Americans Underestimate National Levels of Concern for Future Generations: Evidence Across Collective, Governmental and Moral Considerations

Kyle Fiore Law[1], Liane Young[2,3], & Stylianos Syropoulos[1]

[1] School of Sustainability, College of Global Futures, Arizona State University, Tempe, AZ

[2] Department of Psychology and Neuroscience, Boston College, Chestnut Hill, MA

[3] The Schiller Institute for Integrated Science and Society, Boston College, Chestnut Hill, MA

CRediT Statement:

KFL: Conceptualization, Validation, Software, Investigation, Writing Original – Draft (lead), Writing – Review & Editing, Visualization

LY: Resources, Writing – Review & Editing, Funding Acquisition

SS: Conceptualization, Methodology, Software, Validation, Formal Analysis, Investigation, Data Curation, Writing Original – Draft (support), Writing – Review & Editing, Supervision, Project Administration

Kyle Fiore Law: kflaw@albany.edu; https://orcid.org/0000-0001-5911-4772

Stylianos Syropoulos: syropoul@bc.edu; https://orcid.org/0000-0001-5622-1417

Funding Statement: This research was funded by a grant from the John Templeton Foundation (Number 62221; “The Impact of Social Norms on Virtue”).

Highlights

- Americans underestimate societal concern for future generations.
- Pluralistic ignorance distorts concern perceptions in moral and decision contexts.
- Intergenerational concern is widespread yet underleveraged in public discourse.
- Correcting misperceptions might mobilize collective action on long-term challenges.

Abstract

Concern for future generations is fundamental to multigenerational ethical decision-making and policymaking; yet people may underestimate how widely it's shared—a misperception that could weaken mobilization towards collective action. Across two nationally representative U.S. samples (N = 1,000), we examined actual versus perceived intergenerational concern within the circle of moral regard, as well as in prescriptions for collective and governmental decision-making contexts. Participants significantly underestimated how many future generations their fellow Americans morally consider and believe should be accounted for in collective and governmental decisions. This pattern aligns with pluralistic ignorance—where individuals assume their attitudes are uncommon despite broad consensus. Our findings suggest that intergenerational concern is widespread in the U.S. but remains a potentially underleveraged driver of long-term policy support. Correcting misperceptions about the prevalence of concern for future generations may enhance collective action and foster policies that better account for the needs of those yet to come.

Keywords: future generations, moral concern, norms, pluralistic ignorance, decision-making

Introduction

At present, just over eight billion people live on Earth. In 2024 alone, approximately 132 million babies were born worldwide (Ritchie & Mathieu, 2023), and, even with projected declines in birthrates over the next 175 years, demographers conservatively estimate that around 19 billion babies will be born between now and 2200 (Alkema et al., 2011; United Nations, 2025). In other words, in only six generations—assuming 25 years per generation—almost three times the number of people already living will be born into the world. Importantly, our collective and governmental decisions in the present will have an increasingly large impact on quality of life for—and possibly even the existence of—the people living in these future generations (Moynihan, 2020; Nations, 2024). This impact could be positive or negative, depending on how we navigate rising existential threats such as climate change, pandemics, the risk of war, and the escalating cost of living (MacAskill, 2022; Ord, 2020). Thoughtful, forward-looking policies have the potential to mitigate these risks and create a more stable and prosperous future, while inaction or short-sighted decision-making could exacerbate these challenges, making life significantly more difficult for those who come after us (González-Ricoy, 2024; Serra del Pino, 2007).

But meaningful policy change requires collective action, and collective action requires a public that is concerned enough to demand it. How much do people today care about the well-being of future generations? And how many generations ahead do they believe should be considered when governments and collectives make decisions? The answers to these questions could shape humanity's future, yet beyond direct beliefs, people's *perceptions* of what others think play a crucial role in driving collective action (Geiger & Swim, 2016; Sparkman et al., 2022). Drawing on research on social norms (Berkowitz, 1972), we focus here on how people

estimate society's concern for future generations to assess whether an underestimation of intergenerational concern may pose a barrier to driving forward-looking collective action.

How Much Do People Care About the Future?

Philosophical arguments from longtermism—the idea that future generations matter morally and that we should prioritize actions that positively shape the long-term future (MacAskill, 2022; Ord, 2020)—have sparked debate over how much weight their needs should carry in present-day decision-making. On one side, proponents argue that future people living hundreds or thousands of years from now will vastly outnumber those alive today, meaning even small improvements to their well-being could have enormous moral significance (Greaves & MacAskill, 2019). They contend that we have a duty to mitigate existential risks like climate change, pandemics, and technological threats to ensure their survival. On the other hand, critics argue that prioritizing distant future generations could divert resources from pressing present-day issues, such as poverty and social injustice (Crary, 2023; Fisher, 2023; Law, Syropoulos, & Earp, 2024). Some also question the certainty of long-term predictions, cautioning against basing ethical obligations on speculative outcomes (see Law, Syropoulos, O'Connor, et al., 2024 and Wade-Benzoni & Tost, 2009 for related findings).

But beyond academic debates, discussions on multigenerational ethics can benefit from understanding the perspectives of everyday people. While individuals tend to discount the moral standing[1] of future generations—prioritizing present-day needs, especially when future individuals are perceived as distant in time (Hauser et al., 2014; Law, Syropoulos, Coleman, et al., 2024; Syropoulos et al., 2025; Wade-Benzoni, 2002)—there is also strong evidence that people believe future individuals deserve ethical consideration and a voice in policy decisions

[1]Moral standing or moral concern refers to the extent to which an entity's interests are deemed worthy of being factored into ethical decisions (Crimston et al., 2016).

(Martínez & Winter, 2021). That is, even though future generations cannot advocate for themselves, many recognize their well-being as morally significant and support policies that account for their needs (González-Ricoy & Gosseries, 2016; Jones et al., 2018; Law, Gittle, Young, et al., 2024; von Knebel, 2023), even across political boundaries in particularly divided countries like the United States (Martínez & Winter, 2021; Syropoulos, Law, Kraft-Todd, et al., 2024). In fact, based on recent investigations, roughly 20% of Americans report exceptionally high levels of intergenerational concern for future generations *without showing any decline as they are depicted farther away in* time (Syropoulos, Law, Amormino, et al., 2024; Syropoulos et al., 2025). Taken together, the evidence suggests that concern for future generations is not only widespread but may serve as a rare unifying principle that could help bridge ideological divides and foster cooperation on long-term societal issues.

If There's a Will, Why Isn't There a Way? Considering Whether Americans Underestimate Intergenerational Concern Among Their Fellow Citizens

In this investigation, we examine a question that may be critical if we are to address recent calls for a more futures-focused society (Tonn, 2018): if concern for future generations is widespread, why are forward-looking policies and institutions so uncommon? While this question has global relevance, we focus on the United States, where public policy tends to be particularly present-focused (Brigham et al., 2014; Matus, 2021), and examine it through the lens of insights on social norms. Recent perspectives in futures studies suggest that a mobilized population is essential for the emergence and proliferation of forward-looking institutions and policies within a society (Radavoi & Rayman-Bacchus, 2021). At the same time, psychological research highlights the role of perceived descriptive norms—the belief that an attitude is widely held—in shaping collective support for social change (Agostini & van Zomeren, 2021; Berkowitz, 1972; Howe et al., 2021; Ostrom, 2010). Together, these insights suggest that

fostering the perception that concern for future generations is a common and shared value may be key to mobilizing public support for future-oriented initiatives.

Recent efforts to promote collective action on behalf of future generations have focused on expanding moral concern across time (Anthis & Paez, 2021). Yet no published studies have directly examined how far into the future intergenerational concern extends or whether people tend to underestimate the concern of their peers. Given evidence of pluralistic ignorance in climate change beliefs and broadly future-oriented policy support—where individuals significantly underestimate public consensus (Andre et al., 2024; Dixon et al., 2024; Law, Gittle, Young, et al., 2024; Sparkman et al., 2022)—we explore whether a similar pattern applies to perceptions of others' attitudes on the moral standing of future generations and the timeframe within which they should be considered in collective and governmental decisions. If such pluralistic ignorance exists, it could help explain why forward-looking policies, institutions, and calls for multigenerational action remain uncommon despite widespread concern.

The Current Study

In the present investigation, we examined whether Americans underestimate the average level of intergenerational concern in American society. All aspects of this study were pre-registered (https://aspredicted.org/9n5y-r8js.pdf). We hypothesized that Americans would: estimate that their average compatriot considers fewer generations worthy of moral concern than the actual average (H1a) and estimate that their average compatriot believes fewer future generations should be considered in collective (H1b) and governmental (H1c) decision-making than the actual average. Survey instruments, data and code for analyses are available on the Open Science Framework, https://osf.io/by4jf/?view_only=896e697ff0424196b944dac83efd50d2.

Methods

Participants

We provide study-specific information for each sample in Table 1. Data collection for both samples was conducted through a Qualtrics survey hosted on Prolific, a website where subjects register within a validated database to complete surveys in exchange for a small payment. All participants were from the U.S. Importantly, Prolific allows researchers the option to apply US Census quotas to approximate the U.S. population. Thus, to ensure that our samples provided descriptive demographic representation of the U.S. population, we implemented quotas for age, gender, race/ethnicity and political affiliation. Studies 1a-1b each had a sample size of N = 500 (total N = 1,000).[2] H1a-H1c was tested by estimating one-sample t-tests. Sensitivity analyses using G*power (Faul et al., 2007) indicated a sample size of N = 500 would provide 80% power to detect effect sizes as small as d = 0.16 for a two-tailed test. test.

Table 1

Demographic information for all studies

Parameter	Study 1a: Actual Levels of Intergenerational Concern	Study 1b: Estimated Levels of Intergenerational Concern
Sample Size	499	499
Man	254	242
Woman	236	242
White American	351	353
Black/African American	70	68
Asian/Asian American	51	45
M_{age}	45.05	44.66
SD_{age}	15.62	15.40
Platform	Prolific	Prolific
Nationally representative	Yes	Yes
Pre-registered	Yes	Yes

Measures

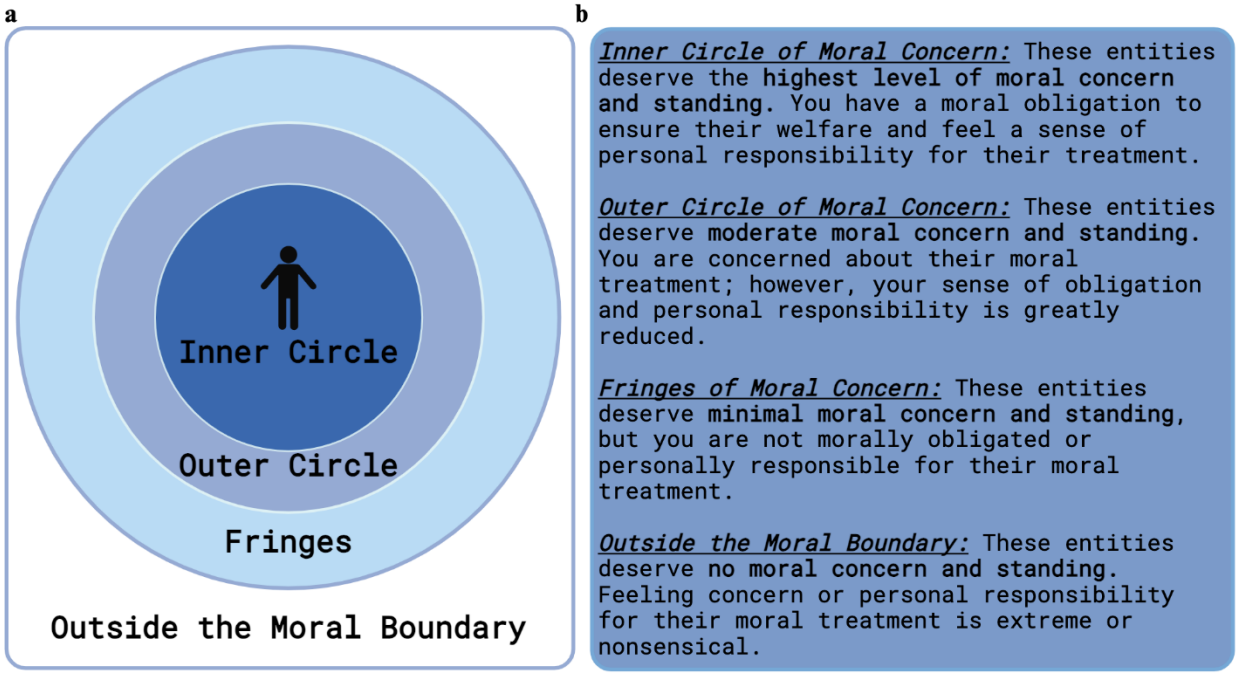
Three questions were asked in each survey, each summarized below.

[2] In accordance with our pre-registered exclusion criteria, participants with duplicate IP addresses were excluded from analyses.

Study 1a: Actual intergenerational concern. We used the Moral Expansiveness Scale (MES; Crimston et al., 2016) to examine ascriptions of moral concern/worth to the present generation and the subsequent 50 generations hence. Each generation was operationalized as the total number of people born within a 25-year period. When completing the scale, participants were asked to list which "boundary" of moral concern they would place each of the 51 generations within, serving as a measure of the level of moral standing they ascribe to the welfare of people living at each timepoint in the future. Scores on the MES could range from 0 to 3, with higher scores indicating the ascription of greater moral worth to a given target or, in this case, generation (see Figure 1). As our primary measure, we estimated subjects' "indifference points," defined as the generation at which concern for future generations dropped to zero and, importantly, remained at zero for all subsequent, more-temporally-distal future generations. In other words, the indifference point represents the generational distance from the present at which an individual becomes morally indifferent to the well-being of people living in future generations—the point at which they no longer feel any level of responsibility over their existence or quality of life.

Figure 1

The boundaries of moral concern as defined by the moral expansiveness scale



Note. To measure moral concern, participants used the Moral Expansiveness Scale (MES; Crimston et al., 2016). They were shown a blank diagram of a moral circle (like the one shown in panel **a**) and asked to decide which future generations—ranging from the present generation up to 50 generations into the future—should be included within the different boundaries of concern. Their choices were based on the descriptions shown in panel **b**. Each generation received a score ranging from 0 "Outside the Moral Boundary" to 3 "Inner Circle of Moral Concern." Our primary measure was the "indifference point," the generational distance from the present where participants began to place the remaining, more distant future generations outside the moral boundary—effectively indicating that they are indifferent to the welfare of people that far away in time.

We also reasoned that intergenerational concern could be conceptualized as the degree to which respondents believe that future people should be represented in collective decisions—decisions that could have an impact on society. We captured this with a single item: "How many future generations should we have in mind when we engage in collective decision making? Please enter the number of generations that you think is most appropriate. Keep in mind that this number reflects generations, such that each generation is the total number of people born over the next 25 years." Finally, we also agreed that a similar item focusing on the number of future generations considered for governmental decisions—decisions related to the lawmaking process–

–ought to be considered. A similarly-worded, single-item measure was thus employed: "How many future generations should elected officials (i.e., the government) have in mind when they are making decisions about legislation? Please enter the number of generations that you think is most appropriate. Keep in mind that this number reflects generations, such that each generation is the total number of people born over the next 25 years." For both of these measures, scores could range from 0 (only people living in the present generation) to 50 (people living in generations up to 1,250 years in the future). We opted to use this range of generational distance by following the precedent of existing research on the psychology of multigenerational ethics (Syropoulos, Law, Young, et al., 2024).

Study 1b: Perceptions of intergenerational concern. In the second survey, respondents were asked to estimate: (1) the generation at which other Americans feel no moral concern on average towards future people (in other words, the average indifference point, as conceptualized in Study 1a), as well as the average number of generations other Americans believe are worthy of consideration in (2) collective and (3) governmental decisions. In essence, the purpose of Study 1b was to measure whether Americans tend to underestimate, overestimate, or accurately estimate levels of intergenerational concern among their fellow compatriots.

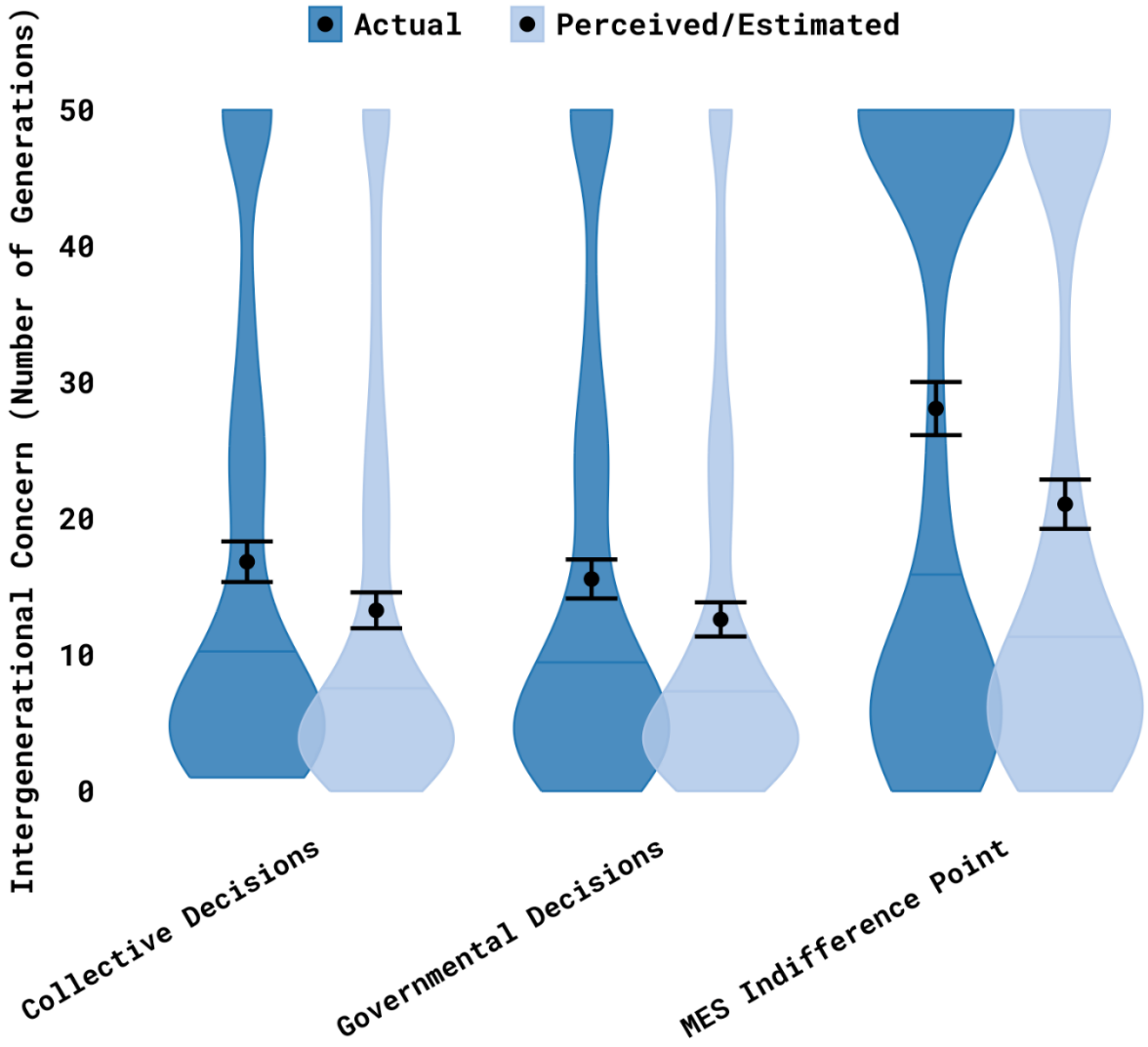
Results

Analyses for all studies were conducted in SAS 9.4. Using scores from Study 1a—which captured American's actual reported levels of intergenerational concern, we estimated the national average for each measure. Then, using the scores from Study 1b—which captured Americans' estimates of other Americans' levels of intergenerational concern—we conducted a one sample t-test comparing the estimates from Study 1b to the actual national averages from Study 1a. Figure 2 provides a visual depiction of the results, which show that, for each of the

three measures, Americans significantly underestimated other American's reported levels of intergenerational concern.

Figure 2

Comparison of actual versus perceived intergenerational concern among American citizens



Note. Violin plots displaying Americans' actual intergenerational concern and their perceptions of other Americans' intergenerational concern. Intergenerational concern is reflected by the number of future generations Americans believe—or perceive/estimate that others believe—are worthy of consideration in collective decisions, governmental decisions, or within individuals' personal circles of moral concern/worth. The shape of each violin represents the distribution of scores, with wider sections indicating more common values. The horizontal line inside each violin marks the median, while the dot with brackets represents the mean and its 95% confidence interval.

The national average for the Moral Expansiveness Scale (MES) indifference point—the generation at which typical Americans' moral concern for future people fell to zero—was 28 (M

= 28.08, SD = 21.16). In other words, the average American reported feeling some moral concern for people living up to the year 2675. Americans significantly underestimated this score by 150 years ($t(451) = -7.46$, $p < .0001$, $d = -0.35$), estimating 21 generations on average (M = 21.13, SD = 19.57). For the number of generations considered for collective decisions, the national average was 17 (M = 16.83, SD = 16.93), such that the average American reported that people living up to the year 2450 should be considered in decisions with societal consequences. Americans significantly underestimated this score as well, this time by 100 years ($t(498) = -5.56$, $p < .0001$, $d = -0.25$), estimating 13 generations on average (M = 13.27, SD = 14.98). Finally, for the number of generations considered for governmental decisions, the national average was 16 (M = 15.57, SD = 16.27), such that the average American reported that people living up to the year 2425 should be considered in policymaking. And, mirroring the results above, Americans significantly underestimated this score by 75 years ($t(498) = -5.32$, $p < .0001$, $d = -0.24$), estimating 13 generations on average (M = 12.60, SD = 14.24).

Thus, our research reveals that, on average, Americans believe that government and society should take future generations 400–425 years from now into account when making decisions. They also tend to extend at least some moral concern to people living up to 675 years in the future. However, Americans tend to drastically underestimate how much others care about future generations, suggesting the rights and needs of future people represent a broader societal concern than many realize.

Discussion

Our findings provide strong evidence that intergenerational concern is widespread in the United States; yet Americans significantly underestimate how much their fellow citizens prioritize the welfare of future generations. We find that this miscalibration between one's own intergenerational concern and their perception of others' is consistent across both the ascription

of moral concern to future generations and beliefs about the relevance of future generations in collective and governmental decision-making. This pattern aligns with prior research on other intergenerationally-oriented issues like climate change, where pluralistic ignorance—the mistaken belief that one's attitudes or behaviors are uncommon—can serve as a barrier to collective action (Dixon et al., 2024; Geiger & Swim, 2016). Much like perceptions of climate policy support, where individuals underestimate public consensus (Sparkman et al., 2022), our findings suggest that Americans may be more willing to endorse future-focused policies than they assume others would be.

This misperception could have critical implications. Given that collective action often depends on the perceived support of others (Berkowitz, 1972; Ostrom, 2010), correcting pluralistic surrounding intergenerational concern could be an important step toward mobilizing public engagement on long-term issues. Emphasizing the popularity of intergenerational concern in public discourse and policymaking may reduce barriers to adopting future-oriented legislation, particularly in politically polarized contexts where common ground is crucial (Syropoulos, Law, Kraft-Todd, et al., 2024). That is, if people recognize that concern for future generations is a shared societal value, they may feel more empowered to advocate for policies that reflect these priorities, such as enforcing cuts in non-renewable energy usage, curtailing the development of increasingly advanced and potentially-dangerous artificial intelligence systems, and reserving legislative seats for younger leaders (Law, et al., 2024; Tonn, 2018; von Knebel, 2023).

At a broader level, our results contribute to a growing body of literature (e.g., Syropoulos et al., 2025; Syropoulos, Law, Amormino, et al., 2024) indicating that individuals and societies align with some key aspects of longtermist thinking (Greaves & MacAskill, 2019). While debates in moral philosophy have questioned whether people meaningfully care about the distant future (Crary, 2023; Fisher, 2023), our data suggest that Americans already extend moral

concern well beyond the present generation. What's more is that people feel high levels of intergenerational concern *in spite of the fact that they think others don't*. This means it is unlikely people are merely feigning concern about the future to conform to social pressures, but rather they independently maintain and privately hold forward-looking attitudes toward human welfare. As such, this widespread concern could make intergenerational concern a powerful and underleveraged driver of policy support, especially if descriptive norms are more clearly communicated to both the general public and policymakers.

Nevertheless, our study has limitations. While our data provide a good approximation of the U.S. demographic, future work should examine whether similar patterns of pluralistic ignorance exist in other cultural and political contexts. For instance, in societies that have greater cultural alignment with long-term orientation—the tendency for a culture or society to undertake greater efforts for the sake of long-term commitments (Hofstede, 2011)—or in societies that are less politically polarized than the United States, it's possible that people's intergenerational attitudes and perceptions of others' are more aligned. Intriguingly, a handful of nations (e.g., Hungary, Wales, Israel) have already implemented legislative bodies devoted to representing the rights of future people (von Knebel, 2023). Further investigations might investigate whether pluralistic ignorance surrounding intergenerational concern is less pronounced in these countries and whether cultural values or political dynamics might play a moderating role. Finally, more in-depth measures of intergenerational concern—such as behavioral indicators of intergenerational decision-making—could provide further insights into the ways individuals translate concern into action. Addressing these questions might be essential for leveraging concern towards the far-future as a tool for fostering long-term societal cooperation and sustainable policymaking.

References

Agostini, M., & van Zomeren, M. (2021). Toward a comprehensive and potentially cross-cultural model of why people engage in collective action: A quantitative research synthesis of four motivations and structural constraints. *Psychological Bulletin*, *147*(7), 667–700. https://doi.org/10.1037/bul0000256

Alkema, L., Raftery, A. E., Gerland, P., Clark, S. J., Pelletier, F., Buettner, T., & Heilig, G. K. (2011). Probabilistic projections of the total fertility rate for all countries. *Demography*, *48*(3), 815–839. https://doi.org/10.1007/s13524-011-0040-5

Andre, P., Boneva, T., Chopra, F., & Falk, A. (2024). Globally representative evidence on the actual and perceived support for climate action. *Nature Climate Change*, *14*(3), 253–259. https://doi.org/10.1038/s41558-024-01925-3

Anthis, J. R., & Paez, E. (2021). Moral circle expansion: A promising strategy to impact the far future. *Futures*, *130*, 102756. https://doi.org/10.1016/j.futures.2021.102756

Berkowitz, L. (1972). Social norms, feelings, and other factors affecting helping and altruism. In *Advances in experimental social psychology* (Vol. 6, pp. 63–108). Elsevier.

Brigham, K. H., Lumpkin, G. T., Payne, G. T., & Zachary, M. A. (2014). Researching Long-Term Orientation: A Validation Study and Recommendations for Future Research. *Family Business Review*, *27*(1), 72–88. https://doi.org/10.1177/0894486513508980

Crary, A. (2023). The toxic ideology of longtermism. *Radical Philosophy*, *214*, 49–57.

Crimston, C., Bain, P. G., Hornsey, M. J., & Bastian, B. (2016). Moral expansiveness: Examining variability in the extension of the moral world. *Journal of Personality and Social Psychology*, *111*(4), 636–653. https://doi.org/10.1037/pspp0000086

Dixon, G., Clarke, C., Jacquet, J., Evensen, D. T. N., & Hart, P. S. (2024). The complexity of pluralistic ignorance in Republican climate change policy support in the United States.

Communications Earth & Environment, *5*(1), 1–6. https://doi.org/10.1038/s43247-024-01240-x

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Fisher, R. (2023). What is longtermism and why do its critics think it is dangerous? *New Scientist*. https://www.newscientist.com/article/mg25834382-400-what-is-longtermism-and-why-do-its-critics-think-it-is-dangerous/

Geiger, N., & Swim, J. K. (2016). Climate of silence: Pluralistic ignorance as a barrier to climate change discussion. *Journal of Environmental Psychology*, *47*, 79–90. https://doi.org/10.1016/j.jenvp.2016.05.002

González-Ricoy, I. (2024). Intergenerational Justice and Institutions for the Long Term. In K. H. Goetz (Ed.), *The Oxford Handbook of Time and Politics* (p. 0). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190862084.013.24

González-Ricoy, I., & Gosseries, A. (2016). *Institutions for Future Generations*. Oxford University Press.

Greaves, H., & MacAskill, W. (2019). *The Case for Strong Longtermism*. https://philpapers.org/rec/GRETCF-4

Hauser, O. P., Rand, D. G., Peysakhovich, A., & Nowak, M. A. (2014). Cooperating with the future. *Nature*, *511*(7508), Article 7508. https://doi.org/10.1038/nature13530

Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, *2*(1). https://doi.org/10.9707/2307-0919.1014

Howe, L. C., Carr, P. B., & Walton, G. M. (2021). Normative appeals motivate people to contribute to collective action problems more when they invite people to work together

toward a common goal. *Journal of Personality and Social Psychology*, *121*(2), 215–238. https://doi.org/10.1037/pspa0000278

Jones, N., O'Brien, M., & Ryan, T. (2018). Representation of future generations in United Kingdom policy-making. *Futures*, *102*, 153–163. https://doi.org/10.1016/j.futures.2018.01.007

Law, K. F., Gittle, E., Young, L., & Syropoulos, S. (2024). *Mapping and Increasing Americans' Actual and Perceived Support for Initiatives Protecting Future Generations*. OSF. https://osf.io/9my5g

Law, K. F., Syropoulos, S., Coleman, M., Gainsburg, I., & O'Connor, B. B. (2024). Moral Future-Thinking: Does the Moral Circle Stand the Test of Time? *Personality and Social Psychology Bulletin*, 01461672241284324. https://doi.org/10.1177/01461672241284324

Law, K. F., Syropoulos, S., & Earp, B. D. (2024). Artificial intelligence, existential risk and equity: The need for multigenerational bioethics. *Journal of Medical Ethics*, *50*(12), 799–801. https://doi.org/10.1136/jme-2024-110583

Law, K. F., Syropoulos, S., O'Connor, B. B., & Young, L. (2024). The Probabilistic Price of Life Across Time: Generational and Probabilistic Distance Render a Life Today Worth More than Ten Tomorrow. *Personality and Social Psychology Bulletin*. https://doi.org/10.31234/osf.io/s346z

MacAskill, W. (2022). *What We Owe The Future*. https://whatweowethefuture.com/

Martínez, E., & Winter, C. (2021). *Protecting Future Generations: A Global Survey of Legal Academics* (SSRN Scholarly Paper 3931304). https://doi.org/10.2139/ssrn.3931304

Matus, J. C. (2021). A Comparison of Country's Cultural Dimensions and Health Outcomes. *Healthcare*, *9*(12), 1654. https://doi.org/10.3390/healthcare9121654

Moynihan, T. (2020). Existential risk and human extinction: An intellectual history. *Futures*, *116*, 102495. https://doi.org/10.1016/j.futures.2019.102495

Nations, U. (2024). Human Development Report 2023-24. In *Human Development Reports*. United Nations. https://hdr.undp.org/content/human-development-report-2023-24

Ord, T. (2020). *The Precipice: Existential Risk and the Future of Humanity*. Hachette Books.

Ostrom, E. (2010). Analyzing collective action. *Agricultural Economics*, *41*(s1), 155–166. https://doi.org/10.1111/j.1574-0862.2010.00497.x

Radavoi, C. N., & Rayman-Bacchus, L. (2021). The need for durable institutions for future generations: Mobilising the citizenry. *Futures*, *132*, 102820. https://doi.org/10.1016/j.futures.2021.102820

Ritchie, H., & Mathieu, E. (2023). How many people die and how many are born each year? *Our World in Data*. https://ourworldindata.org/births-and-deaths

Serra del Pino, J. (2007). Futures studies and future generations. *Futures*, *39*(1), 113–116. https://doi.org/10.1016/j.futures.2006.03.008

Sparkman, G., Geiger, N., & Weber, E. U. (2022). Americans experience a false social reality by underestimating popular climate policy support by nearly half. *Nature Communications*, *13*(1), Article 1. https://doi.org/10.1038/s41467-022-32412-y

Syropoulos, S., Law, K. F., Amormino, P., & Young, L. (2024). Mapping the personality of (exceptional) intergenerational concern. *Personality and Individual Differences*, *231*, 112814. https://doi.org/10.1016/j.paid.2024.112814

Syropoulos, S., Law, K. F., Kraft-Todd, G., Mah, A., Markowitz, E., & Young, L. (2024). Responsibility to future generations: A strategy for combatting climate change across political divides. *British Journal of Social Psychology*, *n/a*(n/a). https://doi.org/10.1111/bjso.12775

Syropoulos, S., Law, K. F., Kraft-Todd, G., & Young, L. (2025). Impartial Intergenerational Beneficence: The Psychology of Feeling (Equal) Intergenerational Concern for All Future Generations. *Personality and Social Psychology Bulletin*, 01461672241307800. https://doi.org/10.1177/01461672241307800

Syropoulos, S., Law, K. F., Young, L., & O'Connor, B. B. (2024). *Beyond Seven Generations: Mapping and Expanding the Temporal Horizon of Intergenerational Concern*. OSF. https://doi.org/10.31234/osf.io/4j8sn

Tonn, B. E. (2018). Philosophical, institutional, and decision making frameworks for meeting obligations to future generations. *Futures*, *95*, 44–57. https://doi.org/10.1016/j.futures.2017.10.001

United Nations. (2025). *World Fertility Report 2024* (UN DESA/POP/2024/TR/NO.10.). United Nations.

von Knebel, M. (2023). Cross-country comparative analysis and case study of institutions for future generations. *Futures*, *151*, 103181. https://doi.org/10.1016/j.futures.2023.103181

Wade-Benzoni, K. A. (2002). A golden rule over time: Reciprocity in intergenerational allocation decisions. *Academy of Management Journal*, *45*(5), 1011–1028. https://doi.org/10.2307/3069327

Wade-Benzoni, K. A., & Tost, L. P. (2009). The Egoism and Altruism of Intergenerational Behavior. *Personality and Social Psychology Review*, *13*(3), 165–193. https://doi.org/10.1177/1088868309339317