas. Too often, public policy pursues a vision for the future based narrowly on human survival rather than human potential.

There is new urgency to translating scientific findings on how humans flourish into policy action. Our institutions, norms, and policies should create space for us to flourish. Yet, these structures are in a state of massive flux, due to forces such as globalization and automation, the effects of the COVID-19 pandemic, and the realities of climate change. How we choose to respond will influence how quickly and effectively agendas such as the SDGs can be achieved.

What is emerging is a new field of human flourishing, encompassing research, practice, and policy across academic and practical specialties. This field is highly interdisciplinary, bringing together dynamic combinations of researchers across the physical, biological, and social sciences with scholars in philosophy, history, art, and theology. The fact that so many different disciplines have approached the topic reflects its complexity and universality.

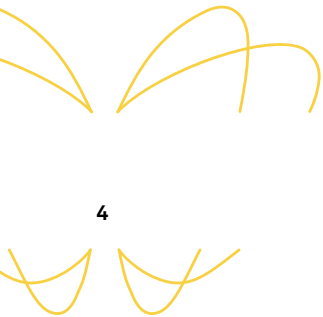
At the same time, there are gaps in attention and resources, and areas where new investments could have significant impact. This paper makes the case—drawing in part on a global call for scientific ideas that attracted more than 500 proposals from researchers at more than 350 institutions—for greater investment in an interdisciplinary ecosystem that supports human flourishing across research, practice, and policy.

Key areas where greater investment could have impact include increasing the representation of non-Western, non-wealthy contexts and approaches in research; expanding the conceptual space of human flourishing to account for adversity and suffering; and encouraging innovators of all kinds to translate new research into practice. In every aspect of this work, a commitment to open science is vital.

Templeton World Charity Foundation has made a US\$ 60 million commitment to build research and a pipeline of innovations that push the boundaries of scientific knowledge to help people flourish. We are committed to sharing the lessons we learn with others and mobilizing further global attention, collaboration, and investment to strengthen the field of human flourishing.

Our call to action is to stress the critical importance of solving global challenges through a revolution in research, practice, and policy focused on what it means to be human and to live in a way that fulfills our potential. We hope you'll join us on this journey into the future of human flourishing.

**Our call to action is to solve global challenges through a revolution in research, practice, and policy focused on what it means to be human and to live in a way that fulfills our potential.**



# I. Why human flourishing matters for sustainable development

Human flourishing is a holistic concept. Yet public policy to improve the human condition is often restricted to narrow outcomes.

## Human flourishing: beyond survival

What does it mean for humans to flourish? While specific conceptions of flourishing are numerous, research across diverse cultures suggests that flourishing encompasses at least five broad domains of human life:<sup>1</sup>

- Happiness and life satisfaction
- Health, both mental and physical
- Meaning and purpose
- Character and virtue
- Close social relationships

A key insight of any description of human flourishing is that it is a multidimensional and holistic concept. Flourishing encompasses but goes beyond the concerns of physical and mental health. Flourishing is contrasted with stasis or languishing; it connotes a sense of growth, positivity, and resilience. It also connotes well-being, joy, and harmony. Modern conceptions of human flourishing owe a debt to Aristotle, who first described the concept of and conditions for *eudaimonia*, or the good life, more than 2,000 years ago.

Despite the importance of flourishing to human endeavor, public policy to improve the human condition is often restricted to addressing a deficit model and very narrow outcomes. For example, health initiatives typically focus on reducing a single disease, and studies in economics often only examine effects on income or the production and consumption of goods. Public policy in general tends to stress attainment of certain goals irrespective of how those goals are achieved. Yet if a central purpose of public policy is to contribute to what it means to be human and how to live a fulfilling life, then a broader integration of flourishing is essential.<sup>2</sup>

<sup>1</sup> VanderWeele, TJ (2017). On the promotion of human flourishing. *Proceedings of the National Academy of Sciences*, 114(31), 8148–8156. doi.org/10.1073/pnas.1702996114

<sup>2</sup> VanderWeele, TJ (2017). doi.org/10.1073/pnas.1702996114

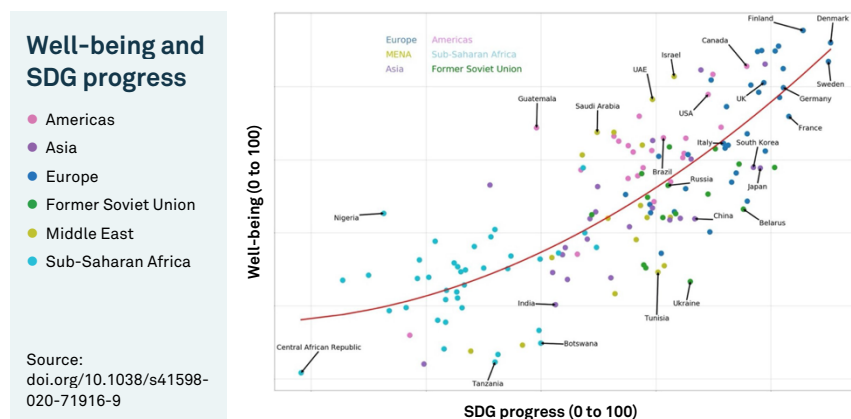
## Links between flourishing and development progress

One of the greatest opportunities for the science of human flourishing to enhance and accelerate the impact of public policy is to apply it to the global agenda known as the Sustainable Development Goals (SDGs). The “Global Goals,” as they are sometimes called, consist of 17 goals that the international community adopted in 2015 and aims to achieve by 2030—including the ambitious goals of ending poverty and hunger, addressing climate change, and ensuring universal access to health care and education.<sup>3</sup>

5

Human flourishing is at the core of the SDG declaration. The goals aim to ensure that “all human beings can fulfill their potential in dignity, equality, and in a healthy environment.” Empirically, metrics of human flourishing and the SDGs also go hand in hand. For example, data suggest that there is a strong positive correlation,  $r = 0.79$ , between a country’s progress toward achieving the SDGs and the subjective well-being of its population as measured by an item in the Gallup World Poll. As countries become more developed, a higher SDG progress is associated with an ever higher subjective well-being score:<sup>4</sup>

There is a strong positive correlation between a country’s progress toward achieving the Sustainable Development Goals and the subjective well-being of its population.



Looking at health specifically, insights on the relationships among health, subjective well-being, and aging are increasingly relevant to policymakers. Research suggests that the connection between physical health and subjective well-being flows in both directions: People with chronic illnesses are more likely to have a depressed mood as well as lower sense of purpose and meaning. At the same time, well-being may play a protective role for health.<sup>5</sup> Yet the relationships between well-being and age differ regionally: In high-income, English-speaking countries, research suggests that the lowest levels of self-reported well-being typically occur in midlife. The pattern is

<sup>3</sup> sdgs.un.org/goals

<sup>4</sup> De Neve, JE & Sachs, JD (2020). The SDGs and human well-being: a global analysis of synergies, trade-offs, and regional differences. *Scientific Reports*, 10(1). doi.org/10.1038/s41598-020-71916-9

<sup>5</sup> Steptoe, A, Deaton, A & Stone, AA (2015). Subjective wellbeing, health, and ageing. *The Lancet*, 385(9968), 640–648. doi.org/10.1016/s0140-6736(13)61489-0

The institutions that have historically promoted and safeguarded our individual and collective flourishing are in a state of flux.

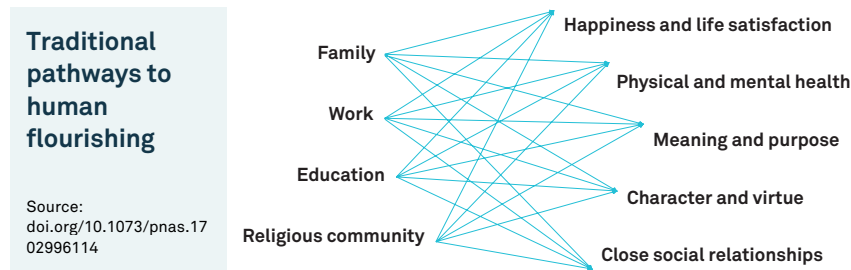
different in the former Soviet Union and eastern Europe as well as Latin America, where self-reported well-being declines progressively as people approach advanced age.<sup>6</sup>

To take another example, education, there is increasing attention to the importance of providing a holistic curriculum that prepares young people for the challenges of this century. This means building critical thinking and rational decision-making skills alongside character virtue development—including identifying a sense of purpose, feeling empathy toward others, and taking compassionate action. Research shows that social emotional learning can be taught in the classroom across age levels and results in improved social and emotional skills, attitudes, behavior, and academic performance.<sup>7</sup>

Building on these and other findings, governments have begun to collect and track data on broader outcome measures related to human flourishing. Notably, the Organization for Economic Cooperation and Development (OECD) now collects data on measures such as life satisfaction.<sup>8</sup> These efforts are complemented and enhanced by academic research such as the World Values Survey, which studies social, political, economic, religious, and cultural values across countries.<sup>9</sup>

## Pathways to flourishing in a state of flux

Research has shown that at least four major pathways to human flourishing are both relatively common and have reasonably sizable, measurable effects: family, work, education, and religious community.<sup>10</sup>



Of particular relevance to policymakers is that the institutions that have historically promoted and safeguarded our individual and collective flourishing are in a state of flux. These structures are being substantially

<sup>6</sup> Steptoe, A, Deaton, A & Stone, AA (2015). doi.org/10.1016/s0140-6736(13)61489-0

<sup>7</sup> Durlak, JA, Weissberg, RP et al. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. Child Development, 82(1), 405–432. doi.org/10.1111/j.1467-8624.2010.01564.x

<sup>8</sup> OECD (2013). OECD Guidelines on Measuring Subjective Well-being. doi.org/10.1787/9789264191655-en

<sup>9</sup> worldvaluessurvey.org

<sup>10</sup> VanderWeele, TJ (2017). doi.org/10.1073/pnas.1702996114



reorganized, presenting potentially significant challenges as well as opportunities to advance human flourishing:

- **Disruption of traditional institutions:** In 2019, majorities of adults across 27 countries reported in a survey that family ties have weakened in their countries.<sup>11</sup> The state of religiosity and religious practice is similarly in flux, albeit not uniformly around the world. The same 2019 survey saw religion declining in stature in North America and Europe compared with 20 years ago, while remaining highly relevant in parts of Africa and Asia and the subject of split opinion elsewhere.<sup>12</sup> Work is also changing: Estimates before the COVID-19 pandemic projected that in a majority of occupations, one-third or more of the activities now performed by humans could be automated by 2030—with potentially vast implications for a critical source of meaning in people’s lives.<sup>13</sup>
- **Toll of the COVID-19 pandemic:** Evidence is mounting of the toll, and long tail, of COVID-19 on human flourishing. Not only does COVID-19 compromise a person’s health, the social conditions of the pandemic are also having a negative impact. Economic hardship, heavy COVID-related media exposure, reduced social contact, and the anxiety from a loss of control are just some of the stressors.<sup>14</sup> Studies of how people across Europe fared during the first half of 2020 suggest that mental health worsened during the pandemic, and the research links these declines to intensified loneliness.<sup>15</sup>
- **Media, technology, and misinformation:** The effects of media and communications technology on human flourishing have become pressing policy questions. With much of the world’s population now having access to smartphones, internet services, and social networking platforms,<sup>16</sup> what do these changes portend for well-being? With humans encountering unprecedented amounts of systematic misinformation, what are the consequences for the search for truth?<sup>17</sup> Conversely, how can communications technology be used to strengthen aspects of flourishing, like relationships, empathy, and moral decision-making?

The effects of media on human flourishing have become pressing policy questions. So has resolving the long-term benefits of climate change mitigation with the short-term trade-offs required.

<sup>11</sup> Pew Research Center (2019). A Changing World: Global Views on Diversity, Gender Equality, Family Life and the Importance of Religion. [pewresearch.org](http://pewresearch.org)

<sup>12</sup> Pew Research Center (2019).

<sup>13</sup> McKinsey Global Institute (2017). Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation. [mckinsey.com](http://mckinsey.com)

<sup>14</sup> See studies cited at [weforum.org/agenda/2021/02/covid-19-pandemic-europe-mental-health-depression-anxiety-loneliness-social](http://weforum.org/agenda/2021/02/covid-19-pandemic-europe-mental-health-depression-anxiety-loneliness-social)

<sup>15</sup> Santini, ZI & Koyanagi, A (2021). Loneliness and its association with depressed mood, anxiety symptoms, and sleep problems in Europe during the COVID-19 pandemic. *Acta Neuropsychiatrica*, 33(3), 160–163. [doi.org/10.1017/neu.2020.48](https://doi.org/10.1017/neu.2020.48)

<sup>16</sup> See [ourworldindata.org/internet](http://ourworldindata.org/internet)

<sup>17</sup> For example, see Loomba, S, de Figueiredo, A et al. (2021). Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. *Nature Human Behaviour*, 5(3), 337–348. [doi.org/10.1038/s41562-021-01056-1](https://doi.org/10.1038/s41562-021-01056-1)

- **Climate change:** A key challenge facing policymakers is how to resolve the long-term benefits of climate change mitigation with the short-term trade-offs required. Indeed, research correlating overall progress on the SDG agenda with subjective well-being has found an important exception: progress toward SDG 12, ensuring responsible consumption and production patterns, is negatively correlated with subjective well-being even when controlling for a country's general level of economic development.<sup>18</sup> A recent report by the OECD attempts to address this challenge by proposing climate change mitigation through a well-being lens, putting people at the center of climate policy.<sup>19</sup>

We need to develop our human abilities, skills, and other inner qualities to effectively address global challenges such as health inequity and climate change.

## Introducing the Inner Development Goals

A new initiative called the Inner Development Goals offers a unique and important contribution to the conversation about creating a sustainable global society. The premise of the project is that policy experts often overlook the human abilities, qualities, and skills essential to implement effective policy.

The purpose of the Inner Development Goals project is, in its first phase, to highlight the need to develop our human abilities, skills, and other inner qualities to effectively address global challenges such as health inequity and climate change. This includes fostering these traits among the general population to sustain democratic support for societal sustainability.

The initial framework put forth by the Inner Development Goals identifies five key categories of human capabilities, qualities, and skills that are needed to successfully reach the Sustainable Development Goals: (i) being and the relationship to self; (ii) thinking and cognitive skills; (iii) relating and caring for others and the world; (iv) collaborating and social skills; and (v) acting and driving change.

Learn more at [innerdevelopmentgoals.org](https://innerdevelopmentgoals.org).

<sup>18</sup> De Neve, JE & Sachs, JD (2020). [doi.org/10.1038/s41598-020-71916-9](https://doi.org/10.1038/s41598-020-71916-9)

<sup>19</sup> OECD (2019). Accelerating Climate Action. [doi.org/10.1787/2f4c8c9a-en](https://doi.org/10.1787/2f4c8c9a-en)

## Encouraging global partnership in a creative process

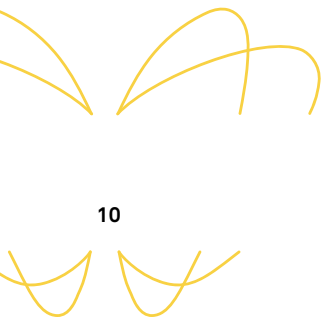
The philanthropist Sir John Templeton often reminded us that periods of change are actually opportunities for us all to participate in a grand creative process of human progress. Therefore, contemporary challenges to human flourishing need not necessarily be framed as problems. Rather, we should view the situation as an opportunity to learn, to expand, and synthesize our knowledge, and to discover new ways of applying these insights to benefit the world around us and others in it.

9

One way of seizing the opportunity is to integrate contributions to human flourishing from institutions and partners from many sectors simultaneously. This includes:

- **The public sector**, given its role in shaping international policies and services as well as values
- **The private sector**, recognizing its influence on the human experience through the products and services that companies provide, the role that companies play in creating meaningful work, and the resources that the private sector brings to public policy issues
- **Educational institutions**, owing to their profound impact on the development of what we learn, how our worldviews are shaped and what we value
- **Religious institutions**, given their inherent role in appreciation for, and empowerment of, our spiritual capacities and our pursuit of ultimate concerns
- **Media**, given the role all forms of media play in shaping our beliefs and worldviews, increasingly taking over from traditional sources of authority

Sir John Templeton reminded us that periods of change are opportunities to participate in a grand creative process of human progress.



# II. How new investments in human flourishing can have impact

New investments in human flourishing could have impact across a range of innovations at the discovery, development, and launch stages.

## Nurturing a young, still-emerging field

Scientific study of human flourishing necessarily draws on cooperation and synthesis across multiple existing academic fields. What is emerging is a sum greater than its parts: a new field that encompasses research, practice, and policy to better understand the dimensions of human flourishing and translate those insights into the development and deployment of practical tools. As the field is still young, there are many opportunities for new investments to have impact on the generation of new knowledge and tools.

The modern mindfulness movement provides a source of inspiration for what the field of human flourishing could become. The core insight from Zen Buddhist tradition about non-evaluative attention to the present moment was subjected over decades to an innovation process. It started with developing candidate interventions and, with further investment, continued through prototype testing, trials in multiple human populations, replication, and meta-analysis. Today, mindfulness interventions are integrated throughout cultures and across many types of organizations.<sup>20</sup> It is time to apply the same rigor and intensity to many more innovations.

New investments in human flourishing could have impact across a range of innovations at different stages of the research pipeline—discovery, development, and launch:

Discovery	Development	Launch
Rigorous and imaginative research to answer fundamental questions about what it means to be human, and how humans flourish amid modern challenges	Refinement and testing of new interventions that promote flourishing to achieve policy outcomes, determining for whom these tools work, when, and where	Resources and platforms to spread awareness of human flourishing innovations, and encourage their incorporation into public policies and systems

<sup>20</sup> For example, see Baminiwatta, A & Solangaarachchi, I (2021). Trends and Developments in Mindfulness Research over 55 Years: A Bibliometric Analysis of Publications Indexed in Web of Science. *Mindfulness*, 12(9), 2099–2116. doi.org/10.1007/s12671-021-01681-x

## Examples of research at the discovery stage

Human flourishing research at the early discovery stage seeks to rigorously and imaginatively answer fundamental questions about what it means to be human, and how humans flourish amid uniquely modern challenges.

11

Examples include:

- **Collective behavior in a digital world:** Globally, billions of people now use social media and can transfer high-fidelity information over vast distances at low cost. It is vital to understand how this radical shift in the way people create and share information affects our ability to take positive collective action—particularly on challenges such as infectious disease and climate change.

For example, how can we discern truth from falsehood when faced with large volumes of polarizing information on digital platforms? Satisfying answers to questions such as these do not yet exist, and building knowledge will have implications for multiple pressing policy issues that technology companies and governments are grappling with.<sup>21</sup>

The challenge of coexisting, cooperating, and thriving with the people and technologies that populate our increasingly hybrid digital-physical lives has inspired a growing body of research on the meta-virtue of “cyberwisdom.”<sup>22</sup>

- **Artificial intelligence and human moral judgment:** In some domains of human activity, automating a task has diminished human skill at the task. As societies increasingly delegate some kinds of decision-making to artificial intelligence (AI)—including public policy decisions involving moral judgment—it is essential that humans remain in the loop.

The Machine Wisdom Project is one of multiple research teams studying how AI-based decision-making systems could be intentionally designed to facilitate human moral judgment. The project’s researchers hypothesize that improving people’s self-awareness of the limitations of AI could guard against failure to exercise ethical autonomy over the technology. This can be particularly challenging when people only partially understand how an AI system works.<sup>23</sup>

At the same time, other research is exploring how AI might teach humans to make better moral decisions, for example by emphasizing the value of face-to-face positive connection with other humans.<sup>24</sup>

Discovery research seeks to answer fundamental questions about what it means to be human, and how humans flourish amid modern challenges.

<sup>21</sup> Bak-Coleman, JB, Alfano, M et al. (2021). Stewardship of global collective behavior. Proceedings of the National Academy of Sciences, 118(27), e2025764118. doi.org/10.1073/pnas.2025764118

<sup>22</sup> See [jubileecentre.ac.uk/2909/projects/cultivating-cyber-phronesis](http://jubileecentre.ac.uk/2909/projects/cultivating-cyber-phronesis)

<sup>23</sup> [themachinewisdomproject.org](http://themachinewisdomproject.org)

<sup>24</sup> See [templetonworldcharity.org/projects-database/understanding-whether-when-and-how-artificial-intelligence-can-strengthen-human](http://templetonworldcharity.org/projects-database/understanding-whether-when-and-how-artificial-intelligence-can-strengthen-human)

Development projects aim to refine and test new interventions that promote flourishing, so we know whether they work, for whom, and under which circumstances.

- **How altruism develops—and can be fostered:** Although research on altruism is growing in popularity, more research needs to be conducted into the origins of this essential prosocial behavior. By investigating how different experiences in childhood shape empathy and identity, researchers believe that they can discover new pathways for fostering ethical choices and behaviors.

For example, a series of experiments found evidence that infants can override their possessive tendencies and share valued items with people outside of their direct family. The data also suggested that by 19 months of age, certain sociocultural experiences are associated with greater infant sharing, including parental life experiences, values, goals, and practices.<sup>25</sup> Understanding what enhances the fundamental ability of young children to treat others generously could help in the design of programs to promote prosocial behaviors.

## Examples of research at the development stage

Human flourishing research at the development stage connects fundamental insights to important psychological and social outcomes. It aims to refine and test new interventions that promote dimensions of flourishing such as character development and gratitude, so we know whether they work, for whom, and under which circumstances. Examples include:

- **Hope, purpose, and community health work:** It is well established in medicine that a patient's sense of hope aids in their recovery. More recently, research also shows that incorporating hope and a sense of purpose could help health care workers do their jobs better and provide quality care under stress.<sup>26</sup>

For example, researchers in Pakistan are developing a testable and potentially scalable character development tool for health workers. It includes participatory activities drawing on local arts and storytelling to enhance health workers' sense of joy, purpose, and self-worth.<sup>27</sup> Research is planned to evaluate the real-world impact of the tool.

Similarly, in Mexico, researchers are developing an integrated digital toolbox aimed at supporting health care professionals to strengthen four key pillars of character that underlie well-being: awareness, connection, insight, and purpose, or ACIP. This character-based, digital health intervention is being designed as a cost-effective, scalable, and culturally

<sup>25</sup> Barragan, RC & Meltzoff, AN (2021). Human infants can override possessive tendencies to share valued items with others. *Scientific Reports*, 11(1). doi.org/10.1038/s41598-021-88898-x

<sup>26</sup> See Ishimwe, AB, Kaufman, J et al. (2020). Cross-cultural adaptation and psychometric properties of the Herth Hope Index in Kinyarwanda. *Health and Quality of Life Outcomes*, 18(1). doi.org/10.1186/s12955-020-01537-3

<sup>27</sup> See [templetonworldcharity.org/projects-database/towards-human-centric-model-training-healthcare-leveraging-humanities-strengthen](https://templetonworldcharity.org/projects-database/towards-human-centric-model-training-healthcare-leveraging-humanities-strengthen)

relevant method of improving the mental health and well-being in health workers across Latin America.<sup>28</sup>

- **Gratitude and conservation of natural resources:** Environmental conservationists have long maintained that expressing gratitude for nature could counter complacency toward the environment and encourage greater public responsibility for environmental protection.<sup>29</sup>

This important hypothesis has been supported by recent experiments finding that gratitude can drive sustainable actions including the extraction of fewer resources from a common pool. In the experiments, participants played a resource dilemma game after being randomly assigned to experience a neutral emotion or a state of gratitude. When the game's common pool became depleted, participants who started with a neutral emotion increased what they took from the pool—but those who started with gratitude did not.<sup>30</sup> Findings on the role of eliciting gratitude could spark new insights for public campaigns that communicate the urgency of policy priorities such as climate action.

- **Humility, social connectedness, and COVID-19 behaviors:** The seriousness of the ongoing COVID-19 pandemic has focused policymaker attention on strategies to encourage people to follow public health guidance, including overcoming hesitancy to be vaccinated. Research conducted during the pandemic suggests that promoting intellectual humility and connectedness with all humanity may be key for promoting public health.

For example, one recent study demonstrated that people with more intellectual humility—those more able to accept their own intellectual fallibility—were less likely to hold anti-COVID vaccine attitudes. The influence of humility on vaccination attitudes was in addition to that of other factors such as socioeconomic status, race and ethnicity, age, and political orientation.<sup>31</sup>

Related research has shown that people with greater identification with all humanity—that is, a broad identity that spans genders, races, and experiences—are more likely to adopt guidance recommended by the World Health Organization to limit the spread of COVID-19.<sup>32</sup>

Incorporating hope and a sense of purpose into health care jobs could help workers provide better care under stress. Eliciting gratitude could help public campaigns communicate the urgency of climate action.

<sup>28</sup> For more information contact Templeton World Charity Foundation

<sup>29</sup> Loder, RE (2011). Gratitude and the environment: Toward individual and collective ecological virtue. *The Journal Jurisprudence*, 10, 383-435.

<sup>30</sup> Kates, S & DeSteno, D (2020). Gratitude reduces consumption of depleting resources. *Emotion*. doi.org/10.1037/emo0000936

<sup>31</sup> Huynh, HP & Senger, AR (2021). A little shot of humility: Intellectual humility predicts vaccination attitudes and intention to vaccinate against COVID-19. *Journal of Applied Social Psychology*, 51(4), 449–460. doi.org/10.1111/jasp.12747

<sup>32</sup> Barragan, RC, Oliveira, N, et al. (2021). Identifying with all humanity predicts cooperative health behaviors and helpful responding during COVID-19. *PLOS ONE*, 16(3), e0248234. doi.org/10.1371/journal.pone.0248234

Launching an innovation means investing in resources and platforms to spread awareness and encourage incorporation into public policies and systems.

## Public database of human flourishing ideas

To help connect new public and private sector investors with human flourishing research of relevance, Templeton World Charity Foundation has launched a Global Database of Human Flourishing Ideas. Each entry in the database represents a bold but under-funded idea for advancing the science of human flourishing.

The ideas highlighted in the database were sourced from the Foundation’s worldwide call for scientific proposals to address “Grand Challenges in Human Flourishing.” The response was far greater than one organization can support alone. We hope that like-minded funders and others can learn about ideas they might want to support.

Browse and search the database at [templetonworldcharity.org/humanflourishing/ideas-database](http://templetonworldcharity.org/humanflourishing/ideas-database).

## Research ready for launch—forgiveness innovations

Tools to aid in practicing forgiveness are an example of human flourishing innovations ready for launch. Templeton World Charity Foundation and John Templeton Foundation have been supporting scientific research on forgiveness for more than 20 years. More than 50 studies conducted around the world have found that forgiveness significantly improves mental health outcomes such as depression, anger, hostility, and stress across ages.<sup>33,34,35</sup>

<sup>33</sup> Friedberg, JP, Suchday, S & Srinivas, VS (2009). Relationship Between Forgiveness and Psychological and Physiological Indices in Cardiac Patients. *International Journal of Behavioral Medicine*, 16(3), 205–211. doi.org/10.1007/s12529-008-9016-2

<sup>34</sup> McFarland, MJ, Smith, CA et al. (2011). Forgiveness of Others and Health: Do Race and Neighborhood Matter? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 67B(1), 66–75. doi.org/10.1093/geronb/gbr121

<sup>35</sup> Toussaint, L, Shields, GS et al. (2014). Effects of lifetime stress exposure on mental and physical health in young adulthood: How stress degrades and forgiveness protects health. *Journal of Health Psychology*, 21(6), 1004–1014. doi.org/10.1177/1359105314544132



## Forgiveness Forum

Top: Forum with Zak Williams and mental health influencers, discussing forgiveness and young people

Bottom: Forum with Mary Robinson and other members of The Elders, discussing forgiveness in challenging times

More at [forgivenessforum.com](http://forgivenessforum.com)



15

To help bring the science of forgiveness to more people, Templeton World Charity Foundation is in the early stages of a Global Forgiveness Campaign.

To help bring the science of forgiveness to more people, Templeton World Charity Foundation is in the early stages of a Global Forgiveness Campaign. The initiative will grow in size and scope toward the goal of bringing millions of people into a global discourse on the benefits of forgiveness. In the first year, the Foundation is pursuing three core tracts: (i) creation of a digital hub of scientific studies on forgiveness and practical tools for practicing it; (ii) forums to explore forgiveness interventions with religious, education, and mental health front line workers; and (iii) an effort to position forgiveness and flourishing within larger policy conversations.<sup>36,37</sup>

## Fostering interdisciplinary approaches to big questions

The field of human flourishing joins disciplines as disparate as neuroscience, engineering, and philosophy in pursuit of deeper understanding and innovative thinking. Therefore, investing in human flourishing typically means investing in the development of interdisciplinary teams, some of which may cross or challenge traditional academic or sector boundaries.

As one example, ongoing study of how people develop character virtues or character strengths—which include compassion, forgiveness, gratitude,

<sup>36</sup> [forgivenessforum.com](http://forgivenessforum.com)

<sup>37</sup> [templetonworldcharity.org/humanflourishing](http://templetonworldcharity.org/humanflourishing)

honesty, humility, and kindness—spans multiple academic disciplines and methodologies, including:<sup>38</sup>

16

Investing in human flourishing means investing in teams that may cross or challenge traditional academic or sector boundaries.

- **Neurobiology and psychology:** One key area of character virtue development research aims to understand how character is limited or enhanced by neurobiological factors. For example, studies suggest that variations in the oxytocin receptor gene are associated with differences in moral judgment.<sup>39</sup>
- **Sociology and human development:** Another key area of research focuses on how an individual's social environment, including family and school, can influence character development among youth. For example, the Five Cs model of positive youth development emphasizes the mutually influential relationship between individuals and their context in supporting the development of competence, confidence, character, connection, and caring.<sup>40</sup>
- **History and anthropology:** Sustained human flourishing can require the adaptation, struggle, and fortitude of a group over time. Highly relevant to character virtue development research, therefore, are studies of countries and periods where human flourishing required overcoming turbulent pasts and a long-term, collective process of social healing.
- **Computational modeling:** Strong social connections are considered key to a flourishing society. The Human Generosity Project seeks to answer fundamental questions about the nature of generosity by exploring why humans share during times of need. This large-scale interdisciplinary research project combines computational modeling with laboratory experiments and anthropological fieldwork in nine communities worldwide.<sup>41</sup>
- **Philosophy and morality:** Interventions designed to increase engagement with issues of morality may be able to reduce the likelihood of behavior that harms others. For example, research in Colombia found that fostering critical thinking among youth encouraged the young people to question beliefs and justifications that made it easy to resort to moral disengagement.<sup>42</sup>

<sup>38</sup> For a fuller discussion see [education.ox.ac.uk/research/education-purpose-and-human-flourishing-in-uncertain-times-ephf](http://education.ox.ac.uk/research/education-purpose-and-human-flourishing-in-uncertain-times-ephf)

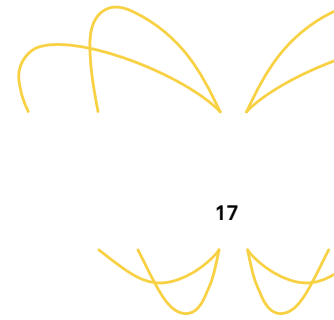
<sup>39</sup> Bernhard, RM, Chaponis, J et al. (2016). Variation in the oxytocin receptor gene (OXTR) is associated with differences in moral judgment. *Social Cognitive and Affective Neuroscience*, nsw103. doi.org/10.1093/scan/nsw103

<sup>40</sup> Lerner, RM, Lerner, JV et al. (2005). Positive Youth Development, Participation in Community Youth Development Programs, and Community Contributions of Fifth-Grade Adolescents. *The Journal of Early Adolescence*, 25(1), 17–71. doi.org/10.1177/0272431604272461

<sup>41</sup> [humangenerosity.org](http://humangenerosity.org)

<sup>42</sup> Bustamante, A & Chau, E (2014). Reducing Moral Disengagement Mechanisms: A Comparison of Two Interventions. *Journal of Latino/Latin American Studies*, 6(1), 52–54. doi.org/10.18085/llas.6.1.123583644qq115t3

# III. Addressing areas of neglect in human flourishing research



## Insights from a global call for ideas

In 2020, Templeton World Charity Foundation issued a worldwide call to researchers: what are the grandest challenges facing human flourishing, and how can scientific inquiry address these challenges and create practical solutions? More than 500 ideas from researchers at more than 350 institutions were received.

Initial analysis of the responses reveals major areas of neglect in need of greater investment. These include the need to increase global inclusivity in human flourishing research; the need to better understand how humans can flourish amid adverse conditions—including the COVID-19 pandemic; and the need to develop, validate, and share new research methods.

The scientific data that inform our current understanding of human flourishing have been generated primarily from a small subset of the global population.

## Increasing geographic and cultural representation

The data that inform our current understanding of social, behavioral, psychological, and cognitive science have been generated primarily from a subset of the global population that is Western, Educated, Industrialized, Rich, and Democratic. In other words, WEIRD. This phenomenon has profound implications because it means that much of scientific knowledge is based on a narrow cultural context, drawn from limited samples that leave out most of human experience and tradition.<sup>43</sup>

A related area of neglect is that most funding for research on human flourishing goes to institutions in high-income countries. There is an underrepresentation of researchers from other settings. Among the 500-plus submissions received in response to the 2020 Grand Challenges call, more than 40 countries were represented, but overwhelmingly the submissions came from researchers in high-income countries.

<sup>43</sup> Henrich, J, Heine, SJ & Norenzayan, A (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83. doi.org/10.1017/s0140525x0999152x

An important development in increasing global inclusivity in human flourishing research is a new global longitudinal study that will follow 300,000 individuals around the world from 22 geographically and culturally diverse countries. The Global Flourishing Study is a collaboration between scholars at Harvard University and Baylor University, with the support of John Templeton Foundation, Templeton Religion Trust, and a consortium of funders.<sup>44</sup> In a similar vein, Templeton World Charity Foundation's Global Innovations for Character Development initiative aims to fund projects around the world to promote character strengths.<sup>45</sup>

What hope do we have of flourishing in the face of adverse conditions that cannot be changed? Lack of inclusivity in research hampers our understanding of how humans can flourish amid adversity.

## Understanding human flourishing amid adversity

If flourishing is a state in which all aspects of a person's life are good, what hope do we have of flourishing in the face of adverse conditions that cannot be changed? Certainly, the way the COVID-19 pandemic has cut across society and spread around the world has brought the inevitability of suffering to the fore for many people who have spent lives in states of relative privilege. Furthermore, COVID reminds us that adversity is not distributed equitably, and many vulnerable communities and individuals live with physical, economic, and social hardships that predate the pandemic.

Lack of inclusivity in research hampers our understanding of how humans can flourish amid adversity. Although studies have shown that flourishing is distinct from an absence of physical or mental illness and other adversities, and that flourishing can and does exist amid these circumstances,<sup>46</sup> most of the research has been conducted in WEIRD contexts. Additional research and new conceptual models are needed to better understand flourishing amid adversity in a way that includes all communities and individuals.

There is also a need to translate findings on flourishing amid adversity into practical tools that people can use. For example, one avenue suggested by emerging research is a fundamental link between flourishing and compassion, both giving it and receiving it. This research has found that even subtle expressions of compassion can radically shift patients' experience of suffering, even if their medical condition is serious, and compassionate interactions from health workers can create such a shift in the experience of suffering.<sup>47</sup>

<sup>44</sup> [hfh.fas.harvard.edu/partners](https://hfh.fas.harvard.edu/partners)

<sup>45</sup> [templetonworldcharity.org/our-priorities/global-innovations-character-development](https://templetonworldcharity.org/our-priorities/global-innovations-character-development)

<sup>46</sup> See Bethell, C, Gombojav, N & Whitaker, RC (2019). Family Resilience And Connection Promote Flourishing Among US Children, Even Amid Adversity. *Health Affairs*, 38(5), 729–737. [doi.org/10.1377/hlthaff.2018.05425](https://doi.org/10.1377/hlthaff.2018.05425)

<sup>47</sup> See Patel, S, Pelletier-Bui, A et al. (2019). Curricula for empathy and compassion training in medical education: A systematic review. *PLOS ONE*, 14(8), e0221412. [doi.org/10.1371/journal.pone.0221412](https://doi.org/10.1371/journal.pone.0221412)

## Developing, validating, and sharing new research methods

To understand something as valuable and complex as human flourishing, we should be using all of the best research methods at our disposal.

Methodological flexibility and pluralism will be key to understanding how to conceptualize and quantify flourishing outcomes—including objective and externally observable markers, as well as indicators that are more subjective. There is a need to design studies that can more definitively determine whether particular interventions cause outcomes of interest, using experimental methods and the types of controlled trials often used in medical and social research.

One potentially fruitful area for applying innovative research methods to human flourishing is establishing causal links between the practice of religious and spiritual exercises and a range of outcomes associated with human flourishing. Templeton World Charity Foundation is currently supporting two studies in this domain: A study at Johns Hopkins School of Medicine will involve randomized controlled trials to compare the efficacy of centering prayer, which focuses the practitioner's mind on the interior presence of God, with an attention-based practice that does not focus on a religious target. Additionally, a collaborative project between Coventry University and Radboud University will use randomized controlled trials to examine the effects of two heart-focused visualization techniques rooted in Catholic and Islamic traditions, as compared with mindfulness-based stress reduction techniques.<sup>48</sup>

As the field of human flourishing advances, the knowledge and tools gained must be shared openly with all. Open science refers to a process whereby research data, methods, and findings are made open and available to all researchers, regardless of affiliation, for free. Templeton World Charity Foundation is one of a growing number of research funders that have adopted open science policies, including a specific open access policy requiring anyone who uses our research dollars to make their final paper openly accessible to anyone with an internet connection. We expect open science policies to help more researchers contribute to the growing body of human flourishing scholarship, and to help more policymakers put powerful research insights to practical use.<sup>49</sup>

**As the field of human flourishing advances, the knowledge and tools gained must be shared openly with all.**

<sup>48</sup> For more information contact Templeton World Charity Foundation

<sup>49</sup> [medium.com/templeton-world/what-our-new-open-science-policy-means-for-the-future-of-research-68be53c61ec0](https://medium.com/templeton-world/what-our-new-open-science-policy-means-for-the-future-of-research-68be53c61ec0)

## Templeton World Charity Foundation's commitment

Since 1996, Templeton World Charity Foundation has served as a global philanthropic catalyst for discoveries around big questions of the universe in areas at the intersection of science, theology, philosophy, and society.

The Foundation has embarked on an ambitious five-year strategic framework focusing on the discovery, development, and launch of innovations that enable human flourishing.<sup>50</sup> This includes a commitment of US\$ 60 million to support new scientific research on fundamental discoveries related to what it means to be human, and to translate those discoveries into practical and positive innovations. We are investing in efforts to develop a more global picture of flourishing across different cultures and across the lifespan. We are also committed to build capacity to conduct this important research around the world.

We strive to be a connector and advocate for interdisciplinary approaches to human flourishing and to help like-minded organizations pursue this vital work alongside us. We have revised our grant-making activities to incentivize open science best practices across all fields of inquiry that we support, including human flourishing.

Our founder, Sir John Templeton, placed our distinct cognitive, social, and spiritual capacities at the center of what it means to be human. He had an expansive view of humanity's potential, place, and purpose. In *The Humble Approach*, Sir John wrote: "More and more healing and health are being seen as involving a partnership between inner resources of mind and spirit and external scientific medicine. Such a vision treats the whole person."<sup>51</sup> Sir John believed in the wonder and mystery of the human condition and in the search for meaning, purpose, and truth. In *Possibilities for Over One Hundredfold More Spiritual Information*, he asked: "Is creativity accelerating? Is there any reason to think that this new world of mind and free will must be the end of progress?"<sup>52</sup>

'More and more healing and health are being seen as involving a partnership between inner resources of mind and spirit and external scientific medicine. Such a vision treats the whole person.'  
—Sir John Templeton

<sup>50</sup> [templetonworldcharity.org/our-strategy](https://templetonworldcharity.org/our-strategy)

<sup>51</sup> [templetonpress.org/books/the-humble-approach](https://templetonpress.org/books/the-humble-approach)

<sup>52</sup> [templetonpress.org/books/possibilities-for-over-one-hundredfold-more-spiritual-information](https://templetonpress.org/books/possibilities-for-over-one-hundredfold-more-spiritual-information)





TEMPLETON WORLD  
CHARITY FOUNDATION

*The Future of*  
**HUMAN FLOURISHING**