

5. Wellbeing in Public Policy: Contributions Based on Sen's Capability Approach

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This chapter provides a brief introduction to the capability approach and its use in public policy-making around the world. Specifically, it shows the approach provides a definition of wellbeing and a framework for understanding how it is produced and distributed. It notes that the framework is useful across the entire life course and so helpful for understanding wellbeing in children and retirees as well as working age adults. The chapter then discusses the practical impacts of the approach on the development of monitoring systems in the OECD and UN where the Human Development Index paved the way for the globally adopted Sustainable Development Goals. It highlights the fact that behavioural and psychological factors are an important contributor to understanding how resources are converted into wellbeing.

Over the past two decades, economists in research and policy have helped transform the way governments think about and act on wellbeing [1]. The traditional economic approach, which holds that income is broadly correlated with most dimensions of human wellbeing, has been supplemented with two approaches that have significantly affected public policy.

The first focuses on life satisfaction as experienced by individuals, and has encouraged the use of wellbeing in government priority setting, of behavioural insights in policy design, and has led to the introduction of programmes to help individuals improve their lives through policies ranging from increased funding of mental health services and to the reduction of youth unemployment [2–4].

A second approach, developed by Amartya Sen and others, focuses ultimately on how humans can fulfil their capabilities and live a flourishing life, rooting itself in both economics and moral philosophy [5]. This ‘capability’ approach often, but not always, arrives at similar policy conclusions as the first, though sometimes by different routes. Specifically, it argues that an individual’s quality of life depends on their activities and experiences, but also on the opportunities and constraints they face [6–7]. This approach recognises the multiple dimensions of quality of life, and has contributed to the development of the UN’s Sustainable Development Goals (SDGs). Philosophically sophisticated, this approach is grounded in standard economic analysis tools, but by applying them to human wellbeing is transforming international policy-making, as well as practice across a range of professions. Crucially, it offers a singular, coherent and widely applicable language and framework for policy-makers to understand human wellbeing with some advantages discussed in this chapter.

Defining Wellbeing and its Production

The capability approach emphasises three aspects of wellbeing. The first element consists of an individual’s activities and states

(functionings), which depends on the resources they can access and their ability to convert these resources into valued activities. The second element comprises the individual's subjective experience, which depends on their activities and the states in which they find themselves. The third and final element comprises all the opportunities to do things in different dimensions of life – the individual's capabilities given their resources and conversion abilities. This approach can be summarised as defining wellbeing in terms of three relations:

Activities and States = $f(\text{Resources} \times \text{Conversion Abilities})$

Happiness = $u(\text{Activities and States})$

Capabilities = *(All Possible Activities and States given Resources and Conversion Abilities)*

Sen's approach is similar to that of the subjective wellbeing model, in that it argues that the individual's experiential aspect of wellbeing depends on activities and states. But it also allows for the fact that a person's wellbeing might be judged on the basis of their potentiality, which cannot be directly observed. Policies concerned with equality of opportunity are an obvious example of how sometimes it matters to the individual and society not just what they are doing, and how feel about it, but also that the opportunities they have in life are appropriate and fair. The philosopher Isaiah Berlin called this aspect 'positive freedom.' Examples range from the ability to bring up a family to being able to find good and suitable employment, and are distinct from negative freedoms, such as the ability to make a decision without interference from a third party. What a person can

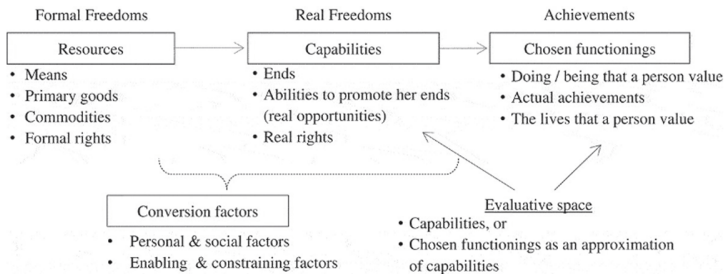
decide for themselves is part of their agency and has intrinsic value as well as the instrumental value that economists have for a long time emphasised. This approach can therefore be used to emphasise mental health because it is essential for agency, rather than because it has an impact on empirical measures such as life satisfaction, which is how the subjective wellbeing approach addresses it. So, both approaches emphasise mental health, albeit for different reasons. In addition, Sen's capability approach emphasises that public deliberation, and inclusive involvement in it by different groups, can be valuable for collective choice where the legitimacy of any choice is a consideration, in addition to any instrumental and intrinsic benefits it may result in.

There are various ways to depict the capability approach.

Figure 5.1 offers a generic diagram drawn from a discussion of how to apply the approach to housing policy [8].

Kimhur argues that policy often focusses on physical housing stock, rather than considering how housing policy bears on a range of human wellbeing outcomes and opportunities, including: safety, permanence, health, access to decent work, community membership, tenants' rights, affordability, access to information on housing options and the ability to be consulted about maintenance or developments. These contributors to wellbeing may seem obvious but it is far from clear that they get the attention they deserve. While they may not appear in models of satisfaction with total life, such factors are likely to be significant in models of satisfaction with housing, especially when there are problems or constraints. The multi-dimensional emphasis of the capability approach helps to direct attention towards the assessment of different dimensions.

Figure 5.1: Example of a capability approach to housing policy



The framework can also be used to understand that these dimensions of wellbeing do not depend just on income, but also on personal abilities that help individuals convert resources into the activities they value. Someone with a mobility impairment, for example, may find it harder to obtain accommodation that provides suitable access to decent employment opportunities because the travel environment the accommodation is located within is less likely to be suited to their situation. Thus, personal abilities are important ‘conversion’ factors. Furthermore, it is conceivable that the impact of some conversion factor, such as disability status, might show up more strongly in more specific models, for instance, in housing satisfaction models more than in models of overall life satisfaction. Life satisfaction might adapt to, or be compensated by, other factors, whereas problems with housing might be salient and specific, making them harder to ignore.

Through this framework, it is also possible for other challenges to be more effectively redressed. In particular, it can be particularly helpful for identifying priority issues and/or target

populations. Coates et al., [9] for example, looked at housing policy in relation to Irish travellers. Within focus groups conducted for the research, which was ostensibly directed towards housing provision, other problems affecting wellbeing emerged. One woman noted that a house built by sub-contractors to a local authority was damp in winter and caused her children to be hospitalised. Another observed that the neighbourhood where she was housed was blighted by unemployment due to local employer attitudes towards the traveller community, with almost three quarters of adults in that community unemployed. And a third, younger woman reported that teachers did not ‘push’ traveller children, and that this had, ultimately, discouraged her from aiming for university.

The story that emerged, as a result, was that by focussing on housing, rather than considering the broader wellbeing of the community, policy-makers were failing to address the substantive problems. Hopefully, this housing example, of what Robeyns calls ‘place based’ capabilities,[10] gives a brief flavour of how some of the general concepts can be applied in practical policy settings and how the emphasis shifts and broadens as issues of wellbeing are brought into the conversation more directly. In the next section, we extend these discussions by considering how the approach can be used to consider the production of wellbeing at different points in the life course.

The Production and Distribution of Wellbeing Over the Life Course

Considering wellbeing through this perspective can help us answer some perennial questions for science and public policy.

For instance, what are the dimensions of wellbeing and how are individuals in certain groups able to produce it? Many policies seek to improve the capabilities of individuals either by acting on the individuals' own resources or conversion factors, or on the environment in which they live and work. Empirical evidence on individual capabilities, activities, and states, and how these are produced and enhanced is therefore required. What follows below is an account of three case studies from the long-standing capability measurement project that help to illustrate how such evidence can be produced.

Adult wellbeing

In a survey of working age adults conducted internationally, Anand et al. asked them to provide Likert ratings [11–12], which rate their abilities to do or achieve certain things related to home, work, community, physical environment and service access. From this work, it is possible to identify some stylised facts about the drivers of capabilities at national level. For instance, what individuals are able to do in their lives reflects the state of economic development of their country, as well as their position within its socio-economic strata, although there are also notable cross-country variations, even in countries that have comparable levels of economic development. In the USA, for example, individuals report that they are more able to get help from the police than in European countries, while in the UK, individuals report that they are more freely able to get medical assistance, and in Italy, respondents appear relatively more critical of their local governments' clearing of waste. These responses reflect the approaches taken to particular public services by different

countries, such as the UK's free-at-point-of-use NHS, but also reflect differences in political institutions, such as the accountability of Italian local authorities to the people. These data also help to identify the possible need for other kinds of responses. For example, in all countries, work-life balance was low, which may suggest the existence of a prisoner dilemma situation that is contributing to low wellbeing, which warrants a non-market intervention from the state.

Child development and happiness

Wellbeing depends on what individuals are able to do, and this changes most rapidly in childhood. To explore this dynamic aspect, therefore, it is natural to ask how and when do individual capabilities develop, and how might this development be supported where necessary? Accordingly, in a second project, we sought to assess the happiness and development of toddlers in Germany using data from the annual German socio-economic panel survey [13]. Within this dataset, the 'mother and child' module contains a particularly rich array of questions on the child's activity involvement, skills and happiness, as reported by the parent. Three equations were estimated to understand child happiness, with the results showing that of all activities, reading with a parent and going on shopping trips were significantly and positively correlated with a child's happiness.

One interpretation of this data is that these activities contribute to a child's sense of wellbeing above all others. A more subtle interpretation is that other activities also contribute to wellbeing but that the ones with the strongest positive correlation were constrained in some way. For example, if reading

with a parent promotes the child's happiness and is constrained for some children, such as those whose parents have low amounts of time for or interest in reading, then the significant coefficient for reading could indicate that for some children, the amount of reading with a parent is too little compared with what might be optimal. Further, then considering the factors behind these numbers, it would seem that income has a small positive effect on reading specifically, while it has a negative effect on shopping, with lower income families more likely to shop with toddlers.

Other factors that proved relevant included the location of the children, (possibly reflecting different policies and cultures in the former East and West Germanies), certain characteristics of the mother, including her education level and migrant status, and the number of siblings the child has. More education seems to make it easier for mothers to read to their child, while having migrant mothers were related to more outdoor activities – perhaps because there are fewer social ties and therefore invitations to indoor activities. Siblings have multiple impacts as they compete for parental time but also provide alternative sources of stimulation. Finally, we investigate how these activities contribute to skill development and find that involvement in related activities appears to be particularly important. For example, singing and reading help with speech development, while visiting other families is a significant predictor for the development of social skills. These results confirm the assumption that income plays only a modest role in child development and happiness, and that more direct support for parental activities and investments may generate skills more efficiently.

Female empowerment and micro-finance

In our third case study, we consider the situation of women in an empowerment and enterprise programme based in Uttar Pradesh, Northern India [14]. One puzzle in the economics literature is the fact that these micro-finance programmes often are found to have only a modest impact in raising income, but that they are subscribed to by vast numbers of people – with 90 million women participating in India alone. One possible explanation is that participation in such programmes has a more substantial positive impact on other aspects of wellbeing. In order to test this hypothesis, we conducted a programme evaluation, comparing capability indicators for women who had participated in the programme for some time against those for women who were not members.

Using propensity score matching to select controls with similar characteristics, and including data on length of time in programme to control for unobserved selection effects, we find that many aspects of women's wellbeing are enhanced through participation in a self-help group, whether being able to meet socially to being able to find interesting employment (see **Table 5.1**). However, there are exceptions. For instance, health limitations become more of a constraint on activity as women in the programme are now more active outside the house. In a similar, but distinct, vein, the risk of assault and discrimination are unaffected, but this is unsurprising, as the programme targeted the women themselves and their capacities, not the social environments in which they lived. It seems probable that the significant nonfinancial wellbeing impacts of this programme may help explain its popularity and those like it with many women

Table 5.1: Statistical impact of membership of a self-help group on capability indicators

Outcome	Nearest-neighbours				Kernel-based matching			
	ATE		ATT		ATE		ATT	
	Coef.	z-stat	Coef.	z-stat	Coef.	z-stat	Coef.	t-stat
Health limits activities***	0.0789	3.38	0.0873	3.33	0.0719	0.0205	3.59	
Able to meet socially***	0.0687	4.72	0.0774	4.56	0.0564	0.0571	4.15	
Lost sleep from worry (mental health)	0.0138	0.72	0.0204	0.97	0.0092	0.0108	0.66	
Able to enjoy recreation***	0.1017	6.60	0.1222	7.24	0.0975	0.1047	5.76	
Own home***	0.0897	5.57	0.0918	4.85	0.0856	0.0836	5.09	
Accommodation suitable***	0.0961	3.78	0.1086	3.55	0.0959	0.1017	4.92	
Feel safe walking***	0.1059	4.10	0.1062	3.51	0.1095	0.1108	5.56	
Risk of future assault	0.0085	0.46	0.0147	0.70	0.0195	0.0209	1.18	
Risk of future discrimination	-0.0055	-0.28	0.0005	0.02	0.0111	0.0169	1.03	
Influence local decisions***	0.1433	6.10	0.1403	5.33	0.1261	0.128	6.19	
Freedom of political and religious expression***	0.1380	6.17	0.1553	5.97	0.1204	0.1288	6.22	
Support of family and friends**	0.0539	2.13	0.0686	2.24	0.0199	0.0244	1.20	
Free to live life***	0.1099	5.08	0.1126	4.80	0.1105	0.1154	5.58	
Freedom of creative expression***	0.1395	6.64	0.1368	6.00	0.1419	0.1365	6.66	
Interesting work***	0.1794	8.45	0.1879	7.56	0.1547	0.1575	7.95	

Notes: Significance at less than 1% (***), less than 5% (**), less than 10% (*); Epanechnikov kernel estimates used bandwidth 0.06, Complete Sample, N = 5433.

in rural communities in lower income countries. These case studies are just examples of ideas of how the production and distribution of wellbeing can be assisted by the approach. In the section that follows, we consider other applications relating to childhood, health, psychology and social justice.

Capabilities in Children, Health, Psychology and Social Justice

The literature that uses the capability approach to study wellbeing over the life course is now large, and includes work by Biggieri et al. who asked children of primary school age and above from a range of countries about the dimensions of wellbeing that mattered most to them [15]. Within their responses, the most prominent were the need for respect, the ability to live according to their own identity and religion, some autonomy in time use, the ability to move freely, and the value of familial connections, such as being loved. These dimensions of wellbeing are related to those in adulthood but not identical, with it being noticeable how the desired level of autonomy changes as children grow.

Work by Heckman et al. has also encouraged the development of a significant literature on the technology of skill development in children [16]. This literature suggests that there are multiple critical periods in childhood for the development of particular skills, and that success in life is best enabled through the development of both socio-emotional and cognitive skills, skills that are developed through parental and educational investment.

Health has also seen a burgeoning literature considered through the prism of capability, using it to produce measures of

health and wellbeing for use in clinical trials. The ICECAP-O, developed by Keeley et al. has helped to highlight the value of access to socialising in older age, while the OXCAP-MH comprises 16 dimensions of life quality that might be impacted by mental illness [17–18]. Others have used the approach to examine issues of disability, arguing for a need to capture non-physical aspects of wellbeing loss not covered by medical models. Mitra with Kuklys argue that for those suffering from disability, satisfaction with their finances indicates that mobility impairment is equivalent to the loss of over 25% of income [19–20].

There are also interesting connections between the capability approach and psychological literatures. The ability to persist, captured by psychometric measures of GRIT, by Duckworth et al., has been shown to predict a range of successful education-related outcomes, while the closely related ability to plan ahead has been found to predict both life satisfaction and income [21–22]. One of the founders of positive psychology, Marty Seligman has also drawn on ideas about human flourishing to argue that positive emotion, engagement, relationships, meaning and accomplishment are the building blocks for wellbeing, which he nonetheless concludes is subjective [23]. Certainly, capabilities researchers would accept that items such as relationships and accomplishments are valuable functionings, and by extension, so are the capabilities required for achievements on these dimensions, though they stop short of viewing subjective wellbeing as their final metric of wellbeing. Looking into particular dimensions is often informative for policy purposes, while life satisfaction measures fail to identify all aspects of wellbeing, particularly non-salient sources of wellbeing, outcomes to which adaptation

has taken place, or activities and states of being that have intrinsic value not reflected in mental experience.

The capability approach has also helped to encourage work related to inequality and social justice, another important source of misery in Layard's language. For example, within economics, there is a closely related work that formalises inequality of opportunity, and finds that cross-sectional income-based measures may over-estimate inequalities when compared with measures based on permanent incomes, given the presence of some social mobility [24]. Taking inequality of opportunity (opportunities related to environmental aspects of an individual's capability) into account therefore gives rise to different measures compared with those based on income. In other disciplines, much of the work is more conceptual and oriented towards the drivers of wellbeing. Ruger for example, develops a capability approach towards social justice in health, and argues that global health institutions can contribute to human welfare variously by generating information to alleviate health inequalities, by empowering individuals and groups in national and global forums, by providing technical and financial assistance, and by adopting multi-sectoral policies that recognise many determinants of a healthy life are social and economic rather than based on healthcare per se [25].

In work applying the approach to equity in education, Unterhalter also considers how failures to ensure that boys and girls have the same opportunities for learning might be investigated [26]. She argues that ensuring effective equity, rather than just formal equality, is important. Girls and boys, for example, may be equally entitled to do homework in formal terms but

there may also be social norms that make some groups less able to make use of these entitlements than others. This distinction between formal freedom and freedom on the ground is often particularly useful when trying to understand effectiveness in public policies.

International Impacts of Capabilities on Wellbeing Policy

The single most important global governance consequence of the capability approach is the development and pursuit of the Sustainable Development Goals adopted by the United Nations in 2015. However, the capability approach's effect has been wider than this, with many organisations moving towards multi-dimensional approaches that co-exist with income-based approaches to wellbeing. The first of these was the development of the Human Development Index, which added to income, health and education as areas to be monitored at a global level and has been published almost every year since 1990 [27]. A decade later saw the launch of the Millennium Development Goals, which covered health (particularly maternal and child health) and education, and can be seen as one of the first international attempts to establish a partial international social welfare function for economic development. Nearly a decade later, the OECD started to produce its own response which took the form of a Better Life Compendium [28], an interactive index which allows users to compare countries based on capabilities and functionings in 11 domains using their own weightings. It also instructed departments to take account of wellbeing in all their areas of policy analysis. Then in 2021, the EU launched a multi-dimensional

set of inequality indicators that drew explicitly and in several ways on the capability approach [12].

There have also been several country initiatives that drew on or were motivated by the capability approach or aspects of it. In Australia, it was used as a framework for articulating priorities within government as well as to the public, while Bhutan has used it to argue for the preservation of the natural environment, including wellbeing measures in the country's planning procedures. In the UK, a coalition government, inspired by the OECD work, commissioned its National Office of Statistics to hold a public consultation and develop a wellbeing dashboard comprising 40 indicators, as well as a set of 'what works' research hubs that have helped support research impact development and interactions between practitioners and researchers.

There are also many examples of not-for-profit organisations using the capability approach, though these are typically only documented, if at all, in grey literature. The old adage about 'giving someone a fish and you feed them for a day, teach them how to fish and you might feed them for life' represents an ongoing and deep distinction between the ways of supporting individuals that not-for-profit organisations adopt. Many NGOs do aim to help individuals to have better opportunities than would otherwise be the case, and the fit between their empowerment narratives and the conceptual resources of the capability approach has proven natural and productive. NGOs are often concerned to help individuals improve their own wellbeing by helping individuals take actions for themselves that are empowering, though of course lobbying to remove external constraints on individuals who are disadvantaged can also be important.

So, what is the future for wellbeing and capabilities? Does wellbeing stand a chance or do these impacts reflect the influence of some prominent economic thinkers in the late 20th and early 21st centuries? I want to be optimistic, and cannot ignore the evidence that both Sen's capability approach, based on the concepts of real opportunity and wellbeing production functions, and the Layardian reworking of utilitarianism, have had huge impacts at the international, governmental and local levels. However, ideas have to become embedded and able to address new challenges and there are a variety of headwinds and tailwinds, deriving from psychological, governance and economics sources, that the wellbeing agenda faces. In terms of policy impact, the two variants of the wellbeing model often come to similar conclusions, even if some important differences remain at the level of theory. Those who advocate using the insights of subjective wellbeing models to inform policy generally accept the importance of choice, but implicitly. Those who advocate using Sen's account of wellbeing, which emphasises capabilities, accept also that personal experience is informative about and important for wellbeing and only demur from the proposal that it is the sole source of information about wellbeing.

What the Capability Approach Contributes

Sen's capability approach to welfare economics and the economics of happiness literatures have both been successful in terms of empirical research and social impact. Together they can be seen as subfields of approaches that view income as an input to human wellbeing rather than a proxy for it. While their conceptual differences dominate academic discourse, for the most part, they lead to similar policy conclusions in practical policy

settings. For instance, Layard has successfully used happiness benefits to argue for improvements to mental health services but mental health is also vital for human agency and the ability to make decisions and hence valued by capability researchers. Happiness economics has highlighted the importance of good social relations, and such relations also feature in many lists of capabilities that are important.

Nonetheless, there are differences. Both value democracy but in different ways. The capability approach explicitly maintains the importance of public deliberation and scrutiny while happiness economics stresses the importance of weights (inferred from models of life subjective wellbeing) given to different factors by individuals. In line with this, the capability approach tends to focus on philosophical and social science literatures relating to rights, with the happiness literature engaging particularly with psychological research on experienced wellbeing measures. As a result, the capability literature has the potential to identify sources of wellbeing (or its absence) that are not often used in economic analyses and derive largely from household surveys (for example discrimination).

In sum, the capability approach contributes to our understanding of wellbeing in various ways but its particular contribution appears to be a foundational framework for thinking about the dimensions, drivers and distribution of wellbeing. The most practical impact of this framework has been its use by UN bodies, motivating first an annual index of human development, and then creating a social welfare function for global action (the SDGs). Similar kinds of dashboards have been adopted by the OECD, EU and several countries and they generally seek

to cover key domains of life with a mix of indicators that cover the objective-subjective spectrum. These initiatives have not replaced the national income paradigm nor do they seek to do so, but they do complement it by providing direct indicators of wellbeing across key domains and over the life course.

References

1. Anand P. Happiness Explained: Human Flourishing and Global Progress. Oxford University; 2016.
2. Layard R. The economics of mental health. *IZA World of Labor*; 2017. DOI: <https://doi.org/10.15185/izawol.321>
3. Dolan P, Hallsworth M, Halpern D, King D, Metcalfe R, Vlaev I. Influencing behaviour: The mindspace way. *Journal of Economic Psychology*. 2012; 33(1): 264–277. DOI: <https://doi.org/10.1016/j.joep.2011.10.009>
4. Graham C, MacLennan S. Policy insights from the new science of well-being. *Behavioral Science & Policy*. 2020; 6(1): 1–20. DOI: <https://doi.org/10.1353/bsp.2020.0001>
5. Sen A. Commodities and capabilities. OUP Catalogue; 1999.
6. Nussbaum M, Sen A. (eds.) The quality of life. Clarendon Press; 1993. DOI: <https://doi.org/10.1093/0198287976.001.0001>
7. Chiappero-Martinetti E, Egdell V, Hollywood E, McQuaid R. 2015. Operationalisation of the capability approach. In: Facing trajectories from school to work. Cham: Springer. 2015; 115–139. DOI: https://doi.org/10.1007/978-3-319-11436-1_7
8. Kimhur B. How to apply the capability approach to housing policy? Concepts, theories and challenges. *Housing, Theory and Society*. 2020; 37(3): 257–277. DOI: <https://doi.org/10.1080/14036096.2019.1706630>

9. Coates D, Anand P, Norris M. Capabilities and marginalised communities: The case of the indigenous ethnic minority Traveller community and housing in Ireland (No. 80). Open Discussion Papers in Economics; 2015.
10. Robeyns I. 2020. Wellbeing, place and technology. *Wellbeing, Space and Society*. 2020; 1: 100013. DOI: <https://doi.org/10.1016/j.wss.2020.100013>
11. Anand P, Roope LS, Peichl A. 2016. Wellbeing evidence for the assessment of progress. IZA Paper 9840; 2016. DOI: <https://doi.org/10.2139/ssrn.2757950>
12. Anand P, Chiappero-Martinetti E, Corneo G, Mcknight A, Moro E, O'Brien D, Peragine V, Stuhler J. Multidimensional perspectives on inequality: conceptual and empirical challenges. Brussels: European Union; 2020. Available from: <https://perma.cc/8CVY-3QGX>
13. Anand P, Roope L. The development and happiness of very young children. *Social Choice and Welfare*. 2016; 47(4): 825–851. DOI: <https://doi.org/10.1007/s00355-016-0993-9>
14. Anand P, Saxena S, Gonzalez R, Dang HAH. Can Women's Self-Help Groups Contribute to Sustainable Development? Evidence of Capability Changes from Northern India. The World Bank; 2019. DOI: <https://doi.org/10.1596/1813-9450-9011>
15. Biggeri M, Libanora R, Mariani S, Menchini L. Children conceptualizing their capabilities: results of a survey conducted during the first children's world congress on child labour. *Journal of Human Development*. 2006; 7(1): 59–83. DOI: <https://doi.org/10.1080/14649880500501179>
16. Heckman JJ, Mosso S. The economics of human development and social mobility. *Annual Review of Economics* 2014; 6(1): 689–733. DOI: <https://doi.org/10.1146/annurev-economics-080213-040753>
17. Keeley T, Coast J, Nicholls E, Foster NE, Jowett S, Al-Janabi H. An analysis of the complementarity of ICECAP-A and EQ-5D-3 L in an adult population of patients with knee pain. *Health and Quality*

- of Life Outcomes*. 2016; 14(1): 1–5. DOI: <https://doi.org/10.1186/s12955-016-0430-x>
18. Simon J, Anand P, Gray A, Rugkåsa J, Yeeles K, Burns T. Operationalising the capability approach for outcome measurement in mental health research. *Social Science & Medicine*. 2013; 98: 187–196. DOI: <https://doi.org/10.1016/j.socscimed.2013.09.019>
 19. Mitra S. The capability approach and disability. *Journal of Disability Policy Studies*. 2006; 16(4): 236–247. DOI: <https://doi.org/10.1177/10442073060160040501>
 20. Kuklys W. Amartya Sen's capability approach: Theoretical insights and empirical applications. Springer; 2005.
 21. Duckworth AL, Peterson C, Matthews MD, Kelly DR. Grit: perseverance and passion for long-term goals. *Journal of personality and social psychology*. 2007; 92(6): 1087. DOI: <https://doi.org/10.1037/0022-3514.92.6.1087>
 22. Anand P, Poggi A. Do social resources matter? Social capital, personality traits, and the ability to plan ahead. *Kyklos*. 2018; 71(3): 343–373. DOI: <https://doi.org/10.1111/kykl.12173>
 23. Seligman ME. Flourish: A visionary new understanding of happiness and well-being. *Policy*. 2011; 27(3): 60–1.
 24. Aaberge R, Mogstad M, Peragine V. Measuring long-term inequality of opportunity. *Journal of Public Economics*. 2011; 95(3–4): 193–204. DOI: <https://doi.org/10.1016/j.jpubeco.2010.11.023>
 25. Ruger JP. Health and social justice. *The Lancet*. 2004; 364(9439): 1075–1080. DOI: [https://doi.org/10.1016/S0140-6736\(04\)17064-5](https://doi.org/10.1016/S0140-6736(04)17064-5)
 26. Unterhalter E. Education, capabilities and social justice. *Chapter prepared for UNESCO EFA Monitoring Report*, 4; 2003.
 27. United Nations. Available from: <https://sdgs.un.org/goals>
 28. OECD. 2011. Available from: <https://www.oecd.org/sdd/47917288.pdf> (cited 2021 June 21).