

Supplementary Information

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Please note that, as part of the Supplementary Materials package, we provide the raw data collected, the consolidated dataset derived from it, and the STATA code used for the statistical analyses (all in the compressed file). In addition, we include the experimental protocols, detailing the exact questions presented to participants via the Qualtrics platform.

Appendix A. World Dynamics Model Adjustments

Four simple modifications were made to the original World Dynamics (also known as World2) model (Forrester, 1971) to align it with the scope of the experiment,. First, the variables “*QLC quality of life from crowding*” and “*QLF quality of life from food*” no longer influence the “*QL quality of life*” variable. Specifically, while the original equation was (Equation 1):

$$\begin{aligned} \text{QoL quality of life} &= \text{QLM quality of life from material} * \text{QLS QUALITY OF LIFE STANDARD} \\ &* \text{QLP quality of life from pollution} * \text{QLC quality of life from crowding} \\ &* \text{QLF quality of life from food} \end{aligned} \quad \text{Equation 1}$$

Now, it is:

$$\begin{aligned} \text{QoL quality of life} &= \text{QLM quality of life from material} * \text{QLS QUALITY OF LIFE STANDARD} \\ &* \text{QLP quality of life from pollution} \end{aligned} \quad \text{Equation 2}$$

This change was made to ensure that the quality of life indicator depends only on model components under participants’ relatively direct control, making it easier to interpret system behavior and more closely aligned with the goals of the experimental task.

Second, the “*quality of life from pollution*” function has been modified from its original logistic form (Ríos-Ocampo & Gary, 2022) to a logarithmic formulation. This adjustment increases the benefit of maintaining low pollution levels (i.e., low values of “*POLR*”) while imposing a steeper penalty as pollution rises (see Figure 1). In this experimental task, the “*quality of life from pollution*” function operates within a range of 0.2 to 10 (ensuring that the logarithmic function remains valid and avoids issues related to the logarithm of zero).

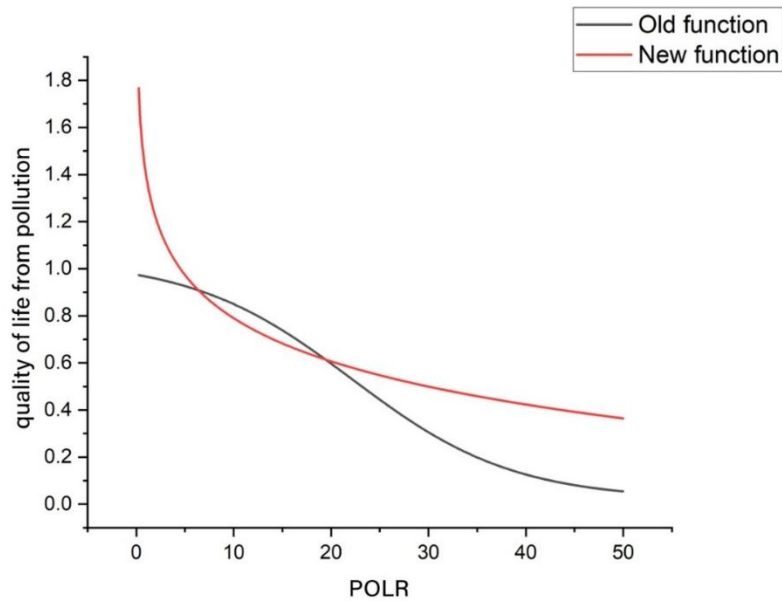


Figure 1. “quality of life from pollution” function in the original World Dynamics mode (grey) l and revised (red) version.

Third, three variables were recalibrated to generate the desired conflicting payoff landscape and to create a meaningful context aligned with the Planet X microworld narrative (see Table 1).

Table 1. Recalibrated values in the adjusted World Dynamics

Variable name	Previous value	Experimental value	Reason
<i>PI Population Initial</i>	1.65e+09	1.2e+09	Initial value of the Population stock. It was rescaled to prevent the slight initial decline in population within the selected time horizon—endogenously generated by the model—that could confuse participants. The new value also reflects a smaller population, better suited to the narrative of a newly colonized planet.
<i>POLI</i>	2e+08	1.4e+09	POLI – Initial Pollution Stock. This value was rescaled for the same reasons as the population stock: to eliminate early-model dynamics that could confuse participants and to better align with the narrative of a newly colonized planet—specifically, by reflecting lower initial pollution levels.
<i>POLS Pollution Standard</i>	3.6e+09	5e+09	Rescaled to ensure it triggers the intended effects at the appropriate time and contributes to generating the desired conflicting payoff landscape.

Fourth, while the original model runs from 1900 to 2100, the experimental task operates over a shorter time frame: from 2030 to 2130, a 100-year horizon instead of 200. This adjustment was

made for three key reasons. (i) To keep the time horizon meaningful and cognitively manageable for participants. Asking them to imagine developments 100 years into the future is already challenging; extending that to 200 years would make the task feel overly abstract and intangible. (ii) Second, one of the dominant behaviors in the original model is that humanity exceeds Earth's carrying capacity, ultimately leading to population collapse. I intentionally avoided exposing participants to this collapse dynamic, as it could bias their responses toward overly conservative or environmentally driven decisions, potentially undermining the ambiguity of the task. (iii) The simulation starting point was shifted from 1900 to 2030 to better align with the experimental narrative. This framing encourages participants to think in terms of future-oriented decision-making rather than reflecting on past events, which is expected to give them a greater sense of agency in their strategic choices. Overall, these adjustments—along with the calibration of policy effects per unit of allocated resources—were guided by manual sensitivity analysis (Barlas, 1996; Sterman, 2000), involving systematic variation of parameters to observe their impact on system behavior. The selected values were chosen to generate not only a meaningful payoff landscape (as shown in Figure 1 in the main manuscript) but also system responses that produce clear, observable variations in behavior, without being so extreme as to trigger collapse dynamics or stock oscillations during the simulation period.

In this respect, to provide readers with an intuitive understanding of the model's structure and complexity,

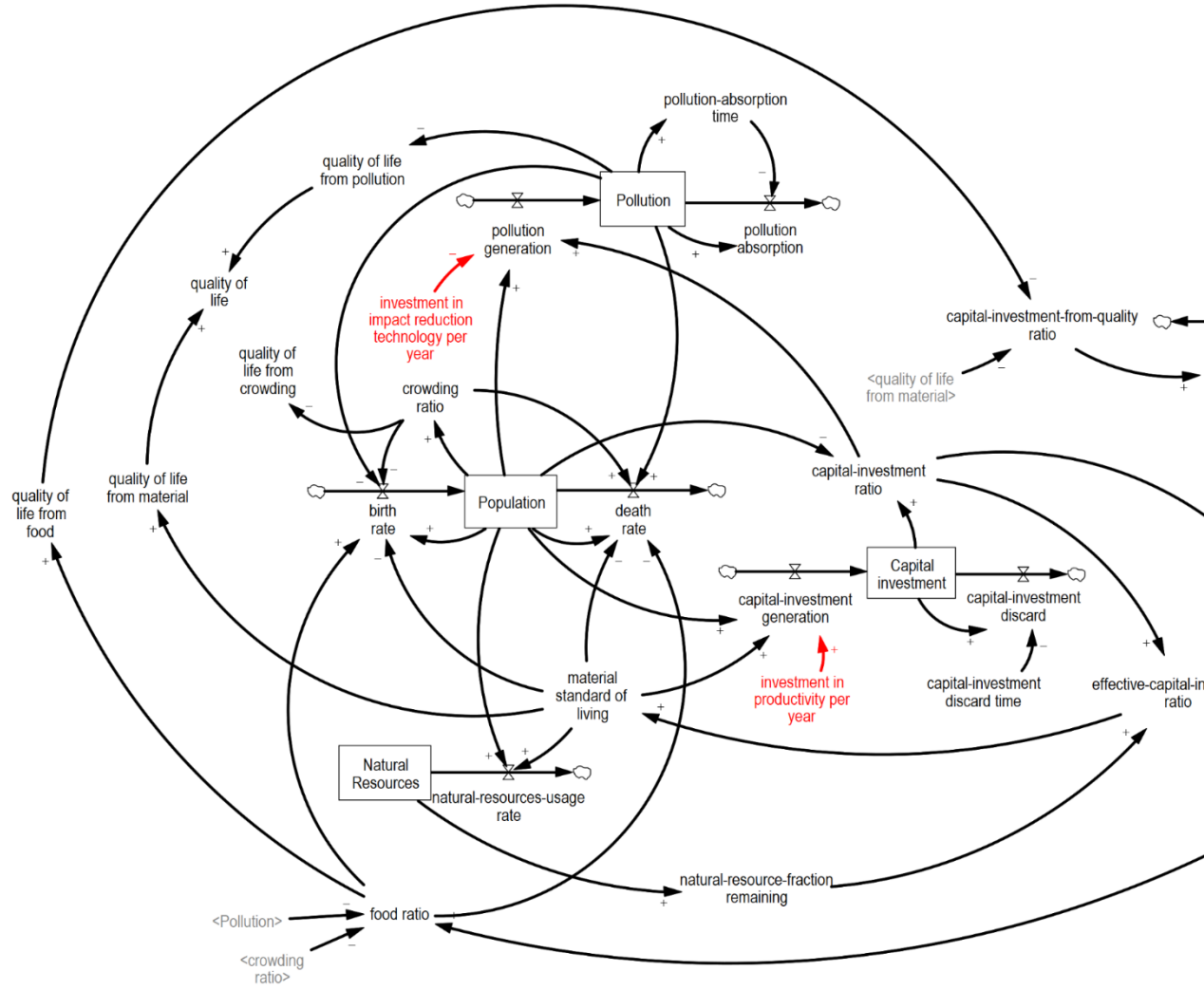


Figure 2 presents a simplified hybrid causal loop diagram (Groesser & Schaffernicht, 2012) of the model, adapted from the diagram originally provided by Forrester in World Dynamics (1971, p. 24). Furthermore, to complement Figure 1 in the main manuscript—which reports the payoff landscape of

the six indicators visible to users—

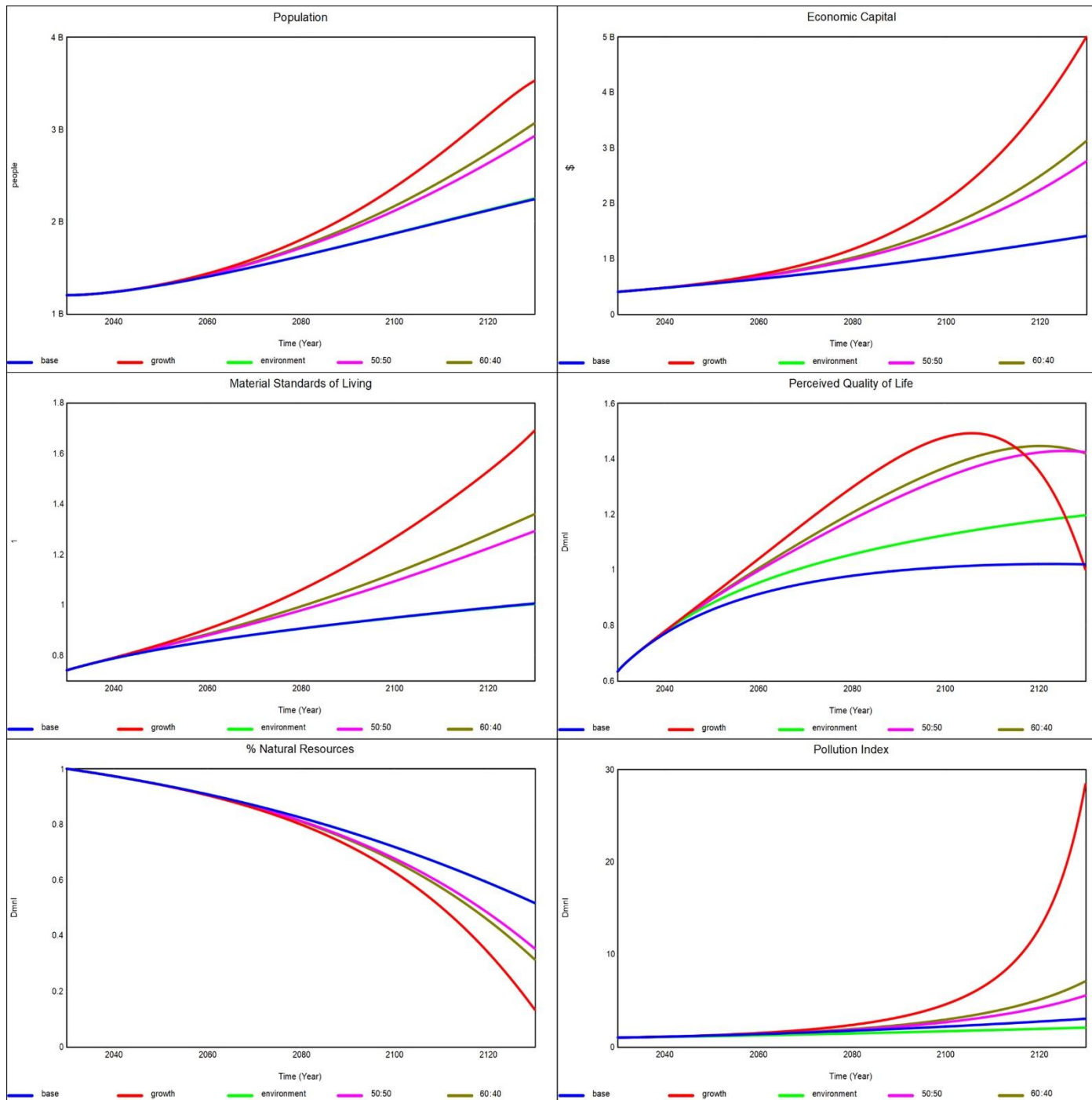
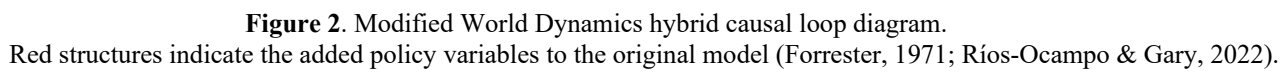


Figure 3 further below illustrates the dynamic behaviors emerging from a selection of archetypal strategies that participants might adopt when varying the total allocation of 100 million Space \$ between the two policy strategies. As shown in Figure 1, allocating a high proportion of resources to productivity improvements leads to greater population, economic capital, and material standard of living, but performs poorly in terms of pollution, perceived quality of life, and natural resources. Conversely, prioritizing pollution reduction yields better outcomes for pollution and natural resources but results in lower levels of population, economic capital, and material standard of living.

A balanced allocation (50:50) produces a relatively high perceived quality of life, though at the expense of other indicators. As expected under the notion of goal ambiguity, no single strategy achieves optimal performance across all indicators simultaneously.

It is also worth noting that, although the payoff landscape involves clear trade-offs and conflicts, it remains intentionally simple: the peaks occur either at the extremes or around midpoint allocations, making them easy for participants to identify. This design choice was deliberate, as the task aims to examine the drivers of decision-making under goal ambiguity rather than the participants' cognitive ability to locate optimal solutions.



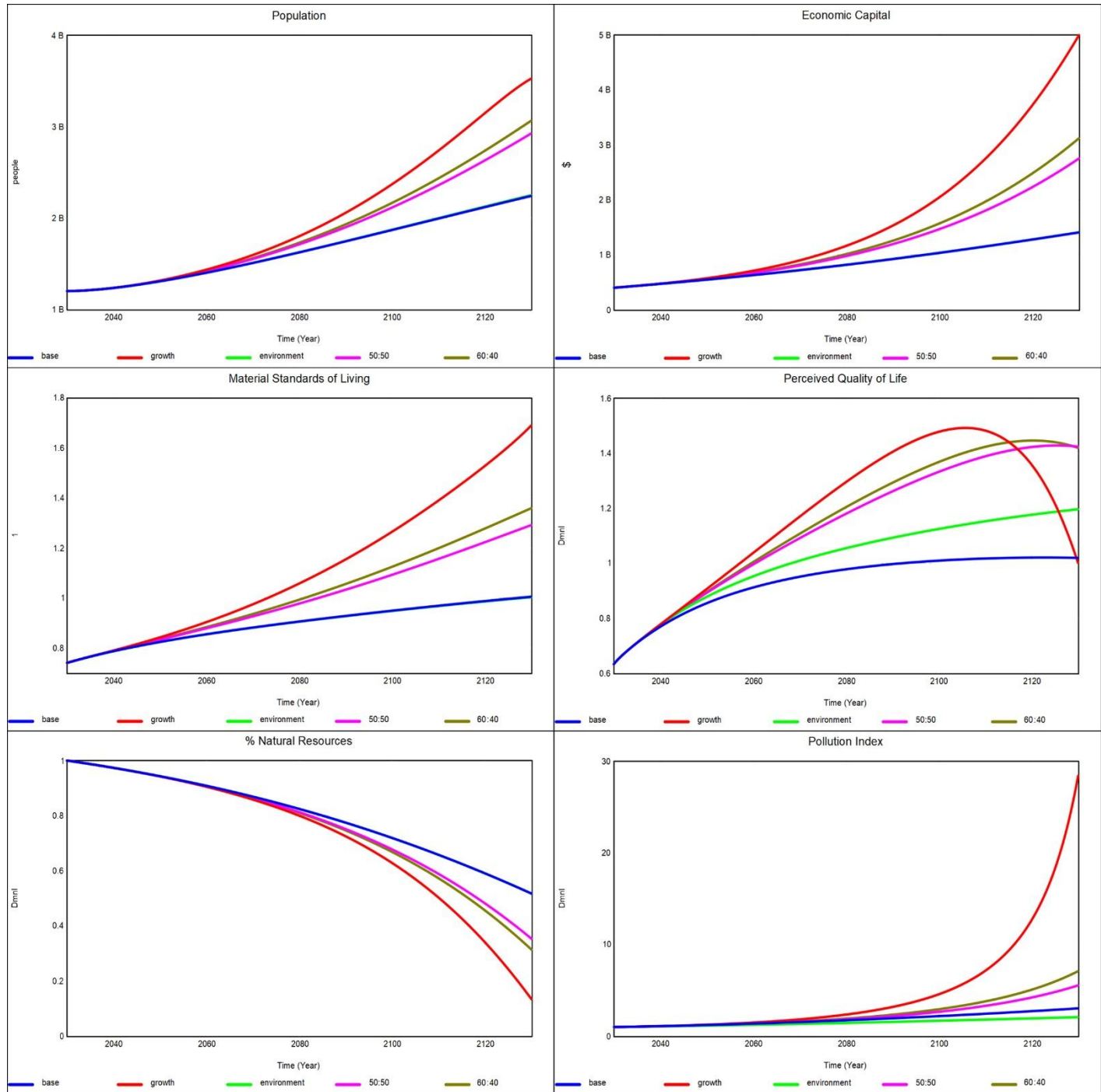


Figure 3. Simulated model behaviors for the six key variables over time, corresponding to archetypal resource allocation strategies.

Base (no resources allocated to either policy), Growth (all resources allocated to the productivity increase policy), Environment (all resources allocated to the pollution reduction policy), 50:50 (an equal split of 100 million Space Dollars between both policies), and 60:40 (60 million allocated to productivity increase and 40 million to pollution reduction). In some variables, the Base and Environment simulations overlap, as allocating all resources to pollution reduction does not produce a significant difference from the base case in those indicators.

Appendix B. Growth and Environmental survey Module

Data on participants' worldviews were collected using the Growth and Environment Model (GEM) survey (Savin et al., 2021). This is a parsimonious five-item instrument measured on a 7-point Likert scale (Table 2 reports the specific items), specifically designed to capture individuals' preferences regarding the prioritisation of economic growth versus environmental protection. Participants' worldview scores were calculated as the average across the five items, yielding a continuous variable ranging from 1 to 7, where 1 indicates a strong pro-environmental stance and 7 reflects a strong pro-economic growth orientation. we selected the GEM due to its compactness and efficiency. Given that the experiment involves a relatively high cognitive load, requiring participants to perform multiple actions, I aimed to minimise additional burden by using a short, targeted instrument. Furthermore, the GEM has been successfully applied in prior studies (e.g., King et al., 2023) to assess trade-offs between economic growth and sustainability, supporting its validity for our purposes.

Table 2. Growth and Environmental survey Module (GEM – Savin et al., 2021).

GEM items	
1.	Continued economic growth is essential for improving people's life satisfaction
2.	Economic growth is necessary to finance public health and pension systems
3.	Without economic growth, a country's economy will become less stable
4.	Economic growth is necessary to finance environmental protection
5.	In view of limited natural resources, rich countries may have to give up their economic growth to assure that all poor people in the world can reach a fair standard of living (R)

'R' indicates the items that require reverse coding

Appendix C. Planet X Interface & Gamification

Table 3 below outlines the relationship between the indicators shown to participants and their corresponding variables in the model. In some cases, both the nomenclature and computation of the indicators were adjusted from the original model variables to clarify their meaning for a general audience and ensure they were perceived as relevant and understandable (an issue emerged during the pilot testing). Additionally, Figure 4 to Figure 14 display the sequence of web pages that make up the Planet X microworld simulation interface, which participants interacted with during the experiment.

The adjusted version of World Dynamics model was gamified into a microworld simulator by overlaying it with a graphical user interface and hosting it on the online platform IseeExchange. The model used is available upon request to the authors. The gamification process followed the principles outlined by Cunico et al. (2022) and Größler (2004), who emphasize that entertainment and usability are essential for creating high-quality simulators and fostering participant engagement, and that these elements must be carefully tailored to the specific scope and context in which the simulator is used. To enhance usability and participant engagement, the simulator was designed using cartoon-style graphics to evoke the feel of a game, which is especially important in online experiments. The microworld's usability and overall user experience were iteratively refined through two rounds of pilot testing with both academic and non-academic participants, including IT professionals. These tests aimed to ensure an intuitive online experience aligned with the requirements of the experiment

Furthermore, the visual layout of the page displaying the indicators, where participants also make their resource allocation decisions (see Figure 8 below for example), was designed according to key principles of effective data visualization, such as avoiding unnecessary complexity, unclear elements, or cryptic formatting (Bresciani & Eppler, 2015; Petropoulos et al., 2023). The same data are presented in both graphical and tabular formats to accommodate different cognitive styles (Vessey, 1991). The number of indicators shown in the dashboards was capped to 6 to avoid triggering any possible cognitive overload effect on participants (Miller, 1956; Roetzel, 2019).

Lastly, note that between simulation trials we added a reflection slide. This pause was intended to stimulate participants' thinking and to deliberately slow their progress, allowing additional time to consolidate recent learning.

Table 3. Indicators shown to Planet X users and corresponding model variables.

Variable in the model	Indicators visible to participants	Description provided to players	Comment
<i>P Population</i>	Population	Number of people living on Planet X	The indicator shown to participants represents the current value of the Population stock in the model.
<i>CI Capital investment</i>	Economic Capital	Total economic and physical capital stock in Planet X (e.g., money, industries, infrastructures, machinery, buildings) measured in Space \$.	The variable ' <i>CI Capital Investment</i> ' represents the model's economic capital (i.e., financial resources allocated to industries, infrastructure, machinery, buildings, etc.). However, since the original name was not intuitive or easily relatable for a general audience, it was simply renamed <i>Economic Capital</i> to enhance clarity and align with participants' common understanding.
<i>displayed material standards of living</i>	Material Standards of Living	Index of people's wealth on Planet X, where 1 is equivalent to the average wealth people enjoy on Earth today	The ' <i>displayed Material Standards of Living</i> ' variable is derived from the original ' <i>Material Standards of Living</i> ' variable in the model (and presented as such in the participants' indicator dashboard), with its value increased by a constant. This adjustment was made to ensure that, even when no resources are allocated to productivity, the indicator still reaches a value of at least 1. Without this correction, extremely low values could appear, potentially biasing participants toward growth-oriented strategies.
<i>normalized quality of life</i>	Perceived Quality of Life	Planet X inhabitants' perception of their quality of life collected through surveys; an index accounting for economic and environmental conditions, where 1 is equivalent to the perceived quality of life on Earth today.	To enhance both the range of variation and the interpretability of the ' <i>QL Quality of Life</i> ' output, a normalized version of the variable was presented to participants.
<i>normalized natural resources</i>	Natural Resources	Percent of natural resources (e.g., oil, gas, timber) remaining on Planet X relative to the initial value in 2030	Within the new time horizon of the task and given the effects of the policies, variation in the natural resources stock was not easily noticeable to participants. To address this, I identified a meaningful lower bound—referred to as the ' <i>normalized natural resources lower limit</i> '—based on the range in which the stock operates during the task. The natural resources stock was then normalized based on the lower limit to enhance the visibility of changes and make its dynamics more perceptible to participants.
<i>pollution index</i>	Pollution	Index of environmental pollution (e.g., water, air, soil), where 1 is equivalent to the initial pollution level on Planet X in 2030	The pollution stock in the model is measured in pollution units, which may not be immediately meaningful to participants. Therefore, I chose to present it as an index, calculated relative to its initial value in 2030 (the ' <i>POLI</i> ' variable).

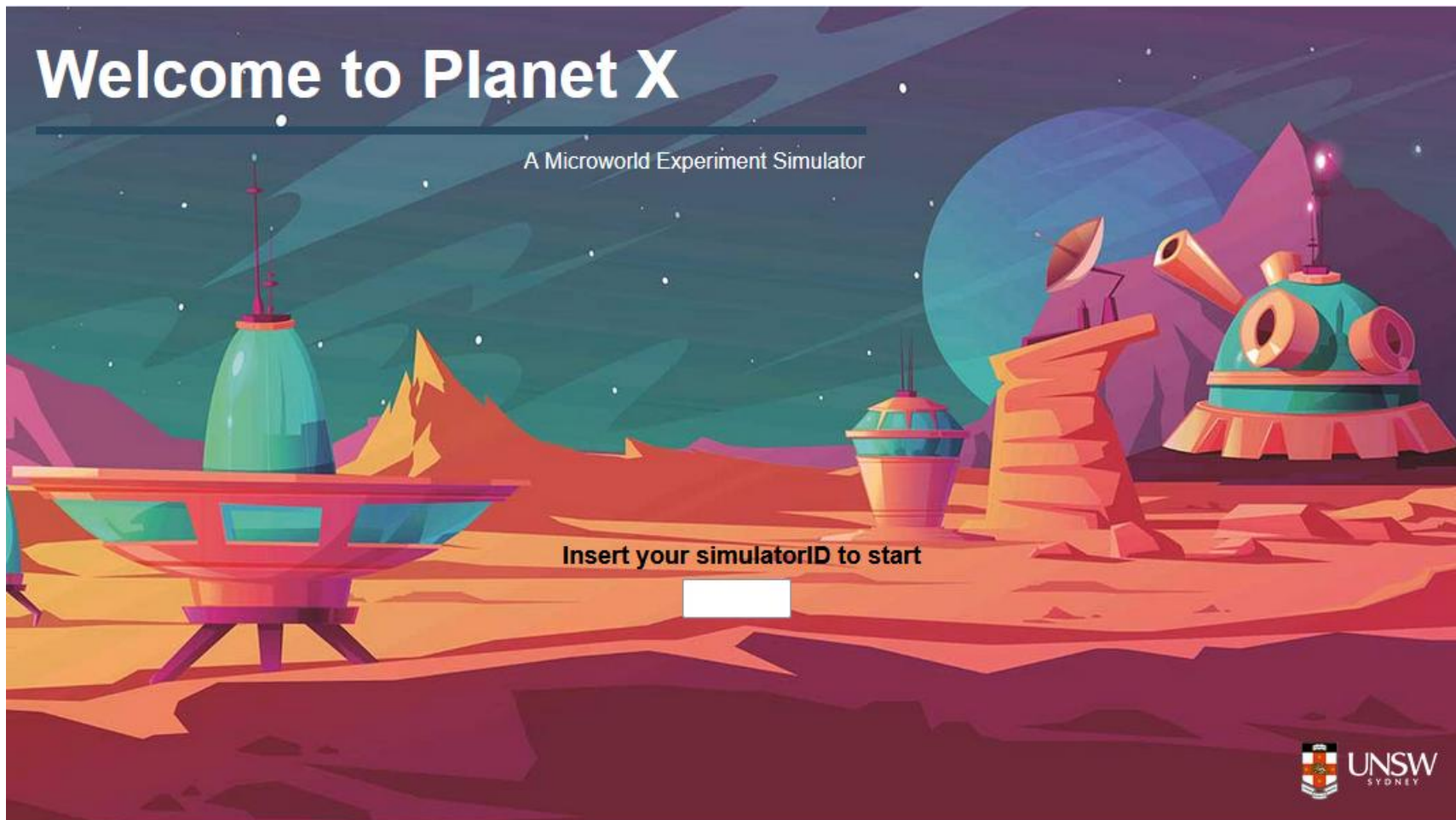


Figure 4. Planet X - Page 1/ Landing Page

Participants must use a specific ID provided by the experimenters to access the task. This serves as a basic control and sanity check to prevent unauthorized access.

Humanity has colonised a new planet light years away from Earth, called Planet X, and you have been appointed as the sole leader.

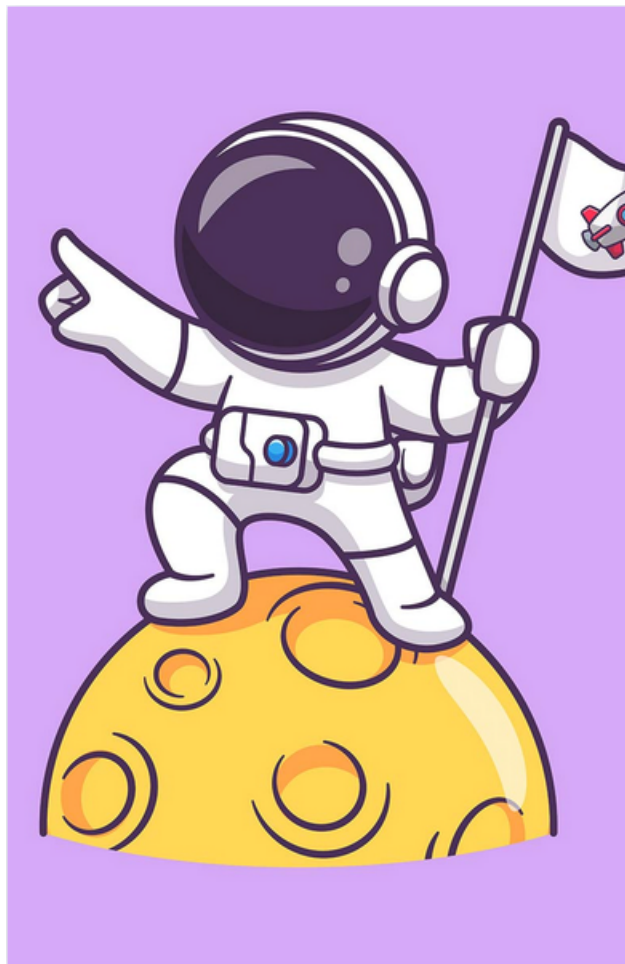
You have to decide how to allocate the upcoming available budget of \$100 million (in Space dollars) for the year 2030 between two strategic priorities, i.e., productivity improvements and pollution reduction. This is a one-time decision and will affect the planet for the next century. Your goal is to lead Planet X to a thriving future. There are no right or wrong decisions as the definition of 'thriving future' depends only on what you think is a good state of society.

Given the importance of this decision for Planet X, your staff has developed a simulator in which you can explore step by step the impact of the different strategies on the planet and that you can use three times before making your decision.



Figure 5. Planet X - Page 2

This page provides a summary of the key information and instructions participants need to understand before using the simulator.



Your Goal

You have to decide how to allocate the upcoming available budget of \$100 million (in Space dollars) between two strategic priorities. The strategic priorities consist of investments to increase productivity (i.e., higher economic production - Gross Domestic Product (GDP) - per person) and to develop more environmentally friendly technology (i.e., lower pollution emitted per person). This is a one-time decision and will affect the planet for the next century. All the strategies are acceptable; for example, you can allocate everything to one type of investment or maybe decide not to allocate anything to both.

Your goal is to lead Planet X to a thriving future. There are no right or wrong decisions as the definition of 'thriving future' depends only on what you think is a good state of society.

Given the importance of this decision for Planet X, your staff has developed a simulator in which you can explore step by step the impact of the different strategies on the planet and that you can use three times before making your final decision. Each time, you will play 10 rounds, deciding how to allocate the resources available every 10 years to explore the impact of the decision on the simulator. The simulator has a dashboard of indicators to support you and show you the potential outcomes of your decisions.

Whereas the simulator allows you to explore step-by-step the alternative strategies to give you more insights into Planet X functioning, in the end, you will have to make just a one-time decision of what you think is the best way to distribute the \$100 million budget between the two priorities in 2030.

Lastly, keep in mind a delay exists between your decisions to invest and their full impact on Planet X.

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Figure 6. Planet X - Page 3

Detailed description of the goal participants are instructed to pursue (which varies depending on the experimental condition) and the task overview (which remains consistent across all experimental conditions).

Indicators

The simulator shows the effect of your allocation decisions on six indicators:

- *Population*: number of people living on Planet X.
- *Economic Capital*: total economic and physical capital stock in Planet X (e.g., money, industries, infrastructures, machinery, buildings) measured in Space \$.
- *Material Standard of Living*: index of people's wealth on Planet X, where 1 is equivalent to the average wealth people enjoy on Earth today.
- *Perceived Quality of Life*: Planet X inhabitants' perception of their quality of life collected through surveys; an index accounting for economic and environmental conditions, where 1 is equivalent to the perceived quality of life on Earth today.
- *Natural Resources*: percent of natural resources (e.g., oil, gas, timber) remaining on Planet X relative to the initial value in 2030.
- *Pollution*: index of environmental pollution (e.g., water, air, soil), where 1 is equivalent to the initial pollution level on Planet X in 2030.

The indicators show low starting values as Planet X has only been colonised recently and is currently growing.

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Figure 7. Planet X - Page 4

List of indicators and their descriptions as presented in the extended dashboard condition. Note that in the limited dashboard condition, this list does not include the Natural Resources and Pollution indicators.

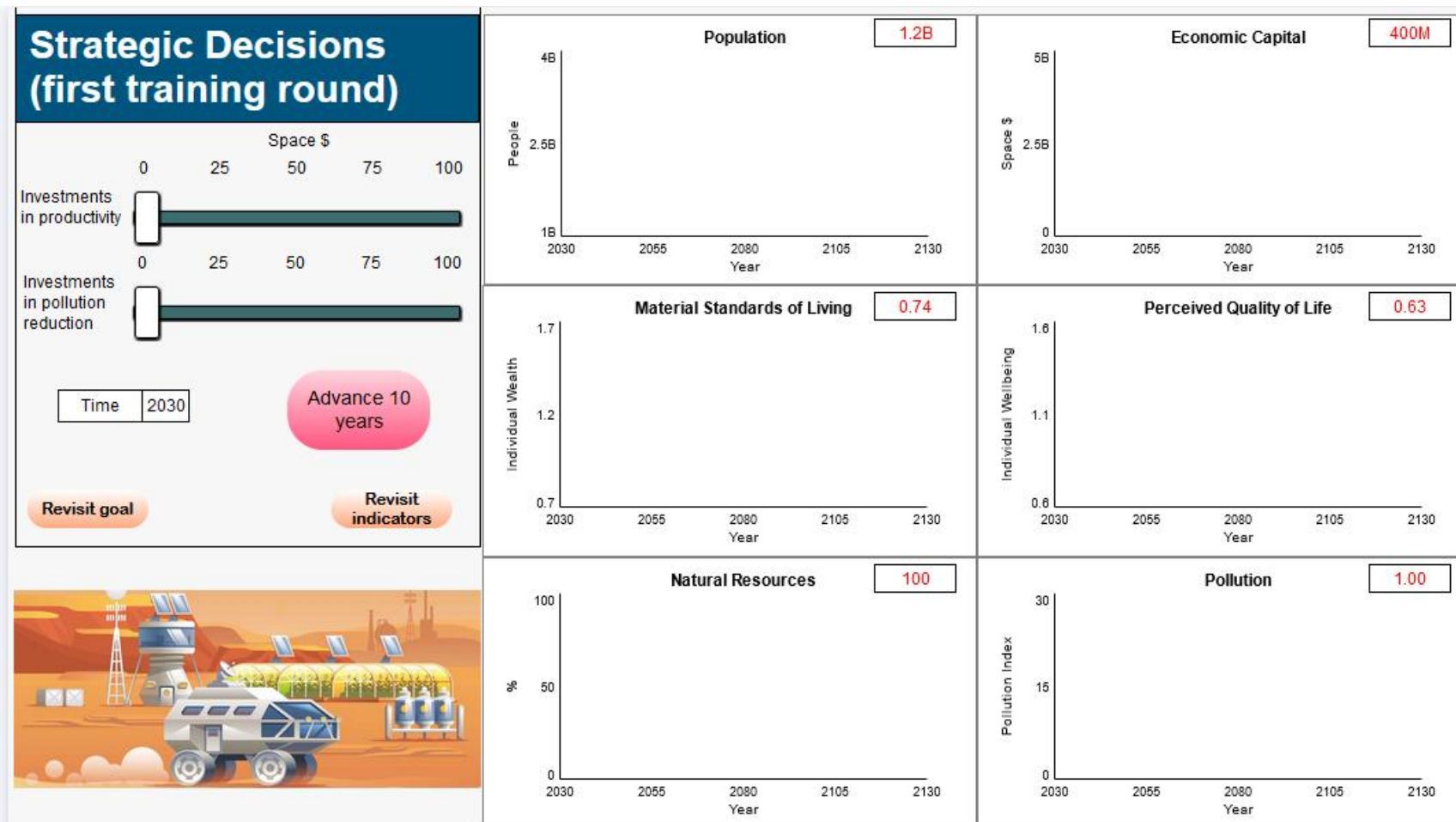


Figure 8. Planet X - Page 5

First trial round.

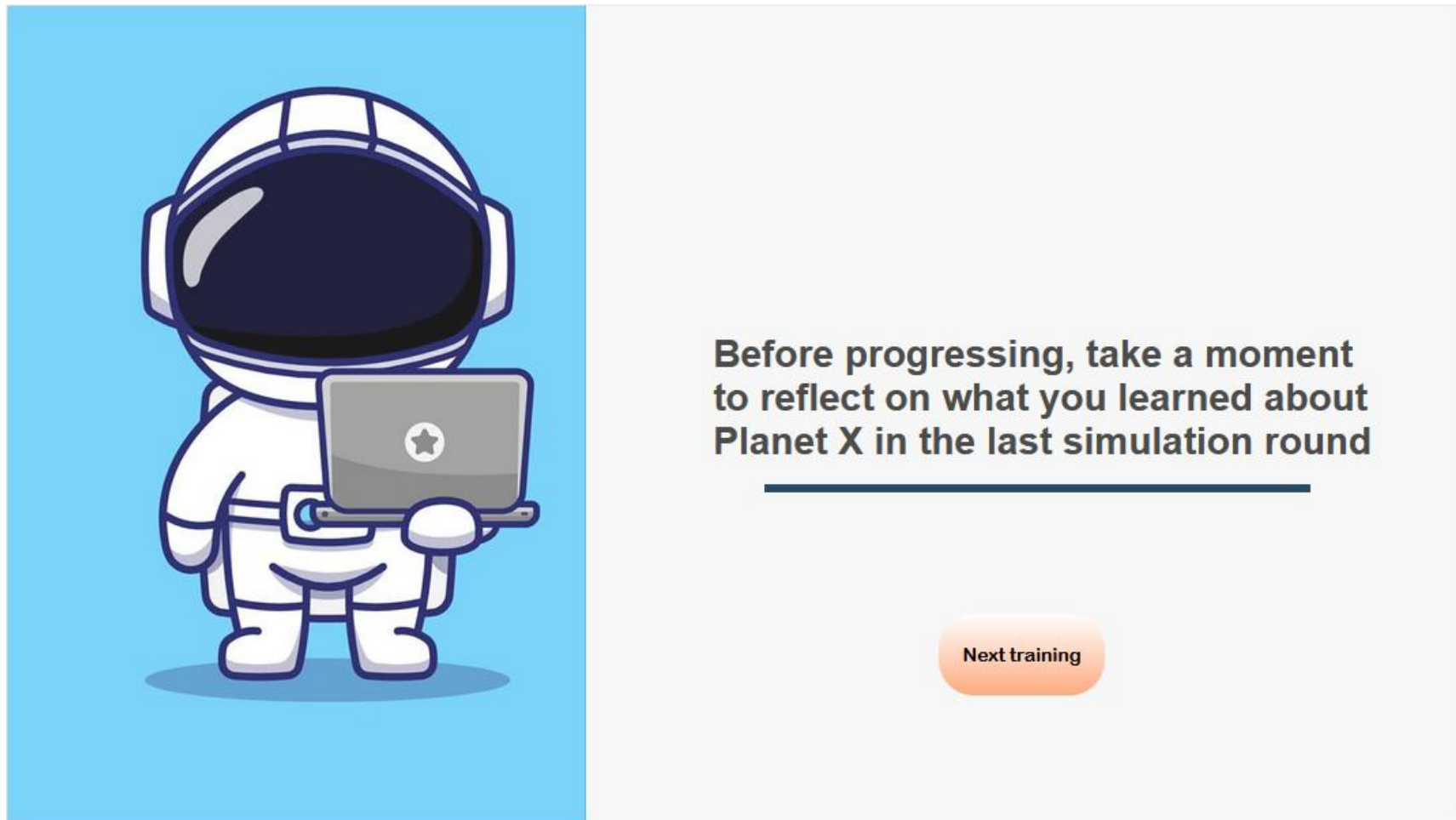


Figure 9. Planet X - Page 6

This page was included to slow down participants during the game and to encourage self-reflection.

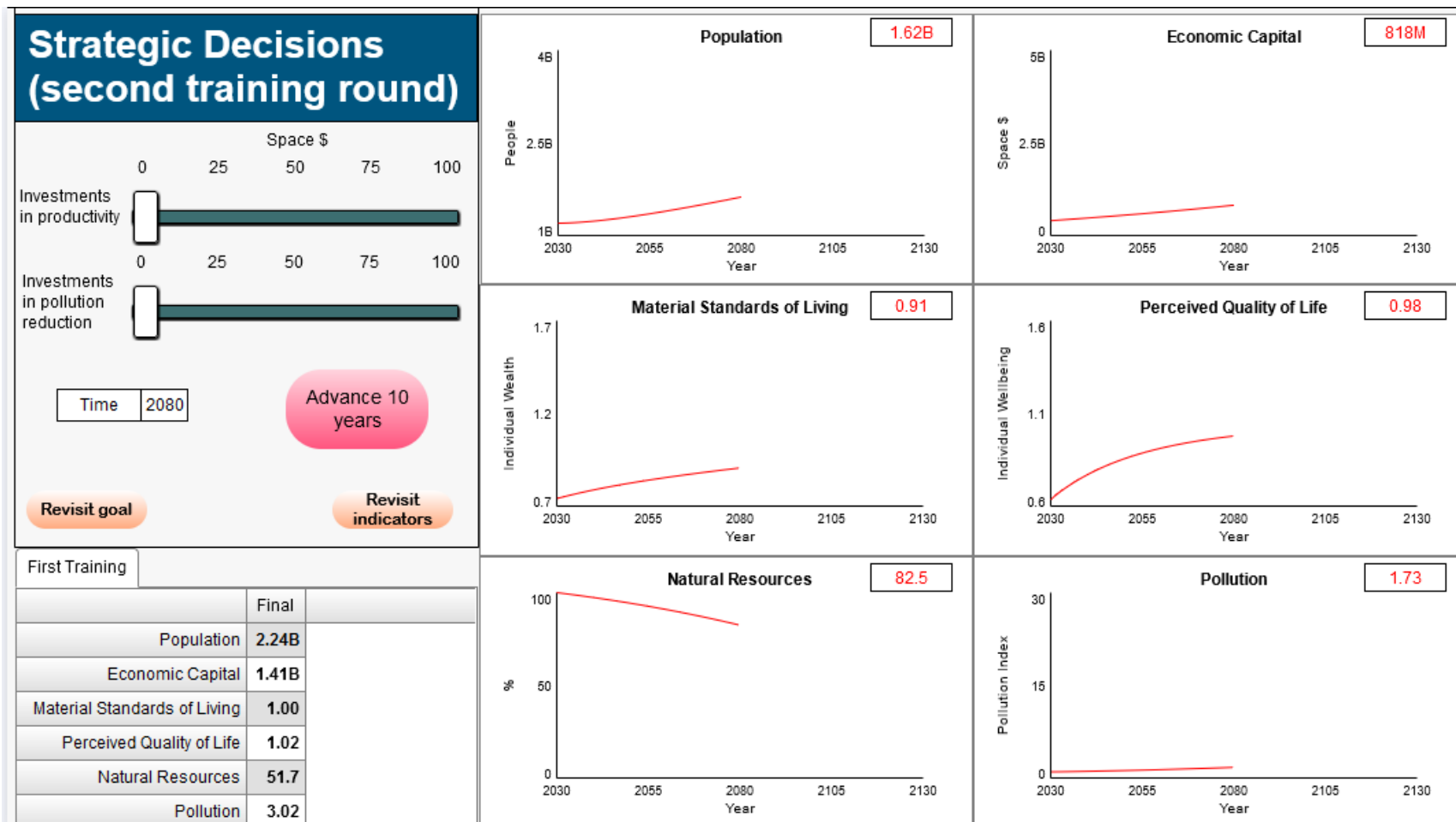


Figure 10. Planet X - Page 7

Second trial round.

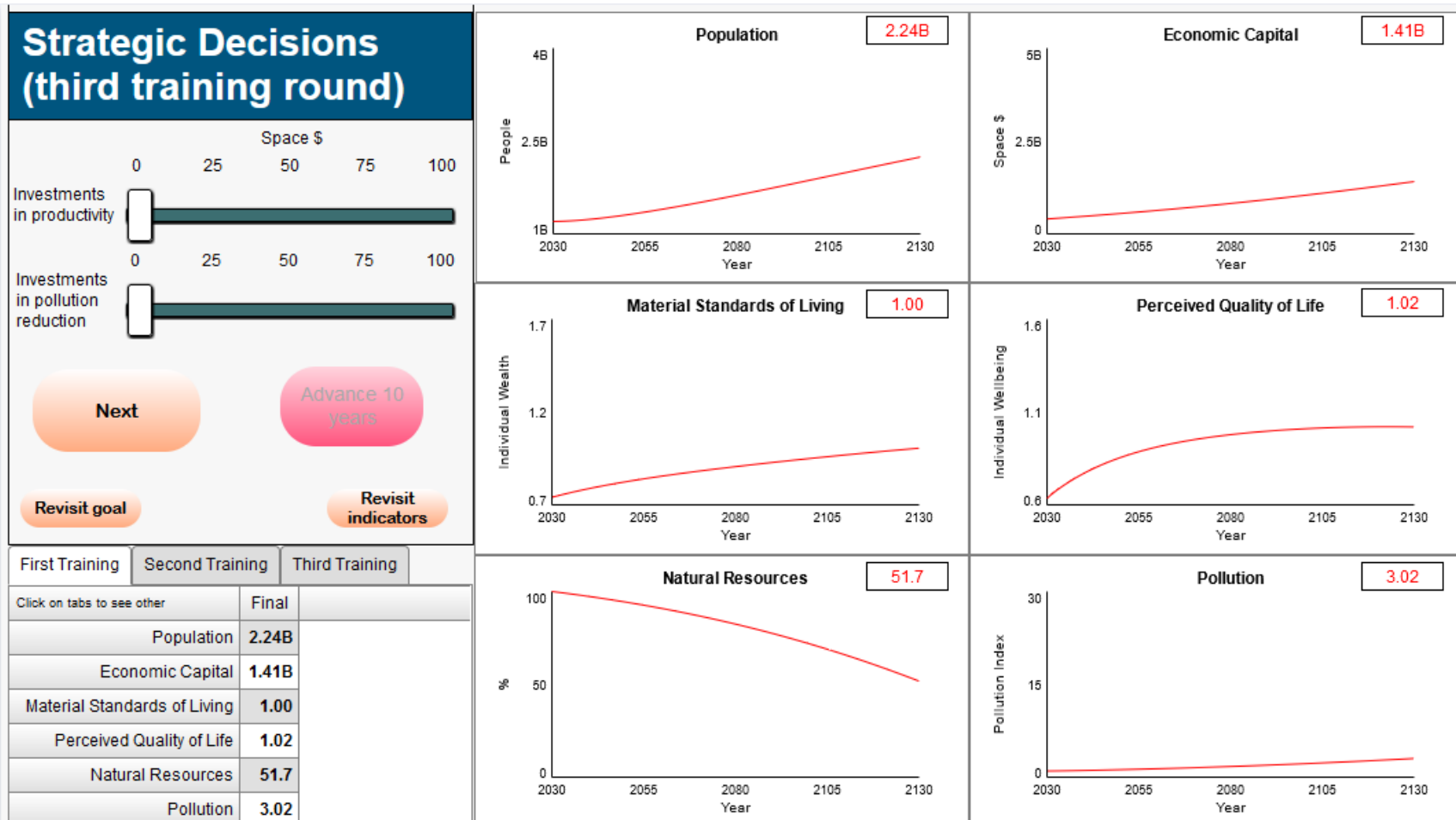
Before progressing, take a moment to reflect on what you learned about Planet X in the last simulation round

Next training



Figure 11. Planet X - Page 8

This page was included to slow down participants during the game and to encourage self-reflection.



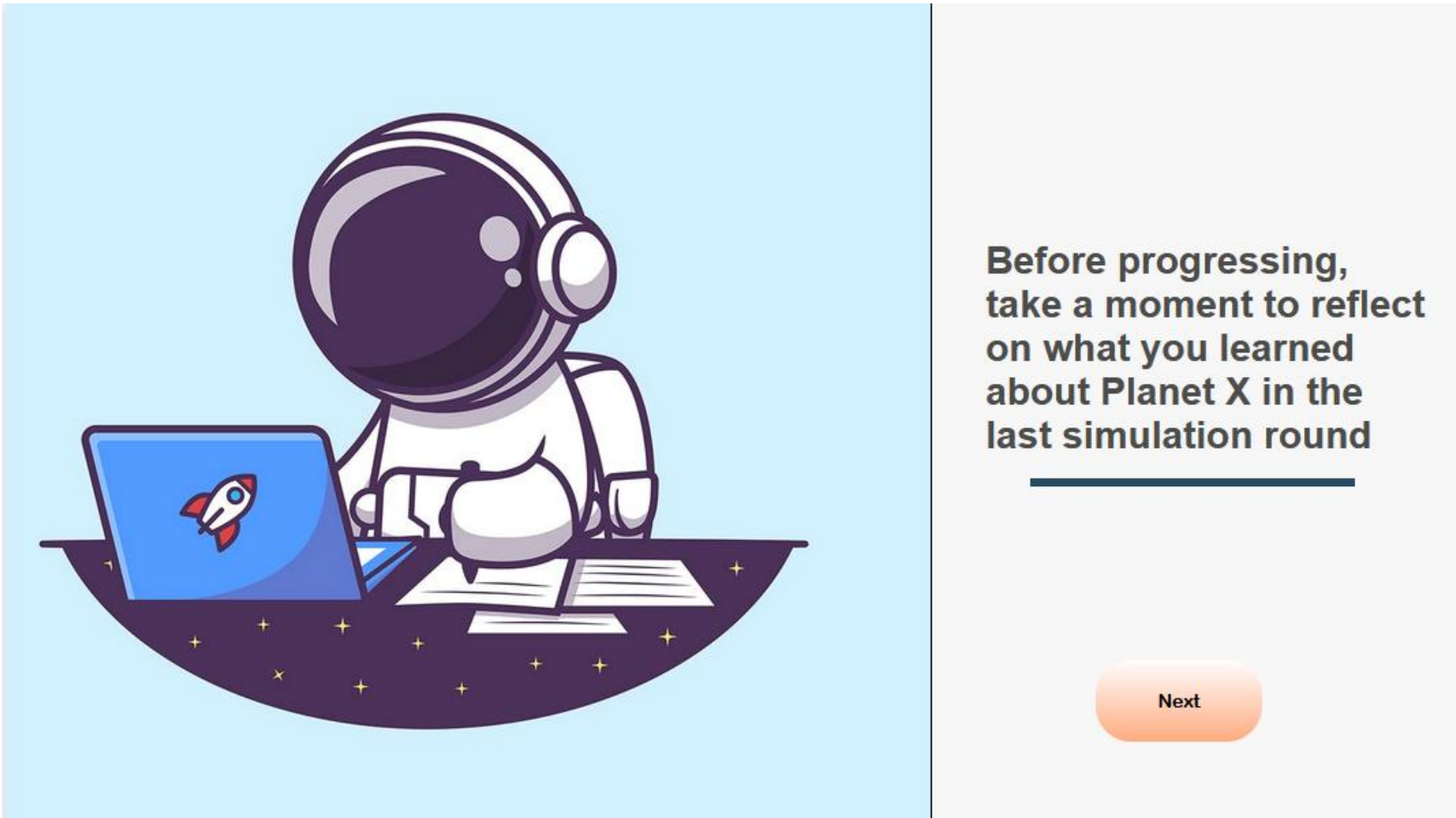


Figure 13. Planet X - Page 10

This page was included to slow down participants during the game and to encourage self-reflection.

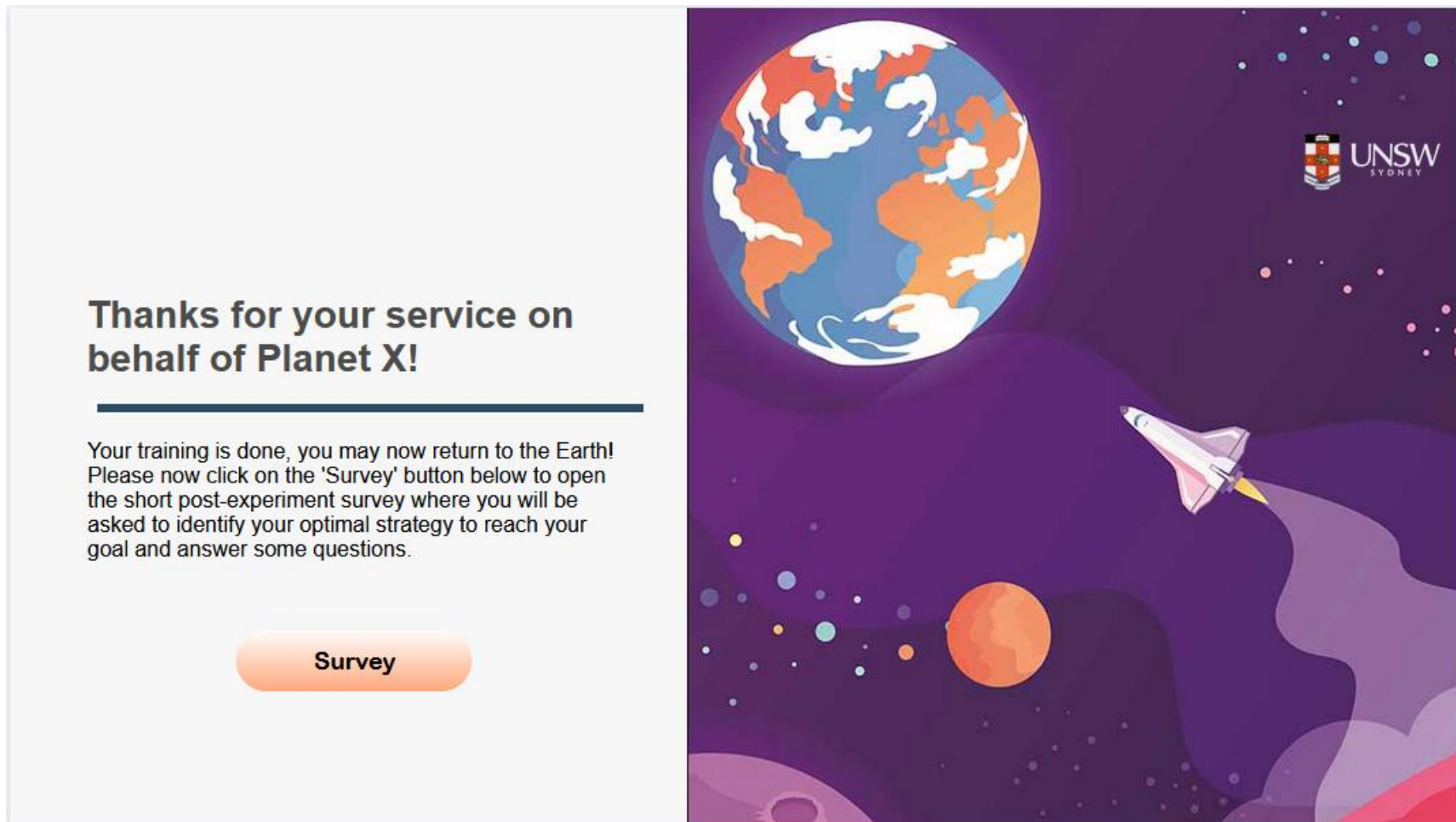


Figure 14. Planet X - Page 11

Simulator interface end page. .

Note that the reported experimental environment corresponds to the one shown to participants in the extended information condition. Figure 15 presents a juxtaposition of the two information conditions, illustrating the appearance of the limited and extended dashboards. In the limited condition, participants see only the left panel of Figure 15, rather than the six indicators displayed in Figure 8, Figure 10, and Figure 12.

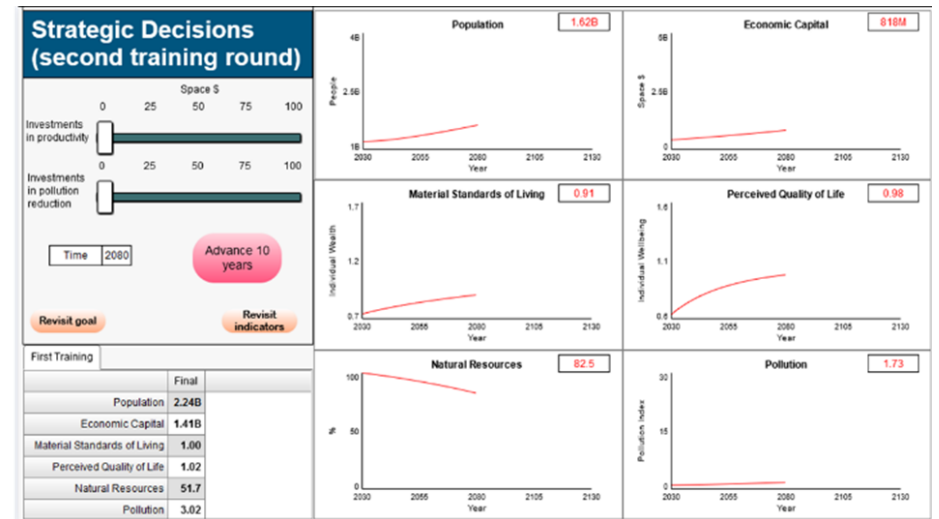
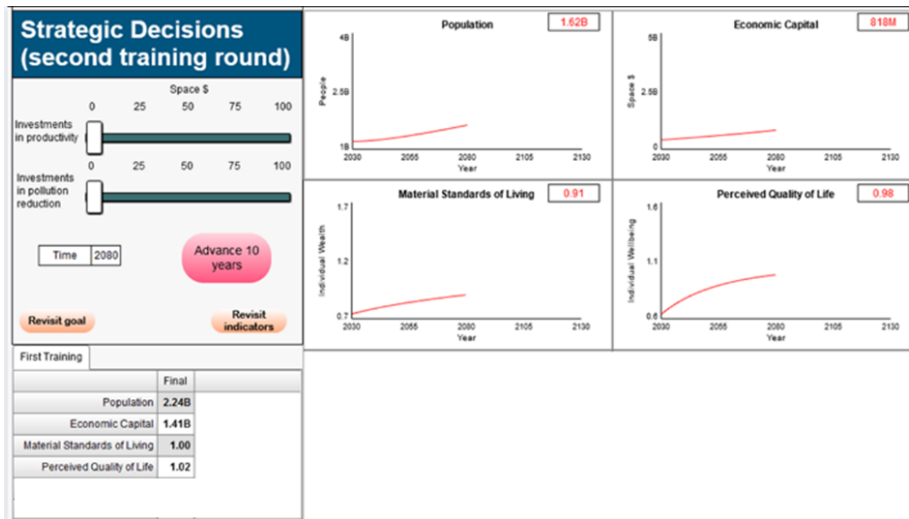


Figure 15. Planet X - Layout of the two dashboard conditions used in the information provision manipulation

The limited dashboard (left) displays four primarily economic indicators: Population, Economic Capital, Material Standards of Living, and Perceived Quality of Life. The extended dashboard (right) includes the same four indicators plus two environmental indicators: Natural Resources and Pollution Index.

Appendix D. Sample Details

Descriptive statistics for the study sample are presented below.

Table 4. Descriptive statistics of age in the sample

Variable	Observations	Mean	Std. Dev.	Min	Max
Age	242	41.719	12.046	18	75

Table 5. Descriptive statistics of gender in the sample

Gender	Freq.	Percent	Cum.
Female	96	39.67	39.67
Male	146	60.33	100.00
Total	242	100.00	

Table 6. Descriptive statistics of country of residency in the sample

Country	Freq.	Percent	Cum.
Australia	22	9.09	9.09
Canada	6	2.48	11.57
Ireland	1	0.41	11.98
New Zealand	9	3.72	15.70
United Arab Emirates	1	0.41	16.12
UK and Northern Ireland	196	80.99	97.11
United States of America	7	2.89	100.00
Total	242	100.00	

Table 7. Descriptive statistics of job role in the sample

Job Role	Freq.	Percent	Cum.
Clerical and Administrative Worker	13	5.37	5.37
Community and Personal Service Worker	5	2.07	7.44
Laborer	1	0.41	7.85
Machinery Operator and Driver	3	1.24	9.09
Manager and decision-maker	124	51.24	60.33
Professional	74	30.58	90.91
Retired	2	0.83	91.74
Sales Worker	7	2.89	94.63
Student	2	0.83	95.45
Technician and Trades Worker	11	4.55	100.00
Total	242	100.00	

Table 8. Descriptive statistics of participants' organizational affiliation

Organization Type	Freq.	Percent	Cum.
Not working currently	2	0.83	0.83
Not-for-profit sector	16	6.61	7.44
Private sector	138	57.02	64.46
Public sector	86	35.54	100.00
Total	242	100.00	

Appendix E. Supplementary Analyses

We also tested a potential three-way interaction between information, worldviews, and goal ambiguity. While we advanced this hypothesis, it was exploratory in nature and not central to our main investigation; therefore, we report it here in the Supplementary Materials for transparency and completeness.

Such a complex interaction was motivated by prior theoretical and empirical work. As Cairney et al. (2016) note, this interplay is evident in real-world policymaking, where decisions rarely rely on data alone but instead blend goal-driven reasoning, evidence use, and value-based judgment. Earlier experimental studies similarly suggest that under goal ambiguity, individual worldviews can shape how information is interpreted, although findings have been mixed (Dearborn & Simon, 1958; Walsh, 1988). Building on this, we explored a moderated moderation effect (Lam et al., 2019): under ambiguous goal conditions, the moderating effect of sustainability worldviews on the use of information (effect hypothesized in H2b) should be stronger than under clear goals. Ambiguity allows greater scope for cognitive biases, such as myside/confirmatory bias, to shape information use. In contrast, with clear goals, information is processed more instrumentally and less dependent on worldviews, since the goal itself directs attention and relevance.

H3c: Decision-makers provided with additional environmental sustainability indicators allocate more resources to economic growth investments when they exhibit lower sustainability worldviews, compared to those with higher sustainability worldviews, and this effect is larger with ambiguous goals.

Table 9 reports the results of the hierarchical linear regression analysis, including this three-way interaction in Model 3. The hypothesis was not supported ($B = 0.004$, $p = .942$), aligning with the absence of a significant worldviews $\times$ information interaction in previous models (H2b). This outcome is unsurprising: three-way interactions are rare and notoriously difficult to detect in behavioral research due to increased noise and the large samples typically required for adequate statistical power (Dawson & Richter, 2006; Heo & Leon, 2010). Model 3 is retained and reported here for completeness and transparency, but the addition of the three-way term provided negligible improvement in explained variance ($\Delta R^2 \approx 0$). Therefore, the more parsimonious Model 2, reported in the main manuscript, remains the preferred specification.

Table 9. Hierarchical linear regression analysis including the three-way interaction in Model 3

	Model 1	Model 2	Model 3
	Direct Main Effects	Pairwise Interactions	Three-way Interaction
	Growth Allocation (%)	Growth Allocation (%)	Growth Allocation (%)
Information	-0.0915*** (0.000453)	-0.0394 (0.271)	-0.0394 (0.272)
Worldviews	0.0356** (0.00843)	-0.00616 (0.821)	-0.00183 (0.959)
Ambiguity	-0.0210 (0.414)	0.0321 (0.376)	0.0325 (0.372)
Information×Worldviews		0.00565 (0.836)	-0.000625 (0.988)
Information×Ambiguity		-0.103* (0.0426)	-0.103* (0.0428)
Worldviews×Ambiguity		0.0686* (0.0117)	0.0621 (0.155)
Information×Worldviews×Ambiguity			0.0106 (0.849)
Constant	0.563*** (0)	0.535*** (0)	0.535*** (0)
Observations	242	242	242
R-squared	0.083	0.126	0.126

p-values in parentheses
 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In Table 1 of the main manuscript, reporting sample correlations and descriptive statistics, there is a small but statistically significant correlation between participants' age and the information condition to which they were randomly assigned ($r = -0.181$, $p < .01$). This result warrants further scrutiny, particularly given that randomization should ideally eliminate systematic relationships between participant characteristics (e.g., age) and experimental conditions (e.g., dashboard type). To assess this, we conducted a series of supplementary analyses. First, Table 10 reports the descriptive statistics for age by information condition. The average age in the extended condition was 43.89 years ($SD = 11.74$), while in the limited condition it was 39.54 years ($SD = 12.13$)—a difference of approximately 4.35 years.

Table 10. Study 1 - Descriptive statistics of participants' age per information condition

Condition	Mean	Std Dev	N
Extended	43.83871	11.71573	124
Limited	39.491525	12.035379	118
Total	41.719008	12.096583	242

To further explore this difference, Figure 16 presents a box plot and Figure 17 an histogram of the age distribution across the two information conditions. The extended group shows a more uniform distribution with a concentration in the 40–50 age range, whereas the limited group skews slightly younger, with a higher proportion of participants in their 20s and 30s.

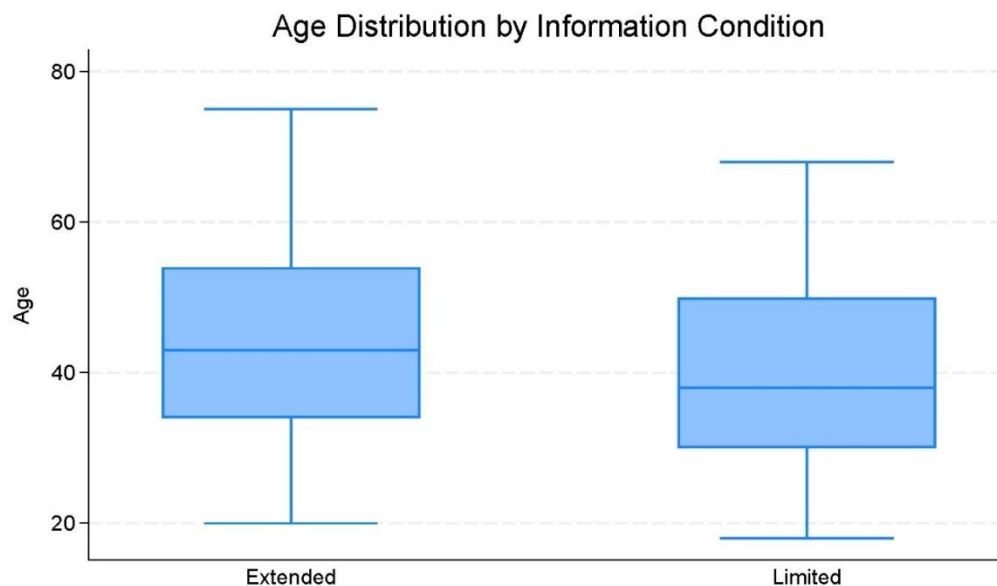


Figure 16. Study 1 - Box plot of age distribution by information condition

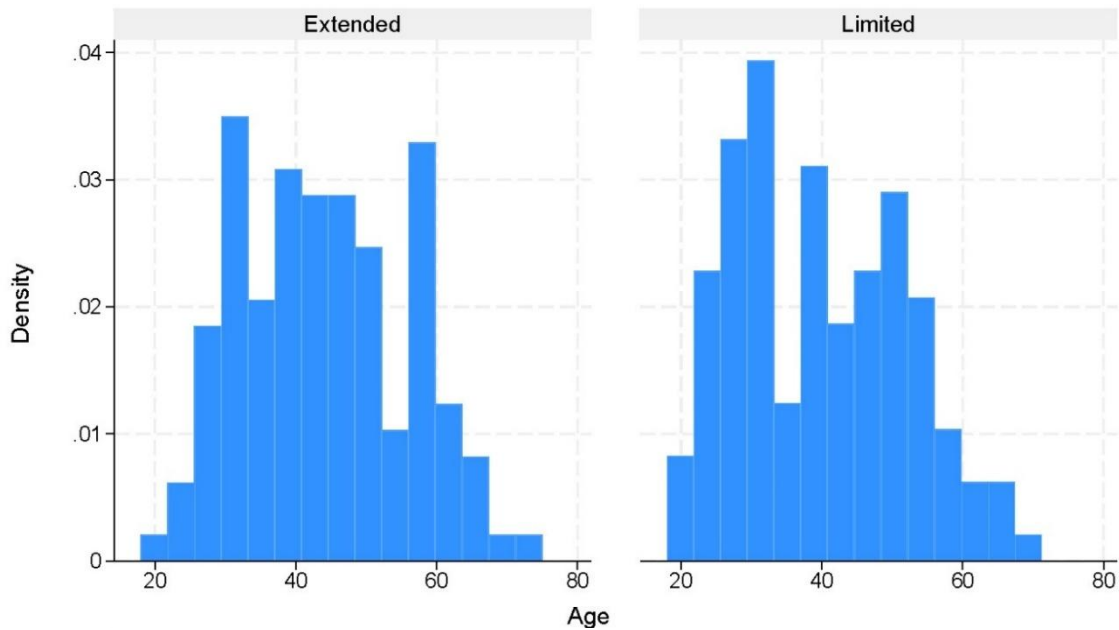


Figure 17. Study 1 - Histogram of age distribution by information condition

We also calculated Cohen's d to assess the effect size of this age difference, which yielded a value of 0.366, indicating a small to moderate effect. While statistically significant, the effect is modest in practical terms, suggesting it is likely due to random sampling variability; particularly given the sample size of 242, which provides sufficient power to detect even small differences. Furthermore, to test for potential multicollinearity, we computed Variance Inflation Factors (VIFs). The VIFs for age and information conditions were both 1.03, well below the conventional problematic threshold of 10. This suggests that there is no multicollinearity issue and that age and the dashboard condition are not influencing each other's coefficients in a way that would distort the regression model, when considering the full set of predictors.

To further assess the robustness of the results reported in the manuscript, we re-estimated the hierarchical regression models including age as a control variable (and, for completeness, also added Model 3, which tests the three-way interaction). The results, presented in Table 11 and Figure 18, closely replicate those reported in the main manuscript (Table 2 and Figure 2) and in Table 9 of this Supplementary Information. The set of statistically significant effects remains identical, and the change in R^2 is negligible. Notably, the dashboard condition continues to be a statistically significant predictor of participants' allocation decisions, reinforcing the conclusion that age does not act as a confounding variable. Consistent with the findings reported above, age shows no meaningful effect on the dependent variable.

In sum, while a statistically significant difference in age exists between the two information conditions, this is likely due to random sample variability, not systematic bias. In this case, sample size plays a role in detecting small effects. In fact, although participants and so age is randomly assigned to manipulation conditions, the sample size is large enough to detect even small discrepancies, meaning it is possible for random variation to result in such differences. The consistency of results across models, with and without age as a covariate, supports the robustness of our findings and increases our confidence that age-related differences across groups are not driving these results.

Table 11. Hierarchical linear regression analysis controlling for age

	Model 1 Direct Main Effects	Model 2 Pairwise Interactions	Model 3 Three-way Interaction
	Growth Allocation (%)	Growth Allocation (%)	Growth Allocation (%)
Age	-0.00222* (0.0414)	-0.00242* (0.0254)	-0.00242* (0.0262)
Information	-0.0821** (0.00176)	-0.0212 (0.560)	-0.0212 (0.560)
Worldviews	0.0349** (0.00936)	-0.00663 (0.806)	-0.00498 (0.888)
Ambiguity	-0.0262 (0.307)	0.0347 (0.334)	0.0348 (0.334)
Information*Worldviews		0.00855 (0.752)	0.00616 (0.885)
Information*Ambiguity		-0.119* (0.0194)	-0.119* (0.0196)
Worldviews*Ambiguity		0.0649* (0.0164)	0.0624 (0.150)
Information*Worldviews*Ambiguity			0.00404 (0.942)
Constant	0.654*** (0)	0.630*** (0)	0.629*** (0)
Observations	242	242	242
R ²	0.099	0.144	0.144
Adjusted R ²	0.084	0.119	0.115

p-values in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

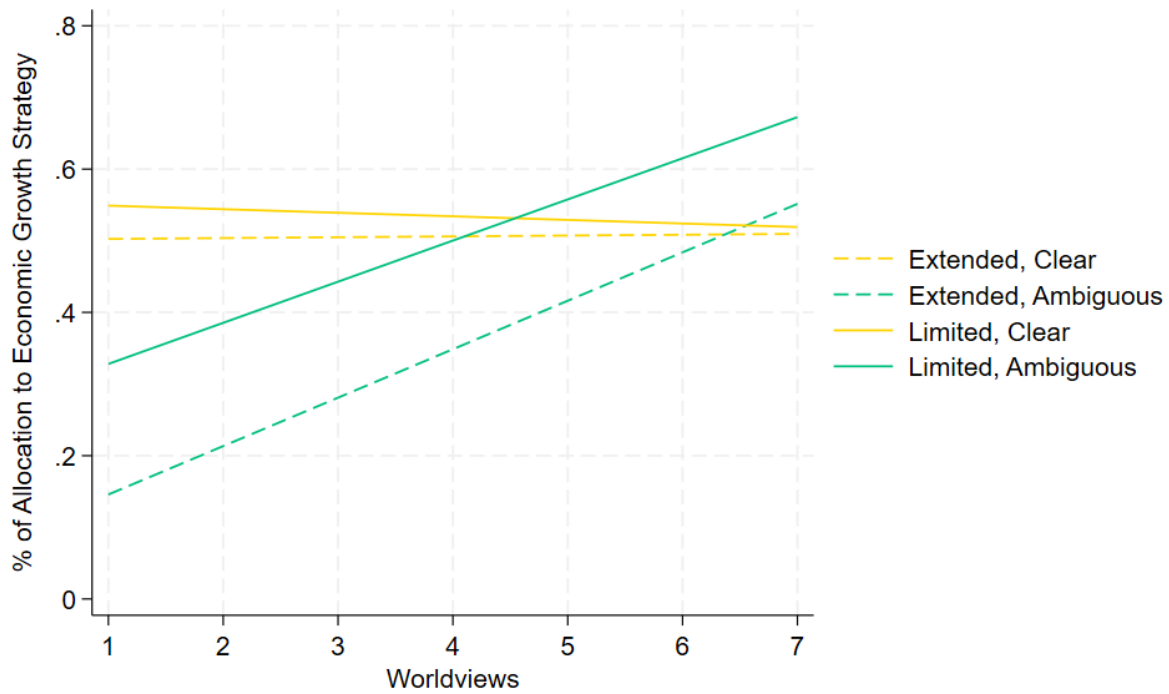


Figure 18. Margins plot of growth allocation by information and goal conditions at different levels of worldviews (controlling for age). Margins plot are based on the complete model (Model 3), which includes all interaction terms and controls for age.

Lastly, Table 12 presents the equivalent of Table 3 in the main manuscript but reporting p-values instead of standardized coefficients

Table 12. Regression models examining the effects of information and worldviews on decision allocation across goal ambiguity conditions (corresponding to Table 3 in the main manuscript; p-values reported)

	Clear Condition Growth Allocation (%)	Ambiguous Condition Growth Allocation (%)
Information	-0.0394 (0.273)	-0.143*** (0.000)
Worldviews	-0.00183 (0.959)	0.0603* (0.018)
Information*Worldviews	-0.000625 (0.988)	0.00996 (0.779)
Constant	0.535***	0.567***
Observations	121	121
R2	0.010	0.215
Adjusted R2	-0.015	0.195

pvalue in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Relate to this Table 12, although the R^2 of 14.4% for Model 2 in Table 2 in the main manuscript may appear modest to some, it falls well within the expected range for behavioral and social science research—particularly given the presence of statistically significant predictors in inherently noisy decision data (Ozili, 2023). Moreover, the R^2 of 0.215 observed in the subgroup model for the ambiguous condition (Table 3 main manuscript and Table 12 here in the Supplementary Information) is particularly encouraging, suggesting that information and worldviews substantially contribute to explaining decisions in these contexts.

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