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Abstract

We conduct a survey to test for concerns about relative standing based on a large sample of the German population. Our survey approach asks respondents to choose between two hypothetical states of the world, in which they receive either a larger relative endowment or a larger absolute endowment that leaves them worse off in comparison to others. We receive the highest shares of positional answers for household income and one's children's IQ. We show that respondents with a larger social comparison orientation are significantly more likely to indicate positional preferences. This finding is robust despite some limited evidence that unintended alternative explanations based on feelings of material deprivation, feeling overworked, respondents' work ethic and environmental concerns affect respondents' choice.

JEL Classification: C90, D63
Keywords: Social Comparisons; Positionality; Survey Data

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1 Introduction

Status-oriented individuals are argued to evaluate their own situation in reference to their social environment. A series of empirical contributions quantified the degree to which concerns about relative standing matter across different items, referred to as their positionality (Frank, 2005). This is typically measured by means of a survey approach based on preferences for an improved relative standing at the expense of absolute endowments (Alpizar et al., 2005; Carlsson et al., 2007; Hillesheim and Mechtel, 2013; Solnick and Hemenway, 1998; Solnick and Hemenway, 2005; Solnick et al., 2007). In this paper, we follow up on this research by conducting a survey among a large sample of the German population to test for concerns about relative standing regarding income, leisure time, housing wealth, debt, own children's intelligence quotient (IQ), and grade point average (GPA). We investigate the behavioural mechanism underlying positional choice by combining our results with self-reported information on the importance of social comparisons and other sentiment variables proxying alternative explanations.

It has long been argued that individual satisfaction with the own current situation and hence the utility derived from individual endowments are context dependent. Thus, inequality in endowments implies negative externalities for those being worse off in relative terms at any given absolute endowment. Various empirical contributions have highlighted the relevance of concerns about relative standing to individual well-being (Luttmer, 2005) or satisfaction (Card et al., 2012) and economic behaviour, such as consumption-saving decisions of private households (Behringer, Endres and van Treeck, 2023; Bertrand and Morse, 2016; Charles et al., 2009; Frank et al., 2014), or labour supply (Behringer, Gonzalez-Granda and van Treeck, 2023; Bowles and Park, 2005; Oh et al., 2012).

Our identification strategy follows the literature that measures relative concerns, by asking survey participants to choose between two hypothetical states of the world in which they either receive a larger relative endowment or a higher absolute endowment that leaves them worse off in comparison to others. Any given item is argued to be more positional the larger the share of individuals stating a preference for a relative versus absolute advantage. Prior surveys of this kind consistently find that individuals express

preferences for an improved relative standing, even at the cost of being worse off in absolute terms, across a broad range of items.

We conduct the, to the best of our knowledge, first large scale survey of this kind based on a sample of the German population comprising 1,552 individuals. Except for a survey by Carlsson et al. (2007) among 335 individuals from Sweden, all other studies are either based on small classroom surveys or convenience samples. Our findings regarding the positionality of individual items line up well with results from the prior literature. We receive the highest share of positional answers for monthly net income and own children's IQ, followed by housing wealth and own children's GPA. Our survey respondents least often chose the positional state of the world for leisure time and outstanding debt, which in turn exhibit the highest shares of responses indicating a preference for a more advantageous absolute endowment despite a relative disadvantage.

We next investigate potential drivers of positional choice. While our survey design has been applied frequently in the prior literature, the underlying behavioural mechanism has not been empirically verified. We fill this gap by validating whether positional preferences do indeed hinge on comparisons with others. For this purpose, we use self-reported information on the importance of comparisons with others to construct a Social Comparison Index (SCI). Applying this measure in multinomial logit regressions, we show that respondents who report to put a lot of emphasis on comparisons with others are significantly more likely to choose the state of the world with smaller absolute, yet larger relative endowments, holding individual sociodemographic characteristics constant. The magnitude of the effect is closely aligned with the overall share of positional answers for the respective item. This finding is highly consistent with an explanation of individual preferences for higher relative endowments based on concerns about relative standing, thereby validating the applied survey design.

We control for and investigate a series of alternative mechanisms that might explain respondents' preference for either state of the world, irrespective of concerns about relative standing. Feelings of material deprivation might drive preferences for larger absolute endowments regarding material items or working hours. In turn, feeling overworked could

be reflected in a preference for lower absolute, but higher relative working hours. A respondents' work ethic and the associated belief in own agency in determining own outcomes could affect individual preferences over working hours, while a respondents' stance towards the compatibility of economic growth with the environment might motivate preferences for states of the world with absolutely lower income and wealth. We find that in some cases our proxy variables for the respective competing explanations are significantly related to individual choice of endowments, likely biasing positionality interpretations of observed response shares. However, as the estimated coefficients on our SCI are largely unaffected by the inclusion of any of these measures, we conclude that a substantial part of the variation in positional choice across items and individuals can be ascribed to concerns about relative standing.

The remainder of this paper is structured as follows. In Section 2, we describe our survey design and data. Section 3 presents the results from our survey and our empirical analysis of positional choice. Section 4 concludes.

2 Survey Design and Data

In December 2022 we conducted an online survey among a large sample of 1,552 individuals.[1] Survey participants were required to reside in Germany and be between 18 and 75 years old. Our methodological approach to measure the positionality of various items follows the previously established design that asks respondents to choose from two hypothetical states of the world (e.g., Solnick and Hemenway, 1998). One state offers survey respondents a lower absolute, yet higher relative endowment of a given item. In the other state the endowment is higher in absolute terms, yet the respondent would be worse off relative to others. Survey participants also have the option to indicate that they do not have a preference for either state. Our survey includes questions on income, leisure, housing wealth, debt, an own child's IQ, and GPA. Using the income item as an example, the survey question reads as follows:

[1] Our initial sample included 1,608 individuals. To ensure data quality we exclude 56 observations of survey participants who spent less than half of the median time to complete the full survey.

Imagine that you can choose between two possible worlds (World A and World B). Both worlds are the same except for one difference, which is described below. Which world would you prefer to live in?

In both worlds, prices for all goods are the same and at the same level as they are today. "Others" refers to average other persons in society.

(1) A: Your monthly net income as a single person is 3,000 euros; others receive 2,000 euros.

(2) B: Your monthly net income as a single person is 4,000 euros; others receive 6,000 euros.

(3) I do not have a preference.

Full texts for the other survey items are provided in the Appendix. We chose hypothetical endowments for each survey item to most closely reflect the reality of an average person living in Germany, thereby providing relatable examples. For example, the offered values for items such as income or housing wealth are within close range of, yet slightly above the average in Germany. This should also prevent that survey participants avoid picking world A due to loss aversion.

Our survey additionally asks respondents to indicate the extent to which they agree with several statements about comparisons with others. We rely on questions that were specifically designed to measure individual differences in social comparison orientation (SCO) and have been shown to effectively capture comparison behaviour (Gibbons and Buunk, 1999). In particular, we ask survey participants about the extent to which they agree with the statements that they frequently compare their popularity with others, that they rarely compare themselves with others and that they never evaluate their situation in life in comparison to others.[2] Respondents can choose between answers ranging from (1) Disagree completely to (7) Agree completely. We average responses to the three

[2]Our questions on social comparisons are either translations or close adaptations of those designed by Gibbons and Buunk (1999) and read as follows: (a) "I often compare my social recognition and popularity with other people."; (b) "I am not the type of person who compares often with others."; (c) "I never consider my situation in life relative to that of other people."

questions to construct our SCI.[3] We use this measure to validate the proposed mechanism of positional choice.

In addition, we include questions that measure respondents' sentiment and attitudes towards a variety of topics, which might be relevant to their decision in the main survey irrespective of concerns about relative standing. It could pose a violation of the positionality interpretation of our survey results if respondents' choice is strongly influenced by any of these. In particular, we ask survey participants about their satisfaction with their household income and leisure time, and their stance towards implications of economic growth for the natural environment.[4] We also ask about the extent to which they perceive personal economic success and income to be determined by hard work or luck.[5] The exact wording of and summary statistics for our separate survey questions on social comparisons, work ethic, and environmental concerns are provided in the Appendix.

We utilise these additional questions to measure alternative explanations that could influence respondents' choice of hypothetical endowments. Specifically, our measure of income satisfaction proxies (perceived) material deprivation. Perceiving the own income as insufficient to meet (material) needs might induce a non-positional response, as it provides larger absolute endowments for items such as income or housing wealth. In turn, satisfaction with leisure time is supposed to capture feelings of being overworked, which could have the opposite effect to income satisfaction. Besides the effect on world choice regarding working hours, individuals might for example prefer higher (absolute) net wealth as a prerequisite to working less. Answers to the questions whether hard work or luck determine personal success reflect respondents' work ethic. Strongly believing in own agency in achieving desired outcomes might go hand in hand with the desire to work

[3]To maintain a consistent ordering of the responses, we use inverse values for the latter two statements.

[4]We measure environmental attitudes by asking respondents to state the degree to which they agree with the statement "In order to protect the environment Germany needs economic growth." Our survey additionally includes an alternative, antonymous statement. When using responses to the alternative questions for our analysis we obtain similar results (available on request). These questions stem from the International Social Survey Programme (ISSP) and have frequently been applied in environmental research to measure environmental concerns and perceptions about the compatibility of economic growth and the environment (e.g., Franzen and Vogl, 2013; Drews et al., 2018).

[5]Specifically, we ask survey participants about the degree to which they agree with the following statement: "One has to work hard in order to succeed.". We ask about an antonymous statement, as an alternative measure of work ethic, which yields similar results in our empirical analysis (available on request).

longer hours irrespective of how long others work. We also consider survey participants' stance towards ecological implications of economic growth, as perceiving economic growth as harmful to the natural environment could be associated with preferences for absolutely lower material endowments.[6] Summary statistics for the final measures applied in our analysis and the SCI are provided in Panel A of Table 1.

Lastly, our survey includes questions about sociodemographic characteristics. Specifically, we ask participants about their gender, age, employment status, highest educational attainment, number of children, net household income, and political party preferences. Panel B of Table 1 presents summary statistics of our sample.

3 Results

Figure 1 shows response shares by survey item. Across items a substantial share of respondents indicated preferences for the positional state of the world. The fraction of positional answers ranges from 32.8% (net income) to 16.4% (debt). While the positional state was chosen most often for net income endowments, it is also at the top with respect to non-positional answers, making it one of the most polarising items. Particularly for lower income individuals the choice might be governed by feelings of material deprivation, driving up non-positional responses. Concerning the share of positional answers, net income is closely followed by the own child's IQ, a child's grades at school and housing wealth. However, these items received substantially lower shares of non-positional answers than the income scenario, primarily resulting from a larger share of respondents indicating indifference. Children's IQ is the only survey item with a larger share of positional than non-positional answers. Leisure and especially outstanding debt have a substantially lower share of positional answers (25.3% and 16.4%) and the highest shares of non-positional answers (50.5% and 45.9%).

In Table 2 we explore the behavioural mechanisms underlying positional choice. The prior literature has ascribed preferences for the positional state of the world to concerns

[6]While we ask respondents to indicate their preference under a ceteris paribus assumption, it is unlikely that they can completely disregard their own circumstances and beliefs when making their decision.

about relative standing, which hinge on comparisons with others. Yet, this assumption lacks empirical verification. We expect respondents with a stronger SCO to be significantly more likely to choose the positional state of the world if positional choice is driven by concerns about relative standing. Hence, in Table 2 we regress a given respondent's choice by survey item, defined as a categorical variable taking different values for the positional answer, the non-positional answer, and indifference, on our SCI using a multinomial logit model. We additionally control for respondent characteristics, namely an indicator variable for gender, different age groups, higher educational qualification, whether the individual is currently employed, the number of children in the household, monthly net household income in five brackets, and political party affiliation. We compute average marginal effects of changes in the covariates on the probability that individuals choose any of the three answers in the survey. Table 2 reports average marginal effects on the likelihood that individuals choose the positional outcome.[7,8]

Our results yield a significant positive association between the SCI and preferences for the positional state of the world for all but the debt item (Panels A to F, Column 1). We find the strongest relationship for a child's IQ and net household income, which are the items with the highest share of positional answers. We find a smaller yet significant positive association for a child's GPA and housing wealth. For the two survey items with the lowest share of positional answers, leisure and debt, the estimated coefficients are much smaller. Hence, across items the estimated relationship lines up well with the overall shares of positional answers documented in Figure 1. Where the share of positional answers is high, social comparisons are most relevant in explaining our respondents' choice and vice versa. This finding strongly supports the assumption that differences in shares of positional answers are to a large extent driven by a varying relevance of concerns about relative standing.

In Columns 2 to 6 we test alternative mechanisms that might explain why survey participants indicate a preference for the positional state of the world, irrespective of

[7]The corresponding estimates for the non-positional outcome and indifference are available on request.
[8]Table A2 of the Appendix additionally shows average marginal effects of all respondent controls in the baseline specification for each survey item (Table 2, Panel A to F, Column 1).

concerns about relative standing. We include the SCI in all specifications, allowing us to additionally examine the robustness of the previously established relationship. In Columns 2 and 3 we respectively introduce our self-reported measures of income satisfaction and satisfaction with leisure time, to control for the potential influence of feelings of absolute material deprivation and being overworked. Column 4 adds our measure of work ethic that is supposed to capture beliefs in individual agency in determining own outcomes. Lastly, we control for an individual's stance towards the compatibility of economic growth with the environment to rule out that responses are driven by environmental concerns (Column 5). The estimated coefficients on the SCI are virtually unaffected by the inclusion of these additional controls for all items but leisure, where the association becomes insignificant. These results are also robust to the simultaneous inclusion of all additional controls in Column 6.

Moreover, a few findings are noteworthy. The estimated positive relationship between positional choice for the income question (Panel A, Column 2) and income satisfaction is marginally below conventional significance levels, yet turns significant when simultaneously controlling for the other additional controls in Column 6. This substantiates our earlier suspicion that the relatively high share of non-positional answers regarding net income might be attributable to perceived material deprivation of respondents, who opt for higher absolute endowments as they derive a larger marginal utility from absolute income gains. Thus, interpretations of response shares as depicted in Figure 1 likely understate the actual positionality of net income.

We find a significant positive association of our measure of work ethic with positional choice regarding leisure time (Panel B, Columns 4 and 6). Hence, the positionality of our leisure item might be exaggerated when inferred from response shares as in Figure 1. Respondents who strongly believe in own agency with respect to individual success, i.e., that hard work pays off, might prefer to work more irrespective of others. Thus, they are more likely to indicate a preference for world A with longer absolute (yet shorter relative) working hours.

Satisfaction with leisure time is negatively associated with the likelihood of choosing

the positional answer for our debt item (Panel D, Columns 3 and 6). Survey participants who want to reduce their working hours are less likely to indicate a preference for the positional state of the world, which leaves them with larger debt outstanding. This might exert downward pressure on the share of positional answers, as respondents likely see lower net wealth as an obstacle to working less.

For all other items we do not find a systematic relationship with any of the measures proxying alternative explanations. Overall, our results oppose the notion that positional choice is driven to a large extent by unintended mechanisms. Instead, preferences for the positional state of the world are closely aligned with respondents' SCO. These findings suggest that the survey approach successfully captures concerns about relative standing.

4 Conclusion

In this paper, we revisit the identification and measurement of concerns about relative standing based on a survey design that asks participants to choose between two hypothetical states of the world, where one leaves them better off in relative terms, while the other provides a larger absolute endowment that is lower in comparison to others.

We conducted the first large scale survey of this type, asking respondents to state their preferences regarding net income, leisure time, housing wealth, debt outstanding, own children's IQ, and GPA. We obtain the highest share of positional answers for net income, children's IQ, and GPA, while leisure time and debt outstanding receive the lowest share.

We investigate the behavioural mechanism underlying positional choice. Utilising our SCI, we show that respondents' preferences for the positional state of the world are strongly related to their SCO. We test a series of alternative explanations that might influence respondents' choice irrespective of concerns about relative standing. We find limited evidence that preferences are in some cases influenced by other reasons than SCO. However, the strong association with our measure of SCO is robust to controlling for these alternative explanations. We conclude that social comparisons and concerns about relative standing are key in explaining differential preferences for higher relative standing.

Hence, our findings validate the survey methodology and confirm the interpretation of preferences for the state of the world with larger relative endowments as an indicator for the positionality of survey items.

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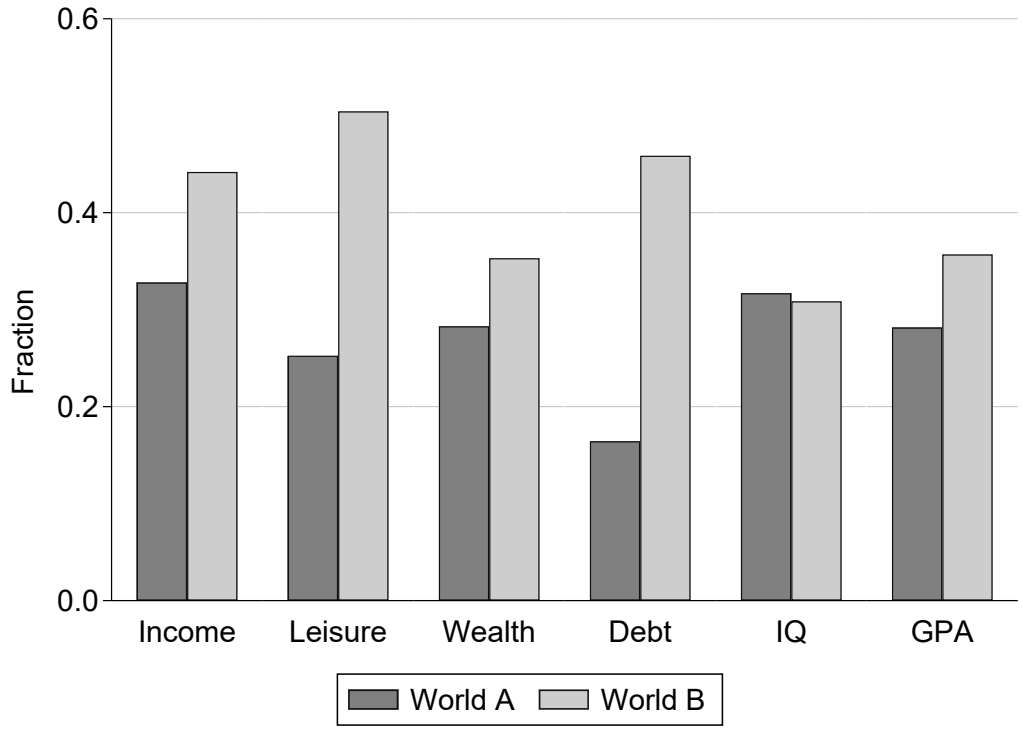

Figure 1: Response Fractions by Survey Item

Table 1: Summary Statistics

	Mean	Std. Dev.	Min	Max	N
Panel A: Sentiment Variables					
SCI	3.04	1.37	1	7	1,542
Satisfied with income	4.39	1.69	1	7	1,549
Satisfied with leisure	5.07	1.55	1	7	1,543
Work ethic	5.57	1.33	1	7	1,537
Growth environment	4.39	1.68	1	7	1,494
Panel B: Sociodemographic Characteristics					
Male	0.52	0.50	0	1	1,552
Age	52.41	14.00	18	75	1,552
High education	0.28	0.45	0	1	1,552
Employed	0.62	0.48	0	1	1,552
Children	0.30	0.71	0	5	1,535
Net household income					
Less than €2,000	0.26	0.44	0	1	1,552
€2,000-€2,999	0.24	0.43	0	1	1,552
€3,000-€3,999	0.19	0.39	0	1	1,552
€4,000-€4,999	0.18	0.38	0	1	1,552
€5,000 and more	0.13	0.34	0	1	1,552
Political party preference					
No preference	0.36	0.48	0	1	1,447
Left Party	0.05	0.22	0	1	1,447
SPD	0.16	0.36	0	1	1,447
Green Party	0.15	0.35	0	1	1,447
CDU/CSU	0.18	0.38	0	1	1,447
FDP	0.04	0.20	0	1	1,447
AfD	0.06	0.24	0	1	1,447
Other	0.01	0.09	0	1	1,447

Table 2: Drivers of Positional Choice

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:			Income			
SCI	0.037***	0.038***	0.036***	0.036***	0.040***	0.040***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
Satisfied with income		0.015				0.019*
		(0.009)				(0.010)
Satisfied with leisure			-0.007			-0.014
			(0.008)			(0.009)
Work ethic				0.012		0.012
				(0.010)		(0.010)
Growth environment					0.001	0.002
					(0.008)	(0.008)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.034	0.040	0.035	0.036	0.036	0.045

	(1)	(2)	(3)	(4)	(5)	(6)
Panel B:			Leisure			
SCI	0.017*	0.017	0.017	0.016	0.013	0.013
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Satisfied with income		-0.004				-0.005
		(0.008)				(0.009)
Satisfied with leisure			0.002			0.001
			(0.008)			(0.009)
Work ethic				0.023*		0.024*
				(0.010)		(0.010)
Growth environment					-0.001	0.003
					(0.007)	(0.007)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.042	0.042	0.043	0.045	0.044	0.047

Notes: All columns report average marginal effects from multinomial logit regressions of the covariates on the likelihood that an individual chooses the positional outcome (i.e. World A). *** p<0.001, ** p<0.01, * p<0.05.

Table 2: Continued

	(1)	(2)	(3)	(4)	(5)	(6)
Panel C:			Wealth			
SCI	0.025**	0.025**	0.025**	0.025**	0.025**	0.026**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Satisfied with income		0.008				0.007
		(0.008)				(0.009)
Satisfied with leisure			-0.001			-0.000
			(0.008)			(0.009)
Work ethic				0.002		0.002
				(0.009)		(0.010)
Growth environment					0.006	0.006
					(0.007)	(0.008)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.041	0.041	0.041	0.041	0.042	0.042
	(1)	(2)	(3)	(4)	(5)	(6)
Panel D:			Debt			
SCI	0.013	0.013	0.010	0.014	0.012	0.009
	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)	(0.008)
Satisfied with income		-0.002				0.009
		(0.007)				(0.008)
Satisfied with leisure			-0.016*			-0.019*
			(0.007)			(0.008)
Work ethic				-0.001		-0.001
				(0.008)		(0.008)
Growth environment					0.005	0.004
					(0.006)	(0.006)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.048	0.049	0.051	0.049	0.053	0.056

Notes: All columns report average marginal effects from multinomial logit regressions of the covariates on the likelihood that an individual chooses the positional outcome (i.e. World A). *** p<0.001, ** p<0.01, * p<0.05.

Table 2: Continued

	(1)	(2)	(3)	(4)	(5)	(6)
Panel E:			IQ			
SCI	0.040***	0.039***	0.038***	0.040***	0.035***	0.035***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
Satisfied with income		-0.001				0.001
		(0.009)				(0.010)
Satisfied with leisure			-0.010			-0.009
			(0.008)			(0.009)
Work ethic				0.013		0.013
				(0.010)		(0.010)
Growth environment					0.006	0.008
					(0.008)	(0.008)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.047	0.048	0.048	0.048	0.048	0.052

	(1)	(2)	(3)	(4)	(5)	(6)
Panel F:			GPA			
SCI	0.028**	0.028**	0.027**	0.027**	0.026**	0.025**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Satisfied with income		-0.001				0.002
		(0.009)				(0.009)
Satisfied with leisure			-0.006			-0.007
			(0.008)			(0.009)
Work ethic				0.012		0.007
				(0.009)		(0.010)
Growth environment					-0.003	-0.002
					(0.007)	(0.008)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1425	1424	1419	1416	1382	1371
Pseudo R-squared	0.043	0.044	0.044	0.043	0.044	0.045

Notes: All columns report average marginal effects from multinomial logit regressions of the covariates on the likelihood that an individual chooses the positional outcome (i.e. World A). *** p<0.001, ** p<0.01, * p<0.05.

Appendix: Survey Questions

The appendix shows English translations of our key survey questions regarding the survey on positional choice and additional sentiment questions which we relied on to construct variables for our empirical analysis in Section 3 in the paper.

1 Positional Choice

Imagine that you can choose between two possible worlds (World A and World B). Both worlds are the same except for one difference, which is described below. Which world would you prefer to live in?

In both worlds, prices for all goods are the same and at the same level as they are today. "others" refers to average other persons in society.

(a) Income

(1) A: Your monthly net income as a single person is 3,000 euros; others receive 2,000 euros.

(2) B: Your monthly net income as a single person is 4,000 euros; others receive 6,000 euros.

(3) I do not have a preference.

(b) Leisure

(1) A: Your weekly working time is 38 hours; the weekly working time of others is 41 hours.

(2) B: Your weekly working time is 35 hours; the weekly working time of others is 32 hours.

(3) I do not have a preference.

(c) Wealth

(1) A: You live in a property that, like all other properties in your neighbourhood, is worth 300,000 euros; in other neighbourhoods, properties are worth 200,000 euros.

(2) B: You live in a property that, like all other properties in your neighbourhood, is worth 400,000 euros; in other neighbourhoods, properties are worth 600,000 euros.

(3) I do not have a preference.

(d) Debt

(1) A: Your level of debt is 400,000 euros; others are 600,000 euros in debt.

(2) B: Your level of debt is 300,000 euros; others are 200,000 euros in debt.

(3) I do not have a preference.

(e) IQ

(1) A: Your child's intelligence quotient (IQ) is 100; the average of other parents' children is 90.

(2) B: Your child's intelligence quotient (IQ) is 110; the average of other parents' children is 120.

(3) I do not have a preference.

(f) GPA

(1) A: Your child has a grade point average of 2.0 in school; other parents' children have a grade point average of 2.5.

(2) B: Your child has a grade point average of 1.7 in school; other parents' children have a grade point average of 1.2.

(3) I do not have a preference.

2 Sentiment Questions

Social Comparison Orientation

Most people compare themselves with others from time to time. There is nothing particularly "good" or "bad" about this kind of comparison, and some people do it more often than others. What about you: To which degree do you agree with the individual statements?

(a) I often compare how I am doing socially (e.g., social recognition, popularity) with other people.

(b) I am not the type of person who compares often with others.

(c) I never consider my situation in life relative to that of other people.

Work Ethic

To which degree do you agree with the individual statements?

(a) What a person achieves in life is above all a question of fate or luck.

(b) One has to work hard in order to succeed.

Growth Environment

The following statements describe different attitudes towards the environment. To which degree do you agree with the individual statements?

(a) In order to protect the environment Germany needs economic growth.

(b) Economic growth always harms the environment.

Respondents were asked to answer all sentiment questions according to the following scale:

(1) 1 = Disagree completely

(2) 2 - 6

(3) 7 = Agree completely

Table A1: Summary Statistics for the Sentiment Questions

	Mean	Std. Dev.	Min	Max	N
Social Comparison Orientation					
Popularity	2.68	1.66	1	7	1,533
Type of person	4.99	1.77	1	7	1,536
Situation in life	4.58	1.76	1	7	1,532
Work Ethic					
Achievements fate or luck	3.53	1.62	1	7	1,531
Work hard to succeed	5.57	1.33	1	7	1,537
Growth Environment					
Growth protects environment	4.39	1.68	1	7	1,494
Growth harms environment	3.70	1.72	1	7	1,525

Table A2: Positional Choice and Respondent Characteristics

	(1) Income	(2) Leisure	(3) Wealth	(4) Debt	(5) IQ	(6) GPA
SCI	0.037***	0.017*	0.025**	0.013	0.040***	0.028**
	(0.009)	(0.009)	(0.009)	(0.007)	(0.009)	(0.009)
Male	-0.025	-0.028	-0.044	-0.035	0.015	-0.004
	(0.025)	(0.023)	(0.024)	(0.020)	(0.025)	(0.024)
Age >49	-0.020	0.003	-0.067*	-0.044	-0.043	-0.089**
	(0.029)	(0.027)	(0.029)	(0.024)	(0.029)	(0.029)
High education	-0.010	-0.022	-0.055*	-0.024	-0.033	0.009
	(0.028)	(0.026)	(0.027)	(0.022)	(0.028)	(0.027)
Employed	0.034	0.071**	-0.025	0.012	-0.015	-0.010
	(0.028)	(0.026)	(0.028)	(0.023)	(0.028)	(0.028)
Children	-0.002	0.024	0.009	0.007	0.046**	0.009
	(0.019)	(0.017)	(0.017)	(0.014)	(0.018)	(0.017)
Net household income (Base = Less than €2,000)						
€2,000-€2,999	-0.013	-0.020	0.015	0.013	-0.011	-0.013
	(0.037)	(0.033)	(0.034)	(0.028)	(0.035)	(0.034)
€3,000-€3,999	-0.030	0.017	-0.008	0.010	0.041	0.020
	(0.040)	(0.038)	(0.036)	(0.030)	(0.039)	(0.038)
€4,000-€4,999	-0.043	-0.007	0.086*	0.051	0.033	0.031
	(0.040)	(0.037)	(0.039)	(0.033)	(0.040)	(0.039)
€5,000 and more	-0.083	-0.016	0.046	0.023	0.013	0.019
	(0.044)	(0.040)	(0.044)	(0.035)	(0.044)	(0.043)
Political party preference (Base = No preference)						
Left Party	-0.085	0.001	-0.141**	-0.029	-0.115*	-0.117*
	(0.053)	(0.054)	(0.046)	(0.044)	(0.050)	(0.048)
SPD	0.042	0.017	-0.009	-0.002	-0.009	0.053
	(0.038)	(0.036)	(0.037)	(0.031)	(0.038)	(0.038)
Green Party	-0.009	-0.048	-0.000	-0.048	-0.075*	-0.045
	(0.038)	(0.033)	(0.038)	(0.029)	(0.037)	(0.036)
CDU/CSU	0.124**	0.073*	0.057	0.031	0.102**	0.084*
	(0.038)	(0.036)	(0.037)	(0.031)	(0.038)	(0.037)
FDP	0.014	0.048	-0.049	-0.036	0.112	0.028
	(0.065)	(0.064)	(0.060)	(0.048)	(0.068)	(0.062)
AfD	0.108	0.041	0.023	0.008	0.049	0.004
	(0.056)	(0.051)	(0.052)	(0.045)	(0.056)	(0.052)
Other	0.062	0.130	-0.106	0.008	-0.063	-0.023
	(0.139)	(0.143)	(0.114)	(0.114)	(0.137)	(0.121)
Observations	1425	1425	1425	1425	1425	1425
Pseudo R-squared	0.034	0.042	0.041	0.048	0.047	0.043

Notes: All columns report average marginal effects from multinomial logit regressions of the covariates on the likelihood that an individual chooses the positional outcome (i.e. World A). *** p<0.001, ** p<0.01, * p<0.05.

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