What Do People Want?*

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PRELIMINARY. PLEASE DO NOT CIRCULATE.

Abstract

We elicited over a million stated preference choices over 126 dimensions or "aspects" of well-being from a sample of 3,351 respondents on Amazon's Mechanical Turk (MTurk). Our surveys also collected self-reported well-being (SWB) questions about respondents' current levels of the aspects of well-being. From the stated preference data, we estimate relative log marginal utilities per point on our 0-100 response scale for each aspect. We validate these estimates by comparing them to alternative methods for estimating preferences, and show that our estimates reflect a precise notion of marginal value. Our findings provide empirical evidence that both complements and challenges historical philosophical perspectives on human desires and values. Our results support Aristotelian notions of eudaimonia through family relationships and Maslow's emphasis on basic security needs, yet also suggest that contemporary theories of well-being may overemphasize abstract concepts like happiness and life satisfaction, while undervaluing concrete dimensions of family well-being, financial security, and health that respondents place the highest marginal utilities on. We document substantial heterogeneity in preferences across respondents, with current SWB levels explaining a significant portion of the variation.

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What do people want? This age-old question has intrigued philosophers, psychologists, and economists alike, each offering their perspectives on human desires and well-being. Ancient philosophers like Aristotle emphasized eudaimonia (flourishing) achieved through virtuous living, while Epicureans and Stoics debated the role of pleasure versus tranquillity. Religious thinkers focused on divine connection, while Enlightenment philosophers like Locke emphasized liberty and property. The modern literature on self-reported well-being implicitly assumes that people's primary goals are happiness and life satisfaction. However, a more recent literature has demonstrated that not only will people sacrifice happiness and life-satisfaction for other aspects of life, but they often value other aspects more highly (Benjamin et al. 2012; Benjamin et al. 2014b; Adler, Dolan, and Kavestsos 2017).

Within economics, what people want is reflected in their preferences. Measuring preferences is central to understanding how people allocate resources, make decisions, and respond to policy, and it is crucial for designing interventions that improve welfare. However, economists often focus exclusively on preferences over market goods, ignoring critical non-market dimensions of well-being such as family relationships, health, and personal fulfilment. To capture a comprehensive picture, we must consider a wide array of both market and non-market goods.

Of course, what people want will generally depend on what they currently have. For most purposes, the relevant notion of "what people want" is its (relative) marginal utility. In this paper, we estimate marginal utilities of different aspects of life by surveying respondents about what they would choose when making trade-offs between improvements in the aspects. This stated preference method allows us to quantify the relative importance of diverse dimensions of well-being, ranging from income and financial security to mental and physical health.

Our methodology integrates numerical measurement of current well-being levels with quantitative tradeoff decisions, both using the same 0-100 scale. We implement this methodology at scale, collecting over a million stated preference choices from 3,351 respondents on Amazon Mechanical Turk (MTurk) across 126 dimensions of well-being. These dimensions were distilled from a comprehensive list of over 2,000 aspects that we developed through an agnostic approach to what might matter to people, rather than relying on predetermined philosophical or theoretical frameworks. This approach represents a significant departure from prior work, including Benjamin, Heffetz, Kimball, and Szembrot (2014) (hereafter BHKS),

which established an initial framework for measuring preferences over non-market goods, but primarily evaluated aspects highlighted in previous literature. Crucially, we integrate our analysis of levels and tradeoffs, while BHKS collected no data on respondents' current well-being levels, and used qualitative scales (e.g., "slightly more", "much more") rather than precise quantitative tradeoffs. Our integration of levels and tradeoffs enables us to analyse how marginal utilities vary with current levels of well-being, and empirically distinguish between aspects where marginal utility differences stem from resource constraints versus inherent preference differences.

We find that respondents place the highest marginal value on aspects related to family well-being, financial stability, and health. For example, *Your children's health* has an estimated relative marginal utility approximately 67 times larger than the average aspect, while notably a standard well-being measure like *How satisfied you are with your life* has a marginal utility only about twice the average. This striking difference highlights the limitations of focusing solely on life satisfaction as a comprehensive measure of well-being. Importantly, we observe substantial heterogeneity in preferences across individuals that stems from multiple sources: differences in current well-being levels, demographic factors, and inherent preference variation. Our analysis distinguishes between variation driven by differences in SWB levels versus those reflecting intrinsic preference differences. With the aim of understanding the stability of preferences, we further estimate a hierarchical model that accounts for both persistent and transitory components of preference variation, and find that approximately 40% of the observed variance represents stable differences across individuals that persists over time.

Our findings also speak to theories about how preferences might shift over the life course. Research in psychology suggests that as people age, they prioritize emotionally meaningful goals over future-oriented objectives (e.g., Carstensen's socioemotional selectivity theory[1]). While we find remarkable consistency in the highest-valued aspects across age groups, our analysis reveals subtle but significant age-related shifts in marginal utilities. Older respondents place relatively higher value on physical health aspects, while showing more modest differences in other dimensions than theories of age-related preference shifts might predict. This suggests that while core valuations of family well-being and financial security remain stable

[1] See Cartensen (2021)

across the lifespan, age-specific concerns do emerge in domains most relevant to late-life challenges.

To further understand the nature of preferences, we conducted an "aspect flagging survey," where respondents evaluated the characteristics of different aspects, such as their breadth, susceptibility to social desirability biases, and whether differences in valuation are driven primarily by supply-side constraints (people's ability to obtain the aspect) or demand-side preferences. These judgments provide valuable insights into our marginal utility estimates. We find a strong significant relationship between aspects' log marginal utilities and social desirability scores, suggesting that social considerations influence stated preferences. However, this relationship explains only 14% of the variation in marginal utility estimates, indicating that while social factors matter, substantial meaningful variation in preferences across aspects remains. We also find that the supply-vs-demand characterization significantly predicts the empirical relationship between aspect levels and marginal utilities, with aspects respondents find to be supply-constrained showing steeper negative relationships between individual marginal utilities and levels. These findings help clarify whether observed differences reflect genuine preference variation or contextual factors, providing empirical validation for our interpretive framework.

In summary, our findings reveal that family well-being, financial security, and health consistently rank as the most valued dimensions of life. While there is remarkable consistency in these priorities across demographic groups, we find substantial individual heterogeneity in preferences that reflects both stable differences between people and variation over time. Our analysis demonstrates that much of this heterogeneity is systematically related to current well-being levels, with supply constraints dominating for certain aspects while preference differences drive variation in others. These patterns have important implications for how policymakers should approach well-being measurement, suggesting that welfare analyses must account for both the diverse non-market dimensions people value and the heterogeneity in how they value them.

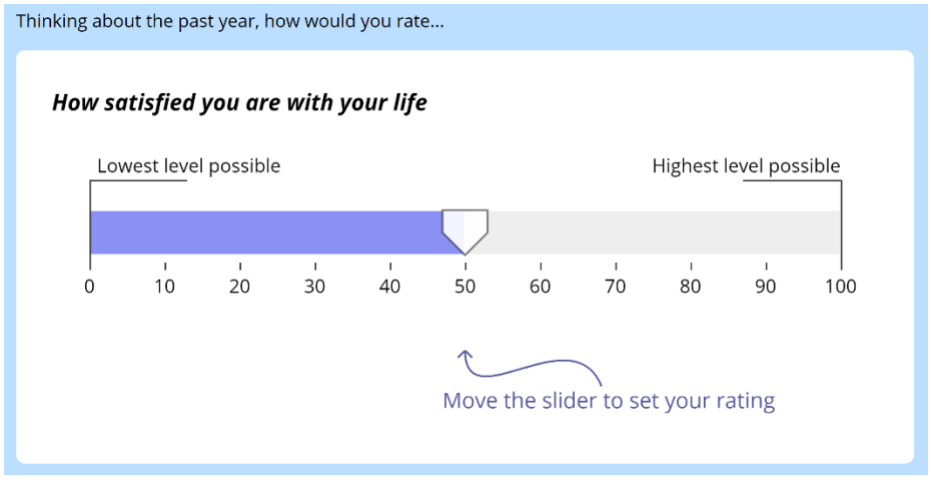
1. Survey Design

We utilize data from three surveys; our baseline (henceforth, *Baseline*), follow-up (*Bottomless*), and *Aspect Flagging* survey. The two key types of questions in Baseline and Bottomless are SWB questions, described in Section 1.1, and stated-preference questions (trade-offs), described in Section 1.2. The survey flow is: (i) consent form; (ii) basic demographic questions (age, gender, household income, ZIP code); (iii) instructions; (iv) SWB and stated-preference questions and (v) calibration questions designed to capture scale-use (not analysed in this paper) ((iv) and (v) in randomized order); (vi) additional demographic, behavioural, and psychological questions; and (vii) exit questions about how the respondent approached the survey.

1.1 SWB Questions

Our SWB questions elicit respondents' ratings of various dimensions of life, over the past year, using a slider. Figure 1 shows an example.

Figure 1 – Screenshot of SWB Question



Note: Screenshot of SWB question for the dimension of well-being ***How satisfied you are with your life***.

Response options are integers from 0 (labeled "Lowest level possible") to 100 (labeled "Highest level possible"). The default slider position is at 50. To give a rating, the respondent moves the slider, and then clicks "Confirm Rating." To prevent lazy default responses, this button appears only after the slider has been moved.

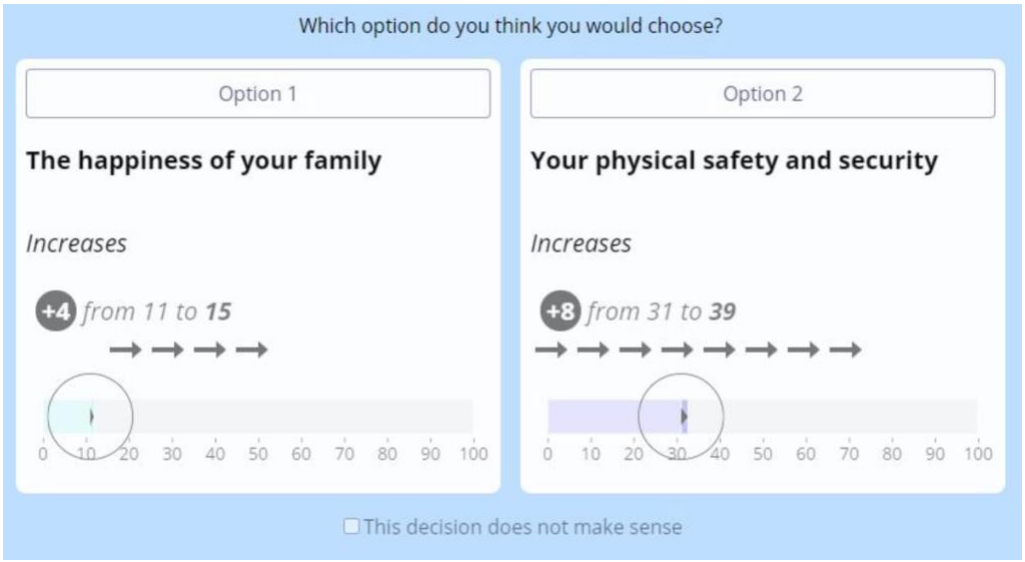
The quasi-continuous 0-100 integer scale makes conclusions less susceptible to untestable assumptions about a latent variable that are needed when there are only a few

response categories (Bond and Lang, 2019).[2] We specify the timeframe of the past year to reduce heterogeneity in interpretation of the question across respondents (Benjamin, Debnam Guzman, Fleurbaey, Heffetz, and Kimball, 2023). The endpoint labels "Lowest/Highest level possible" result in response options that can be used for SWB questions about any potential aspect, and are meant to sound extreme in order to reduce potential top- and bottom-coding.

1.2 Tradeoff Questions

Tradeoff questions ask, "Which option do you think you would choose?" Below the question are two panels. The top of the left panel has a large button labeled "Option 1;" the top of the right panel has a large button labeled "Option 2." Below each option button is an aspect of well-being followed by the word "increases" or "decreases" and a verbal representation of the change (e.g., "+4 from 58 to 62" or "-5 from 68 to 63"). Figure 2 shows an example.

Figure 2 – Screenshot of Tradeoff Question



A key innovation of our design is the tight integration between these tradeoff questions and the previously collected SWB levels data. The starting point for each aspect's change is precisely the

[2] A longstanding tradition in psychology maintains that 5-point or 7-point scales are best for surveys because respondents cannot reliably discriminate more finely than that. The evidence, however, suggests that while response scales with more than 5 options are similar to each other along several metrics of psychometric validity, respondents rate them as better in terms of allowing them to express their feelings but worse in ease and quickness of use (e.g., Preston and Coleman, 2000). We advocate continuous scales precisely because they maximize how fine-grained respondents can be in expressing their feelings and therefore, theoretically, eliminate the problem of inferring latent SWB from discrete response categories. In practice, however, many respondents likely round their answers. Future research should account for such rounding, as in Giustinelli, Manski, and Molinari (2022).

level that the respondent had reported earlier in their rating question. This integration enables us to analyze how preferences relate to current SWB levels, providing a more accurate measurement of marginal utilities relative to each individual's specific circumstances rather than abstract hypotheticals. We explain how the directions and magnitudes of the changes are determined further below. The representation of the change ("+4" or "-5") appears in a contrasting circle for further emphasis. The final element of each panel is an image of the slider bar from the rating questions. The slider bar is colored up to the level of the starting point for the change (this mimics what the respondent saw at the end of the rating question for this aspect). A darker shade of the same color fills the area between the final and initial levels of the change, and a circle appears around this area. We also emphasize the shaded area of the change by putting a black arrow that points in the direction of the change within the slider bar on that area.

To progress through the survey, a respondent must click on the Option 1 button or the Option 2 button. Below both panels, respondents also have the option of checking a box next to the statement, "This decision does not make sense." If the respondent checks the box, a question appears: "Why does this decision not make sense?" Based on pilot testing, where we had an open text box for replies to this question, the following options are given: The aspect on the left does not apply to my life; The aspect on the right does not apply to my life; Both aspects do not apply to my life; These two aspects of life are too similar; These two aspects of life go hand in hand (you can't change one without the other changing as well); I am indifferent between these two options. Other: [text box].[3]

The SWB questions and tradeoffs are arranged in a "triple" format, with three SWB questions (for aspects A, B, C) followed by six tradeoff questions between those aspects (A vs B, B vs A, B vs C, C vs B, A vs C, C vs A, in randomized order).

The magnitudes of the changes in levels depicted in the tradeoffs range from 1 to 8. The changes are chosen as follows:

[3] In pilot testing, we also found that a significant fraction of respondents who checked the box wanted to express that they did not prefer either option more than the status quo. (Since trade-offs show both aspects decreasing with 50% probability, this is plausibly the case for about half of all tradeoffs.) So in the Baseline survey, below the question, "Why does this decision not make sense?" we added a note: "Note: If you dislike both options, please choose the option you dislike the least." If a respondent checks, "This decision does not make sense," they can progress to the next screen either by choosing one of the two options or clicking the "submit" button.

1. For a given triple, the changes in the trade-off questions all go in the same direction, and that direction is randomized with 50% probability.[4]
2. At the level of each pairwise trade-off, there is a 2% probability that the aspects move in opposite directions. We use this "opposite direction trap" as a data quality check.
3. For each aspect in a tradeoff, the magnitude of the change is randomly chosen from integers 1 to 8, with equal probability.

Note that in the practice questions (in the Baseline survey instructions), the tradeoffs are not randomized in the same way as the real survey. The magnitudes of the tradeoffs are always 4 and 5; we randomize which aspect has the bigger change. The first example tradeoff (between X and Y) shows decreases of -4 and -5. The second and third example tradeoffs (between X and Y and Z and A, respectively) show increases of +4 and +5. Exceptions can arise if a respondent rates an aspect below 8 or above 92 in the practice questions; if both aspects in a practice tradeoff question were rated below 8 (above 92), the relevant tradeoff question is always shown as an increase (decrease). If a respondent has rated one aspect below 8 and the other above 92, the practice tradeoff screen says, "There is no practice decision about the two aspects you just rated since your ratings were extraordinarily high and extraordinarily low."

1.3 Baseline and Bottomless Surveys

Using Amazon's Mechanical Turk (MTurk) platform, we collected data between June 13 and December 7, 2022. We restricted eligibility for all surveys to MTurk workers located in the United States (as identified by MTurk), with a HIT approval rating of at least 95%, and at least 100 previously approved HITs. MTurk restricts all participation to workers who are at least 18 years of age. Respondents were recruited to Baseline with a HIT titled "Academic survey about what is important in life," after passing an initial prescreening survey. Respondents were

[4] There are some exceptions. If a respondent has rated one of the aspects in the tradeoff below 8 or above 92, it would be possible for the realized value of the tradeoff to put the rating below 0 or above 100, respectively. To avoid this outcome, if one of the three aspects in the triple was rated above 92, we "force" the direction of the changes in the tradeoffs to be negative (i.e., we do not randomize the direction of changes for the triple); if one of the three aspects was rated below 8, we "force" the direction of tradeoffs to be positive. If one of the aspects was rated below 8 *and* another one of the aspects was rated above 92, we skip the tradeoff questions for that triple. We do not tell respondents about this feature of the survey. In our data for X respondents covering Y triples, only Z% of triples were skipped.

compensated $4.50 for completing Baseline. For those who passed our stringent quality control checks, the median completion time was 36 minutes.

After completing Baseline, respondents who passed quality control were invited to a follow-up survey (Bottomless). Bottomless features the same SWB and Tradeoff questions for additional aspects of well-being. We organize Bottomless into "blocks", each one featuring questions about a set of 33 aspects. Within a block, the aspects' order (i.e., assignment to triples within the block) is always randomized. The aspect list for regular blocks always includes the 16 aspects from which we plan to construct a welfare measure in a forthcoming paper[5]. The remaining 17 aspects in each block have been chosen for a variety of reasons, such as finding a more comprehensive set of aspects and testing hypotheses about the wording of aspects.

In Block 2, we tried to develop an aspect list which with maximal "comprehensiveness." Based on pilot data for 2000+ aspects of well-being, we chose the 17 non-welfare-measure aspects for Block 2 with a stepwise procedure; we maximized an R^2 criterion with marginal utility weights to see which of the other aspects added the most explanatory power to the 33 aspects already in the Baseline list. We also did the procedure with marginal utility-squared weights and without marginal utility weights; the aspects identified with the alternate procedures which did not already appear in the Bottomless survey are included in later Blocks (6-8).

In the other Blocks, we included other aspects of well-being from the pilot survey's long list of aspects, for various reasons. The following list of rationales corresponds to aspects in Blocks 3 through 12. For the first 12 blocks of the Bottomless survey, every respondent sees the same 33 aspects in that block. (1) Two aspects are included to study dimensions of well-being with low importance; they were identified by low marginal utilities in pilot data. (2) Fifteen aspects are included because we hypothesize that they are closely related to choices; we plan to study these in another project studying the multidimensionality of well-being. (3) Four aspects

[5] Including the aspects for the welfare measure in every block achieves two aims for our other work which estimates the aspects' relative marginal utilities. First, this design allows us to compare the relative MU's within a list that includes all the Bottomless survey aspects. The tradeoffs where aspects in the welfare measure are compared to other aspects create the "interlocking" triples required to do this. Second, for other work, we want to be able to estimate individual-level marginal utilities for these aspects, to test the robustness of our welfare measure to individual-level prices. We will not be able to estimate individual prices for all respondents because of the high data requirement, but it is feasible for respondents who complete a lot of Bottomless blocks. Across all surveys, roughly ¼ of tradeoffs are between two aspects within the welfare measure list; we will pool these tradeoffs at the individual level, across all available blocks, to estimate the individual-level prices.

are included because they reflect local public goods; their ratings can be compared with external data. (4) Three aspects are included because they correspond to questions we ask about expected future aspect levels; we plan to study these for studying theories about the shape of well-being over the life course. (5) We include 35 aspects because they correspond, as nearly as possible, to questions asked by major SWB surveys (Gallup and statistical agencies). (6) We include 22 aspects as variant wording of Baseline aspects, to test the sensitivity of small wording changes. (7) We include 13 aspects because they correspond to the aspects used for personal calibration questions. This is another source of data for exploring general vs. specific scale use. (8) We include 53 aspects which reflect extremes in different categories – such as social desirability, ease of purchasing with money, or "objectivity" – based on another preliminary pilot survey.

Across the remaining 17 regular Blocks, the order of the 289 aspects is randomized. These aspects were also chosen from the long pilot list for various reasons. We include 7 aspects related to political efficacy and life satisfaction which correspond as closely as possible to the vignette literature. We include 66 aspects which are considered local public goods, in order to further probe potential correlations with external "objective" measures. We include 47 aspects which are considered national or global public goods; from among all such aspects in the long list, we looked for the best possible ones to use as "quasi-calibration questions": hypothesized to have minimal interpersonal differences in definition and perception (for example, trying to avoid aspects connected to political ideology). We include 82 aspects with simple and compound forms – such as *Your feeling of independence*, *Your feeling of self-sufficiency*, and *Your feeling of independence and self-sufficiency* – to test hypotheses about wording and conceptual overlap between aspects. We also include 14 aspects which we wrote since the pilot to test conceptual overlap related to trust. Finally, we include 130 new aspects – developed since the pilot – which are hypothesized to have high marginal utilities either directly or indirectly (through having a high marginal product), and 10 new aspects which are hypothesized to be highly predictive of other aspect levels.

1.4 Aspect Selection

Out of the full list of aspects on Baseline and Bottomless, we focus on 126, chosen for the following reasons:

1. Commonly used and studied in the subjective well-being literature (e.g., *How satisfied you are with your life*)
2. Collected by large statistical agencies (e.g., *How happy you feel*)
3. Those algorithmically selected to provide comprehensive coverage of anything one may care about (e.g., *Your financial security*)[6]
4. Represent aspects people naturally trade off with other dimensions of life (e.g., *You getting enough sleep*)[7]

While we only report estimates for the 126 aspects chosen based on these criteria, our methods can in theory be applied to the full set of aspects from Baseline and Bottomless, and ignoring computational constraints, on our full list of 2000+ aspects. Our final sample contains respondents who completed SWB and tradeoff questions for all 126 aspects.

1.5 Sample

In total, 5,970 respondents completed Baseline. Table 1 summarizes the demographics among those who answered the demographic questions used in our main applications (5,466 respondents) and among those who additionally passed quality control (3,358 respondents). Though similar to the U.S. population (according to the 2020 Census) on most demographics, as in other MTurk studies, our sample differs from the U.S. population in several ways: respondents are more likely to have completed college, be younger than 50, and be unemployed (other than MTurk); and less likely to have annual household income above $120,000 and to be Black or Hispanic/Latino.

For our main study sample, we further narrowed the respondents to include only those who answered tradeoffs in the first nine blocks. This ensures that every respondent in this sample provided a marginal utility estimate for our 126 aspects of interest. By fixing the study sample in this manner, we can more confidently analyze heterogeneity in preferences and make robust comparisons across the complete set of aspects. The resulting subsample consisted of 896 respondents, whose demographic shares are nearly identical to those of the broader Baseline passed quality control sample.

[6] Details of the algorithm are included in Appendix Section XX
[7] For further examples of aspects that represent natural trade-offs, see Benjamin, Heffetz, Kimball, Rees-Jones (2012)

Table 1 - Demographics

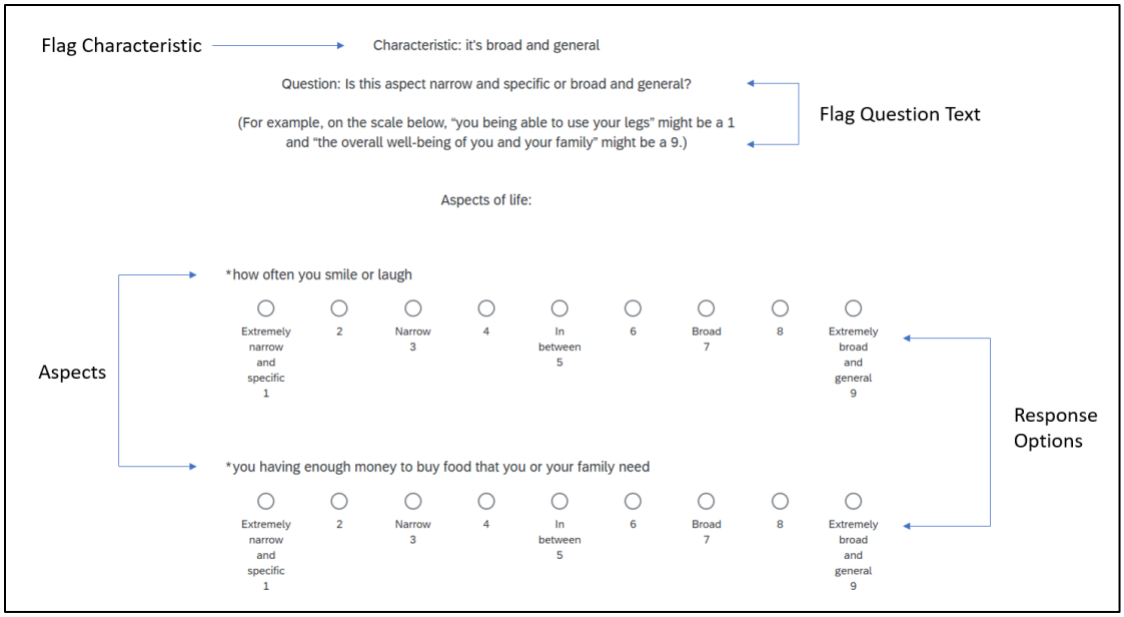
Respondent Demographics					
Category	Population	Baseline, 2022 Sample, *(N=5466)*	Baseline, 2022 Sample, Passed QC *(N=3358)*	Bottomless, 2022 Sample, Blocks 1-9 *(N=896)*	Census
Gender	Male	49.6	43.5	45.6	49.0
	Female	50.4	56.5	54.4	51.0
Marital status	Married	65.7	50.4	52.0	51.1
	Never married	24.6	35.4	34.2	33.5
	Other	9.6	14.3	13.8	15.4
Highest education level completed	High school grad	7.9	10.4	10.8	28.3
	Some college	16.6	25.7	24.1	27.1
	Bachelor's degree	52.6	46.2	48.0	22.2
	Graduate degree	22.6	17.2	16.9	12.8
Age	18–29	18.7	14.9	12.2	20.6
	30–39	35.3	33.6	32.8	17.5
	40–49	21.6	23.4	25.3	16.0
	50–64	19.2	20.7	24.3	24.9
	65 and older	5.2	7.4	5.4	21.1
Household Income	Less than $30,000	14.2	17.3	15.6	22.1
	$30,000–$49,999	21.7	21.1	23.7	15.7
	$50,000–$69,999	22.2	20.1	19.5	13.4
	$70,000–$89,999	18.4	15.4	15.0	10.8
	$90,000–$119,999	13.5	12.8	12.6	12.0
	$120,000 and above	10.0	13.3	13.6	26.0
Region	Midwest	22.8	22.9	22.9	20.8
	Northeast	16.6	18.1	19.9	17.4
	South	38.0	38.5	37.6	38.1
	West	22.6	20.5	19.6	23.7
Race	White, and other	79.1	78.6	80.1	63.3
	Black	6.8	8.1	6.9	12.1
	Hispanic/Latino	9.8	7.3	6.8	18.7
	Asian	4.3	6.0	6.1	5.9
Household size	1	15.6	20.7	21.0	28.5
	2	27.9	30.3	28.5	35.0
	3	19.0	19.5	20.3	15.0
	4 and above	37.6	29.5	30.2	21.5
Employment status	Employed	86.6	79.7	80.0	57.6
	Unemployed	6.4	10.0	9.8	3.8
	Not in labor force	7.0	10.3	10.2	38.5

Notes: All numbers are percentages. 'Passed QC' refers to everyone who passed quality control and 'Blocks 1-9' refers to everyone who completed tradeoffs in each of blocks 1 to 9.
Sources: Authors' surveys, 2020 Census.

1.6 Aspect Flagging Survey

The *Aspect Flagging* survey aims to understand how respondents characterize various aspects of life. By eliciting these characteristics, we are better able to understand what aspect features drive the marginal utility estimates we derive from the tradeoff data in Baseline and Bottomless. This survey was administered to MTurk respondents who completed *Baseline* and passed quality control. Respondents rated aspects on various characteristics (which we call "flags") using a 9-point integer scale. As shown in Figure 3, each flag contained a headline characteristic and detailed question text, followed by the list of aspects to be rated.

Figure 3 – Screenshot of Aspect Flagging Survey



To make the survey manageable, we divided 172 aspects (which includes all 126 of our aspects of interest) into four separate surveys of 43 aspects each. These were fielded across multiple waves, with each wave containing 7 flags. We fielded Waves 2-4 between September 2024 and January 2025, with response rates ranging from 23.0% to 41.3% and median completion times between 26 and 35 minutes. Each flag included two additional "calibrator" aspects designed to represent very low and high scores for that specific question.

For quality control, we dropped responses from duplicate survey takes and removed respondents who failed attention checks or "straight-lined" their responses (gave identical ratings for all aspects on a flag). After cleaning, 86.1% to 93.8% of complete responses were retained across surveys.

To account for scale-use heterogeneity, we standardized ratings within person, distinguishing between "calibration-question-like" flags (where underlying ratings are not impacted by respondents' aspect levels) and "aspect-like" flags (where they are). For each person *i*, their standardized rating *r* for aspect *a* and flag *f* was calculated as:

$$\widehat{r_{afi}} = \frac{r_{afi} - E_{af}[r_{afi}]}{\sqrt{Var_{af}[r_{afi}]}}$$

where expectations and variances were taken across all aspect ratings for CQ-like flags. The resulting standardized means across respondents help characterize how aspects score on various dimensions while controlling for individual scale-use differences.

2. Theoretical framework

In this section, we introduce our theoretical framework and underlying assumptions, and introduce our econometric model.

2.1 Binary choice model

Denote w_{ij} as individual i's level of aspect j, and $\boldsymbol{w_i}$ as the vector of levels for each individual. Let $u_i(\boldsymbol{w_i})$ be individual i's utility function so that changes in utility can be expressed as

$$\frac{\Delta u_i}{\Delta w_{ij}} = \frac{u_i\left(w_{ij} + \Delta w_{ij}, \boldsymbol{w_{i,-j}}\right) - u_i\left(w_{ij}, \boldsymbol{w_{i,-j}}\right)}{\Delta w_{ij}}$$

where Δw_{ij} is a change in the level of aspect j for individual i. Let M_{ij} denote MU (m_{ij} for log MU). Then for small changes Δw_{ij}, we have that

$$\frac{\Delta u_i}{\Delta w_{ij}} \approx \frac{du_i}{dw_i} = M_{ij} \Rightarrow$$

$$u_i\left(w_{ij} + \Delta w_{ij}, \boldsymbol{w_{i,-j}}\right) - u_i\left(w_{ij}, \boldsymbol{w_{i,-j}}\right) \approx M_{ij}\Delta w_{ij}$$

For small changes, the change in utility induced by a change Δw_{ij} is, by a first order approximation, the marginal utility, M_{ij}, times the amount of the change. In order to estimate this model, we ask hypothetical choice questions (*tradeoffs*), as described in further detail in Section 1.2. Tradeoff questions ask respondents to choose between two options: a (small) increase in aspect j, Δw_{ij} and an increase in a different aspect j', $\Delta w_{ij'}$. The amount of each change is randomized. We assume that a respondent chooses the option changing aspect j if and only if $M_{ij}\Delta w_{ij} > M_{ij'}\Delta w_{ij'}$. Taking logs and rearranging yields

$$m_{ij} - m_{ij'} + \ln\left(\Delta w_{ij}\right) - \ln(\Delta w_{ij'}) > 0$$

and adding in response error we have

$$m_{ij} - m_{ij'} + \ln\left(\frac{\Delta w_{ij}}{\Delta w_{ij'}}\right) + e_{ijj'q} > 0$$

where q is a specific tradeoff.

2.2 Hierarchical model

To study the heterogeneity of preferences, we add additional structure where individual draws of log marginal utilities are drawn according to a hierarchical process. Let μ_j be hyperparameters

representing the mean log marginal utility for each aspect, *j*. Then individual log marginal utilities are drawn:

$$m_{ij} \sim N(\mu_j,\ \sigma_j)$$

where , σ_j varies by aspect. Since the scale of marginal utilities are not identified, we impose the normalization that the average across log marginal utility means $\bar{\mu}$ to be 0. Therefore, all log marginal utility estimates can be interpreted as being relative to the average aspect.

We model individual response error as being drawn from a log normal distribution such that

$$\sigma_{e_i} \sim \text{lognormal}(\mu_e,\ \sigma_e)$$

where σ_{e_i} is the standard deviation of response error, $e_{ijj'q}$ for individual *i*. Note that by allowing the variance of the error term to vary by individual, our estimates of aspect hyperparameters (the mean and standard deviation of log marginal utility draws) will reflect responses from respondents who make more consistent choices.

Under this model, our likelihood of observing our binary choices is given as

$$\mathbb{P}\left[r_{ijj'} = 1 \middle| \Delta w_{ij}, \Delta w_{ij'},\ m_{ij},\ m_{ij'},\ \sigma_{e_i}\right] = \phi\left[\frac{m_{ij} - m_{ij'} + \ln\left(\frac{\Delta w_{ij}}{\Delta w_{ij'}}\right)}{\sigma_{e_i}}\right].$$

where $r_{ijj'}$ is an indicator for choosing the option associated with increasing aspect *j*.

We estimate the model using Hamiltonian Markov Chain Monte Carlo (HMC). Given that this method imposes a Bayesian framework, we follow standard practice (Gelman, 2006) and specify uninformative priors for our hyperparameters

$$\mu_j \sim N(0,\ 10)$$

$$\sigma_j \sim \text{cauchy}(0,\ 2)$$

$$\mu_e \sim N(0,\ 10)$$

$$\sigma_e \sim \text{cauchy}(0,\ 2)$$

One possible concern in estimating marginal utilities for individual aspects is the potential for overlap between aspects. For example, some aspects may represent combinations of underlying components, much like a bundle of 2 bananas and 4 oranges compared to another aspect consisting of 1 orange and 5 bananas. However, our method does not rely on the assumption that aspects are strictly non-overlapping or mutually exclusive. Instead, the marginal utility we estimate for a given aspect reflects the aggregate value across its individual

components. This approach ensures that even if aspects share common elements, their contributions are appropriately captured in the overall valuation. By allowing for this flexibility, we can accommodate overlapping aspects while maintaining the validity of our marginal utility estimates.

3. Marginal Utility Estimates for Aspects of Well-Being

3.1 Aspects People Want Most

Our main estimates reveal the relative importance that individuals place on different dimensions of well-being. For each aspect j, we estimate μ_j, which represents the population mean of log marginal utilities across individuals. Given our normalization that the average of these means across aspects equals zero, $M_j = e^{\mu_j}$ can be interpreted as the relative marginal utility of aspect j compared to the geometric mean across all aspects. Table 2 presents these estimates for all 126 aspects ordered from highest to lowest mean log marginal utilities.

The aspects with the highest marginal utilities cluster around three key domains: family well-being, financial security, and health (both mental and physical). Family-related aspects rank particularly high, with the top aspect, "Your children's health", having an estimated relative marginal utility approximately 67 times larger than the average aspect. This means that a one-point improvement on our 0-100 scale for "Your children's health" is valued as much as a 67-point improvement for an average aspect.

Importantly, for aspects that pertain to specific relationships (such as those involving children or partners), we limit our analysis to respondents who actually have those relationships in their lives. This approach provides a more accurate representation of how people value these aspects when they are directly relevant to their circumstances. When we examine the variance estimates (e^{σ_j}) for these aspects, we observe substantial heterogeneity in marginal utilities across individuals, even within the subset of people for whom these aspects are relevant. For example, even among parents, the relative valuation of "Your children's health" shows considerable variation (e^{σ_j}= 25.02), suggesting that factors beyond simple applicability influence how people prioritize these dimensions.

Table 2 – Relative Marginal Utility Estimates

Aspect Estimates						
Aspect (Rank # / 126)	$\mathcal{M}_j$	**LB - UB**	$\mathcal{M}_j$ **(per SD)**	**LB - UB (per SD)**	e^{σ_j}	**Grouping**
Your children's health (1)	66.87	(42.41 - 115.5)	1731.46	(1098.02 - 2990.54)	25.02	Family Well-being
Your children being able to live happy lives (2)	18.63	(13.73 - 26.25)	461.70	(340.26 - 650.53)	10.94	Family Well-being
Your spouse/partner's health (3)	16.22	(11.5 - 23.8)	400.67	(284.11 - 587.83)	17.03	Family Well-being
You having a strong bond with your children (4)	10.84	(7.76 - 15.77)	291.55	(208.77 - 424.4)	12.40	Relationships
The health of your parents and siblings (5)	8.64	(6.79 - 10.98)	185.75	(145.99 - 236.08)	13.26	Family Well-being
The people who have been most important to you in your life still being alive (6)	8.03	(6.41 - 10.13)	176.70	(140.95 - 222.94)	12.31	Relationships
The overall well-being of your family (7)	7.16	(5.95 - 8.58)	119.10	(98.92 - 142.78)	6.31	Family Well-being
Your family living a wonderful life (8)	5.85	(5.01 - 6.85)	119.35	(102.38 - 139.85)	5.01	Family Well-being
The happiness of you and your family (9)	5.83	(5.03 - 6.76)	107.99	(93.22 - 125.33)	4.36	Summum Bonum
Your ability to protect your loved ones (10)	5.61	(4.63 - 6.77)	107.88	(89.01 - 130.19)	7.81	Financial
The overall well-being of you and your family (11)	5.60	(4.76 - 6.65)	100.87	(85.71 - 119.82)	5.33	Summum Bonum
Your health (12)	5.02	(4.29 - 5.89)	99.70	(85.15 - 116.89)	5.65	Health
The happiness of your family (13)	4.92	(4.41 - 5.5)	88.39	(79.34 - 98.98)	4.52	Family Well-being
You being able to support your family financially (14)	4.57	(4.1 - 5.12)	124.05	(111.51 - 139.08)	4.40	Financial
Your financial security (15)	4.35	(3.69 - 5.21)	117.94	(100.19 - 141.46)	5.33	Financial
You having enough money to pay for healthcare and/or medicines that you or your family need (16)	4.22	(3.53 - 5.13)	109.78	(91.8 - 133.52)	7.83	Financial
Your ability to take care of your family (17)	4.01	(3.47 - 4.63)	90.48	(78.37 - 104.37)	4.79	Financial
You not worrying about money (18)	3.85	(3.34 - 4.47)	112.54	(97.7 - 130.67)	4.50	Financial
You having enough money to buy food that you or your family need (19)	3.82	(3.2 - 4.62)	81.45	(68.24 - 98.53)	7.99	Financial
Your physical health (20)	3.69	(3.32 - 4.09)	72.00	(64.88 - 79.95)	4.18	Health
Your children being kind and caring about other people (21)	3.61	(2.85 - 4.64)	86.27	(68.16 - 110.82)	7.35	Family Well-being
You having enough financial resources for your retirement years (22)	3.26	(2.82 - 3.81)	104.05	(89.8 - 121.4)	5.19	Financial
Your mental health (23)	3.24	(2.97 - 3.53)	78.08	(71.67 - 85)	3.17	Mental Health
Your relationship with your spouse, partner, or closest friend being stronger than ever (24)	3.21	(2.72 - 3.86)	82.76	(70.07 - 99.37)	4.70	Relationships
You having enough material assets and resources for the future (25)	2.92	(2.56 - 3.34)	77.09	(67.57 - 88.23)	4.03	Financial
You and your family having enough to eat (26)	2.88	(2.32 - 3.59)	49.92	(40.07 - 62.13)	14.65	Financial
You having enough money to do everything you want to do (27)	2.66	(2.32 - 3.07)	74.46	(64.83 - 86.07)	4.73	Financial
You not having to worry about where your family's next meal will come from (28)	2.58	(2.16 - 3.09)	57.84	(48.49 - 69.35)	8.05	Financial
Your children growing up to follow the golden rule— treating others as they would like to be treated (29)	2.54	(2.02 - 3.22)	59.05	(46.95 - 74.97)	7.34	Family Well-being
The quality of your spouse/partner as a mate (30)	2.50	(2.09 - 3.01)	70.58	(58.97 - 84.95)	5.18	Relationships
You not having depression (31)	2.29	(2 - 2.61)	64.77	(56.64 - 73.94)	4.26	Mental Health
You feeling that you have enough money for the things that are most important to you (32)	2.28	(1.99 - 2.58)	61.67	(53.96 - 69.81)	3.69	Financial
Your freedom from physical pain (33)	2.08	(1.82 - 2.39)	47.08	(41.08 - 54.04)	4.98	Health
The absence of worry in your life (34)	2.07	(1.85 - 2.34)	56.97	(50.84 - 64.33)	3.11	Feelings
How happy you feel (35)	2.02	(1.91 - 2.15)	45.60	(42.93 - 48.4)	2.13	Feelings
How satisfied you are with your life (36)	1.99	(1.89 - 2.1)	45.39	(43.16 - 47.82)	1.84	Summum Bonum
How much you enjoy your life (37)	1.97	(1.86 - 2.08)	42.64	(40.36 - 45.01)	1.91	Feelings
You not feeling downhearted and depressed (38)	1.92	(1.73 - 2.13)	50.76	(45.75 - 56.36)	2.56	Feelings
The absence of stress in your life (39)	1.85	(1.64 - 2.1)	51.15	(45.26 - 57.91)	3.38	Time
Your rating of your life on a ladder where the lowest rung is "worst possible life for you" and the highest rung is "best possible life for you" (40)	1.85	(1.72 - 1.98)	41.19	(38.41 - 44.19)	2.59	Summum Bonum
The quality of your romantic relationships, marriage, love life or sex life (41)	1.76	(1.46 - 2.12)	54.52	(45.17 - 65.72)	8.71	Relationships
You enjoying every day (42)	1.67	(1.52 - 1.84)	37.64	(34.31 - 41.49)	2.16	Feelings
You getting the health care you need (43)	1.67	(1.42 - 1.95)	37.82	(32.27 - 44.14)	5.22	Financial
How high your income is compared to the income of other people around you (44)	1.64	(1.37 - 1.97)	42.07	(35.19 - 50.4)	7.65	Status
You not feeling anxious (45)	1.60	(1.46 - 1.75)	43.49	(39.8 - 47.45)	3.52	Feelings
Your physical safety and security (46)	1.59	(1.38 - 1.86)	25.19	(21.82 - 29.39)	5.41	Local Public Goods
The absence of sadness in your life (47)	1.47	(1.37 - 1.57)	37.81	(35.18 - 40.53)	2.54	Feelings
You feeling calm and peaceful (48)	1.40	(1.26 - 1.55)	31.35	(28.19 - 34.83)	2.64	Feelings
Your sense of control over your life (49)	1.27	(1.19 - 1.35)	28.26	(26.57 - 30.03)	2.29	Meaning and Fulfillment
You having hope (50)	1.25	(1.11 - 1.42)	30.25	(26.79 - 34.17)	3.24	Meaning and Fulfillment
You feeling well-rested (51)	1.17	(1.03 - 1.34)	27.28	(23.93 - 31.22)	3.95	Health
You liking what you do every day (52)	1.15	(1.04 - 1.27)	25.30	(22.85 - 27.93)	2.22	Meaning and Fulfillment
You having people you can turn to in time of need (53)	1.12	(0.96 - 1.29)	27.00	(23.23 - 31.14)	4.98	Relationships
You reaching most of your goals over the past 12 months (54)	1.11	(0.98 - 1.28)	27.45	(24.2 - 31.48)	3.69	Meaning and Fulfillment
You having many options and possibilities in your life and the freedom to choose among them (55)	1.09	(0.96 - 1.24)	25.39	(22.33 - 28.72)	3.47	Meaning and Fulfillment
You not having to worry about being unemployed (56)	1.09	(0.92 - 1.27)	32.35	(27.47 - 37.75)	5.94	Financial
You feeling active and productive every day (57)	1.08	(0.97 - 1.19)	24.41	(21.96 - 27.07)	2.50	Meaning and Fulfillment
You having a lot of energy (58)	1.07	(0.94 - 1.2)	25.17	(22.25 - 28.43)	3.31	Health
Women being treated fairly in your nation (59)	1.05	(0.85 - 1.3)	23.12	(18.75 - 28.57)	12.70	Non-local Public Goods
Your life being more than just getting things done (60)	1.04	(0.92 - 1.17)	24.73	(21.97 - 27.89)	3.01	Meaning and Fulfillment
The extent to which you feel the things you do in your life are worthwhile (61)	1.03	(0.97 - 1.08)	22.62	(21.44 - 23.85)	1.89	Meaning and Fulfillment

Your knowledge and skills (62)	1.02	(0.89 - 1.17)	16.44	(14.36 - 18.86)	4.30	Being Learned
Your sense of purpose (63)	1.02	(0.95 - 1.1)	24.26	(22.66 - 26)	2.42	Meaning and Fulfillment
You not feeling tired all the time (64)	0.99	(0.87 - 1.13)	25.02	(22 - 28.41)	3.95	Health
Your living environment not being spoiled by crime and violence (65)	0.99	(0.84 - 1.16)	20.32	(17.23 - 23.97)	6.31	Local Public Goods
You getting enough sleep (66)	0.98	(0.84 - 1.14)	23.62	(20.19 - 27.55)	5.30	Health
How much of the time the things you do seem meaningful (67)	0.96	(0.86 - 1.07)	21.91	(19.62 - 24.39)	2.71	Meaning and Fulfillment
You being a good person (68)	0.94	(0.85 - 1.03)	14.75	(13.4 - 16.19)	3.52	Prosocial Virtues
You feeling that you have enough time for the things that are most important to you (69)	0.92	(0.86 - 0.98)	18.40	(17.26 - 19.68)	2.34	Time
You being able to turn your good intentions into actions (70)	0.89	(0.78 - 1.01)	17.88	(15.69 - 20.19)	3.40	Prosocial Virtues
How satisfied you are with your standard of living compared to the people you spend time with (71)	0.85	(0.75 - 0.96)	18.87	(16.71 - 21.27)	3.19	Status
How often you smile or laugh (72)	0.85	(0.73 - 0.97)	18.41	(16 - 21.1)	3.86	Feelings
You being a winner in life (73)	0.83	(0.72 - 0.95)	21.62	(18.85 - 24.88)	4.33	Status
Your spouse/partner taking on their fair share of responsibility for the household (74)	0.81	(0.67 - 0.97)	22.18	(18.31 - 26.6)	5.21	Relationships
Your home being comfortable (75)	0.80	(0.71 - 0.92)	15.52	(13.63 - 17.66)	3.87	Financial
The wisdom you have been able to accumulate (76)	0.80	(0.7 - 0.92)	13.64	(11.98 - 15.59)	3.65	Being Learned
You not being lonely (77)	0.77	(0.7 - 0.85)	20.40	(18.53 - 22.38)	3.65	Feelings
Your friends and family giving you positive energy every day (78)	0.77	(0.68 - 0.87)	17.24	(15.18 - 19.57)	3.73	Relationships
You taking care of others instead of just yourself (79)	0.75	(0.65 - 0.87)	16.19	(13.95 - 18.64)	4.62	Prosocial Virtues
The absence of anger in your life (80)	0.75	(0.66 - 0.87)	18.65	(16.27 - 21.47)	4.20	Feelings
You having people in your life who see the good in you (81)	0.73	(0.64 - 0.82)	13.87	(12.14 - 15.71)	3.60	Relationships
Your ability to climb a flight of stairs (82)	0.71	(0.59 - 0.86)	13.68	(11.33 - 16.52)	8.69	Health
You not being bothered by having little interest or pleasure in doing things (83)	0.70	(0.62 - 0.79)	17.92	(15.85 - 20.17)	3.14	Mental Health
You being a good friend and doing your duty by your friends (84)	0.67	(0.58 - 0.77)	12.98	(11.24 - 14.93)	4.20	Prosocial Virtues
You learning or doing something interesting every day (85)	0.64	(0.56 - 0.74)	13.74	(12 - 15.66)	3.82	Meaning and Fulfillment
You not having things stolen from you (86)	0.64	(0.54 - 0.75)	11.28	(9.58 - 13.26)	5.75	Local Public Goods
You feeling like you have work-life balance (87)	0.61	(0.54 - 0.69)	13.62	(11.97 - 15.36)	3.08	Time
You always making time for regular trips or vacations with friends and family (88)	0.60	(0.51 - 0.7)	17.48	(14.87 - 20.48)	5.72	Time
How much fun you have when you get together with friends (89)	0.59	(0.52 - 0.68)	11.23	(9.8 - 12.85)	3.84	Relationships
You finding meaning in the world (90)	0.59	(0.52 - 0.67)	13.45	(11.8 - 15.33)	3.22	Meaning and Fulfillment
You being satisfied with your job (91)	0.59	(0.51 - 0.67)	14.72	(12.74 - 16.8)	4.05	Work
You getting to use your strengths to do what you do best every day (92)	0.53	(0.47 - 0.6)	11.50	(10.14 - 13.01)	3.19	Meaning and Fulfillment
You having a life outside of work (93)	0.53	(0.46 - 0.61)	11.95	(10.44 - 13.71)	3.88	Time
How much you like your home (house or apartment) (94)	0.51	(0.44 - 0.59)	11.20	(9.67 - 12.93)	4.41	Financial
You showing people the right way to live by your words and actions (95)	0.49	(0.42 - 0.57)	9.64	(8.27 - 11.11)	4.53	Status
The ability of ordinary citizens to influence your national government (96)	0.49	(0.39 - 0.59)	12.15	(9.71 - 14.88)	11.33	Non-local Public Goods
The overall quality of your experience at work (97)	0.48	(0.42 - 0.56)	10.49	(9.04 - 12.09)	4.18	Work
You being able to spend a lot of time with your friends (98)	0.47	(0.4 - 0.55)	11.38	(9.68 - 13.27)	5.11	Time
The air in your area not being polluted (99)	0.46	(0.37 - 0.55)	9.77	(8.01 - 11.75)	8.23	Local Public Goods
You having the frequent opportunity to see things of beauty (100)	0.45	(0.39 - 0.51)	8.22	(7.16 - 9.39)	3.91	Being Learned
You living in a city or area that is perfect for you (101)	0.44	(0.38 - 0.51)	10.89	(9.29 - 12.6)	4.52	Local Public Goods
You having someone in your life who always encourages you to be healthy (102)	0.43	(0.37 - 0.5)	10.91	(9.29 - 12.83)	5.52	Relationships
The pleasure you get from helping people (103)	0.39	(0.33 - 0.45)	7.22	(6.17 - 8.39)	4.78	Prosocial Virtues
How much you can trust most people in your nation (104)	0.39	(0.32 - 0.46)	8.86	(7.37 - 10.51)	6.28	Non-local Public Goods
You doing your duty (105)	0.37	(0.31 - 0.43)	7.01	(5.95 - 8.13)	4.60	Prosocial Virtues
At work, you getting to use your strengths to do what you do best every day (106)	0.34	(0.29 - 0.39)	7.69	(6.64 - 8.87)	4.04	Work
You feeling generous (107)	0.32	(0.27 - 0.37)	6.10	(5.16 - 7.17)	4.95	Prosocial Virtues
You having an impact on the world (108)	0.27	(0.22 - 0.32)	7.22	(5.94 - 8.71)	7.00	Meaning and Fulfillment
How much you trust the police in your nation (109)	0.26	(0.2 - 0.32)	6.87	(5.41 - 8.59)	12.54	Non-local Public Goods
You not being discriminated against for any reason (110)	0.25	(0.21 - 0.31)	5.59	(4.54 - 6.84)	7.80	Non-local Public Goods
How much you trust the courts in your nation (111)	0.25	(0.2 - 0.31)	6.28	(5.07 - 7.66)	9.60	Non-local Public Goods
You having the courage to talk to people you don't already know (112)	0.25	(0.21 - 0.3)	6.90	(5.66 - 8.35)	7.42	Prosocial Virtues
You being satisfied with your city (113)	0.25	(0.21 - 0.29)	5.52	(4.66 - 6.48)	4.45	Local Public Goods
How easy it is for you to express who you are through your lifestyle, culture, and beliefs (114)	0.23	(0.19 - 0.26)	4.24	(3.56 - 4.97)	4.49	Status
You having a leader in your life who makes you enthusiastic about the future (115)	0.20	(0.16 - 0.24)	5.59	(4.53 - 6.71)	7.10	Status
You having others remember your accomplishments long after your death (116)	0.18	(0.14 - 0.22)	5.08	(4.05 - 6.18)	8.54	Status
Your understanding of the society you live in (117)	0.17	(0.14 - 0.2)	3.00	(2.48 - 3.6)	5.98	Being Learned
How easy it is for you to get from home to work and back (118)	0.16	(0.13 - 0.2)	3.31	(2.66 - 4.04)	8.28	Time
People doing what you tell them to do (119)	0.16	(0.13 - 0.21)	3.63	(2.83 - 4.6)	9.65	Status
Your stature in your community (120)	0.15	(0.12 - 0.18)	3.82	(3.09 - 4.64)	6.75	Status
You being part of a grand story (121)	0.15	(0.12 - 0.18)	4.11	(3.3 - 5.01)	7.63	Meaning and Fulfillment
Your freedom from government interference in your dealings with people who are citizens of other countries (122)	0.13	(0.1 - 0.16)	2.74	(2.17 - 3.44)	10.22	Non-local Public Goods
Your cultures and traditions being honored (123)	0.10	(0.08 - 0.14)	2.24	(1.67 - 2.92)	14.95	Status
You having good taste and being up on the latest things (124)	0.10	(0.08 - 0.12)	2.11	(1.66 - 2.64)	8.15	Status
How much you trust the media in your nation (125)	0.07	(0.05 - 0.1)	2.04	(1.48 - 2.72)	16.97	Non-local Public Goods
Your enjoyment of risky situations (126)	0.04	(0.03 - 0.06)	1.19	(0.84 - 1.65)	21.12	Being Learned

A particularly interesting pattern emerges when examining the standard SWB questions (highlighted in blue in Table 2). These aspects - including *How happy you feel*, *How satisfied you are with your life*, and similar measures – consistently show both relatively low marginal utilities compared to top aspects, and remarkably low variance in our sample. While the top family-related aspects have marginal utilities 20-70 times higher than the average aspect, these standard SWB measures have marginal utilities only about 1.6-2 times the average. Additionally, their variance estimates range from 1.84 to 2.59, making them among the most consistently valued aspects across respondents. This pattern suggests that while people broadly agree on the relative importance of these general well-being measures, they place substantially higher and more variable value on specific dimensions like family health and financial security.

Notably, we also find several pro-social virtues such as *You feeling generous*, and *You doing your duty* have low estimated marginal utilities (ranked 107 and 103 out of 126, respectively). One might expect that social desirability concerns would artificially inflate the reported importance of pro-social aspects in traditional surveys. To investigate whether social desirability influences our marginal utility estimates, we analyse data from our aspect flagging survey, where we asked respondents whether "someone would downplay how much they want this aspect because openly wanting it might make them look bad." After constructing aspect-level scores for the flag as described in section 1.6, we find a significant negative relationship (slope = -1.71) between aspects' scores and the estimated log marginal utility means. The magnitude of this relationship is substantial: an aspect scoring at the lowest end of this social desirability flag (like *Your children's health*) would have a predicted log marginal utility mean 2.69 higher than an aspect scoring at the highest end (like *How high your income is compared to the income of other people around you*).[8] This observed relationship between social desirability and marginal utilities could be interpreted in multiple ways. It might reflect genuine alignment between social norms and true preferences, or it could indicate that our tradeoff-based measurement remains susceptible to social desirability influences. Under either interpretation, this relationship explains only 14% of the variation in log marginal utility aspect means, indicating that while social factors matter, substantial meaningful variation in preferences across aspects remains.

[8] Figure A6 in the Appendix displays this relationship visually.

While our per-point estimates provide a clear ranking of aspects, the "points" unit itself lacks inherent meaning. Unlike comparing the value of one apple versus one orange, the value of a one-point change on our rating scale is not naturally interpretable. To address this, columns 4 and 5 of Table 2 present marginal utility estimates per the standard deviation of ratings for each aspect. This rescaling expresses the relative value of aspects in terms of a more natural unit - the value of a one standard deviation change in the aspect level.

Interestingly, this alternative scaling largely preserves the ordinal ranking of aspects, with family well-being, financial security, and health remaining at the top of the distribution. This stability in rankings across scaling methods highlights the magnitude of differences in marginal utilities across aspects. The variation in marginal value per point is so substantial that even after accounting for differences in the dispersion of aspect levels (standard deviations), the same general ordering persists. Later analyses will demonstrate that these estimates of value are meaningful beyond their unit. They align closely with direct elicitation of aspect importance through simpler survey methods, suggesting that our framework captures genuine patterns in how people value different dimensions of well-being.

3.2 Comparing Tradeoff-Based Estimates with Direct Importance Measures

Building on the Aspect Flagging survey described in section 1.6, we analyse three specific flags that help validate our tradeoff-based approach to measuring marginal utilities. Each flag was included in a different survey wave and captures a distinct way of asking respondents about the importance they place on different aspects of well-being. We compare these direct importance measures with our theoretically-motivated tradeoff estimates to shed light on both our measurement approach and the interpretation of our results.

We analyse three distinct survey flags, each asking about aspect importance in different ways. The first asks about global importance: "How important is this aspect to you?" The second focuses on marginal importance relative to one's current circumstances: "Think about your own life as it is. Given how much you have of this aspect, how eager would you be to get more? In particular, compared to other aspects of life, how valuable would it be to have a little bit more of this aspect?" The third explicitly frames the question in terms of tradeoffs: "Imagine you could gain more of this aspect by giving up other things. How much would you be willing to give up?" These questions progressively incorporate more of the key features of our original tradeoff

framework: the focus on marginal changes relative to current circumstances, and the inherent tradeoffs between different aspects of well-being.

Figure 4 presents scatter plots comparing our estimated log marginal utilities (μ_j) with these three direct measures, each standardized to facilitate comparison. Several patterns emerge. First, all three direct measures show substantial correlation with our tradeoff-based estimates, with R^2 values ranging from 0.63 for global importance to 0.82 for the tradeoff-focused question. This strong alignment validates our tradeoff-based approach. Aspects that people say are important are indeed the ones they prioritize when faced with explicit tradeoffs.

Second, the relationship between direct importance measures and log marginal utilities becomes stronger as the questions more closely mirror the conceptual framework underlying our tradeoff approach. The weakest correlation is with global importance, which neither emphasizes marginal changes nor makes tradeoffs salient. The correlation strengthens for marginal importance, which explicitly asks respondents to consider the value of incremental improvements given their current circumstances – a key feature of marginal utility. The strongest relationship emerges with the tradeoff-focused question, which captures both the local nature of the marginal changes and the necessity of giving up other aspects to achieve improvements.

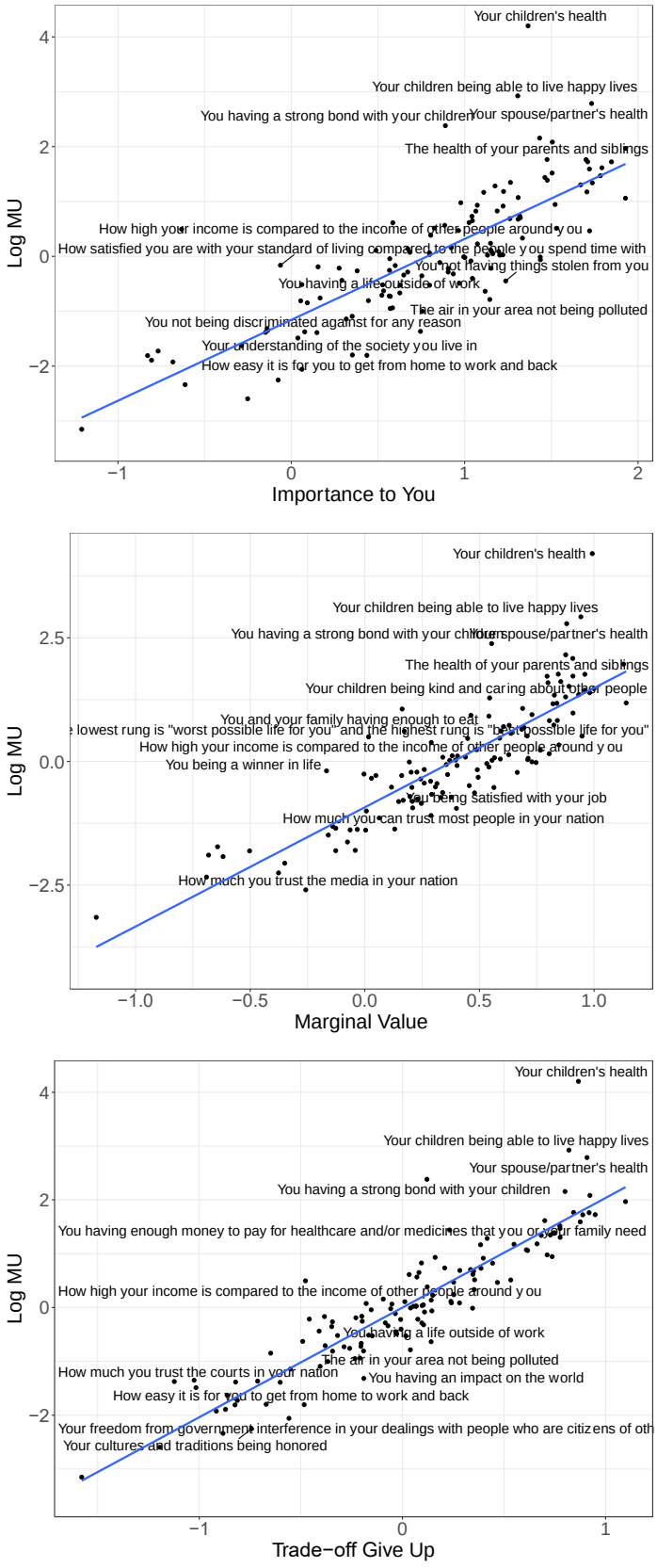
Third, the linear relationship we observe in these scatter plots is particularly meaningful. The fact that direct importance ratings correlate linearly with our log marginal utility estimates suggests that when people rate the importance of aspects, they are naturally thinking in logarithmic terms. This aligns with a wide body of research on how humans process quantities and magnitudes.[9] The slopes of these relationships provide a practical scaling factor. They tell us how to potentially convert simple importance ratings into weights that can be used for cost-benefit calculations or policy analysis.

These relationships provide strong validation for both our measurement approach and the interpretation of our results. While direct importance questions can provide a reasonable proxy for marginal utilities, our structured tradeoff approach appears better suited to capturing the precise concept we aim to measure – the relative value of marginal improvements across different aspects of well-being. The strong alignment between these different measurement

[9] See Dehaene, 2003

approaches suggests that people have relatively stable and well-defined preferences over aspects of well-being that can be elicited through various methods.

Figure 4: Comparing μ_j to Direct Importance Elicitation



3.3 Grouping Aspects

To better understand how people value different types of aspects, we group them into categories using two distinct approaches. First, we create subjective groupings by manually categorizing aspects based on their text descriptions alone. This yields several intuitive categories like "Family Well-being," "Health," and "Financial." We then estimate the average marginal utility and average preference heterogeneity for aspects within each category, shown in Table 3.

Family-related aspects have the highest average marginal utility, followed by aspects categorized as summum bonum (aspects such as *The happiness of you and your family* that, on their face, cover everything that matters and therefore should have the highest marginal utility), and then by financial aspects. In contrast, aspects related to status, non-local public goods, and pro-social virtues (e.g., *You being a good friend*) have the lowest average marginal utilities.

Table 3 – Subjective Groups

Group Estimates			
Grouping (# Aspects)	$\mathcal{M}_j$	**LB - UB**	e^{σ_j}
Family Well-being (9 aspects)	8.86	(8.05 - 9.74)	9.91
Summum Bonum (4 aspects)	3.31	(3.11 - 3.52)	3.49
Financial (17 aspects)	2.56	(2.47 - 2.67)	5.85
Mental Health (3 aspects)	1.73	(1.62 - 1.85)	3.52
Relationships (11 aspects)	1.58	(1.5 - 1.68)	6.11
Health (8 aspects)	1.55	(1.48 - 1.63)	4.94
Feelings (11 aspects)	1.41	(1.36 - 1.45)	2.94
Meaning and Fulfillment (15 aspects)	0.77	(0.74 - 0.8)	3.43
Local Public Goods (6 aspects)	0.61	(0.57 - 0.65)	5.74
Time (7 aspects)	0.59	(0.56 - 0.63)	4.44
Prosocial Virtues (8 aspects)	0.51	(0.49 - 0.54)	4.66
Work (3 aspects)	0.46	(0.42 - 0.5)	4.10
Being Learned (5 aspects)	0.30	(0.28 - 0.33)	6.76
Status (11 aspects)	0.29	(0.27 - 0.31)	6.95
Non-local Public Goods (8 aspects)	0.27	(0.25 - 0.29)	10.75

Our second approach employs computational text analysis to create data-driven groupings. We employ ChatGPT (gpt-4) to derive two-sentence descriptions of each aspect. Then, using natural language processing techniques, we convert each aspect's text description into a numerical representation and apply clustering algorithms to group similar aspects together. A complete description of this process is included in Appendix Section A1.

This automated approach identifies clusters that largely align with our intuitive categorization, while revealing some interesting nuances. "Family health and well-being" emerges as the highest-valued cluster (M_j = 4.17), followed by "Love and relationships" (M_j = 3.60) and "Financial security" (M_j = 2.70). Notably, "Sleep" forms its own distinct cluster with moderate marginal utility (M_j = 1.04), highlighting its unique importance that might be overlooked in broader categorizations. At the lower end of the spectrum, we find "Social justice" (M_j = 0.24) and "Social trust" (M_j = 0.21) clusters, reinforcing our earlier observation that aspects related to broader social concerns tend to have lower marginal utilities despite their potential social desirability.

Table 4 - Groups from Embeddings

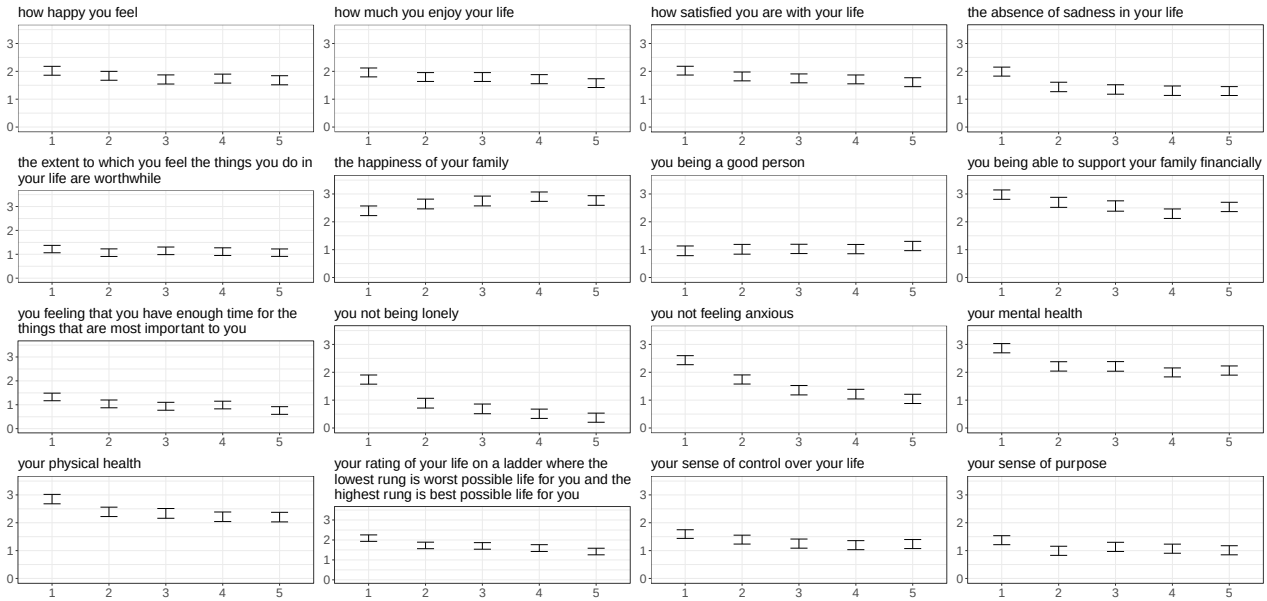
Group Estimates			
Grouping (# Aspects)	$\mathcal{M}_j$	**LB - UB**	e^{σ_j}
Family health and well-being (17 aspects)	4.17	(3.96 - 4.4)	6.65
Love and relationships (7 aspects)	3.60	(3.33 - 3.91)	7.77
Financial security (13 aspects)	2.70	(2.58 - 2.83)	6.31
Physical health and power (4 aspects)	1.99	(1.87 - 2.11)	4.18
Peace and security (11 aspects)	1.52	(1.46 - 1.58)	3.85
Sleep (3 aspects)	1.04	(0.96 - 1.13)	4.40
Fulfillment and satisfaction (21 aspects)	0.81	(0.79 - 0.84)	3.10
Morality (10 aspects)	0.81	(0.77 - 0.86)	4.79
Growth and experience (3 aspects)	0.81	(0.75 - 0.87)	3.93
Social connection (5 aspects)	0.50	(0.47 - 0.54)	5.09
Vigor and impact (12 aspects)	0.42	(0.39 - 0.44)	6.36
Home/Community Amenities (8 aspects)	0.33	(0.31 - 0.35)	5.46
Social justice (8 aspects)	0.24	(0.22 - 0.26)	9.39
Social trust (4 aspects)	0.21	(0.18 - 0.23)	11.02

4. Explaining differences in marginal utilities across people

4.1 MU vs Levels

To understand how relative marginal utilities vary across individuals, we explore heterogeneity by individual circumstance. We group individuals based on their reported levels of each aspect, dividing the sample into quintiles. Within each quintile, we average the individual estimates of log marginal utility for that aspect. Figure 5 shows this relationship for the 16 aspects that feature in Baseline and every block of the Bottomless survey.

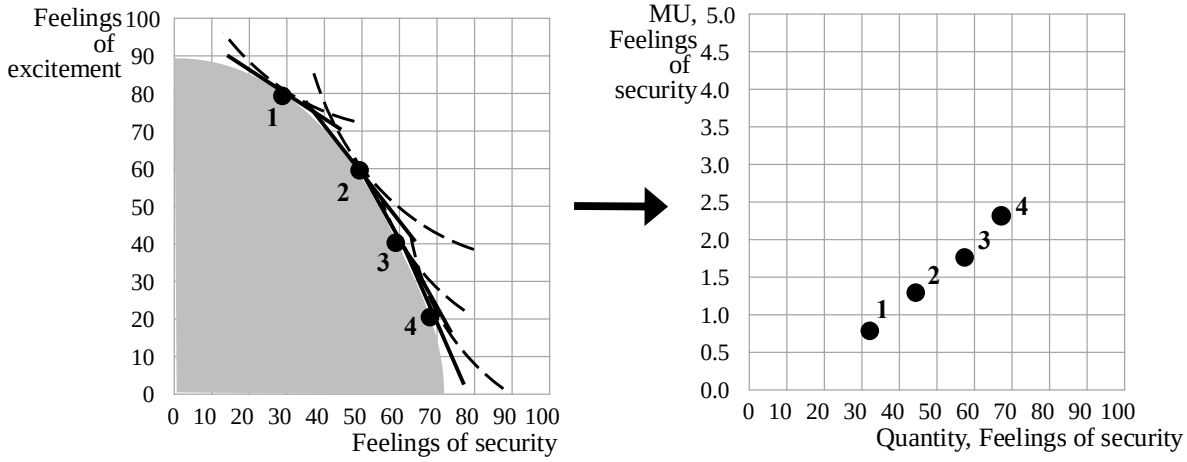
Figure 5: Relationship between level quantiles and μ_j for 16 core aspects



While many aspects display a downward-sloping relationship between levels and marginal utilities (consistent with diminishing marginal utility), this pattern is not universal nor mechanically determined by our estimation approach. To better understand what we can infer from these empirical patterns, we propose a framework of production and preferences over dimensions of well-being.

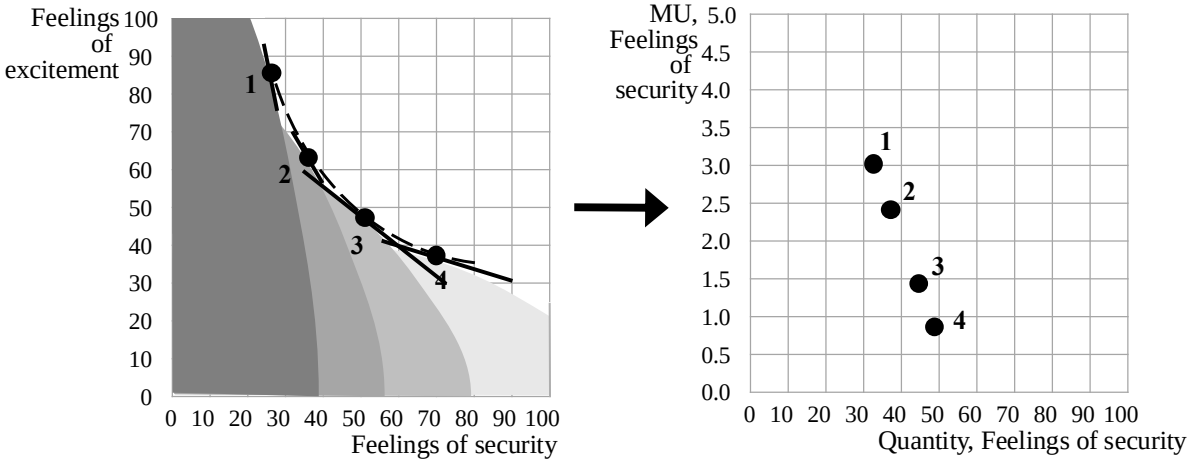
Consider two aspects of well-being: "feelings of excitement" and "feelings of security." Individuals have technologies for producing these aspects and preferences over their levels. The relationship between current levels and marginal utilities depends critically on what drives variation in aspect levels across individuals. We illustrate this with two stylized scenarios.

Figure 6: Production possibilities and preferences when individuals differ only in preferences



In the first scenario (Figure 6), all individuals have identical production possibilities—they face the same concave production possibility frontier (PPF) for transforming inputs into excitement and security. Variation in observed aspect levels stems entirely from heterogeneity in preferences. Some individuals strongly prefer excitement over security and therefore choose points on the PPF with high excitement and low security. Others with stronger preferences for security choose the opposite.

Figure 7: Production possibilities and preferences when individuals differ only in production



The second scenario (Figure 7) illustrates the opposite case. Here, all individuals have identical preferences (represented by the same convex indifference curve), but they differ in their production technologies. Some individuals are relatively more efficient at producing excitement, while others can more easily generate feelings of security.

These two scenarios represent extremes on a spectrum. In reality, both preference heterogeneity and production technology differences likely contribute to the patterns we observe. The downward-sloping relationship observed for many aspects suggests that production differences play a dominant role—individuals with lower levels of an aspect typically value marginal improvements more highly. However, the varying slopes and occasional upward-sloping relationships indicate that preference heterogeneity also matters substantially.

This framework helps interpret the heterogeneity in our estimates. When we observe strong negative relationships between aspect levels and marginal utilities (as with many health and financial security aspects), it suggests that differences in individuals' capacity to produce these aspects drive much of the observed variation. When relationships are flatter or even positive, it suggests that preference heterogeneity plays a larger role in determining aspect levels.

4.2 Validation of the Supply vs. Demand Framework

To directly test our interpretive framework, we included a specific question in our aspect flagging survey designed to distinguish between supply-driven and preference-driven heterogeneity. The question asked:

For each aspect, think about **people you know who don't care much about getting more of it.** They might not care much about getting more for either of two reasons:

1. They already have plenty of it.
2. They don't value it much. For each aspect below, of people who don't care much about getting more, what fraction have each reason?

Respondents provided their judgment on a scale where lower scores indicate "they already have plenty of it" (supply-driven indifference) dominates, while higher scores indicate "they don't value it much" (preference-driven indifference) dominates.

Our framework generates a clear prediction: aspects where supply differences dominate should show steeper negative relationships between current levels and marginal utilities, while aspects where preference differences dominate should show flatter or even positive relationships. To test this prediction, we compare each aspect's score on this supply-vs-preference flag with the empirical slope of the relationship between ratings and marginal utilities.

Figure 8: Empirical Slope vs Supply-Demand Score

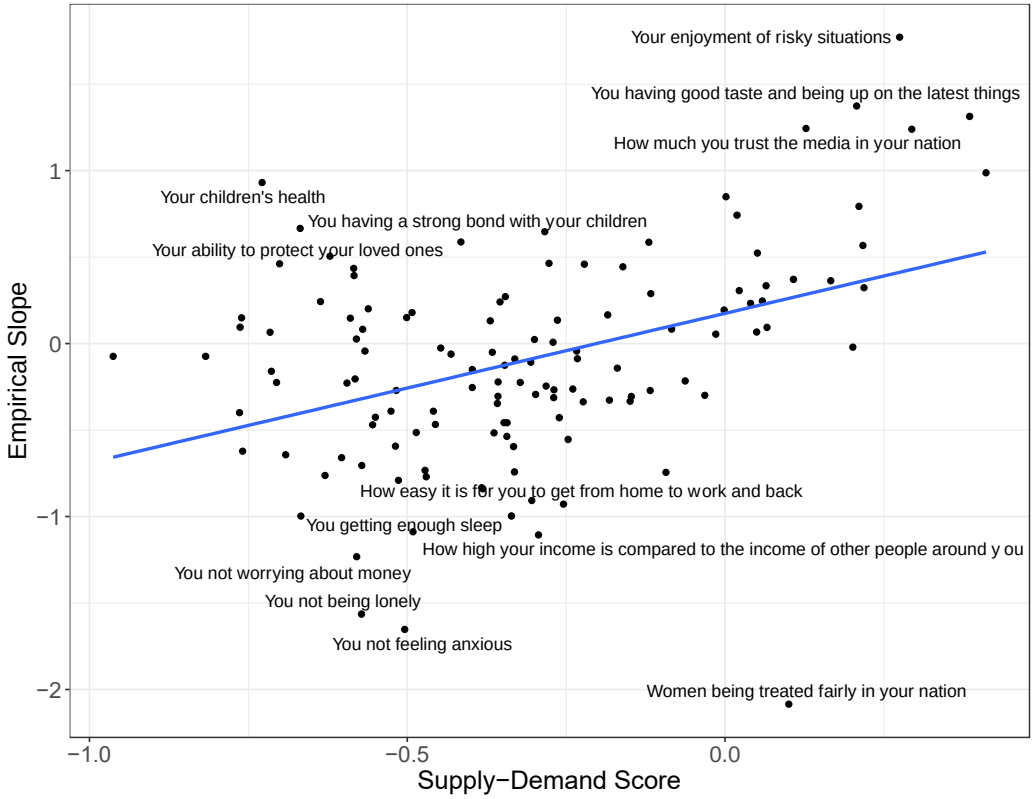


Figure 8 confirms this prediction. We find a statistically significant relationship between the aspect's supply-vs-preference score and the empirical slope of its ratings-log marginal utility relationship (slope = 0.86). Aspects that respondents judged as predominantly supply-driven (low scores) show steeper negative slopes, consistent with our second scenario where production technologies differ. Conversely, aspects judged as predominantly preference-driven (high scores) show flatter or more positive slopes, consistent with our first scenario where preferences differ.

This finding provides strong validation for our interpretive framework. It demonstrates that the observed relationships between aspect levels and marginal utilities reflect meaningful economic mechanisms rather than statistical artifacts. Moreover, it suggests that respondents

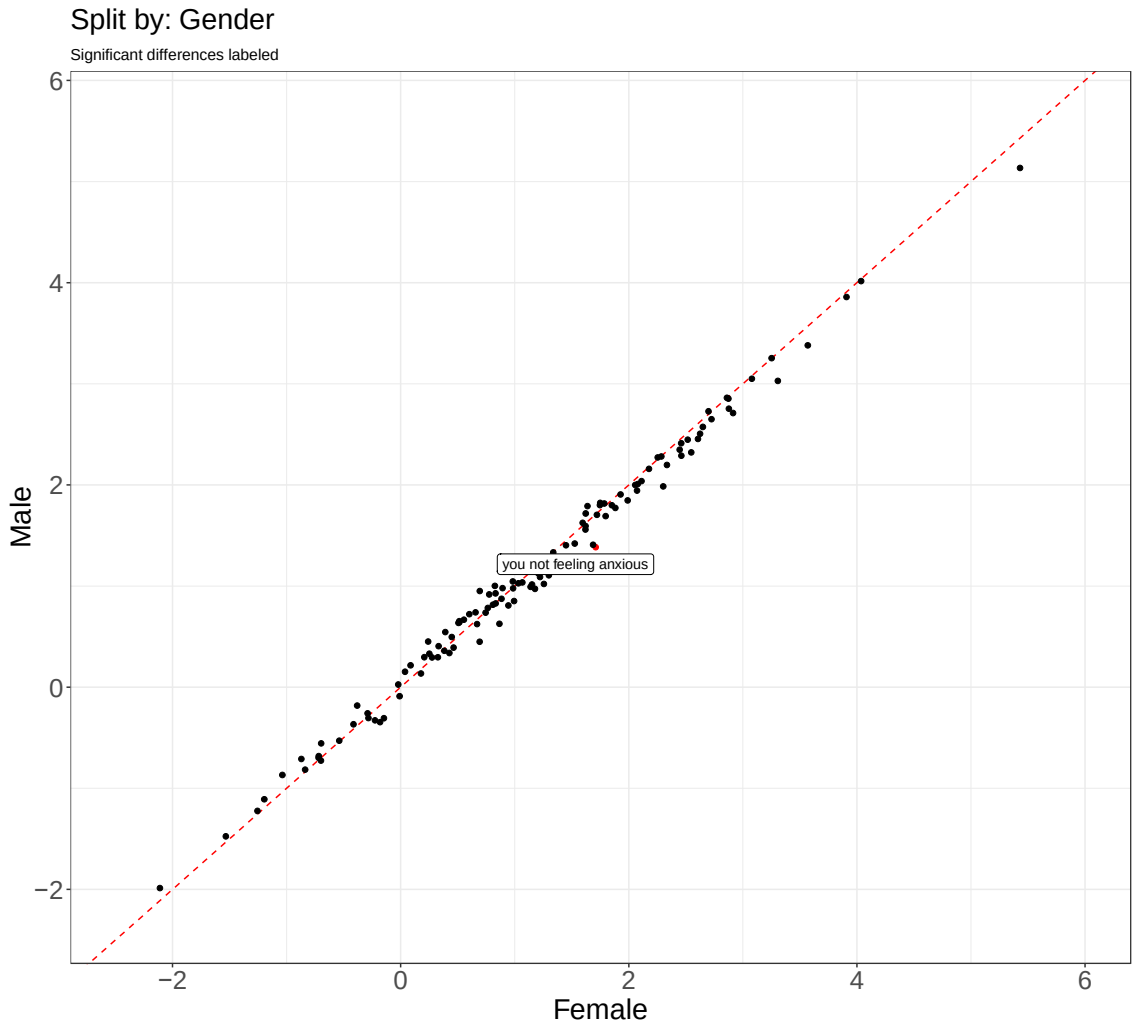
have intuitive understanding of the sources of heterogeneity in different aspects of well-being, and these intuitions align with the patterns we observe in our marginal utility estimates.

The result also has significant implications for how we interpret individual differences in well-being. For aspects where supply differences dominate (like many health and financial aspects), individuals with lower levels likely face greater constraints in production rather than simply having different preferences. This suggests that interventions targeting these constraints could generate substantial welfare improvements. In contrast, for aspects where preference differences dominate, the diversity in levels may primarily reflect legitimate differences in individual values rather than inequalities in capabilities or resources.

4.3 Demographic Heterogeneity

To investigate demographic differences in marginal utilities, we leverage our individual-level estimates from the full hierarchical model to examine group-level patterns. After obtaining the joint posterior distribution of all model parameters, we compute the posterior distribution of the average log marginal utility for each aspect within demographic groups by averaging the individual-level estimates across group members for each posterior draw. This approach maintains the correlation structure of our estimates while allowing us to quantify uncertainty in group differences. Figure 9 presents one example of a scatter plot of the posterior means of these group-averaged log marginal utilities, revealing the degree to which preferences align or diverge across demographic categories.

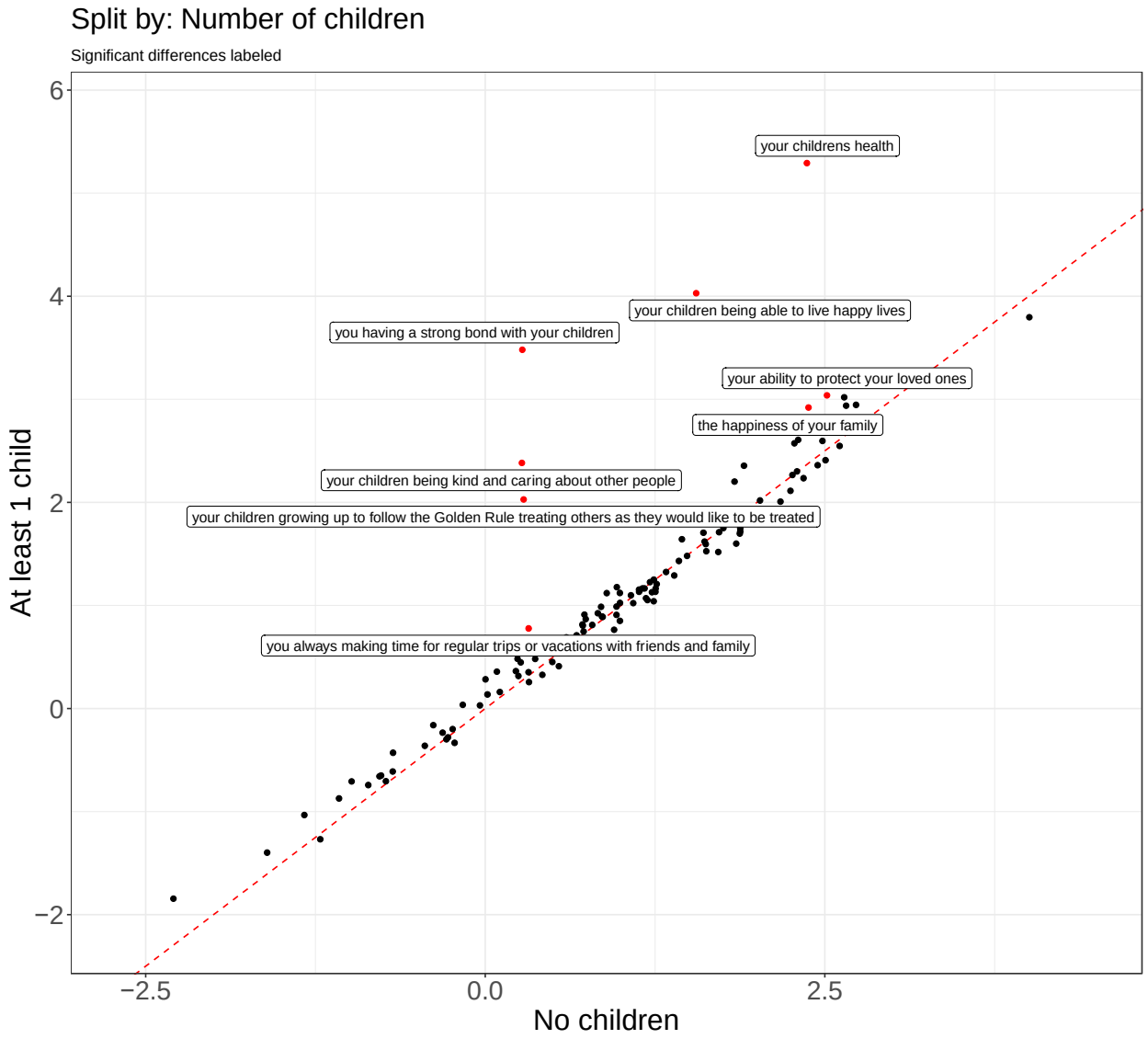
Figure 9: Scatterplot of μ_j by women vs men



Surprisingly, we find remarkable consistency in relative marginal utilities across demographic groups (see Benjamin et al. 2014b, who finds s a similar result). Figure 9 shows that most aspects cluster tightly along the 45-degree line when comparing across groups, indicating broad agreement about which aspects of well-being matter most. This consistency suggests that despite individual heterogeneity, there exists a shared understanding of well-being priorities that transcends many demographic boundaries.

Nevertheless, we do observe some meaningful differences aligned with life circumstances and social roles. Figure 10 highlights these selective differences for parents versus non-parents. Parents place significantly higher marginal utility on aspects related to children and family relationships. For example, *Your children's health* and *Having a strong bond with your children* show substantially higher marginal utilities among parents.

Figure 10: Scatterplot of μ_j by non-parents vs parents



These differences extend to relationship status more broadly, with partnered individuals placing higher value on aspects such as *Your spouse/partner's health*, *The happiness of your family*, *Your relationship with your spouse/partner or closest friend being stronger than ever*, *The quality of your spouse/partner as a mate*, *The quality of your romantic relationships, marriage, love life, or sex life*, and *Your spouse/partner taking on fair share of responsibility for the household*.

Demographic differences beyond family structure are more limited. Income shows no systematic variations in marginal utilities across aspects, contrary to what one might expect if certain dimensions functioned as luxury goods. Gender differences are minimal, with the only notable distinction being that women place higher marginal utility on *You not being anxious*.

Education levels show no significant differences in marginal utilities across aspects. Age correlations are similarly limited, with older respondents placing higher value primarily on *Your physical health*, reflecting the increasing salience of health concerns with age. Racial differences are minimal, with the most notable distinction being that Black respondents place higher marginal utility on *Not being discriminated against for any reason*, a pattern that likely reflects lived experiences with discrimination.

Political affiliation shows expected value differences: Democrats place higher marginal utility on *Women being treated fairly*, while Republicans value *Your culture and traditions being honored* more highly. Employment status reveals that unemployed respondents place higher marginal utility on *You not being anxious*, possibly reflecting the psychological impact of joblessness. Religious differences center primarily on cultural aspects, with religious respondents placing higher marginal utility on *Your culture and traditions being honored*. We provide the figures for each of these splits in Appendix Section A4.

These patterns suggest that while there exists broad agreement on well-being priorities, life circumstances and social identity do shape marginal utilities in predictable ways. However, the modest magnitude of these differences, relative to the overall consistency across groups, suggests that demographic factors explain only a small portion of the heterogeneity in marginal utilities that we observe across individuals.

5. Conclusion

Philosophers and social scientists have long theorized about what matters to people. Our findings both confirm and challenge these historical perspectives. We have provided systematic evidence on the relative marginal utilities of a wide range of aspects of well-being. We have four main conclusions. First, existing theories have missed some of the aspects of well-being that we find are most highly valued, such as *Your children's health*, *Your financial security*, and *The absence of worry in your life*. Second and relatedly, like previous related work, we find that happiness and life satisfaction, which are often assumed to capture all of what people care about, have far lower relative marginal utilities than many other aspects of well-being. Third, while there is substantial heterogeneity in preferences across individuals, little of that heterogeneity can be identified with the sociodemographic variables we measured. Finally, much of the heterogeneity across individuals is "supply-driven," meaning that people who assign a higher marginal utility to an aspect of well-being are, on average, people who have less of it.

One important limitation of our paper is that we primarily rely on stated preferences. Although features of our design aim to account for social-desirability bias and differences across respondents in how they interpret the aspects of well-being, stated preferences could differ from "true" preferences for various reasons, including simply that people may not be able to fully imagine changes in certain aspects of well-being. By finding real-world situations in which people face tradeoffs like those we study for a small set of aspects of well-being (as in Benjamin et al. 2014b), future work with real choices could provide an independent test of our methodology. Future research should also explore how these preferences evolve over longer time horizons and across different cultural contexts. Finally, developing methodologies to translate these marginal utility estimates into practical welfare indices could provide valuable tools for policy evaluation.

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Appendix

A1 Computational Text Analysis Methodology

To create interpretable, data-driven aspect groupings, we developed a multi-stage computational analysis pipeline that leverages natural language processing (NLP) and machine learning techniques. This appendix details our methodology.

A1.1 Generating Standardized Aspect Descriptions

First, we created standardized descriptions of each aspect to establish a common semantic basis for comparison. Using the GPT-4 language model (OpenAI), we generated concise two-sentence descriptions for each of our 126 aspects. This step was necessary because the aspect names alone (e.g., "Your children's health," "Your financial security") lacked sufficient textual context for robust semantic analysis.

We instructed the model to "describe and explain the aspect in two sentences, capturing what it means to most people in the current time," and specified that descriptions should be written to ensure anyone reading them "understands the essence of the aspect, and what it means to most people in the world today." This approach standardized the semantic representation of aspects while preserving their core meaning.

A1.2 Creating Semantic Embeddings

Next, we transformed these text descriptions into high-dimensional numerical representations (embeddings) using a state-of-the-art sentence transformer model (all-mpnet-base-v2). This model converts text into 768-dimensional vectors that capture semantic relationships between aspects, with similar concepts positioned closer together in the vector space.

The embedding process used the SentenceTransformer framework and involved:

1. Tokenizing each description into word pieces
2. Passing these tokens through the pre-trained neural network
3. Generating a dense vector representation for each aspect

These embeddings effectively distilled complex natural language descriptions into mathematical representations that preserve semantic relationships between aspects.

A1.3 Similarity Analysis and Dimensionality Reduction

We computed cosine similarity between all aspect pairs to create a similarity matrix, which quantifies the semantic relatedness between aspects. To visualize these relationships, we applied Uniform Manifold Approximation and Projection (UMAP) to reduce the 768-dimensional embeddings to a two-dimensional representation while preserving local and global structure. UMAP parameters were tuned to capture both local relationships (n_neighbors=5) and global structure (min_dist=0.3). This dimensionality reduction enabled the visualization of semantic relationships between aspects in a two-dimensional space.

A1.4 Cluster Analysis

To identify coherent aspect groups, we applied Spectral Clustering to the similarity matrix. This algorithm is particularly effective for detecting clusters in data represented by similarity graphs. We explored different clustering configurations to determine the optimal number of clusters (n=15) that balances granularity with interpretability.

The clustering process:

1. Normalized the similarity matrix to ensure proper scaling
2. Applied Spectral Clustering using the similarity matrix as input
3. Assigned each aspect to one of 15 clusters

A1.5 Cluster Interpretation and Naming

To interpret each cluster, we employed two complementary approaches:

1. **TF-IDF Analysis**: We identified the most distinctive terms within each cluster using Term Frequency-Inverse Document Frequency (TF-IDF) analysis. This helped extract key words that characterize each aspect group while downweighting common terms that appear across many aspects.
2. **Topic Modeling**: We applied BERTopic, a topic modeling technique that leverages transformers and class-based TF-IDF, to identify coherent themes within clusters. We used a custom set of stop words to filter out generic terms and extract meaningful topics.

In practice, BERTopic failed to generate topic names in most cases. Therefore, the resulting clusters were named using a combination of the top terms identified by TF-IDF analysis and subjective judgement to label the underlying conceptual grouping.

A2 Marginal Utility Estimates by Group

Figure A1: M_j By Group

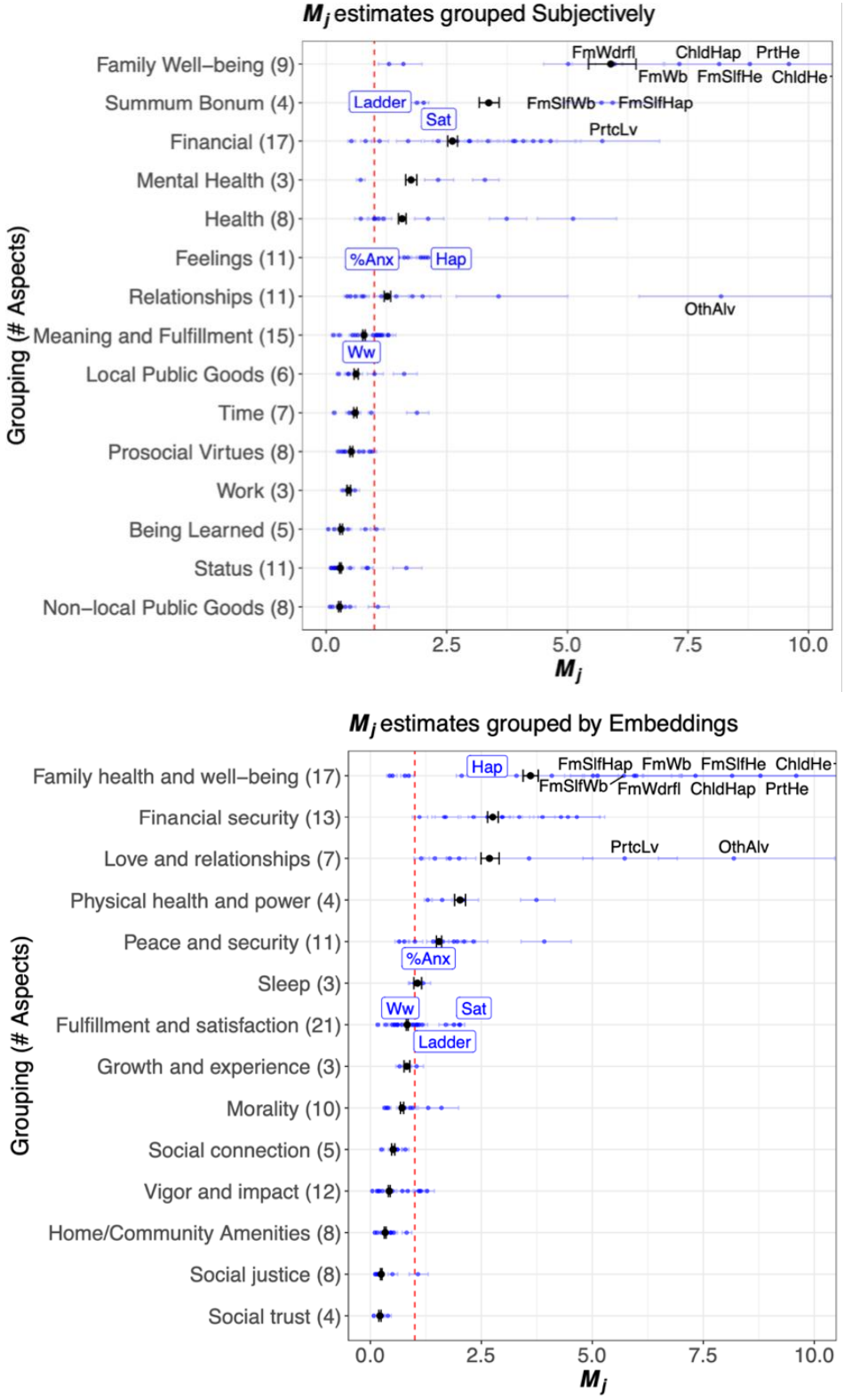
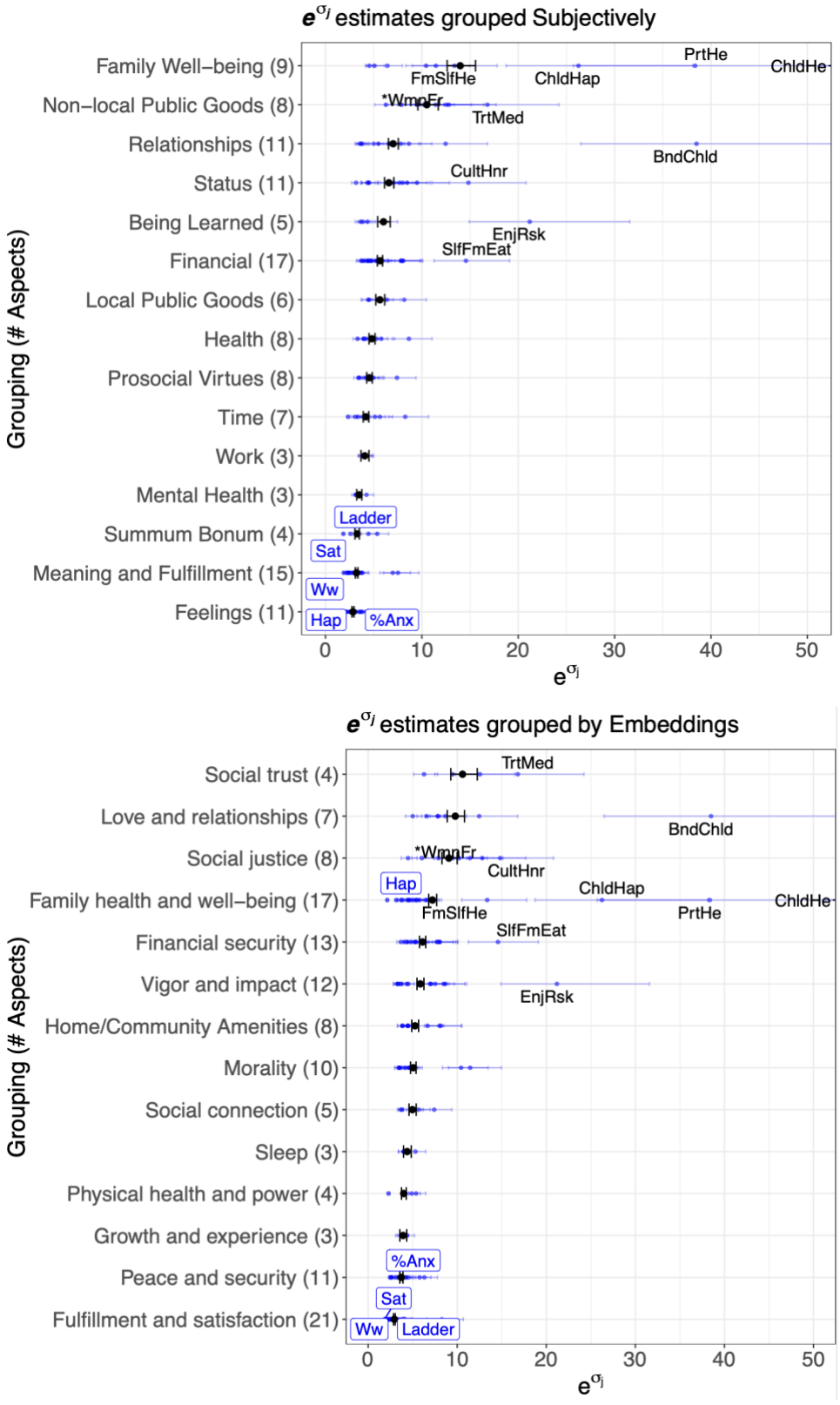


Figure A2: e^{σ_j} by Group



A3 Persistent vs Transitory variance

One issue in interpreting our estimated preference variation as differences across people is that the it is potentially a combination of true differences across people, and the fact that within-individuals, preferences can change over time.

To account for this, we estimate a modified version of our model. Fix an aspect *j*, and add a time index *t*. For now, assume there are only two time periods, $t = 0$ or $t = 1$. We model log marginal utility draws across the two time periods as

$$\begin{bmatrix} m_{ij,1} \\ m_{ij,2} \end{bmatrix} \sim \mathcal{N}\left(\begin{bmatrix} \mu_j \\ \mu_j \end{bmatrix}, \begin{bmatrix} \sigma^2_{m^p} + \sigma^2_{m^\tau} & \cdots \\ \sigma^2_{m^p} & \sigma^2_{m^p} + \sigma^2_{m^\tau} \end{bmatrix} \right)$$

where $\sigma^2{}_{m^p}$ and $\sigma^2{}_{m^\tau}$ are the *persistent* (differences across people) and *transitory* (differences across time) portions of the total variance. To estimate this model, we utilize data coming from two waves of surveys, (X) months apart. In each wave, participants answered tradeoff questions for the same set of 33 aspects. We limit our sample to respondents who answered tradeoffs for all 33 aspects in both waves of the survey. Using this sample, we estimate the results shown in Table XX

Table A1 – Baseline (33 Aspects): Persistent and Transitory components of variation in preferences

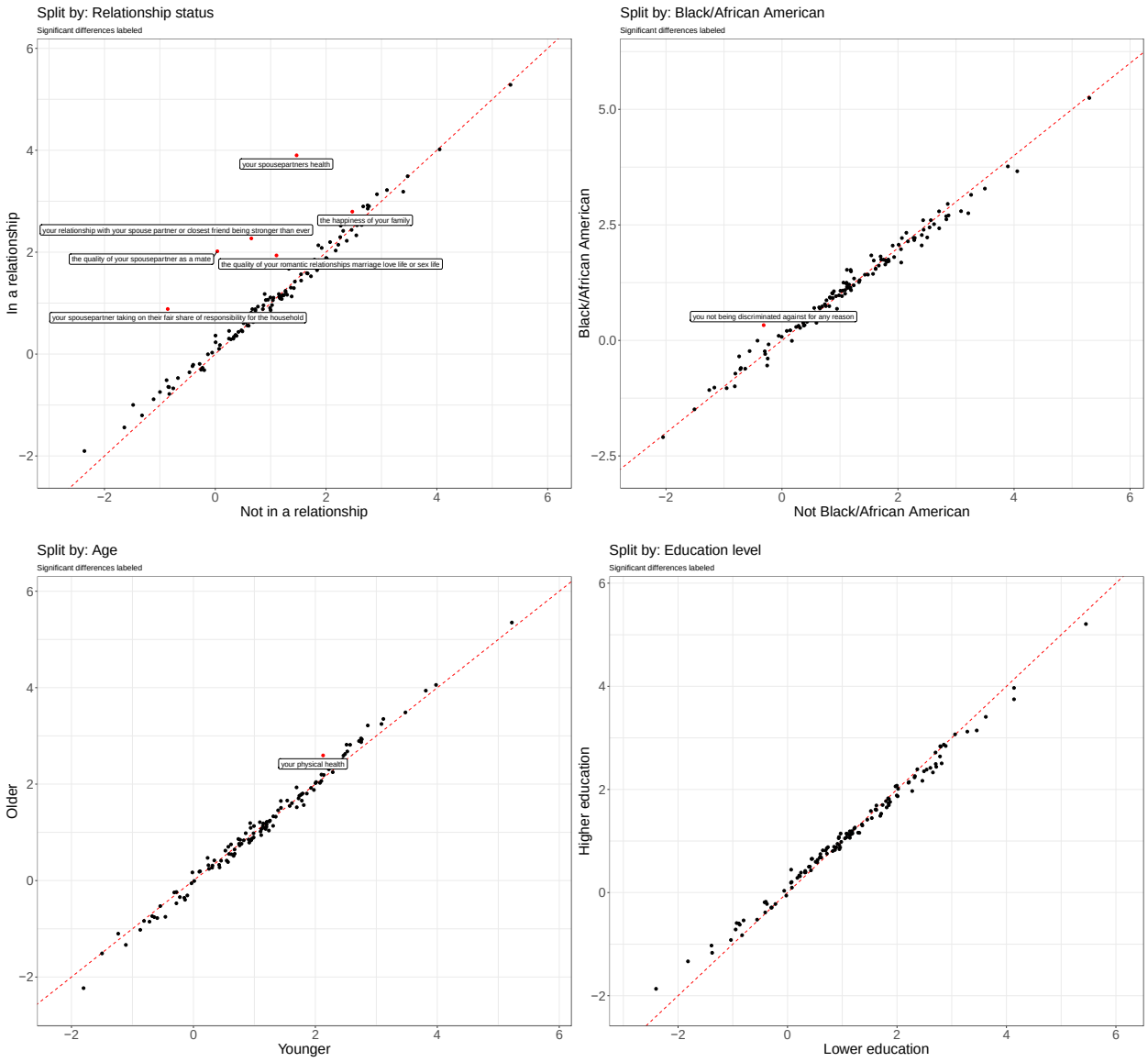
Comparing pooled and two-wave model		
Parameter	Pooled Estimate (LB - UB)	Two-Wave Estimate (LB - UB)
μ_e	**0.52** (0.49-0.55)	**0.47** (0.44-0.5)
σ_e	**0.77** (0.74-0.8)	**0.7** (0.67-0.73)
σ_m	**1.72** (1.69-1.75)	**1.63** (1.6-1.67)
σ_{mp}	–	**1.07** (1.04-1.09)
σ_{mt}	–	**1.24** (1.21-1.26)

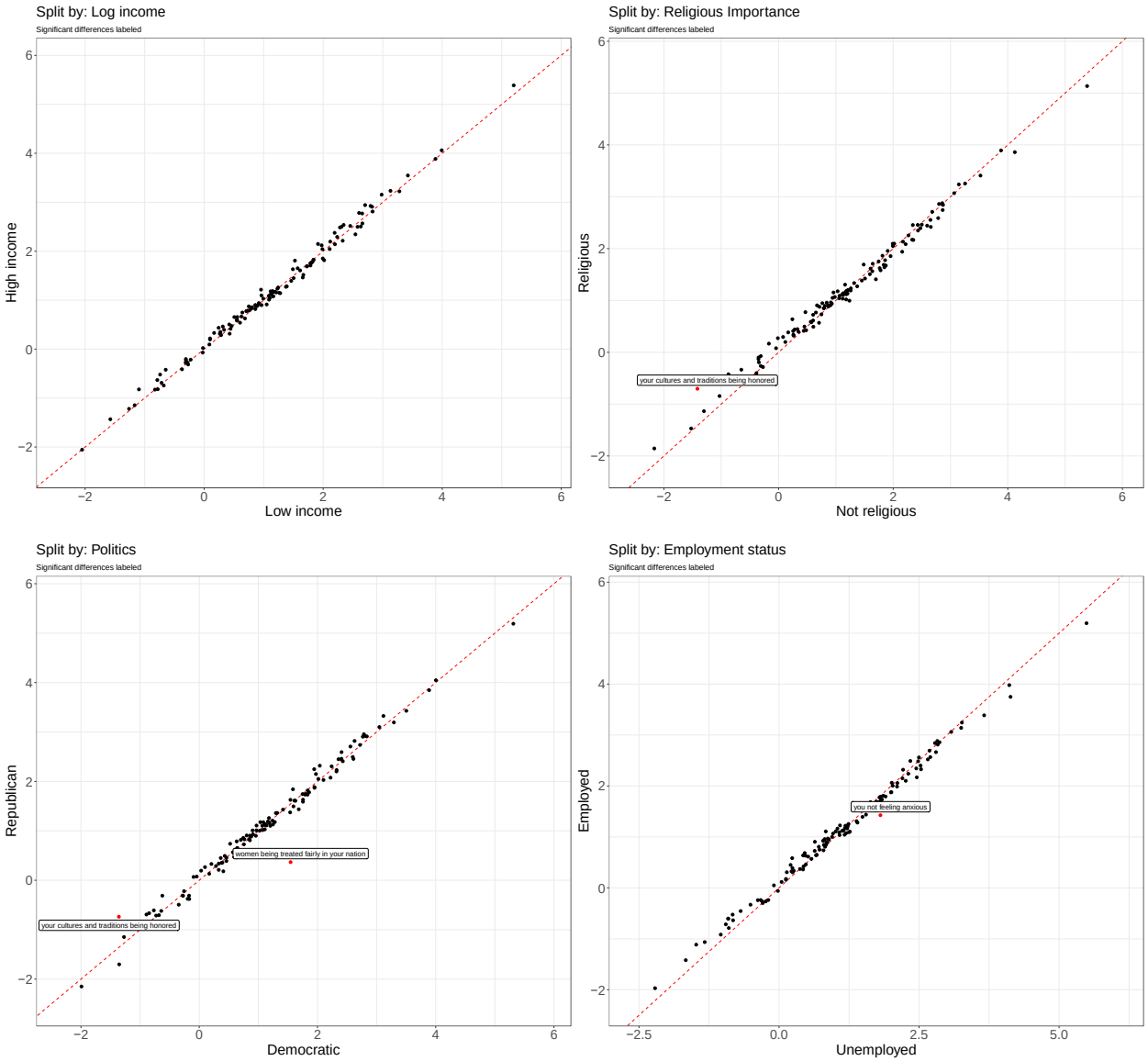
We find that around 60% of the total variance is captured by the transitory component, and 40% is captured by the persistent component, implying that a significant portion of our observed variance is due to differences across time. In column 1, we use the same data, but estimate our

pooled model as described in Section XX. Compared to the pooled estimate of total variance, the total implied variance ($\sigma^2{}_{m^p} + \sigma^2{}_{m^\tau}$) is slightly smaller, but of a similar magnitude.

A4 Additional Demographic Splits

Figure A3: Demographic Splits



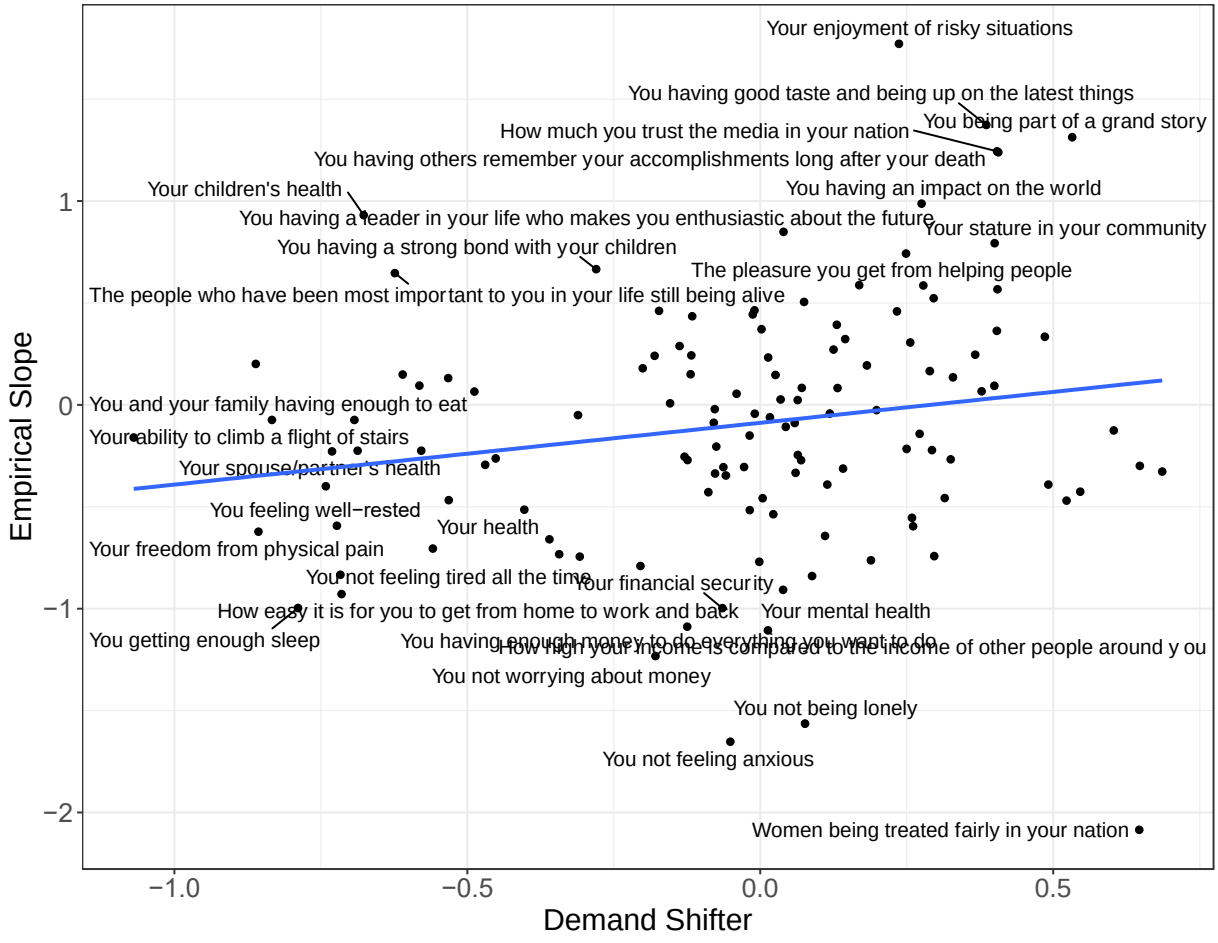

Split by: Log income
Significant differences labeled
High income
Low income
Split by: Religious Importance
Significant differences labeled
Religious
Not religious
your cultures and traditions being honored
Split by: Politics
Significant differences labeled
Republican
Democratic
women being treated fairly in your nation
your cultures and traditions being honored
Split by: Employment status
Significant differences labeled
Employed
Unemployed
you not feeling anxious

A5 Additional Aspect Flags

Question: People differ in how much they have of each aspect of life. Sometimes it's because of differences in the options available to them, because of differences in resources or abilities. Sometimes it's because of differences in values (how much they prioritize this aspect relative to other aspects of life). Suppose everyone had the same options available to them. How much would people still differ in how much they have of this aspect because of differences in their values?

Prediction: positive relationship with empirical slope

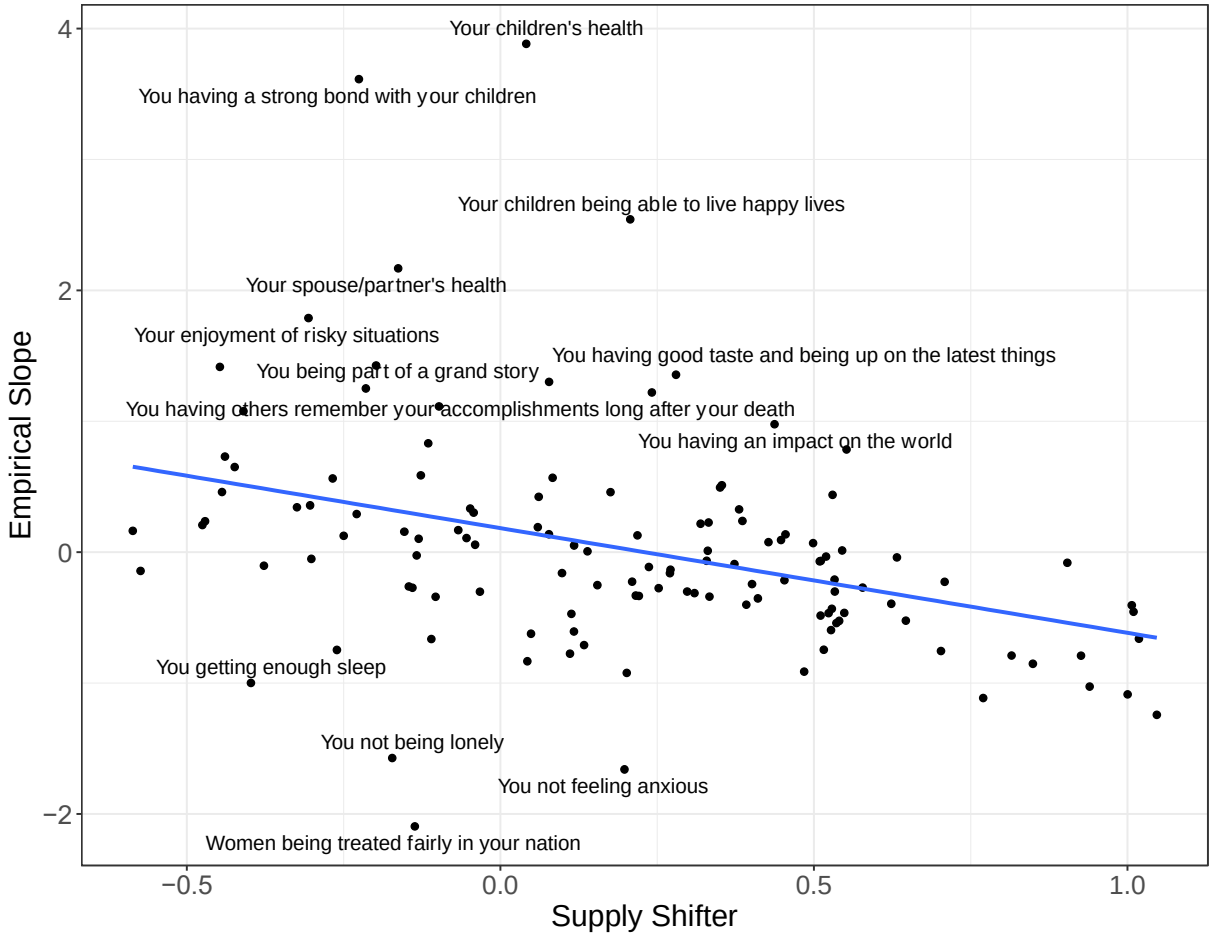
Figure A4: Empirical Slope vs Demand Shifter Flag



Question: People differ in how much they have of each aspect of life. Sometimes it's because of differences in the options available to them, because of differences in resources or abilities. Sometimes it's because of differences in values (how much they prioritize this aspect relative to other aspects of life). Suppose everyone had the same values. How much would people still differ in how much they have of this aspect because of differences in resources or abilities (and therefore differences in what options are available to them)?

Prediction: negative relationship with empirical slope

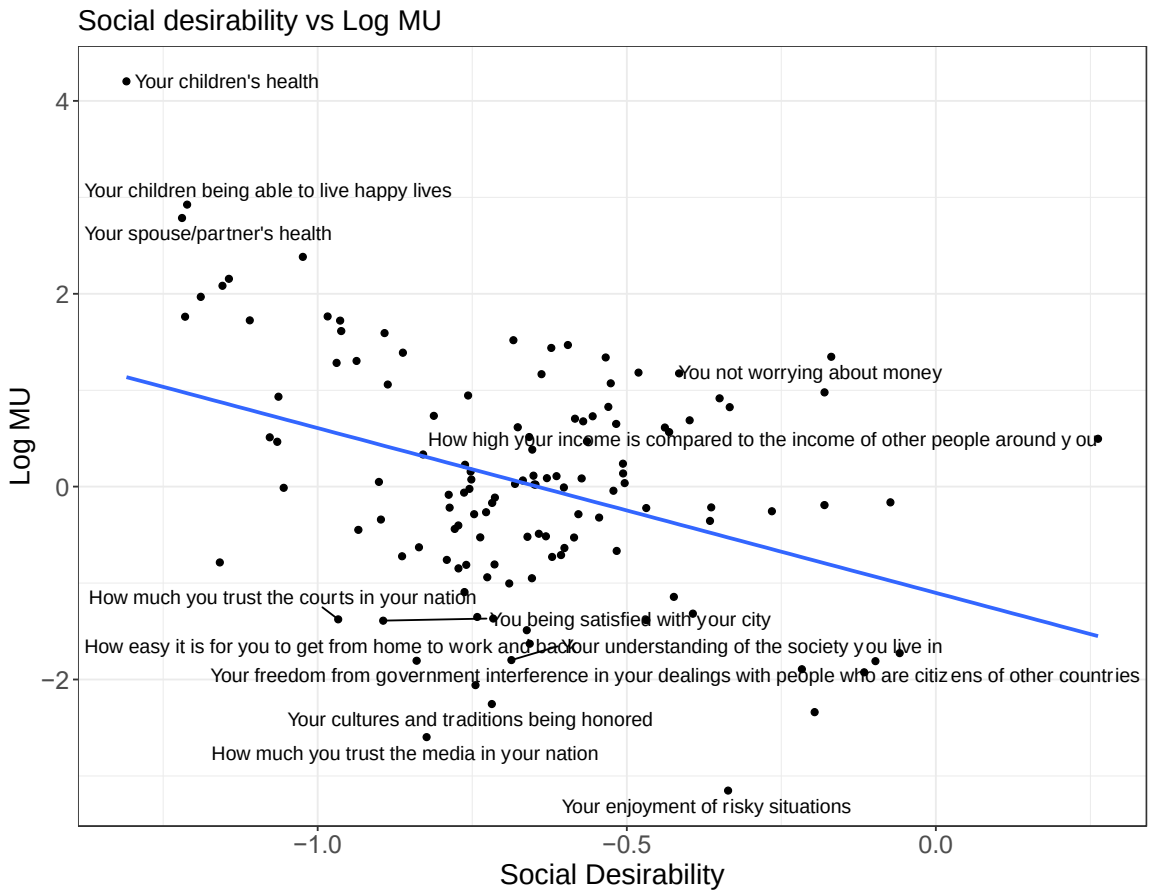
Figure A5: Empirical Slope vs Supply Shifter Flag



Question: Would someone downplay how much they want this aspect because openly wanting it might make them look bad?

Prediction: negative relationship with log marginal utility

Figure A6: Log Marginal Utility vs Social Desirability Flag



Question: How critical is it to you to have at least a little of this aspect in your life rather than none?

Prediction: Much larger MU for lowest rating quintile (or negative relationship with empirical slope)

Figure A7: Empirical Slope vs Inada Condition Flag

