

# Web Appendix to:

## “Do People Seek to Maximize Happiness? Evidence from New Surveys”

Daniel J. Benjamin  
*Cornell University and NBER*

Ori Heffetz  
*Cornell University*

Miles S. Kimball  
*University of Michigan and NBER*

Alex Rees-Jones  
*Cornell University*

**This Draft:** April 5, 2011

---

This document provides additional results, discussion, and analysis to accompany “Do People Seek to Maximize Happiness? Evidence From New Surveys.” Sections are numbered to correspond to the portion of the main text to which the additional details provided are relevant. For example, Web Appendix section AIV.B contains the supplemental results for section IV.B from the main text.

## Contents

AI.A. Description of auxiliary and pilot surveys and results.....	3
AI.A Demographic summary .....	9
AII. Do people respond to the choice and SWB questions in the same way? .....	10
AIII.C. Additional coefficient comparisons.....	24
AIII.C. Direct and indirect effects of aspect ratings. ....	37
AIII.D Additional measurement error correction information .....	39
AIV.A. Are results driven by a few individuals?.....	44
AIV.B. Order effects and participant fatigue.....	46
AIV.C. Self-reported artificial consistency/inconsistency and mistakes.....	47
AIV.D. Self-control .....	51
AIV.E. Context of choice, SWB, and non-SWB aspect questions .....	52
AIV.F. An alternative approach: willingness-to-pay questions .....	55
AV.A. Comparing SWB measures, and pilot data on new SWB measures .....	59
AV.B. Heterogeneity across decision scenarios .....	64
AV.C. Preference heterogeneity across respondents .....	68
AVI. Applications to ongoing empirical work .....	69

*A1.A. Description of auxiliary and pilot surveys and results*

The primary text details the three studies that form the basis of our analysis of the relationship between choice and measures of SWB. For the purposes of full disclosure of all the data that we collected, here we detail several initial studies we conducted on closely-related topics, providing a chronology of our research program pursuing a better understanding of SWB measures. Table A1 summarizes the basic features of these studies. Details about the contents and basic results are described below.

Table A1: Auxiliary and Pilot Surveys

Study Name	Dates	Survey Population	Sample Size
CNSS 2008 Pilot	July 17-July 31, 2008	Americans 18+	25
Happiness Literacy Survey	January 6-12, 2009	Doctor's Office Sample	114
Price Theory of Happiness Survey	April 17-28, 2009	Doctor's Office Sample	315
Elation Theory of Happiness Survey	April 17-28, 2009	Cornell Students	222
Aspect Rating Pilot	October 13-30, 2009	University of Chicago Students	102
Important Scenarios Faced in Daily Life	December, 2009	Cornell Students	171

*CNSS pilot and happiness literacy survey.* In the initial stages of this line of research, we were primarily interested in “happiness literacy,” or the general public’s awareness of the results of happiness research and how awareness of these results affects behavior. In order to explore these results, we posed a series of scenarios similar in style to the scenarios presented in the main text, asking the respondents only to predict which scenario would lead to greater happiness. We presented scenarios where we felt the happiness literature suggested which of the options in the

scenario should indeed make the person happier. We then measured the degree to which individuals were aware of these findings, and the degree to which their level of awareness predicted related behaviors.

Our data on these research questions come from two data sources: the pilot of the 2008 Cornell National Social Survey (CNSS)<sup>1</sup>, and a paper survey we administered in the Denver doctor's office described in the main text. In the CNSS pilot, we posed scenarios involving tradeoffs between sleep hours and salary, living location and commute time, absolute and relative wealth, time spent with friends and times spent with children, and time spent in church versus time spent reading the newspaper. The primary finding in these studies was that happiness is positively associated with degree of "happiness literacy," and that individuals' beliefs about what would make them happiest were largely in line with the literature.

*Elation theory and price theory of happiness surveys.* After exploring the topic of happiness literacy, we focused attention on testing specific aspects of the Kimball and Willis (2006) framework in the Elation Theory and Price Theory surveys, which ran simultaneously in the spring of 2009.

In the price theory survey we focus on testing measures of willingness to pay for happiness in attempts to measure the heterogeneity of individual "preference for SWB." This survey contained three measures of willingness to pay for happiness: an elicitation of WTP for needed depression treatment (later used in the surveys described in the main text), an elicitation of WTP for a brain stimulating device which would consistently raise happiness levels, and the minutes per week an individual would devote to a happiness improving meditation. All three of these ways of approaching WTP for happiness were positively correlated. The WTP for depression treatment and willingness to devote time to meditation were significantly positively predictive of actual reported SWB levels.

The elation theory survey focused on testing the happiness response to news shocks, in the form of small, random gains or losses in wealth. In particular, we were interested in how these dynamics relate to risk aversion. We found some evidence that higher WTP for happiness

---

<sup>1</sup>Though our questions appeared in the pilot—and hence were asked to 25 respondents—these questions were not included in final survey administered in the 2008 CNSS.

was associated with more risk loving behavior. We found no direct evidence that the measured volatility of happiness responses to shocks predicted risk preference.

*Aspect rating pilot.* In preparation for running the Cornell studies reported in the main text, we ran a preliminary pilot study at the University of Chicago, where 102 respondents filled out preliminary versions of the Cornell questionnaires. These respondents faced a shorter list of aspects: own happiness, family's happiness, health, romantic life, social life, control over your life, spirituality, fun, social status, and sense of purpose. As in the regression results reported in table 3, own happiness was found to be most predictive of choice, but other aspects were found to have significant positive predictive power.

*Important life decisions.* As we discuss in section I.B of the main text, in creating the Cornell study we wished to find a number of important choice situations that students regularly encounter. To that end, we included the following questions at the end of the University of Chicago Pilot.

**10) Think of the top 3 decisions you've made in the last **day**. What were they?**

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

**11) Think of the top 3 decisions you've made in the last **month**. What were they?**

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

**12) Think of the top 3 decisions you've made in the last **two years**. What were they?**

1) \_\_\_\_\_



**Budget-** Decision about finances/budget/spending.  
**Class-** Decision about attending class on a particular day.  
**Class Admin-** Decision about adding/dropping classes or course of study.  
**Clothes-** Decision about what to wear.  
**Club-** Decision about joining/quitting a club/getting involved in university clubs.  
**College-** More general decision about applying to/picking college.  
**Contact-** Decision about keeping in contact with family/friends.  
**Cornell-** Some decision about attending Cornell University  
**Experiment-** Attend this experimental session.  
**Frat -** Joining a fraternity/sorority.  
**Friendship-** Decision about friendships with other people and/or family members.  
**Grad School-** Some decision about graduate school.  
**Gym-** Decision about working out and/or staying in shape.  
**Hard-** Too specific/obscure to classify in any category.  
**Healthy Eating-** Decision about eating healthier.  
**High School-** Decision related to high school.  
**Job-** Decision relating to job/internship application or duties.  
**Life Improvement-** Decision about improving one's quality of life (including starting to engage in some new activity like reading, playing music, etc.).  
**Misc -** Decision about miscellaneous errands/tasks to do.  
**Moving-** Decision about moving from one place in the country/world to another.  
**Purchase-** Decision about buying something.  
**Relationship-** Decision to start/end romantic relationship with another person.  
**Religion-** Decision about practicing religion or religious affiliation.  
**Residence-** Decision about where to live on campus.  
**Skipping Meals-** Deciding to skip a meal.  
**Sleep-** Taking a nap / going to bed at a particular time.  
**Study-** Decision about studying for classes or starting class assignments, or about study plans in general.  
**Study Abroad-** Decision about studying somewhere outside of the country.  
**Travel-** Some decision about traveling.  
**U Chicago-** Some decision about attending University of Chicago.  
**Volunteering-** Decision about volunteering in some capacity.  
**Wake-** Waking up at a particular time.  
**Weekend Plans-** Plans about weekend activities or doing something with friends.

Table A2: Distribution of Topics for Students' Top/Most Important Decisions

	Cornell Responses (percentage)	U Chicago Responses (percentage)
Budget	0.5	1.8
Class	3.8	1.8
Class Admin	5.2	10.0
Clothes	0.0	0.4
Club	3.2	4.5
College	2.8	1.7
Contact	0.6	2.6
Cornell	15.4	0.0
Experiment	9.4	1.4
Frat	0.7	0.4
Friendship	3.2	4.8
Grad School	1.0	1.4
Gym	1.5	1.2
Hard	3.2	3.5
Healthy Eating	0.4	2.5
High School	2.7	2.3
Job	3.1	4.4
Life Improvement	2.6	10.0
Meal	7.5	0.0
Misc	4.7	4.4
Moving	1.8	2.2
Purchase	2.2	1.8
Relationship	3.3	5.5
Religion	0.7	1.7
Residence	1.1	0.9
Skipping Meals	1.1	0.4
Sleep	3.5	2.7
Study	8.4	7.5
Study Abroad	1.6	1.0
Travel	1.4	1.8
U Chicago	0.0	12.0
Volunteering	0.0	1.0
Wake	2.9	1.2
Weekend Plans	0.5	0.8
<i>N</i>	1458	1202

*Notes:* This table reports one RA's categorization of Cornell and Chicago "important recent decision" free responses. Non-responses are excluded. The table pools responses from the different "top/most important decisions in recent time" questions described in the text above.



*AIA Demographic summary*

**Table A3: Demographic Summary**

		Denver Sample		CNSS	Cornell Sample
Gender	Male	24%		47%	40%
	Female	76%		53%	60%
Age	18-20	<1%		2%	31%
	21-25	3%		3%	60%
	26-30	5%		5%	6%
	31-35	9%		8%	1%
	36-40	10%		9%	<1%
	41-45	10%		11%	<1%
	46-50	11%		13%	<1%
	51-55	11%		10%	<1%
	56-60	9%		9%	0%
	61-65	7%		10%	0%
	66-70	5%		6%	0%
	70+	20%		14%	0%
Race	White or Caucasian	87%		88%	42%
	Hispanic or Latino	5%		7%	6%
	Black or African- American	5%		9%	9%
	American Indian, Aleut, Eskimo	<1%		5%	1%
	Asian or Pacific Islander	2%		3%	37%
	Something Else	1%		1%	4%
	Do not know	<1%			0%
Income	<30k	6%	<10k	3%	
	30k-50k	11%	10k-20k	5%	
	50k-70k	15%	20k-30k	8%	
	70k-90k	15%	30k-40k	8%	
	90k-110k	13%	40k-50k	10%	
	110k-130k	11%	50k-75k	25%	
	130k-150k	6%	75k-100k	14%	
	150k-170k	6%	100k-150k	13%	
	170k-190k	3%	150k+	15%	
	190k-210k	3%			
	210k+	9%			
Don't Know	1%				

*Notes:* The above table provides the distribution of several demographic variables across our three sample populations. Note that individuals were permitted to indicate several racial categories in the CNSS, and thus the racial percentages sum to more than 100%.

*All. Do people respond to the choice and SWB questions in the same way?*

*Explanation of modifications to survey questions.* As discussed in the main text, of the scenarios 1, 3, 4, 11, 12, and 13 included in the Denver within-subject study, only scenarios 1, 3, and 13 are candidates for within/between-subjects comparisons. Scenario 4 was included in the between-subjects survey, but not in a between-subjects design. Rather, it was repeated several times with the money value modified to allow for the analysis in section IV.A. Scenario 11, involving a trade-off between stopping to assist police and continuing on to an enjoyable concert, was modified into scenario 2, which involves a trade-off between attending a friend's birthday dinner and attending an enjoyable concert. This scenario was modified because we felt subjects were interpreting the trade-off differently than we intended. For example, table 2 indicates that 77% of subjects felt they would have higher SWB if they stopped to assist the police rather than attending the desirable concert (perhaps because they anticipated feeling guilty if they attended the concert). Finally, the phrasing of scenario 12 was slightly modified to emphasize that the choice involves an unpleasant commuting, since the results from the within-subject study suggested that subjects might have been imagining a pleasant commute.

*Restricting analysis to specific subsamples.* The tables below reproduce the results of table 2, restricting the sample to specific survey populations, SWB questions, and survey structure. Comparisons across tables reveal that the life satisfaction measure generally has the fewest choice-SWB reversals. Tables A4.vi and A4.xi compare Cornell data when the happiness question is presented "in-series" (that is, grouped with the other aspects in the aspect rating table seen in the main text), or "in-isolation" (where the SWB question appears separately from the other aspect ratings). The qualitative results described in section II are largely similar within any of these subgroups in the data. If we fully divide the data by scenario, survey population, SWB question, and questionnaire structure, we are left with 172 different framings of choice-SWB comparisons. We omit a list of the choice-SWB comparison across all these situations for space considerations; however, table A4.xii provides the details of the three scenarios with the highest and lowest concordance between choice and predicted SWB ratings.

Table A4.i: Choice and SWB In Denver Sample, Restricted to Life Satisfaction SWB Question (i)

		<b>Denver Study</b>						
<u>Choice Scenario</u>		1	2	3	4	11	12	13
		Income	Concert	Abs. Inc.	Income	Concert	Rent	Friends
<i>For exact phrasing, see appendix</i>		vs	vs	vs	vs	vs	vs	vs
		Sleep	Birthday	Rel. Inc.	Legacy	Duty	Commute	Income
<b>Within</b>	Higher SWB: Option 1	67%		45%	20%	11%	55%	51%
	Chosen: Option 1							
	Higher SWB: Option 2	26%		44%	66%	74%	33%	40%
	Chosen: Option 2							
	Higher SWB: Option 2	2%		5%	2%	11%	8%	1%
	Chosen: Option 1							
	Higher SWB: Option 1	5%		6%	12%	4%	4%	8%
	Chosen: Option 2							
	p-value of Liddell Exact Test	0.180		1.000	0.004	0.041	0.144	0.023
	n =141		n =144	n = 139	n =141	n = 142	n =141	
<b>Between</b>	Higher SWB: Option 2	34%	86%	51%	***	Version 2	54%	54%
	Chosen: Option 2	44%	84%	48%	***	Version 2	55%	53%
	p-value of difference in proportion choosing option 1 between studies 1 and 2	0.019		0.81	***		---	0.300
	p-value of difference in proportion with higher SWB under option 1 between studies 1 and 2	0.263		0.756	***		---	0.012
	p-value of Fisher Test	0.020	0.716	0.433	***		0.930	0.793
		n = 525	n = 524	n = 525	***		n = 526	n = 525

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning half of the observations to choice and half to SWB, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subjects design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.ii: Choice and SWB In Denver Sample, Restricted to Happiness with Life as a Whole SWB Question (ii)

		<b>Denver Study</b>						
<u>Choice Scenario</u>		1	2	3	4	11	12	13
		Income	Concert	Abs. Inc.	Income	Concert	Rent	Friends
<i>For exact phrasing, see appendix</i>		vs	vs	vs	vs	vs	vs	vs
		Sleep	Birthday	Rel. Inc.	Legacy	Duty	Commute	Income
<b>Within</b>	Higher SWB: Option 1	48%		52%	25%	22%	53%	50%
	Chosen: Option 1							
	Higher SWB: Option 2	33%		35%	59%	59%	30%	31%
	Chosen: Option 2							
	Higher SWB: Option 2	1%		10%	2%	13%	11%	3%
	Chosen: Option 1							
	Higher SWB: Option 1	18%		3%	14%	6%	6%	16%
	Chosen: Option 2							
	p-value of Liddell Exact Test	0.000		0.049	0.001	0.108	0.152	0.001
		n =137		n =135	n = 139	n =135	n = 139	n =137

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning half of the observations to choice and half to SWB, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.iii: Choice and SWB In Denver Sample, Restricted to Felt Happiness SWB Question (iii)

		<b>Denver Study</b>						
<u>Choice Scenario</u>		1	2	3	4	11	12	13
		Income	Concert	Abs. Inc.	Income	Concert	Rent	Friends
<i>For exact phrasing, see appendix</i>		vs	vs	vs	vs	vs	vs	vs
		Sleep	Birthday	Rel. Inc.	Legacy	Duty	Commute	Income
<b>Within</b>	Higher SWB: Option 1							
	Chosen: Option 1	58%		49%	26%	15%	49%	49%
	Higher SWB: Option 2							
	Chosen: Option 2	29%		45%	55%	62%	32%	33%
	Higher SWB: Option 2							
	Chosen: Option 1	2%		3%	2%	12%	13%	1%
	Higher SWB: Option 1							
	Chosen: Option 2	11%		3%	17%	11%	6%	17%
	p-value of Liddell Exact Test	0.003		1.000	0.000	0.864	0.052	0.000
		n =147		n =141	n = 144	n =146	n = 144	n =144

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning half of the observations to choice and half to SWB, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.iv: Choice and SWB In Cornell Sample, Restricted to Own Happiness with Life as a Whole SWB Question (iv)

		<b>Cornell Study</b>									
<u>Choice Scenario</u>		1	2	3	4	5	6	7	8	9	10
		Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest
		vs	vs	vs	vs	vs	vs	vs	vs	vs	vs
<i>For exact phrasing, see appendix</i>		Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career
		Version 2									
<b>Within</b>	Higher SWB: Option 1										
	Chosen: Option 1	30%	28%	41%	43%	42%	40%	59%	66%	54%	27%
	Higher SWB: Option 2										
	Chosen: Option 2	43%	51%	42%	31%	51%	39%	18%	17%	20%	38%
	Higher SWB: Option 2										
	Chosen: Option 1	2%	5%	14%	8%	3%	16%	17%	5%	23%	6%
	Higher SWB: Option 1										
	Chosen: Option 2	25%	15%	3%	18%	4%	4%	6%	12%	3%	30%
	Indifference for SWB	9%	17%	14%	11%	40%	23%	13%	2%	8%	6%
p-value of Liddell Exact Test	0.000	0.004	0.000	0.015	1.000	0.001	0.002	0.041	0.000	0.000	
	n = 194	n = 176	n = 182	n = 190	n = 125	n = 163	n = 186	n = 208	n = 196	n = 199	
		Version 2									
<b>Between</b>	Higher SWB: Option 2	46%	67%	49%	38%	56%	34%	26%	14%	16%	61%
	Chosen: Option 2	66%	71%	40%	38%	51%	34%	18%	26%	29%	50%
	Indifference for SWB	2%	3%	6%	4%	29%	6%	3%	3%	3%	3%
	(Chosen: Option 2, within)	(68%)	(66%)	(45%)	(49%)	(55%)	(43%)	(24%)	(29%)	(23%)	(68%)
	p-value of Fisher Test (choice, within vs. between)	0.416	0.423	0.613	0.131	1.000	0.248	0.239	0.494	0.394	0.004
	(Higher SWB: Option 2, within)	(45%)	(56%)	(56%)	(39%)	(54%)	(55%)	(35%)	(22%)	(43%)	(44%)
	p-value of Fisher Test (SWB, within vs. between)	0.903	0.080	0.267	0.901	1.000	0.001	0.120	0.099	0.000	0.003
	p-value of Fisher Test	0.006	0.643	0.195	1.000	0.537	1.000	0.234	0.048	0.027	0.117
	n = 197	n = 196	n = 193	n = 196	n = 168	n = 194	n = 198	n = 198	n = 198	n = 198	

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported p-value and n are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.v: Choice and SWB In Cornell Sample, Restricted to Immediately Felt Own Happiness SWB Question (v)

		<b><u>Cornell Study</u></b>									
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
	Version 2										
<b>Within</b>	Higher SWB: Option 1										
	Chosen: Option 1	29%	30%	41%	44%	48%	47%	65%	70%	52%	26%
	Higher SWB: Option 2										
	Chosen: Option 2	48%	47%	44%	32%	49%	35%	11%	12%	24%	32%
	Higher SWB: Option 2										
	Chosen: Option 1	1%	9%	13%	8%	1%	12%	18%	5%	21%	1%
	Higher SWB: Option 1										
	Chosen: Option 2	22%	14%	2%	16%	3%	6%	6%	13%	2%	40%
	Indifference for SWB	6%	12%	11%	9%	33%	21%	8%	7%	5%	6%
	p-value of Liddell Exact Test	0.000	0.174	0.000	0.040	0.375	0.071	0.001	0.020	0.000	0.000
	n = 203	n = 192	n = 193	n = 197	n = 145	n = 170	n = 199	n = 201	n = 206	n = 203	

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.vi: Choice and SWB In Cornell Sample, Restricted to Happiness In Isolation Treatment in the Within Subject Sample.

<b><u>Cornell Study</u></b>										
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career
	Version 2									
Higher SWB: Option 1										
Chosen: Option 1	27%	29%	47%	43%	46%	51%	57%	70%	59%	24%
Higher SWB: Option 2										
Chosen: Option 2	47%	53%	43%	35%	49%	38%	16%	14%	20%	46%
Higher SWB: Option 2										
Chosen: Option 1	1%	9%	8%	9%	2%	8%	23%	4%	17%	6%
Higher SWB: Option 1										
Chosen: Option 2	25%	8%	2%	14%	3%	4%	4%	12%	5%	24%
Indifference for SWB										
p-value of Liddell Exact Test	6%	16%	13%	10%	36%	20%	10%	3%	6%	6%
	0.000	0.720	0.031	0.222	1.000	0.167	0.000	0.014	0.001	0.000
	n = 202	n = 180	n = 186	n = 192	n = 136	n = 170	n = 192	n = 207	n = 200	n = 199

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.



Table A4.vii: Choice and SWB In Cornell Sample, Restricted to Happiness In Series Treatment in the Within Subject Sample.

<b><u>Cornell Study</u></b>											
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
	Version 2										
<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	32%	29%	35%	45%	43%	36%	67%	66%	48%	29%
	Higher SWB: Option 2 Chosen: Option 2	45%	45%	43%	28%	51%	36%	13%	15%	24%	24%
	Higher SWB: Option 2 Chosen: Option 1	1%	5%	20%	8%	1%	21%	11%	6%	28%	1%
	Higher SWB: Option 1 Chosen: Option 2	22%	21%	2%	20%	4%	7%	8%	13%	0%	46%
	Indifference for SWB	10%	13%	12%	10%	37%	24%	11%	6%	6%	6%
	p-value of Liddell Exact Test	0.000	0.000	0.000	0.001	0.453	0.001	0.418	0.053	0.000	0.000
		n = 195	n = 188	n = 189	n = 195	n = 134	n = 163	n = 193	n = 202	n = 202	n = 203

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.viii: Choice and SWB In Cornell Sample, Restricted to Happiness In Series Treatment in the Within Subject Sample and the Own Happiness with Life as a Whole SWB Question.

		<b><u>Cornell Study</u></b>									
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>For exact phrasing, see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
	Version 2										
<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	33%	31%	31%	47%	30%	28%	65%	66%	46%	32%
	Higher SWB: Option 2 Chosen: Option 2	42%	42%	44%	27%	63%	43%	14%	16%	23%	24%
	Higher SWB: Option 2 Chosen: Option 1	2%	3%	23%	5%	2%	24%	11%	8%	31%	2%
	Higher SWB: Option 1 Chosen: Option 2	23%	24%	2%	20%	5%	5%	10%	11%	0%	41%
	Indifference for SWB	9%	14%	13%	10%	39%	25%	13%	3%	9%	7%
	p-value of Liddell Exact Test	0.000	0.000	0.000	0.007	0.625	0.003	1.000	0.648	0.000	0.000
		n = 96	n = 91	n = 91	n = 95	n = 63	n = 79	n = 92	n = 103	n = 96	n = 99

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.ix: Choice and SWB In Cornell Sample, Restricted to Happiness In Isolation Treatment in the Within Subject Sample and the Own Happiness with Life as a Whole SWB Question.

		<b><u>Cornell Study</u></b>									
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
		Version 2									
<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	27%	26%	52%	39%	53%	52%	52%	66%	61%	22%
	Higher SWB: Option 2 Chosen: Option 2	45%	61%	40%	34%	39%	36%	22%	19%	18%	51%
	Higher SWB: Option 2 Chosen: Option 1	1%	7%	5%	12%	5%	8%	23%	3%	15%	9%
	Higher SWB: Option 1 Chosen: Option 2	28%	6%	3%	16%	3%	4%	2%	12%	6%	18%
	Indifference for SWB	8%	21%	15%	11%	42%	21%	12%	2%	7%	6%
	p-value of Liddell Exact Test	0.000	1.000	0.727	0.557	1.000	0.344	0.000	0.021	0.078	0.122
		n = 98	n = 85	n = 91	n = 95	n = 62	n = 84	n = 94	n = 105	n = 100	n = 100

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.x: Choice and SWB In Cornell Sample, Restricted to Happiness In Series Treatment in the Within Subject Sample and the Immediately Felt Own Happiness SWB Question.

		<b><u>Cornell Study</u></b>									
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
		Version 2									
<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	31%	28%	39%	42%	55%	44%	69%	66%	49%	26%
	Higher SWB: Option 2 Chosen: Option 2	48%	47%	42%	28%	41%	30%	12%	14%	25%	23%
	Higher SWB: Option 2 Chosen: Option 1	0%	6%	17%	10%	1%	18%	12%	5%	25%	1%
	Higher SWB: Option 1 Chosen: Option 2	20%	19%	2%	20%	3%	8%	7%	15%	1%	50%
	Indifference for SWB	10%	12%	11%	9%	35%	24%	8%	10%	4%	5%
	p-value of Liddell Exact Test	0.000	0.023	0.001	0.099	1.000	0.134	0.359	0.041	0.000	0.000
		n = 99	n = 97	n = 98	n = 100	n = 71	n = 84	n = 101	n = 99	n = 106	n = 104

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.xi: Choice and SWB In Cornell Sample, Restricted to Happiness In Isolation Treatment in the Within Subject Sample and the Immediately Felt Own Happiness SWB Question.

		<b><u>Cornell Study</u></b>									
<u>Choice Scenario</u>	1	2	3	4	5	6	7	8	9	10	
	Sleep	Concert	Abs. Inc.	Legacy	Apple	Money	Socialize	Family	Education	Interest	
<i>For exact phrasing,</i>	vs	vs	vs	vs	vs	vs	vs	vs	vs	vs	
<i>see appendix</i>	Income	Birthday	Rel. Inc.	Income	Orange	Time	Sleep	Money	Social life	Career	
		Version 2									
<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	27%	33%	43%	46%	41%	50%	61%	74%	56%	26%
	Higher SWB: Option 2 Chosen: Option 2	48%	46%	46%	36%	57%	40%	10%	10%	22%	41%
	Higher SWB: Option 2 Chosen: Option 1	2%	12%	9%	6%	0%	7%	23%	6%	18%	2%
	Higher SWB: Option 1 Chosen: Option 2	23%	9%	1%	11%	3%	3%	5%	11%	4%	30%
	Indifference for SWB	3%	11%	11%	9%	31%	19%	8%	5%	6%	7%
	p-value of Liddell Exact Test	0.000	0.824	0.021	0.332	0.500	0.508	0.001	0.332	0.004	0.000
		n = 104	n = 95	n = 95	n = 97	n = 74	n = 86	n = 98	n = 102	n = 100	n = 99

*Notes:* Response distribution by study and scenario. For the complete text of each scenario, see the appendix. If a questions phrasing changed meaningfully between surveys, the version of the question is indicated in the first row of the study block. For between-subjects comparisons, we report the Fisher Test p-value testing the null-hypothesis that mean response to choice question = mean response to SWB question (an unpaired equality-of-proportions test). For within-subject data, we report the analogous Liddell Exact Test p-value (a paired equality-of-proportions test). In cases where respondents could indicate SWB indifference, responses indicating indifference were dropped from these tests. To conduct hypothesis tests with equal power for the within- and between-subjects data, we treat the within-subject data as if they were between-subjects by randomly assigning observations to choice or to SWB in numbers that match the between-subjects test, and only looking at each respondent's assigned response. The reported *p*-value and *n* are the averages across 500 repetitions of this algorithm. See details in section II. Since Scenario 4 ("legacy vs income") was not presented in a between-subject design in spite of being included in the between-subjects part of the Denver study, its results from that part are not reported. For a description of this scenario's results, see section IV.A.

Table A4.xii: Survey Variations with the Highest and Lowest Rates of SWB-Choice Concordance

	Percentage of Respondents Choosing the Happiness Maximizing Option	Sample Population	Scenario Number	SWB Question	Scenario Order	Aspect Order	Question Order	N
Top 3	100%	Denver, within-subject	13	Life Satisfaction Immediately-felt own happiness (in-isolation)	4-1-11-12-13-3		Choice, Meta-Choice, SWB	36
	97.56%	Cornell, within-subject	5	Immediately-felt own happiness (in-series)		Order 1		41
	97.30%	Cornell, within-subject	5	Own Happiness with life as a whole (in-series)		Order 1		37
Bottom 3	61.22%	Cornell, within-subject	10	Own Happiness with life as a whole (in-series)		Order 1		49
	50.00%	Cornell, within-subject	10	Immediately-felt own happiness (in-series)		Order 1		50
	35.29%	Cornell, within-subject	2	Immediately-felt own happiness (in-series)		Order 1		51

Table A5: Distribution of Choice Among Respondents Indicating Indifference for SWB

	<u>Respondents not indicating indifference for SWB</u>		<u>Respondents indicating indifference for SWB</u>		<u>Respondents indicating indifference for SWB</u>						Number Indifferent
	<u>Option Chosen</u>		<u>Option Chosen</u>		definitely choose	<u>Option 1:</u>	possibly choose	possibly choose	<u>Option 2:</u>	definitely choose	
	Option 1	Option 2	Option 1	Option 2		probably choose			probably choose		
					1	2	3	4	5		
1: Sleep vs Income	30%	70%	15%	85%	0%	6%	9%	12%	45%	27%	33
2: Concert vs Birthday	36%	64%	37%	63%	3%	18%	16%	11%	40%	11%	62
3: Abs. Inc. vs Rel. Inc.	55%	45%	56%	44%	13%	33%	9%	20%	17%	7%	54
4: Legacy vs Income	52%	49%	40%	60%	7%	19%	14%	14%	42%	5%	43
5: Apple vs Orange	47%	53%	53%	47%	19%	27%	6%	8%	22%	17%	157
6: Money vs Time	58%	42%	60%	40%	17%	32%	11%	14%	17%	10%	94
7: Socialize vs Sleep	79%	21%	75%	25%	30%	39%	7%	9%	14%	3%	44
8: Family vs Money	73%	27%	15%	85%	5%	5%	5%	10%	70%	5%	20
9: Education vs Social Life	75%	25%	74%	26%	26%	44%	4%	7%	11%	7%	27
10: Interest vs Career	30%	70%	16%	84%	12%	0%	4%	16%	40%	28%	25

### *AIII.C. Additional coefficient comparisons*

Table 3 in the main text provides regressions of choice on SWB and other aspects, pooling data across different SWB measures and survey variations. To explore the robustness of our regression coefficients, we reproduce table 3 below while restricting the data to specific SWB questions and survey populations. As a reminder, the Cornell studies contained two studies which we refer to as the “within subject” and “between subjects” surveys. The between subjects surveys were designed to ask only one of the choice and SWB questions in an initial section of the survey, but still elicit the responses to choice, SWB, and all aspect ratings later in the survey. In addition, some survey variations presented the aspects in the order they appear in the tables below, which we refer to as aspect order 1. Other surveys presented them in reverse order, which we refer to as aspect order 2.

Looking at the tables below, we find minor variation in the aspect coefficients across different cuts of the data. For example, notice that in aspect order 2 (where sense of purpose appears first among the aspects), sense of purpose has a significantly larger coefficient than in aspect order 1. However, in all cuts of the data, SWB (own happiness) consistently receives the largest weight for predicting choice, and other aspects have significant positive predictive power.



Table A6.i: Regressions of Choice on Aspects of Life, Restricted to Own Happiness with Life as a Whole SWB Question (*iv*)

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.54*** (0.011)		0.47*** (0.012)	0.38*** (0.011)	0.37*** (0.015)
Family happiness		0.15*** (0.021)	0.07*** (0.018)	0.06*** (0.016)	0.09*** (0.021)
Health		0.04 (0.027)	-0.03 (0.023)	-0.01 (0.020)	-0.02 (0.028)
Life's level of romance		0.02 (0.030)	0.02 (0.026)	0.02 (0.022)	0.02 (0.031)
Social life		-0.03 (0.026)	-0.05* (0.022)	-0.04* (0.019)	-0.04 (0.026)
Control over your life		0.16*** (0.021)	0.07*** (0.018)	0.05** (0.016)	0.08*** (0.022)
Life's level of spirituality		-0.08** (0.030)	-0.02 (0.026)	-0.02 (0.022)	-0.03 (0.031)
Life's level of fun		0.13*** (0.026)	0.03 (0.022)	0.03 (0.019)	0.03 (0.026)
Social status		0.06** (0.020)	0.05** (0.017)	0.04** (0.014)	0.06** (0.020)
Life's non-boringness		0.09*** (0.024)	0.01 (0.021)	0.01 (0.018)	0.01 (0.025)
Physical comfort		0.09*** (0.021)	0.05** (0.018)	0.05** (0.015)	0.07** (0.021)
Sense of purpose		0.23*** (0.019)	0.11*** (0.017)	0.09*** (0.014)	0.11*** (0.020)
Observations	4122	4088	4086	4086	4086
$R^2$	0.38	0.20	0.40		
Pseudo $R^2$				0.19	0.34

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects. \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A6.ii: Regressions of Choice on Aspects of Life, Restricted to Own Happiness with Life as a Whole SWB Question (*iv*) and Within-Subject Surveys

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.57 <sup>***</sup> (0.015)		0.49 <sup>***</sup> (0.018)	0.41 <sup>***</sup> (0.017)	0.39 <sup>***</sup> (0.023)
Family happiness		0.16 <sup>***</sup> (0.028)	0.07 <sup>**</sup> (0.025)	0.05 <sup>*</sup> (0.021)	0.09 <sup>**</sup> (0.029)
Health		0.03 (0.037)	-0.03 (0.032)	-0.01 (0.028)	-0.02 (0.039)
Life's level of romance		0.05 (0.042)	0.05 (0.036)	0.05 (0.031)	0.05 (0.043)
Social life		-0.05 (0.035)	-0.07 <sup>*</sup> (0.030)	-0.06 <sup>*</sup> (0.025)	-0.04 (0.035)
Control over your life		0.16 <sup>***</sup> (0.029)	0.06 <sup>^</sup> (0.025)	0.03 (0.021)	0.08 <sup>**</sup> (0.030)
Life's level of spirituality		-0.04 (0.040)	0.01 (0.034)	0.01 (0.029)	-0.01 (0.041)
Life's level of fun		0.12 <sup>***</sup> (0.033)	0.02 (0.029)	0.02 (0.024)	0.02 (0.033)
Social status		0.06 <sup>*</sup> (0.028)	0.05 <sup>*</sup> (0.024)	0.04 <sup>*</sup> (0.020)	0.07 <sup>*</sup> (0.028)
Life's non-boringness		0.08 <sup>*</sup> (0.032)	0.00 (0.028)	0.00 (0.024)	0.02 (0.032)
Physical comfort		0.09 <sup>**</sup> (0.028)	0.04 (0.024)	0.03 (0.020)	0.06 <sup>^</sup> (0.028)
Sense of purpose		0.22 <sup>***</sup> (0.026)	0.11 <sup>***</sup> (0.023)	0.09 <sup>***</sup> (0.020)	0.09 <sup>***</sup> (0.027)
Observations	2124	2103	2102	2102	2102
$R^2$	0.38	0.21	0.41		
Pseudo $R^2$				0.19	0.34

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects. \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A6.iii: Regressions of Choice on Aspects of Life, Restricted to Own Happiness with Life as a Whole SWB Question (*iv*) and Between-Subjects Surveys

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.52 <sup>***</sup> (0.015)		0.45 <sup>***</sup> (0.016)	0.36 <sup>***</sup> (0.015)	0.36 <sup>***</sup> (0.020)
Family happiness		0.14 <sup>***</sup> (0.032)	0.08 <sup>**</sup> (0.027)	0.08 <sup>**</sup> (0.024)	0.08 <sup>*</sup> (0.033)
Health		0.04 (0.039)	-0.04 (0.034)	-0.03 (0.029)	-0.04 (0.042)
Life's level of romance		-0.02 (0.044)	-0.02 (0.038)	-0.02 (0.033)	-0.00 (0.047)
Social life		0.00 (0.039)	-0.01 (0.033)	-0.01 (0.029)	-0.02 (0.040)
Control over your life		0.15 <sup>***</sup> (0.032)	0.08 <sup>**</sup> (0.027)	0.07 <sup>**</sup> (0.023)	0.08 <sup>*</sup> (0.032)
Life's level of spirituality		-0.15 <sup>**</sup> (0.047)	-0.07 (0.040)	-0.07 <sup>*</sup> (0.035)	-0.06 (0.049)
Life's level of fun		0.13 <sup>**</sup> (0.042)	0.04 (0.036)	0.04 (0.031)	0.05 (0.043)
Social status		0.06 (0.029)	0.04 (0.024)	0.04 <sup>*</sup> (0.021)	0.06 <sup>*</sup> (0.029)
Life's non-boringness		0.10 <sup>*</sup> (0.039)	0.02 (0.033)	0.03 (0.029)	0.00 (0.040)
Physical comfort		0.11 <sup>***</sup> (0.032)	0.07 <sup>*</sup> (0.027)	0.07 <sup>**</sup> (0.023)	0.08 <sup>*</sup> (0.033)
Sense of purpose		0.23 <sup>***</sup> (0.028)	0.11 <sup>***</sup> (0.024)	0.09 <sup>***</sup> (0.021)	0.14 <sup>***</sup> (0.029)
Observations	1998	1985	1984	1984	1984
$R^2$	0.38	0.19	0.41		
Pseudo $R^2$				0.19	0.33

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects.

\* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A6.iv: Regressions of Choice on Aspects of Life, Restricted to SWB In Series Treatment

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.56*** (0.017)		0.43*** (0.021)	0.35*** (0.018)	0.34*** (0.025)
Family happiness		0.13*** (0.028)	0.04 (0.026)	0.03 (0.021)	0.06* (0.029)
Health		0.12** (0.036)	0.06 (0.033)	0.05 (0.028)	0.08* (0.039)
Life's level of romance		-0.06 (0.044)	-0.05 (0.040)	-0.04 (0.033)	-0.03 (0.047)
Social life		0.02 (0.037)	0.00 (0.034)	0.02 (0.028)	0.01 (0.038)
Control over your life		0.20*** (0.027)	0.12*** (0.025)	0.10*** (0.021)	0.12*** (0.029)
Life's level of spirituality		-0.09* (0.041)	-0.08* (0.037)	-0.06 (0.031)	-0.06 (0.044)
Life's level of fun		0.07 (0.036)	-0.03 (0.033)	-0.03 (0.028)	-0.04 (0.038)
Social status		0.07* (0.028)	0.07** (0.026)	0.05* (0.021)	0.08** (0.030)
Life's non-boringness		0.16*** (0.034)	0.07* (0.031)	0.07* (0.026)	0.10** (0.035)
Physical comfort		0.09** (0.028)	0.05 (0.026)	0.05* (0.022)	0.05 (0.030)
Sense of purpose		0.23*** (0.026)	0.14*** (0.024)	0.12*** (0.020)	0.13*** (0.027)
Observations	2154	2135	2133	2133	2133
$R^2$	0.33	0.26	0.37		
Pseudo $R^2$				0.19	0.33

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects.

\* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A6.v: Regressions of Choice on Aspects of Life, Restricted to In Series Treatment With Aspect Order 1

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.54 <sup>***</sup> (0.023)		0.43 <sup>***</sup> (0.028)	0.36 <sup>***</sup> (0.025)	0.33 <sup>***</sup> (0.034)
Family happiness		0.12 <sup>**</sup> (0.038)	0.04 (0.035)	0.02 (0.029)	0.05 (0.040)
Health		0.16 <sup>**</sup> (0.051)	0.07 (0.047)	0.06 (0.040)	0.15 <sup>**</sup> (0.059)
Life's level of romance		-0.08 (0.063)	-0.08 (0.057)	-0.05 (0.049)	-0.05 (0.070)
Social life		0.03 (0.054)	0.02 (0.049)	0.02 (0.041)	0.02 (0.058)
Control over your life		0.25 <sup>***</sup> (0.038)	0.15 <sup>***</sup> (0.035)	0.14 <sup>***</sup> (0.030)	0.17 <sup>***</sup> (0.043)
Life's level of spirituality		-0.12 <sup>*</sup> (0.057)	-0.08 (0.052)	-0.05 (0.044)	-0.09 (0.063)
Life's level of fun		0.01 (0.052)	-0.11 <sup>*</sup> (0.048)	-0.08 <sup>*</sup> (0.041)	-0.10 (0.057)
Social status		0.15 <sup>***</sup> (0.041)	0.14 <sup>***</sup> (0.037)	0.11 <sup>***</sup> (0.032)	0.13 <sup>**</sup> (0.044)
Life's non-boringness		0.17 <sup>**</sup> (0.052)	0.10 <sup>*</sup> (0.047)	0.07 (0.040)	0.14 <sup>*</sup> (0.056)
Physical comfort		-0.00 (0.046)	-0.03 (0.042)	-0.03 (0.035)	-0.03 (0.050)
Sense of purpose		0.20 <sup>***</sup> (0.041)	0.11 <sup>**</sup> (0.038)	0.11 <sup>***</sup> (0.032)	0.11 <sup>*</sup> (0.045)
Observations	1067	1056	1055	1055	1055
$R^2$	0.32	0.26	0.38		
Pseudo $R^2$				0.20	0.36

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects. \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A6.vi: Regressions of Choice on Aspects of Life, Restricted to In Series Treatment With Aspect Order 2

	OLS	OLS	OLS	Ordered Probit	Probit
Own happiness	0.59 <sup>***</sup> (0.025)		0.43 <sup>***</sup> (0.033)	0.34 <sup>***</sup> (0.028)	0.35 <sup>***</sup> (0.038)
Family happiness		0.13 <sup>**</sup> (0.041)	0.05 (0.039)	0.03 (0.031)	0.08 (0.043)
Health		0.05 (0.051)	0.03 (0.048)	0.04 (0.039)	0.01 (0.054)
Life's level of romance		-0.02 (0.061)	-0.02 (0.056)	-0.03 (0.046)	0.01 (0.066)
Social life		0.01 (0.051)	-0.02 (0.047)	0.01 (0.038)	-0.01 (0.053)
Control over your life		0.16 <sup>***</sup> (0.038)	0.08 <sup>*</sup> (0.035)	0.06 <sup>*</sup> (0.029)	0.08 (0.040)
Life's level of spirituality		-0.08 (0.058)	-0.09 (0.054)	-0.08 (0.044)	-0.07 (0.064)
Life's level of fun		0.13 <sup>**</sup> (0.050)	0.04 (0.047)	0.01 (0.038)	0.02 (0.053)
Social status		-0.00 (0.039)	0.01 (0.036)	-0.00 (0.029)	0.03 (0.041)
Life's non-boringness		0.16 <sup>***</sup> (0.045)	0.05 (0.042)	0.07 <sup>*</sup> (0.035)	0.07 (0.048)
Physical comfort		0.16 <sup>***</sup> (0.037)	0.10 <sup>**</sup> (0.034)	0.10 <sup>***</sup> (0.028)	0.11 <sup>**</sup> (0.040)
Sense of purpose		0.27 <sup>***</sup> (0.034)	0.18 <sup>***</sup> (0.033)	0.15 <sup>***</sup> (0.026)	0.17 <sup>***</sup> (0.036)
Observations	1087	1079	1078	1078	1078
$R^2$	0.34	0.28	0.38		
Pseudo $R^2$				0.18	0.33

Notes: Standard errors in parentheses. In the OLS and ordered probit regressions, the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point ratings of aspects. Based on 633 Cornell respondents. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. Probit and ordered probit regressions include (unreported) scenario fixed effects. OLS regressions' variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects. \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

A potential concern about our primary regression specification is that it imposes cardinal properties on the relationship between the aspect ratings and choice ratings. Even in the ordered probit specifications which treat the 6-point choice ratings as purely ordinal, the 7-point aspect ratings enter the regression linearly. This implies that moving from, for example, “1: Option 1 definitely better” to “2: Option 1 possibly better” has the same effect on choice ratings as moving from “4: no difference” to “5: Option 2 possibly better.” Here we test whether this linear structure drives our main results. Tables A7 and A8 below recreate our primary OLS and ordered probit regressions, replacing the 7-point aspect ratings with sets of 6 dummy variables (omitted category: “no difference”). If these aspects enter into the utility function monotonically, the coefficients on the dummy variables for ratings 1 to 3, which signal a higher aspect rating under option 1, would be negative. The coefficients on the dummy variables for ratings of 5 to 7 would be positive. The linearity assumption additionally imposes that the difference between the coefficient on the dummy for rating level  $i$  and rating level  $i+1$  are approximately equal for all  $i$ .

These tables demonstrate that while not all variables are unambiguously monotone or linear, the aspects that emerge as most important in our analysis, such as own happiness, family happiness, and sense of purpose, are clearly monotone in the primary OLS specification and appear linear to visual inspection. To test the null-hypothesis of linearity of each variable, we conduct an  $F$ -test of the linear restriction that the slope between any two discrete response categories is equal. (More formally, we test if the difference between the coefficients on the dummy variables for “Own Happiness Response= $i$ ” and “Own Happiness Response= $i+1$ ” is the same for all  $i$ ). In our baseline OLS regression, we can only reject this null-hypothesis at the 5% level for 2 aspects: life’s level of fun ( $p = 0.03$ ) and physical comfort ( $p = 0.01$ ). Conducting an analogous chi-squared test in the ordered probit regression, we reject this null-hypothesis at the 5% level for own happiness ( $p = 0.00$ ), social life ( $p = 0.04$ ), physical comfort ( $p = 0.02$ ), and sense of purpose ( $p = 0.05$ ). While we reject linearity for several regressors in the ordered probit regression, the overall results are similar to those reported in the text. For this reason, we conclude that our main results are robust to relaxing the linearity restriction we impose in the text.

In addition, table A9 reports the results of OLS and ordered probit regressions of choice on SWB and all aspects with the linearity assumption relaxed only for the SWB variable. In this specification family’s happiness, control over your life, social status, physical comfort, and sense

of purpose all have statistically significant positive coefficients. In the primary OLS and ordered probit regressions reported in table 3, a possible concern is that the statistical significant on non-SWB aspects is driven solely by their ability to proxy for non-linearity in SWB.<sup>2</sup> The results of table A9 demonstrate that this potential concern is not driving our main results. For example, the OLS coefficients on family's happiness, control over your life, social status, physical comfort, and sense of purpose are virtually unchanged in the regression with no restrictions on the linearity of the SWB scale. The ordered probit coefficients remain very similar.

---

<sup>2</sup> This is possible because non-SWB aspects are generally predictive of SWB itself. If utility is a non-linear function of SWB then a linear regression of choice on SWB and other aspects is fundamentally misspecified. The significant coefficients on the other aspects could come from their ability to proxy for the unmodeled non-linearity in the relationship between choice and SWB.



Table A7: OLS Regression with Non-linear Aspect Effects

	definitely better	<u>Option 1:</u> probably better	possibly better	no difference	possibly better	<u>Option 2:</u> probably better	definitely better
7-point scale	1	2	3	4	5	6	7
Own happiness	-1.36 (0.07)	-0.82 (0.07)	-0.40 (0.07)	0	0.42 (0.07)	0.93 (0.07)	1.47 (0.08)
Family happiness	-0.33 (0.08)	-0.15 (0.07)	-0.08 (0.06)	0	0.07 (0.06)	0.09 (0.07)	0.20 (0.09)
Health	0.06 (0.1)	0.11 (0.08)	0.01 (0.06)	0	-0.01 (0.06)	0.10 (0.08)	0.17 (0.11)
Life's level of romance	-0.15 (0.12)	0.04 (0.08)	0.01 (0.07)	0	-0.10 (0.06)	-0.01 (0.09)	0.07 (0.13)
Social life	0.12 (0.1)	0.19 (0.07)	0.00 (0.06)	0	-0.06 (0.06)	-0.01 (0.07)	0.13 (0.1)
Control over your life	-0.17 (0.09)	-0.11 (0.06)	-0.14 (0.06)	0	0.19 (0.05)	0.19 (0.07)	0.13 (0.1)
Life's level of spirituality	-0.01 (0.11)	0.06 (0.07)	0.02 (0.06)	0	-0.05 (0.09)	-0.05 (0.12)	-0.26 (0.17)
Life's level of fun	-0.18 (0.09)	-0.25 (0.07)	-0.14 (0.06)	0	-0.06 (0.07)	0.06 (0.08)	-0.15 (0.12)
Social status	-0.12 (0.1)	-0.05 (0.07)	0.04 (0.06)	0	0.07 (0.06)	0.27 (0.06)	0.19 (0.09)
Life's non- boringness	0.01 (0.09)	-0.15 (0.07)	0.00 (0.06)	0	-0.02 (0.07)	-0.12 (0.08)	-0.10 (0.12)
Physical comfort	-0.24 (0.08)	-0.17 (0.07)	-0.24 (0.06)	0	0.01 (0.05)	-0.08 (0.06)	0.06 (0.08)
Sense of purpose	-0.38 (0.07)	-0.20 (0.06)	-0.06 (0.06)	0	0.21 (0.07)	0.18 (0.07)	0.35 (0.09)
Observations	6217						
$R^2$	0.50						

*Notes:* Standard errors in parentheses. The above table provides regression coefficients for an OLS regression of choice on all aspects and scenario fixed effects (fixed effects unreported). The linearity assumption on the 7-point scale is relaxed, and all aspects enter the regression as a set of six-dummy variables, with “4: no difference” serving as the baseline. For ease of comparison, each row corresponds to the coefficients on dummy variables for values of a specific aspect, with aspect value indicated by the column. Please note that all numbers above come from a single regression. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A8: Ordered Probit with Non-linear Aspect Effects

	definitely better	<u>Option 1:</u> probably better	possibly better	no difference	possibly better	<u>Option 2:</u> probably better	definitely better
7-point scale	1	2	3	4	5	6	7
Own happiness	-1.26 (0.06)	-0.57 (0.06)	-0.23 (0.06)	0	0.26 (0.06)	0.67 (0.06)	1.36 (0.07)
Family happiness	-0.31 (0.07)	-0.11 (0.06)	-0.04 (0.05)	0	0.03 (0.05)	0.05 (0.06)	0.25 (0.08)
Health	0.00 (0.09)	0.04 (0.07)	0.02 (0.05)	0	-0.01 (0.05)	0.09 (0.07)	0.14 (0.09)
Life's level of romance	-0.05 (0.1)	-0.02 (0.07)	-0.03 (0.06)	0	-0.09 (0.05)	-0.04 (0.07)	0.08 (0.12)
Social life	0.10 (0.09)	0.19 (0.06)	0.04 (0.05)	0	-0.03 (0.05)	0.02 (0.06)	0.13 (0.09)
Control over your life	-0.10 (0.08)	-0.10 (0.05)	-0.09 (0.05)	0	0.14 (0.05)	0.14 (0.06)	0.10 (0.09)
Life's level of spirituality	-0.07 (0.1)	0.08 (0.06)	0.02 (0.05)	0	-0.07 (0.08)	-0.06 (0.11)	-0.23 (0.15)
Life's level of fun	-0.11 (0.08)	-0.16 (0.06)	-0.12 (0.05)	0	-0.04 (0.06)	0.08 (0.07)	-0.09 (0.1)
Social status	-0.19 (0.08)	-0.02 (0.06)	0.04 (0.05)	0	0.04 (0.05)	0.19 (0.05)	0.19 (0.07)
Life's non- boringness	-0.02 (0.07)	-0.13 (0.06)	-0.01 (0.05)	0	0.02 (0.06)	-0.08 (0.07)	-0.10 (0.1)
Physical comfort	-0.23 (0.07)	-0.16 (0.06)	-0.18 (0.05)	0	0.01 (0.05)	-0.07 (0.05)	0.05 (0.07)
Sense of purpose	-0.33 (0.06)	-0.15 (0.05)	-0.04 (0.05)	0	0.15 (0.05)	0.09 (0.06)	0.35 (0.07)
Observations	6217						
Pseudo $R^2$	0.20						

Notes: Standard errors in parentheses. The above table provides regression coefficients for an ordered probit regression of choice on all aspects and scenario fixed effects (fixed effects unreported). The linearity assumption on the 7-point scale is relaxed, and all aspects enter the regression as a set of six-dummy variables, with “4: no difference” serving as the baseline. For ease of comparison, each row corresponds to the coefficients on dummy variables for values of a specific aspect, with aspect value indicated by the column. Please note that all numbers above come from a single regression. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A9: OLS and Ordered Probit Regressions with Non-Linear SWB Effects

	OLS choice	Probit choice
own_happiness = 1	-1.41*** (0.068)	-1.28*** (0.059)
own_happiness = 2	-0.84*** (0.065)	-0.58*** (0.054)
own_happiness = 3	-0.42*** (0.067)	-0.24*** (0.054)
own_happiness = 5	0.41*** (0.068)	0.25*** (0.056)
own_happiness = 6	0.93*** (0.068)	0.65*** (0.057)
own_happiness = 7	1.43*** (0.074)	1.34*** (0.066)
Family happiness	0.08*** (0.015)	0.07*** (0.012)
Health	0.00 (0.019)	0.01 (0.016)
Life's level of romance	-0.01 (0.021)	-0.01 (0.018)
Social life	-0.03 (0.018)	-0.02 (0.015)
Control over your life	0.08*** (0.015)	0.06*** (0.012)
Life's level of spirituality	-0.02 (0.021)	-0.02 (0.018)
Life's level of fun	0.05* (0.018)	0.03* (0.015)
Social status	0.06*** (0.014)	0.05*** (0.012)
Life's non-boringness	-0.01 (0.017)	0.00 (0.014)
Physical comfort	0.04** (0.014)	0.03** (0.012)
Sense of purpose	0.11*** (0.013)	0.09*** (0.011)
<i>N</i>	6217	6217

Notes: Standard errors in parentheses. The above table provides regression coefficients for OLS and ordered probit regressions of choice on all aspects and scenario fixed effects (fixed effects unreported). The linearity assumption on SWB's 7-point scale is relaxed, and SWB enters the regression as a set of six-dummy variables, with "4: no difference" serving as the baseline. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A10: OLS Regressions of Choice on All Aspects of Life, by Scenario  
*Aspects with greater than 85% of respondents indicating indifference dropped*

<u>Choice Scenario</u>		1	2	3	4	5	6	7	8	9	10
<i>For exact phrasing, see appendix</i>	All questions	Sleep vs Income	Concert vs Birthday	Abs. Inc. vs Rel. Inc.	Legacy vs Income	Apple vs Orange	Money vs Time	Socialize vs Sleep	Family vs Money	Education vs Social life	Interest vs Career
Own happiness	0.46*** (0.010)	0.38*** (0.031)	0.44*** (0.031)	0.52*** (0.032)	0.44*** (0.031)	0.74*** (0.035)	0.53*** (0.036)	0.31*** (0.032)	0.53*** (0.033)	0.35*** (0.029)	0.27*** (0.030)
Family happiness	0.08*** (0.015)	0.07* (0.032)	0.01 (0.071)	0.16*** (0.046)	0.05 (0.041)		0.13* (0.058)	-0.09 (0.053)	0.05 (0.050)	0.14*** (0.037)	0.21*** (0.041)
Health	0.00 (0.019)	-0.05 (0.055)	-0.07 (0.076)	-0.11 (0.077)	-0.04 (0.058)	0.06 (0.062)	0.05 (0.075)	0.18*** (0.054)	0.05 (0.057)	-0.03 (0.044)	-0.06 (0.063)
Life's level of romance	-0.01 (0.021)	0.08 (0.059)	-0.02 (0.064)	0.07 (0.078)	-0.00 (0.066)		-0.11 (0.086)	0.02 (0.054)	-0.03 (0.068)	0.01 (0.053)	0.01 (0.072)
Social life	-0.03 (0.018)	-0.02 (0.055)	0.02 (0.043)	-0.01 (0.056)	0.00 (0.058)		0.06 (0.070)	-0.00 (0.065)	-0.05 (0.053)	-0.04 (0.053)	0.01 (0.054)
Control over your life	0.08*** (0.015)	0.02 (0.042)	0.05 (0.053)	0.04 (0.056)	0.08* (0.039)	-0.01 (0.085)	0.07 (0.052)	0.15*** (0.043)	0.05 (0.049)	0.06 (0.038)	0.07* (0.035)
Life's level of spirituality	-0.02 (0.021)	-0.04 (0.049)	-0.00 (0.061)	-0.16 (0.090)	0.13* (0.055)			-0.01 (0.076)	-0.15* (0.062)	-0.00 (0.054)	-0.01 (0.068)
Life's level of fun	0.05* (0.018)	0.06 (0.042)	0.15** (0.051)	0.04 (0.066)	0.05 (0.047)		0.12 (0.068)	-0.03 (0.073)	0.03 (0.059)	0.06 (0.057)	-0.00 (0.057)
Social status	0.06*** (0.014)	-0.00 (0.036)	0.04 (0.045)	0.05 (0.040)	0.04 (0.036)		-0.03 (0.061)	0.06 (0.059)	0.11 (0.060)	0.06* (0.029)	0.16*** (0.043)
Life's non-boringness	-0.01 (0.017)	0.05 (0.037)	-0.03 (0.054)	0.22** (0.078)	-0.01 (0.047)		-0.03 (0.060)	0.18** (0.062)	-0.05 (0.061)	-0.02 (0.055)	0.05 (0.055)
Physical comfort	0.04** (0.014)	0.09* (0.036)	0.00 (0.060)	-0.05 (0.054)	0.00 (0.042)	0.20** (0.065)	-0.00 (0.049)	0.05 (0.048)	-0.10* (0.041)	0.06 (0.040)	-0.02 (0.049)
Sense of purpose	0.12*** (0.013)	0.17*** (0.038)	0.12** (0.047)	0.12** (0.044)	0.12** (0.041)		0.03 (0.049)	0.04 (0.044)	0.09* (0.046)	0.17*** (0.037)	0.17*** (0.029)
Observations	6217	615	621	620	624	625	619	622	625	626	621
R <sup>2</sup>	0.41	0.46	0.43	0.53	0.41	0.57	0.41	0.32	0.38	0.43	0.37
Incremental R <sup>2</sup>	0.03	0.06	0.03	0.04	0.04	0.01	0.01	0.07	0.02	0.08	0.13
F-Test P-value	0.000	0.000	0.000	0.000	0.000	0.002	0.041	0.000	0.085	0.000	0.000

Notes: Standard errors in parentheses. OLS regressions of 6-point choice on 7-point aspects of life. Based on 633 Cornell respondents. The leftmost column aggregates data across choice scenarios; each of the other columns corresponds to a specific scenario. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. All variables are demeaned at the scenario level, equivalent to including scenario fixed effects. Aspects with greater than 85% indifference in a given scenario are excluded from regressions. The F-test *p*-value reports the probability that all non-happiness aspect coefficients are zero. \* *p* < 0.05, \*\* *p* < 0.01, \*\*\* *p* < 0.001

### *AIII.C. Direct and indirect effects of aspect ratings.*

While our main analysis focuses on choice as the dependent variable, our data also provides evidence about how predicted SWB depends on the ratings of non-SWB aspects of the choice alternatives. The first column of table A11 estimates  $H(X)$  by running an OLS regression of SWB on the eleven non-SWB aspects.

Our coefficient on the aspects in column 2, where we regress choice on the aspects as well as on predicted SWB, are estimates of the *direct* effect of the aspects on utility,  $U_X$ . The estimates of  $H_X$  from the first column of table A11 can be used to estimate the *indirect* effect of the aspects on utility,  $U_H H_X$ . The third column of table A11 multiplies the coefficients in the first column by the coefficient on predicted SWB from column 2, thereby generating an estimate of the indirect effects. As we note in the main text, the estimated indirect effects are generally of comparable magnitude to the direct effects, supporting our evidence that these aspects of life enter utility in a manner beyond their contribution to SWB.

Table A11: Direct and Indirect Effects of Aspects

	Own happiness	Choice	Indirect Effects
Own happiness		0.46*** (0.010)	
Family happiness	0.17*** (0.018)	0.08*** (0.015)	0.08
Health	0.14*** (0.023)	0.00 (0.019)	0.06
Life's level of romance	0.01 (0.026)	-0.01 (0.021)	0.00
Social life	0.05* (0.022)	-0.03 (0.018)	0.02
Control over your life	0.19*** (0.018)	0.08*** (0.015)	0.09
Life's level of spirituality	-0.12*** (0.027)	-0.02 (0.021)	-0.06
Life's level of fun	0.19*** (0.023)	0.05* (0.018)	0.09
Social status	0.02 (0.017)	0.06*** (0.014)	0.01
Life's non-boringness	0.17*** (0.021)	-0.01 (0.017)	0.08
Physical comfort	0.11*** (0.018)	0.04** (0.014)	0.05
Sense of purpose	0.21*** (0.016)	0.12*** (0.013)	0.10
Observations	6236	6217	
$R^2$	0.32	0.49	

Notes: Standard errors in parentheses. The first two columns above provide OLS regressions of happiness and choice on 7-point values of each aspect. The third column provides estimates of indirect effects of the aspects on choice. See text for discussion. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

### *AIII.D Additional measurement error correction information*

In the main text we present and discuss the results from the simulation extrapolation (SIMEX) regressions correcting for measurement error. Here we present additional information relevant to the SIMEX method, and present IV regression results which are likely more familiar to economists.

The fundamental goal of the SIMEX algorithm is to estimate a functional approximation of  $\hat{\beta}((1 + \lambda)\sigma^2)$ , the function describing the asymptotic estimate of the regression coefficient as a function of  $\lambda$ , the scaling of the variance of the measurement error. Conducting a naïve regression without correction for measurement error corresponds to the case where  $\lambda = 0$ . By adding additional noise to our dataset, we can simulate datasets where  $\lambda > 0$ . By simulating enough of these datasets, we can approximate the function  $\hat{\beta}((1 + \lambda)\sigma^2)$  and extrapolate to the case where  $\lambda = -1$ , corresponding to the case with no measurement error where  $\hat{\beta}$  is asymptotically consistent.<sup>3</sup> Figures A1 and A2 graphically present these estimates for the OLS and probit regressions reported in table 3 of the paper.

An additional issue which arises with the SIMEX method involves the decision of how to restrict the sample included in the regression. Of our sample of 633, 230 subjects returned for repeat measure surveys. These repeat measures are used to estimate the variance of each aspect's measurement error, which is necessary for the SIMEX algorithm. In the regressions reported in table 3 of the main text, we are applying these estimated measurement error variances to all subjects (not just the subjects for whom repeat measures are available). In doing so, we are implicitly assuming that there is no difference in the measurement error characteristics of the subjects who returned to the lab and the subjects who were only surveyed once.<sup>4</sup> In table A12 below we recreate our primary regressions considering both the full sample and the restricted sample of the subjects for whom repeat measures are available. We provide uncorrected

---

<sup>3</sup> Since the true functional form of this relationship is unknown, researchers have discretion in choosing the functional form of the extrapolant. We follow the standard practice of using a quadratic extrapolant, but from examining figures A1 and A2, it is clear that a linear extrapolant would often yield a very similar result.

<sup>4</sup> This assumption may be problematic for two reasons. First, standard selection concerns might apply if, for example, less conscientious survey respondents are less likely to return for the second round survey. Second, when employing the SIMEX algorithm we assign each individual the average of their repeated responses. Calculating this average from a different number of repeat responses (1 or 2) will lead to differing degrees of precision in that estimate.

regressions, SIMEX corrections, and IV regressions (where the aspect rating in survey 1 is instrumented by the aspect rating in survey 2).

These regressions demonstrate two important issues. First, IV regressions have less statistical power in our setting. Intuitively, this comes from the fact that the SIMEX algorithm we employ is assuming that our repeated observations are, in fact, independent draws of the same random variable. In contrast, IV regression does not assume that the instrument have the same distribution as the endogenous regression. IV is less efficient in our context primarily because it ignores the extra structure provided from having repeated observation of the same random variable (which allows estimation of the variance of the measurement error).

Second, the decision of whether to apply our measurement error variance estimates to the full sample or just the repeat measure population does affect our coefficient estimates. While the magnitudes are affected, the qualitative story that other aspects besides own happiness matter remains similar.



Figure A1: Simulation Extrapolation Estimates of OLS Coefficient Values

# Simulation Extrapolation Estimates of OLS Coefficient Values

Extrapolant: Quadratic Type: Mean

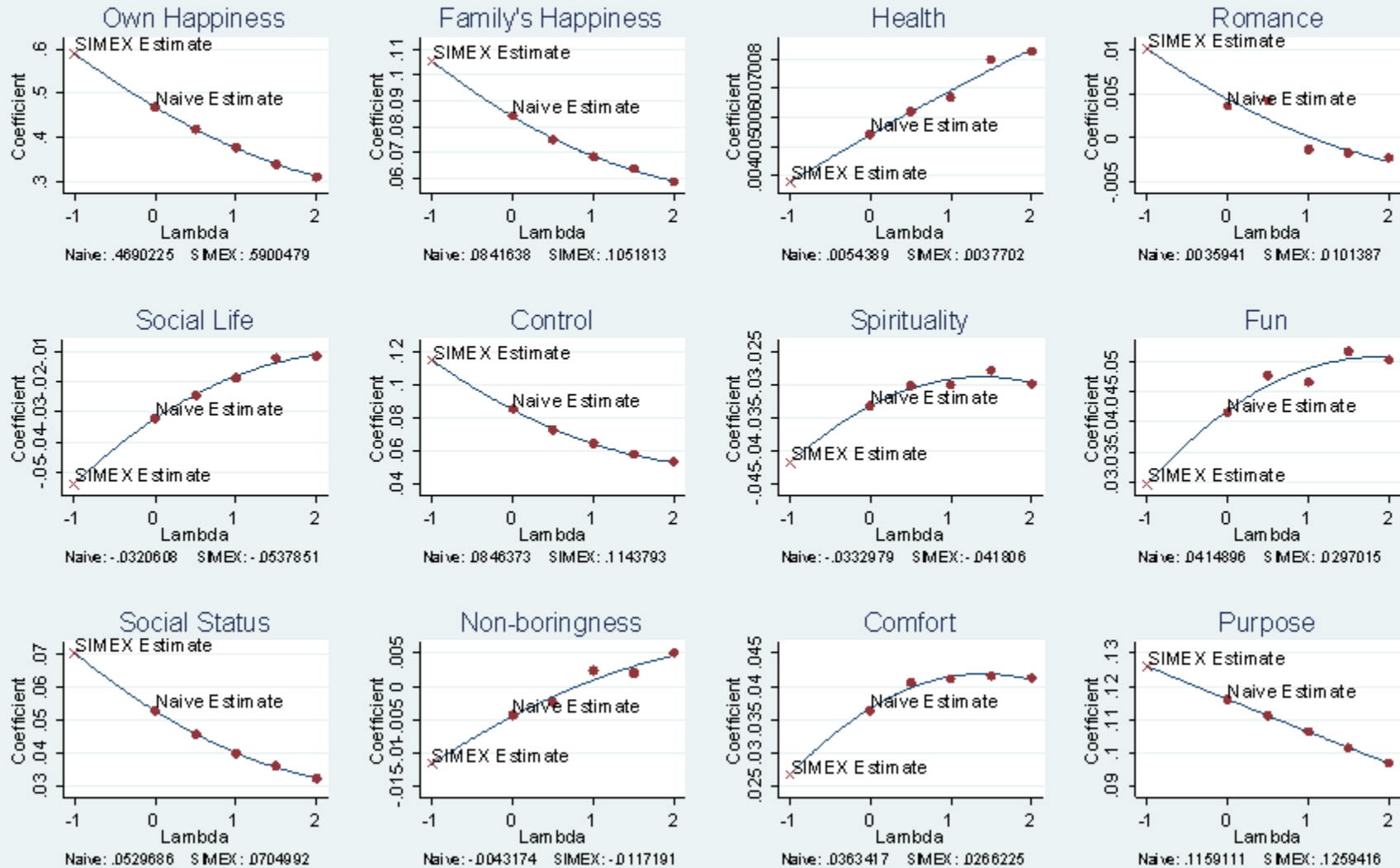


Figure A2: Simulation Extrapolation Estimates of Probit Coefficient Values

# Simulation Extrapolation Estimates of Probit Coefficient Values

Extrapolant: Quadratic Type: Mean

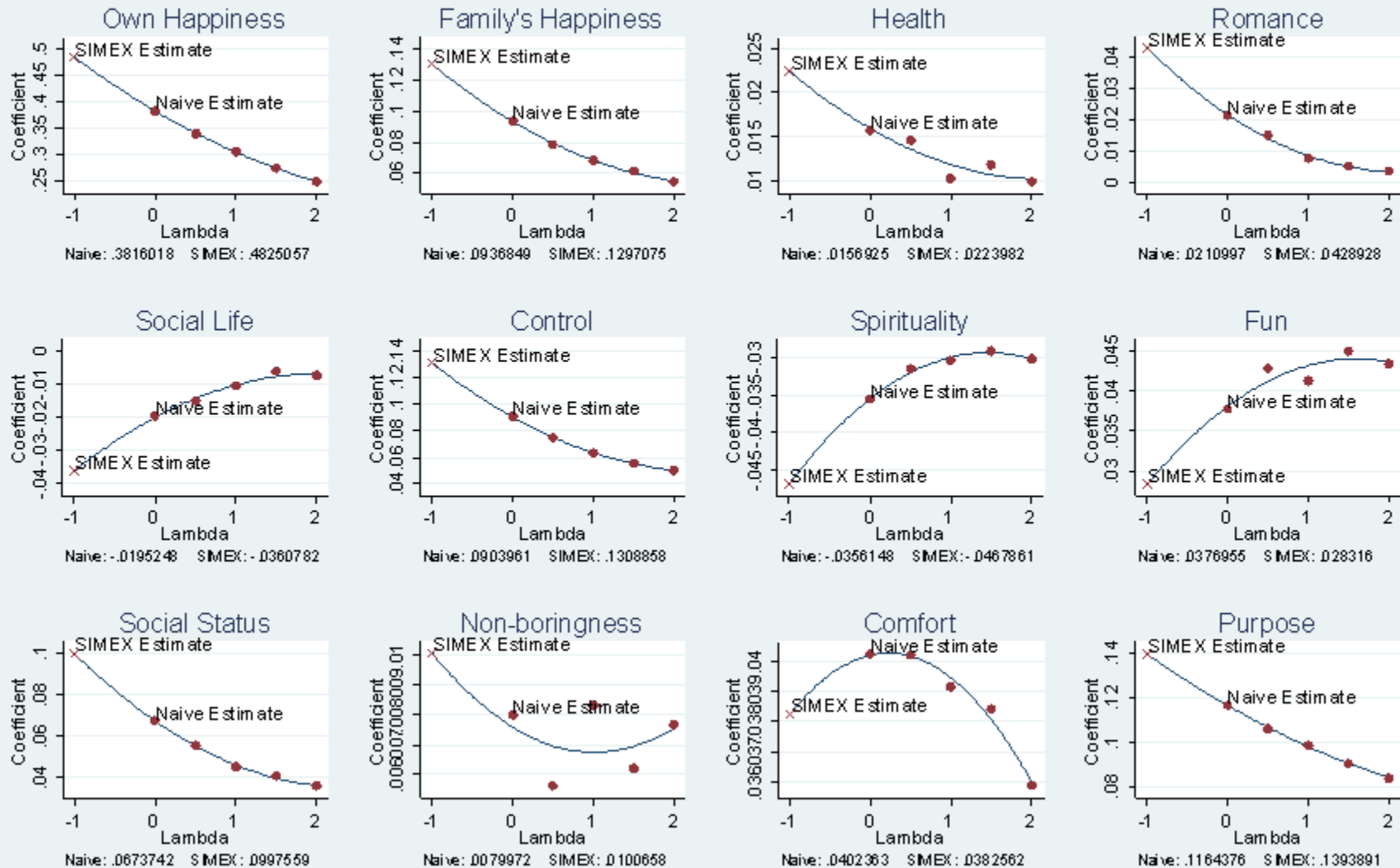


Table A12: Regressions of Choice on All Aspects with Measurement Error Corrections

Measurement error correction	<u>OLS</u>					<u>Probit</u>			
	None	None	SIMEX	SIMEX	IV	None	None	SIMEX	SIMEX
Restricted to sample with repeat aspect ratings?	Yes	No	Yes	No	Yes	Yes	No	Yes	No
Own happiness	0.49*** (0.019)	0.46*** (0.010)	0.77*** (0.040)	0.59*** (0.014)	0.75*** (0.078)	0.44*** (0.025)	0.37*** (0.012)	0.72*** (0.060)	0.48*** (0.019)
Family happiness	0.09** (0.026)	0.08*** (0.015)	0.17** (0.054)	0.11*** (0.026)	-0.04 (0.122)	0.14*** (0.033)	0.09*** (0.017)	0.28*** (0.076)	0.13*** (0.032)
Health	-0.02 (0.034)	0.00 (0.019)	-0.11 (0.083)	0.00 (0.031)	-0.44 (0.256)	-0.05 (0.043)	0.01 (0.022)	-0.14 (0.107)	0.02 (0.042)
Life's level of romance	-0.04 (0.039)	-0.01 (0.021)	0.06 (0.090)	0.01 (0.033)	0.45 (0.310)	-0.08 (0.049)	-0.00 (0.025)	0.05 (0.121)	0.04 (0.045)
Social life	-0.05 (0.032)	-0.03 (0.018)	-0.15 (0.086)	-0.05 (0.028)	-0.12 (0.294)	-0.03 (0.038)	-0.02 (0.021)	-0.08 (0.110)	-0.04 (0.036)
Control over your life	0.07* (0.026)	0.08*** (0.015)	0.08 (0.056)	0.11*** (0.025)	0.10 (0.160)	0.09** (0.032)	0.09*** (0.017)	0.10 (0.075)	0.13*** (0.028)
Life's level of spirituality	0.09* (0.037)	-0.02 (0.021)	0.21** (0.078)	-0.04 (0.036)	0.24 (0.138)	0.08 (0.047)	-0.04 (0.025)	0.33** (0.105)	-0.05 (0.047)
Life's level of fun	0.04 (0.031)	0.05* (0.018)	-0.08 (0.080)	0.03 (0.031)	-0.38 (0.348)	0.05 (0.038)	0.04* (0.021)	-0.08 (0.105)	0.03 (0.036)
Social status	0.09*** (0.025)	0.06*** (0.014)	0.13* (0.056)	0.07** (0.023)	-0.02 (0.107)	0.11*** (0.030)	0.07*** (0.016)	0.17* (0.076)	0.10*** (0.027)
Life's non-boringness	0.02 (0.030)	-0.01 (0.017)	0.06 (0.069)	-0.01 (0.030)	0.34 (0.267)	0.03 (0.036)	0.00 (0.020)	0.10 (0.091)	0.01 (0.037)
Physical comfort	0.06* (0.025)	0.04** (0.014)	0.05 (0.053)	0.03 (0.023)	0.10 (0.105)	0.08* (0.031)	0.05** (0.017)	0.06 (0.075)	0.04 (0.030)
Sense of purpose	0.11*** (0.023)	0.12*** (0.013)	0.09 (0.048)	0.13*** (0.022)	0.07 (0.116)	0.10*** (0.028)	0.12*** (0.015)	0.08 (0.062)	0.14*** (0.025)
Observations	1908	6217	1908	6217	1909	1908	6217	1908	6217

Notes: Standard errors in parentheses. The above table reports OLS and probit regressions of choice on SWB and all aspects. In the OLS regressions the dependent variable is 6-point choice. In the probit regressions the dependent variable is binary choice. All regressions use 7-point values of all aspects. Each observation is a subject's ratings for one scenario; there are 10 observations per subject corresponding to the 10 scenarios included. Probit regressions include (unreported) scenario-specific dummy variables. Equivalently, OLS regressions variables are demeaned at the question level. Measurement error corrections are done using the simulation extrapolation method described in section III, both under the assumption of additive normal measurement error. For details on the measurement error correction methods, see section III. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

*AIV.A. Are results driven by a few individuals?*

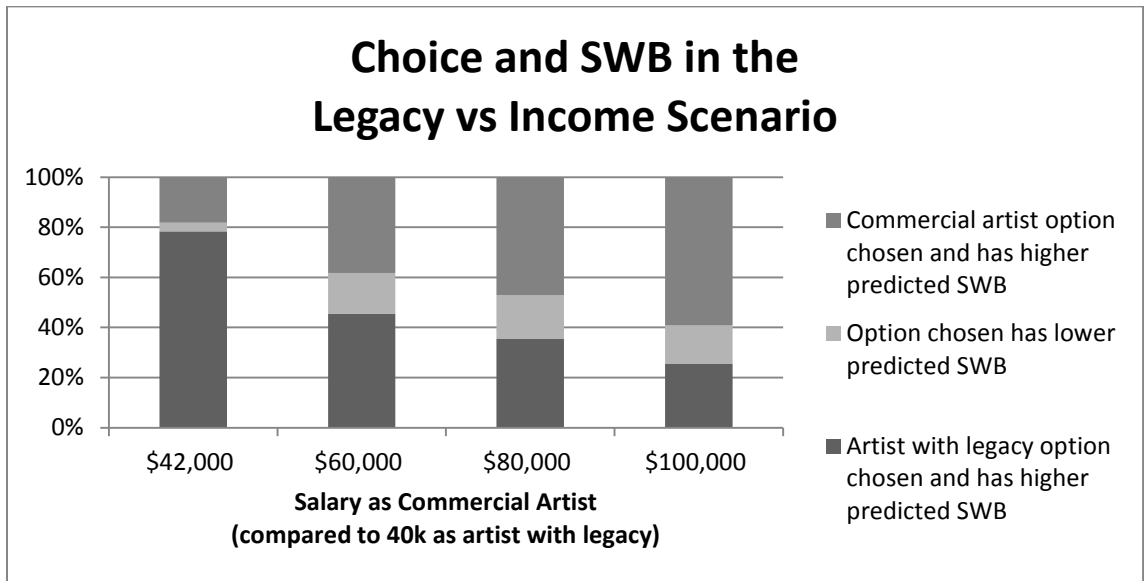
We interpret the evidence from sections II and III as indicating that for most people, preferences put high but not exclusive weight on SWB, and therefore people usually but not always choose the option they predicted would maximize SWB. However, an alternative possibility is that most people exclusively seek to maximize SWB, and our results are driven by a small minority of participants who do not. To test this possibility, we can examine whether choice-SWB reversals are exhibited by the same small number of individuals across scenarios, or whether the reversals are due to different participants in different scenarios. Across the ten scenarios in the Cornell surveys, 18 percent of participants have zero reversals, 28 percent have one reversal, 22 percent have two reversals, 15 percent have three reversals, 9 percent have four reversals, fewer than 9 percent have five or more reversals, and no one has reversals in all ten scenarios. Results from the Denver sample similarly suggest that reversals are broadly distributed in the population: 53 percent of participants have at least one reversal in the six scenarios, and 43 percent have exactly one or two.

While the above figures show that most Denver and Cornell participants have a choice-SWB reversal in at least one scenario, the data in table 2 in the main text indicate that only 5-38 percent of participants have a reversal in any given scenario. A possible interpretation is that for at least 62 percent of participants, choice always maximizes predicted SWB in that scenario. However, since any given scenario holds constant the “price of SWB,” it is also possible that the non-reversal participants *would have* exhibited a choice-SWB reversal in the very same scenario, if that scenario had involved a different price.

To distinguish between these possibilities, we asked participants in the Denver sample several different versions of Scenario 4, a choice between a lower-paying career as an artist who will have a lasting legacy versus a higher-paying career as a commercial artist who will leave no legacy. In all versions, the SWB question we asked was life satisfaction (*i*), and the annual income for the alternative of being an artist who will have a lasting legacy was held constant at \$40,000. The only difference across versions was the annual income for the alternative of being a commercial artist, which equaled \$42,000, \$60,000, \$80,000, or \$100,000. Each participant faced three versions of this scenario, either \$42k/\$60k/\$100k or \$60k/\$80k/\$100k. As illustrated in Figure A3, for a given scenario version, the fraction of participants exhibiting a choice-SWB reversal varies from as low as 3 percent in the \$42k version to as high as 17 percent in the \$80k version. Moreover, 24 percent exhibit a choice-SWB reversal for at least one income level in the

sample.<sup>5</sup> These data suggest that the proportion of individuals for whom we observe a reversal in a given scenario is a lower bound on the total number who would exhibit a reversal in the same scenario with *some* “price of SWB.”

Figure A3



<sup>5</sup> It is probably better to restrict this analysis to the respondents who answered both the choice and SWB question for all three income levels, and answered in a manner consistent with weakly increasing preference for income. For other respondents, choice-SWB reversals may represent response noise. To do this we drop the 9 percent of respondents who switched—either in terms of choice or predicted life satisfaction—to the commercial artist option when the amount of income was higher, but then switched back to the lasting legacy option when income was still higher. Among the monotonic participants, 22 percent exhibit a choice-SWB reversal for at least one income level in the sample, and some at more than one, but only 3 percent exhibit a reversal in all three versions they faced. Moreover, there is still substantial spread in the level of income at which participants exhibit a choice-SWB reversal: 1 percent in the \$42k version, 13 percent in the \$60k version, 15 percent in the \$80k version, and 13 percent in the \$100k version, yielding an average (weighted by the number of observations at each income level) of 12 percent.

#### *AIV.B. Order effects and participant fatigue*

We posed a number of scenarios to each participant. Fatigue when answering later scenarios might have caused greater frequency of choice-SWB discrepancies if variance in participants' responses increased. Alternatively, later scenarios might have more choice-SWB consistency if participants exert less independent effort on the choice and SWB questions separately. We can test for these order effects in the Denver sample, where we presented the six scenarios to half the participants in one order, and to half in the reverse order. In the within-subject data, we find a tendency for participants to both choose and predict higher SWB for Option 2 in scenarios that appeared later in the survey. In the first half of the survey, 49% of participants chose Option 2 and 47% predicted Option 2 would make them happier, compared with 56% and 52%, respectively, for the scenario presented in the second half of the survey (both differences statistically significant, Fisher exact test  $p < 0.02$ ). In the within-subject data, we also find a statistically significant tendency for participants to indicate ratings closer to indifference (for both choice and SWB) more frequently for scenarios later in the survey. Since the order effect that favors Option 2 affects both choice and SWB predictions, it does not affect our estimates of choice-SWB discrepancies. Regardless of whether a scenario appeared in the first half or second half of the survey, 15% of participants exhibited a choice-SWB discrepancy (Fisher exact test  $p = 0.87$ ). In the between-subjects data, the order effects are weaker and less consistent: there is no effect of scenario order on likelihood of choosing a middle response, and while Option 2 is predicted to have higher SWB in later scenarios, Option 1 is more likely to be chosen in later scenarios. These results suggest that scenario order effects do not substantially impact our findings.

*AIV.C. Self-reported artificial consistency/inconsistency and mistakes*

We would like to infer from discrepancies between participants' choices and their predicted SWB that factors other than SWB enter preferences. However, if participants exhibited artificial inconsistency, or if they intended to make choices that maximize SWB but erroneously chose otherwise, our results would overstate the difference between utility and SWB. While our between-subjects surveys address artificial consistency/inconsistency concerns, and while our measurement-error-corrected regressions address the possibility of choice errors that are uncorrelated across repetitions of the survey, we also address the possibility of correlated choice errors and other concerns with evidence about participants' own interpretation of their behavior.

We start with artificial consistency/inconsistency. After participants finished all the decision scenarios, we asked:

Throughout this survey, we asked you to choose between two alternatives, and we also asked you to rate the options in terms of how they would affect various aspects of your life. When you made these ratings, were you trying to make your ratings consistent with what you chose? (Please circle one)

- (A) I rated the aspects independently from what I chose.
- (B) When I rated the aspects, I tried to be unaffected by what I chose, but I was probably affected to some extent.
- (C) When I rated the aspects, I tried to be consistent with what I chose.
- (D) Other (Please specify) \_\_\_\_\_

The distribution of responses to this question, broken down by sample group, is presented below.

Table A13: Self-Evaluation of Intentional Consistency Between Choice and Aspect Ratings

	All Responses	Within-Subject	Within-subject, repeat sample	Between-Subjects
I rated the aspects independently from what I chose	29.0	28.7	30.8	27.6
When I rated the aspects, I tried to be unaffected by what I chose, but I was probably affected to some extent	50.9	50.5	47.3	55.8
When I rated the aspects, I tried to be consistent with what I chose	19.7	20.6	21.9	15.6
Other	0.4	0.2	0.0	1.0
Observations	851	428	224	199

*Notes:* This table reports the frequency of responses to the above question in percentages. The first column presents the aggregate frequencies over all surveys where the question was asked. Later columns present the frequencies in specific studies, with specific phrasings of the happiness questions.

These results suggest that an attempt to be consistent may have consciously or (perhaps more commonly) unconsciously played a role in a non-trivial fraction of participants' responses. Nonetheless, our results from table 3 remain qualitatively very similar when we exclude from the analysis all participants who said they were trying to be consistent, or when we include only participants who believe they rated the aspects independently from what they chose. The first column of table A14 repeats our preferred specification from table 3, while the second and third columns compare the results when we exclude participants who answered (C) and include only participants who answered (A), respectively. This evidence reinforces the impression from section II that while artificial consistency or inconsistency probably affect behavior in the survey, they do not drive our main findings.

In addition to the concerns of artificial consistency, it is also conceivable that subjects view the cases of choice-SWB discrepancy as mistakes. If this were widespread, it would significantly affect the interpretation of our findings. To assess this possibility, we also asked near the end of our surveys:

At times in the earlier scenarios, you might have chosen an alternative which you did not think would make you happier.

If you made such a choice, do you believe it was a mistake? That is, if you could go back and change your answer now, would you want to? (Please circle one).

YES / NO / I never made this kind of choice.

If you made such a choice, do you think you would regret it? That is, if your chosen alternative actually occurred, do you think you would later wish you had instead chosen the other option? (Please circle one).

YES / NO / I never made this kind of choice.

If you made such a choice, please explain your reasoning: [blank space]

Most subjects think of their choice-SWB discrepancies as intentional. In response to the question whether such a discrepancy “was a mistake,” 7% said yes, 73% said no, 19% said they never made such a choice, and 1% did not respond. In response to the question whether they “would regret” such a discrepancy, 23% said yes, 57% said no, 19% said they never made such a choice, and 1% did not respond. Moreover, our conclusions from section III in the main text remain essentially the same if we exclude participants who believed they were making a mistake or



believed they would regret their choices. The fourth and fifth column of table A14 compare the results of the primary regression when we exclude “regret” subjects and “mistake” subjects, respectively.

Table A14: OLS Regressions of Choice on All Aspects; Artificial Consistency Checks

	Full Sample	Excluding individuals who were intentionally trying to be consistent	Only individuals who say they rated choice and happiness independently	Excluding individuals who would regret their decision	Excluding individuals who say their decisions might have been mistakes	Only individuals whose choice=meta-choice	Meta-choice as Dependent Variable
Own happiness	0.46*** (0.010)	0.45*** (0.011)	0.48*** (0.019)	0.47*** (0.011)	0.46*** (0.011)	0.59*** (0.014)	0.41*** (0.014)
Family happiness	0.08*** (0.015)	0.09*** (0.016)	0.07* (0.027)	0.08*** (0.017)	0.08*** (0.015)	0.04* (0.020)	0.01 (0.019)
Health	0.00 (0.019)	0.02 (0.021)	-0.03 (0.035)	0.00 (0.021)	0.02 (0.020)	0.01 (0.025)	0.05* (0.024)
Life's level of romance	-0.01 (0.021)	-0.01 (0.024)	0.01 (0.041)	-0.01 (0.023)	-0.01 (0.022)	0.02 (0.029)	-0.00 (0.027)
Social life	-0.03 (0.018)	-0.03 (0.020)	-0.02 (0.035)	-0.03 (0.020)	-0.03 (0.019)	-0.09*** (0.025)	-0.06* (0.023)
Control over your life	0.08*** (0.015)	0.08*** (0.016)	0.06* (0.029)	0.08*** (0.017)	0.08*** (0.015)	0.08*** (0.020)	0.10*** (0.019)
Life's level of spirituality	-0.02 (0.021)	-0.01 (0.024)	0.01 (0.041)	0.00 (0.024)	-0.03 (0.022)	-0.07* (0.029)	-0.01 (0.027)
Life's level of fun	0.05* (0.018)	0.07** (0.020)	0.04 (0.035)	0.06** (0.020)	0.06** (0.019)	0.08*** (0.024)	0.06** (0.023)
Social status	0.06*** (0.014)	0.05** (0.015)	0.05 (0.026)	0.04** (0.016)	0.06*** (0.015)	0.06** (0.019)	0.01 (0.018)
Life's non-boringness	-0.01 (0.017)	-0.01 (0.019)	0.03 (0.033)	-0.01 (0.019)	-0.03 (0.018)	-0.04 (0.023)	0.02 (0.021)
Physical comfort	0.04** (0.014)	0.04* (0.016)	0.01 (0.027)	0.01 (0.016)	0.03* (0.015)	0.02 (0.019)	0.05** (0.018)
Sense of purpose	0.12*** (0.013)	0.12*** (0.015)	0.11*** (0.026)	0.12*** (0.015)	0.12*** (0.014)	0.14*** (0.018)	0.10*** (0.017)
Observations	6217	5053	1745	4686	5562	2827	4231
R <sup>2</sup>	0.41	0.40	0.40	0.43	0.41	0.57	0.39

Notes: Standard errors in parentheses. The above table provides OLS regressions of 6-point choice on 7-point values of all aspects. Each column after the first restricts the regression to samples with different self-reported degrees of susceptibility to artificial consistency, believing their answers were mistakes, or self-control issues. See section IV.C and IV.D for details. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios included. All variables are demeaned at the question level, equivalent to including question fixed effects. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

#### *AIV.D. Self-control*

A possible concern is that choice-SWB reversals may reflect a self-control problem (e.g., as in Laibson, 1997; O’Donoghue and Rabin, 1999), rather than a preference for non-SWB aspects of life. In most of our decision scenarios, it is not obvious how a self-control problem would be implicated, but there are a few where it could be. For example, in Scenario 7, one of the alternatives is staying out later with friends, while the other is going to bed earlier to feel better and be more productive the next day. A participant who correctly anticipates having a self-control problem might respond that she would choose to stay out late, even though her welfare would be maximized by going to bed earlier.

In order to assess the potential importance of self-control problems, in some versions of the survey, in addition to asking participants what they would choose, we ask them what they would want themselves to choose (their meta-preference, or meta-choice question mentioned in section I.C(c)). We reasoned that if a participant preferred Option 1 but would choose Option 2 due to a self-control problem, the participant would indicate a greater likelihood of choosing Option 2 but a meta-preference for Option 1. Aggregating across all surveys that include the meta-choice question (see table 1 in the main text), we find reversals between choice and meta-choice in 28 percent of the cases. However, while self-control problems may be relevant in these cases, our main results from section III appear to be robust when we exclude these observations. The sixth column of table A14 shows that when we regress choice on SWB and all non-SWB aspects, the results for the sample restricted to observations where preference and meta-preference coincide are qualitatively the same as the results for the full sample (although both the coefficient on own happiness and the  $R^2$  grow by around a third). The last column of table A14 shows the regression of metachoice on all aspects.

#### *AIV.E. Context of choice, SWB, and non-SWB aspect questions*

Closely-related to concerns about artificial consistency and inconsistency, it is possible that our results are affected by the organization of our choice, SWB, and non-SWB aspect questions. In the Denver within-subject sample, we presented a scenario, solicited choice and predicted SWB for that scenario, and then moved on to the next scenario. As a result, participants' interpretations of the choice and SWB questions may have been influenced by the fact that we asked about both questions together. In the Cornell within-subject sample, in order to measure the effect of question context on our results, we randomly assigned participants to receive one of four question organizations. Within each question organization, we also randomized within each scenario the order in which participants rated the non-SWB aspects. Half the participants rated the non-SWB aspects in the "forward" order (the order we list them in all the tables), and half in the opposite, "reverse" order. Table A15 displays regression results estimated separately for each of the eight question designs. For comparison, the first column of table A15 shows full sample results. For comparability, since we asked some of our question organizations only for the "happiness with life as a whole" SWB question, table A15 shows results from restricting all the within-subject Cornell data to only the "happiness with life as a whole" SWB question.

Column 2 of table A15 focuses on the survey design that matches the Denver design as closely as possible: we presented a scenario, solicited choice and predicted happiness for that scenario, and then moved on to the next scenario. We measured the non-SWB aspects only later in the survey, when we re-presented each scenario along with the non-SWB aspects question, with aspects presented in the forward order. Among the designs we implemented, this design generated some of the strongest predictive power for happiness. Column 3 analyzes a survey design that was the same, except that we presented the non-SWB aspects in the reverse order. The order of the aspects clearly makes difference. For example, sense of purpose had a statistically insignificant coefficient of 0.02 in column 2, when it was the last aspect listed, but a statistically significant coefficient of 0.16 in column 3, when it was the first aspect listed. The reverse order of the aspects also caused the coefficient on happiness to decrease from 0.57 in column 2 to 0.48 in column 3, presumably because the aspects that end up mattering more in the reverse ordering also end up being more highly correlated with happiness.

Columns 4 and 5 report on a survey design where we presented each scenario, solicited *only* choice for that scenario, and then asked about own happiness and the non-SWB aspects together. In this design, own happiness was listed in the same table where the rest of the aspects were listed, with own happiness listed first when the aspects were listed in the forward order (column 4) or with own happiness listed last when the aspects were listed in the reverse order (column 5). We expected that when happiness is presented as part of a series of questions regarding other aspects of life, it is interpreted as “happiness controlled for other aspects of life,” and it would have a correspondingly smaller coefficient. Indeed, the coefficient on happiness, 0.46 in column 4 and 0.43 in column 5, is smaller than in columns 2-3. Interestingly, while the order in which the aspects were presented again makes a difference in the coefficients on the non-SWB aspects, the coefficients on happiness are similar regardless of whether happiness was asked first or last.

Columns 6 and 7 show a design where we presented each scenario to solicit only choice for that scenario, then re-presented each scenario to solicit only happiness, and then re-presented each scenario yet again to solicit only non-SWB aspect ratings. This design generates the lowest coefficient on happiness, with 0.31 in the forward order of the aspects (column 6) and 0.40 in the reverse order (column 7). In column 6, the coefficient of 0.27 on sense of purpose is not statistically distinguishable from 0.31; this is the only survey version in table A15 where a non-SWB aspect rivals happiness in predictive power for choice.

Columns 8 and 9 show a design where we presented each scenario to solicit only happiness first, next re-presented each scenario to solicit only choice, and finally re-presented each scenario yet again to solicit only non-SWB aspect ratings. The coefficients of 0.57 on happiness in column 8 (forward aspect order) and 0.48 in column 9 (reverse aspect order) are similar to those from columns 2-3.

While the context in which we asked our key survey questions definitely matters for the coefficients in the regression of choice on happiness and non-SWB aspects, the basic results appear to be robust: happiness is the strongest predictor of choice, but other aspects matter as well.

Table A15: OLS Regressions of Choice on All Aspects, Restricted to Specific Survey Structures

Scenario Iteration:	First	All versions pooled	Choice, SWB	Choice, SWB	Choice, SWB, Aspects	Choice, SWB, Aspects	Choice	Choice	SWB	SWB
	Second Third		Aspects	Aspects			SWB	SWB	Choice	Choice
			Standard	Reverse	Standard	Reverse	Standard	Reverse	Standard	Reverse
Own happiness		0.46 <sup>***</sup> (0.010)	0.57 <sup>***</sup> (0.030)	0.48 <sup>***</sup> (0.036)	0.46 <sup>***</sup> (0.038)	0.43 <sup>***</sup> (0.049)	0.31 <sup>***</sup> (0.039)	0.40 <sup>***</sup> (0.040)	0.57 <sup>***</sup> (0.026)	0.47 <sup>***</sup> (0.029)
Family happiness		0.08 <sup>***</sup> (0.015)	0.10 <sup>*</sup> (0.046)	0.08 (0.049)	0.09 (0.047)	0.10 (0.059)	0.01 (0.058)	0.06 (0.069)	0.01 (0.045)	0.18 <sup>***</sup> (0.049)
Health		0.00 (0.019)	-0.12 <sup>*</sup> (0.060)	-0.05 (0.059)	0.01 (0.072)	-0.02 (0.072)	0.06 (0.076)	-0.08 (0.084)	0.01 (0.054)	-0.09 (0.060)
Life's level of romance		-0.01 (0.021)	0.04 (0.066)	0.06 (0.061)	-0.08 (0.080)	0.07 (0.090)	-0.15 (0.088)	0.14 (0.089)	-0.03 (0.066)	-0.02 (0.065)
Social life		-0.03 (0.018)	0.01 (0.058)	-0.12 <sup>*</sup> (0.050)	0.13 (0.070)	-0.15 <sup>*</sup> (0.070)	0.05 (0.075)	-0.04 (0.087)	-0.02 (0.052)	-0.08 (0.059)
Control over your life		0.08 <sup>***</sup> (0.015)	0.05 (0.047)	0.04 (0.053)	0.10 (0.051)	0.07 (0.052)	0.11 (0.065)	0.12 (0.066)	0.08 (0.043)	0.06 (0.046)
Life's level of spirituality		-0.02 (0.021)	-0.01 (0.071)	0.03 (0.061)	-0.01 (0.076)	-0.09 (0.077)	0.04 (0.109)	-0.05 (0.093)	-0.05 (0.064)	-0.19 <sup>**</sup> (0.069)
Life's level of fun		0.05 <sup>*</sup> (0.018)	0.05 (0.057)	0.12 <sup>**</sup> (0.047)	-0.21 <sup>**</sup> (0.070)	-0.01 (0.064)	-0.05 (0.090)	0.10 (0.089)	0.06 (0.055)	0.12 (0.061)
Social status		0.06 <sup>***</sup> (0.014)	-0.07 (0.045)	0.14 <sup>**</sup> (0.044)	0.07 (0.052)	0.01 (0.053)	0.12 <sup>*</sup> (0.058)	0.05 (0.058)	-0.04 (0.039)	0.08 (0.043)
Life's non-boringness		-0.01 (0.017)	0.03 (0.063)	-0.08 (0.047)	0.16 <sup>*</sup> (0.067)	0.07 (0.059)	-0.09 (0.090)	-0.02 (0.080)	0.07 (0.052)	0.05 (0.055)
Physical comfort		0.04 <sup>**</sup> (0.014)	0.04 (0.052)	0.03 (0.040)	-0.06 (0.057)	0.14 <sup>**</sup> (0.049)	0.10 (0.066)	0.00 (0.067)	-0.04 (0.046)	0.14 <sup>***</sup> (0.043)
Sense of purpose		0.12 <sup>***</sup> (0.013)	0.02 (0.048)	0.16 <sup>***</sup> (0.039)	0.08 (0.055)	0.17 <sup>***</sup> (0.050)	0.27 <sup>***</sup> (0.059)	0.05 (0.056)	0.05 (0.041)	0.09 <sup>*</sup> (0.040)
Observations		6217	528	523	524	527	510	399	554	521
R <sup>2</sup>		0.41	0.52	0.45	0.40	0.35	0.27	0.35	0.56	0.54

Notes: Standard errors in parentheses. The above table provides OLS regressions of 6-point choice on 7-point values of all aspects. Each column after the first restricts the regression to a specific survey variation. For details, see section AIV.E. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios included. All variables are demeaned at the question level, equivalent to including question fixed effects. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

*AIV.F. An alternative approach: willingness-to-pay questions*

Our empirical approach in section III of the main text is to assess the marginal utility of SWB and other factors by confronting participants with a series of scenarios, and estimating the coefficients from a regression of choice on predicted SWB and non-SWB aspect ratings of the choice options. To obtain another source of evidence on marginal utilities, which we can use to cross-validate our regression-based findings, we also asked questions aimed to directly elicit participants' willingness-to-pay (WTP) for improving SWB and other aspects of their life.

Near the end of the Cornell survey, after participants had faced all of the scenarios, we asked:

Suppose some aspects of your life could be improved if you took it upon yourself to regularly work to improve them. In particular, suppose aspects of your life could improve if you were systematically exposed to the right information and if you put in the time, attention, awareness, energy, and effort needed for real improvements to occur. In this question, we are asking you to believe for a moment that this were true for the entire list of aspects of your life below... Specifically, you have to devote a certain number of minutes each week to work on each of the aspects of your life you want to improve. If you do, your rating of the aspects you are working on would go up by 1 point on a 10-point scale for as long as you continue putting in the time... You can work to improve as many aspects of your life as you want during the same week, but each aspect requires its own amount of (non-overlapping) minutes. The minutes you put in are neither particularly pleasant nor particularly unpleasant, regardless of the aspect you are working to improve.

For the full list of 12 aspects of life, respondents were then asked to indicate the maximum number of minutes per week they were willing to put in. We measured WTP in units of time because we expected time to be more comparable across respondents than money for our undergraduate sample. Response categories were 0, 5, 10, 15, 20, 30, 45, 60, 75, and 120 minutes. The first column of table A16 reports the mean and standard deviation of responses on all of the WTP questions.

Since as far as we are aware, there is no existing work using this kind of WTP question, we sought to double-check that the WTP questions are picking up meaningful variation. For that reason, we also asked participants about the current levels of aspects in their life as a whole: "Taking your life as a whole, how would you rate on a scale from 1 (worst) to 10 (best) ...". Participants then rated themselves on the entire list of 12 aspects of life (including own happiness). For half the participants, this question was the very first in the survey, and for half,

the very last in the survey. The second column of table A16 shows the mean and standard deviation of these ratings. The third column shows that almost all the current measures are positively associated with the corresponding WTP measures, and many of them statistically significantly so. We interpret these relationships through a standard price-theoretic lens. Suppose each individual chooses his/her time allocation between activities (e.g., studying, sleep, exercise, as well as work) to maximize his/her preferences defined over aspects of life. Individuals vary from each other in their preferences, as well as in their production technology that transforms time inputs into aspect levels.<sup>6</sup> At an interior optimum, each individual will set every pairwise marginal rate of substitution (the ratio of marginal utilities between aspects) equal to the corresponding marginal rate of transformation (the ratio of marginal time-costs of production between aspects). If variation in preferences across respondents drives the correlation between WTP for an aspect and its optimally-chosen level, then this correlation should be positive; in contrast, if variation in production technology across respondents drives the correlation between WTP for an aspect and its optimally-chosen level, then this correlation should be negative. Besides providing some reassurance that the WTP responses are meaningful, the mostly-positive associations in the third column of table A16 may suggest that for most aspects, our respondents differ from each other in preferences more than in the time-costs of producing the aspects.

Returning attention to column 1 of table A16, consistent with our regression-based findings, own happiness has the largest WTP, 69 minutes, which is statistically significantly larger than the second-largest WTP of 65 minutes for health (Paired  $t$ -test  $p = 0.018$ ). This is consistent with the interpretation of our model where the direct contribution of SWB to utility outweighs the sum of the direct and indirect contributions of other aspects to utility. Additionally, mean WTPs are correlated with the coefficients obtained from a univariate regression of choice on each aspect (correlation 0.67,  $p < 0.02$ ). SWB has a large impact on this correlation coefficient because it has both a high WTP and a high regression coefficient. To assess the robustness of the correlation, we omit SWB from the set of aspects; in that case, the correlation is 0.49, economically sizeable but not statistically significant ( $p = 0.12$ ). These correlations might be inflated if aspects listed earlier have both larger coefficients and higher

---

<sup>6</sup> As a simplifying assumption, we do not explicitly model how some inputs into production of aspects may be purchased through the market. Instead, we think of the income generated from time allocated to “work” as optimally allocated to market purchases; hence, time allocated to work and time allocated to other activities may enter into the production function for an aspect as complements.



WTP. We test if these results are robust to this possibility by calculating the mean WTP and univariate beta coefficients for each of our two aspect orders separately and calculating the correlation between mean WTP in one order and beta values from the other. This yields correlations of 0.64 (for betas calculated from order 2 and WTP calculated from order 1) and 0.67 (for betas calculated from order 1 and WTP calculated from order 2). Performing these same calculations while excluding SWB from the set of aspects yields correlations of 0.53 (for betas calculated from order 2 and WTP calculated from order 1) and 0.38 (for betas calculated from order 1 and WTP calculated from order 2). These results suggest the positive correlation is not driven primarily by order effects.

We prefer our regression-based approach to the WTP approach as our main empirical strategy because we believe participants can more accurately forecast their behavior in the scenarios, which are relatively realistic, as opposed to the somewhat fanciful WTP question. Nonetheless, we interpret our analysis of the WTP data as broadly supportive of our conclusions from the regression-based approach.

Table A16: Aspect-Specific Willingness-to-Pay and Levels

	WTP	Levels	Correlation of WTP and Levels
Own happiness	69.30 (39.83)	7.64 (1.51)	0.08 $p = 0.043$
Family happiness	61.72 (39.48)	7.46 (1.71)	0.14 $p = 0.001$
Health	65.34 (39.47)	7.80 (1.66)	0.03 $p = 0.426$
Life's level of romance	55.63 (38.60)	6.27 (2.48)	0.05 $p = 0.258$
Social life	47.19 (34.15)	7.29 (1.76)	0.06 $p = 0.121$
Control over your life	44.51 (35.20)	7.26 (1.82)	0.03 $p = 0.454$
Life's level of spirituality	31.33 (36.91)	5.85 (2.43)	0.46 $p = 0.000$
Life's level of fun	49.15 (35.20)	7.25 (1.77)	0.11 $p = 0.008$
Social status	35.75 (33.05)	7.05 (1.73)	0.12 $p = 0.004$
Life's non-boringness	44.86 (34.10)	7.19 (1.81)	0.07 $p = 0.102$
Physical comfort	41.06 (35.96)	7.58 (1.58)	-0.06 $p = 0.135$
Sense of purpose	51.07 (40.41)	7.45 (1.83)	0.09 $p = 0.029$
Observations	627	624	

*Notes:* The above table provides the mean and standard deviations of WTP for aspect levels and self reported aspect levels in the respondent's life as a whole, and the correlation between the two. The measure of WTP is the number of minutes respondents would devote to increasing each aspect level by 1 point. Aspect levels are on a 10 point scale.

#### *AV.A. Comparing SWB measures, and pilot data on new SWB measures*

Across our surveys, we asked five different SWB questions, based on three families of SWB questions asked in large-scale social surveys used for empirical work: life satisfaction, happiness with life as a whole, and felt happiness. Basic comparisons of these SWB measures are provided in the main text; here we provide further detail.

The top panel of table A17 reports regressions of choice on predicted SWB, using all of our within-subject data, broken down by SWB measure (and hence also by sample). The first two columns show OLS specifications, where the dependent variable is 6-point choice. Focusing on the Denver sample and pooling across scenarios, the first column suggests that life satisfaction and happiness with life as a whole, SWB questions (i) and (ii), both have coefficients of about 0.80, not statistically different from each other but statistically larger than the coefficient of 0.73 on felt happiness, SWB question (i). The  $R^2 = 55\%$  from the regression of choice on felt happiness is also insignificantly smaller than the  $R^2 = 59\%$  from the regression on happiness with life as a whole, but is significantly smaller than the  $R^2 = 65\%$  from the regression on life satisfaction ( $p = .02$  based on boot-strapped standard errors). Next, we turn to the Cornell sample where we asked about “own happiness with life as a whole” and “immediately-felt own happiness,” SWB questions (iv) and (v). The second column shows that (iv) has about the same coefficient as (v), 0.57 compared with 0.54, as well as about the same  $R^2$ , 39% compared with 37%, with neither difference being statistically significant. Interestingly, the coefficients and  $R^2$ 's from the Cornell sample are clearly lower than those from the Denver sample, which could be due to different sample, different scenarios, or different SWB questions.

For comparison with the OLS estimates, the last two columns of table A17 show probit specifications, where the dependent variable is dichotomous choice. The main difference in the probit regressions is that happiness with life as a whole is a worse predictor of choice than in the OLS, with the coefficient almost identical to that of felt happiness, and both felt happiness and happiness with life as a whole are statistically worse at predicting choice than life satisfaction (the  $p$ -values for both pairwise comparisons = 0.01).

Table A17: Predictive Power of Different SWB Measures

	OLS Estimates		Probit Estimates	
	Denver	Cornell	Denver	Cornell
Life Satisfaction	0.81		0.79	
	(0.020)		(0.024)	
	$n = 848$		$n = 848$	
	$R^2 = 0.65$		pseudo- $R^2 = 0.53$	
Happiness With Life as a Whole	0.79		0.70	
	(0.023)		(0.027)	
	$n = 822$		$n = 822$	
	$R^2 = 0.59$		pseudo- $R^2 = 0.39$	
Felt Happiness	0.73		0.70	
	(0.022)		(0.026)	
	$n = 866$		$n = 866$	
	$R^2 = 0.55$		pseudo- $R^2 = 0.41$	
Own Happiness With Life as a Whole		0.57		0.34
		(0.015)		(0.015)
		$n = 2124$		$n = 2124$
		$R^2 = 0.39$		pseudo- $R^2 = 0.29$
Immediately Felt Own Happiness		0.54		0.36
		(0.015)		(0.015)
		$n = 2163$		$n = 2163$
		$R^2 = 0.37$		pseudo- $R^2 = 0.32$
Broadly Defined Happiness		0.49		0.30
		(0.017)		(0.016)
		$n = 1948$		$n = 1948$
		$R^2 = 0.29$		pseudo- $R^2 = 0.27$
Bardo Choice Question		0.58		0.51
		(0.021)		(0.022)
		$n = 1948$		$n = 1948$
		$R^2 = 0.29$		pseudo- $R^2 = 0.27$

Notes: The above table provides probit and OLS regressions of choice on happiness. Marginal effects are reported for the probit coefficients. The probit regressions run binary choice on binary happiness and question dummies when appropriate. In the Cornell sample, since it was possible to indicate that the two options had the same level of happiness, the happiness variable takes on values of 1, 0, or -1 depending on if option two has higher, equal, or lower SWB compared to option 1. The OLS regressions run six point choice on six- or seven- point happiness, with choice and happiness ratings demeaned at the question level.

To obtain evidence on why participants responded differently to different SWB questions—and more generally to learn about how participants interpreted these questions—we asked at the end of some of our Cornell surveys: “Throughout the first section of this survey, you were asked to predict your happiness under various scenarios. How were you thinking about ‘happiness’ when you were answering these questions?” Table A18 shows the multiple choice response categories we offered, along with the percentage of participants indicating each response for SWB questions (*iv*) and (*v*). The largest difference is that participants who had been asked SWB question (*iv*), “own happiness with life as a whole,” were more likely to indicate that ‘happiness’ meant “What would put me in a better mood throughout my life” than participants who had been asked SWB question (*v*), “immediately-felt own happiness” (36% compared to 23%,  $p = .01$ ).

Table A18: Respondent’s Interpretation of SWB Question

	Cornell Sample: Own Happiness with Life as a Whole	Cornell Sample: Immediately Felt Own Happiness	<i>p</i> -value of difference
What would be the greatest possible good for me, as judged by me	26.8	37.3	0.057
What would put me in a better mood throughout my life	36.0	22.5	0.013
What would put me in a better mood for the next year	2.6	6.9	0.066
What would put me in a better mood right after the choice	6.3	8.8	0.370
What I think is the right way to live	15.1	15.7	0.873
What would lead me to have the least regrets	11.8	7.8	0.349
Other	1.5	1.0	1.000
Multiple selections indicated	4.9	4.7	
Observations	286	107	

*Notes:* This table reports the frequency of responses to the question: “Throughout the first section of this survey, you were asked to predict your happiness under various scenarios. How were you thinking about ‘happiness’ when you were answering these questions?” Individuals who indicated multiple selections are excluded when calculating the total percentage.

While in the Denver data the life-satisfaction-type SWB question is more predictive of choice than the happiness-type SWB questions, in both Denver and Cornell the felt happiness and the happiness with life as a whole questions predict choice similarly. One possible hypothesis as to why some SWB measures predict choice better is that they encourage participants to report the present value of SWB flows over time. However, our finding that variant (*v*)—about happiness

“in the few minutes immediately after making the choice”—is as predictive of choice as variant (*iv*)—about happiness with “life as a whole”—is inconsistent with this view. The interpretations of the SWB questions that participants reported to us in table A18 make us more confident that subjects did, indeed, view variant (*v*) as being a more integrated-over-time measure of happiness than variant (*iv*).

*New SWB Measures.* While we have focused on testing how tightly SWB measures that are at present commonly used in empirical work relate to choice, our methodology could also be used to test potential *new* survey measures of SWB that might turn out to predict choice better than existing measures. Since life satisfaction, one of the broadest SWB measures, appears to match choice most closely, we hypothesized that even broader measures of SWB might predict choice even better. We collected some evidence that bears on this hypothesis using participants in the Cornell sample who came back to the lab for a second administration of the survey. After the participants took an exactly identical repetition of the initial survey they took, we gave them a new survey that re-asked the set of 10 scenarios but with two new SWB measures.

Recall that we found in section III in the main text that predicted levels of sense of purpose, control, and so on, help predict choice after controlling for predicted SWB; hence existing SWB measures do not fully capture these aspects of life. One of our new measures explicitly attempted to get participants to incorporate these aspects into their definition of “happiness”:

Between these two options, which do you think would give you a happier life as a whole, in the very broadest conception of “happiness” – that is, taking into account how these options affect various factors that might matter for your own overall happiness, such as your family’s happiness, your health, your romantic life, your social life, your control over your life, your life’s level of spirituality, your life’s level of fun, your social status, your life’s non-boringness, your physical comfort, your sense of purpose, etc.?

In our other new SWB measure, we told participants an elaborate story in which residents of the U.S. are reincarnated and get to choose whose life they would like to live. A lottery drawing determines the order in which people get to choose. We asked participants how they thought their own life would rank in terms of how early it would be chosen. (We refer to this measure as a “Bardo” question.)

The bottom panel of table A17 compares how well these new SWB questions predict choice relative to the existing SWB questions. The coefficients on the new SWB questions have similar magnitude to those on the existing SWB questions, and the new SWB questions have substantially smaller  $R^2$ 's. We emphasize that our survey procedure may have disadvantaged the new SWB questions because participants had become familiar with the scenarios before encountering them again with the new SWB questions, and because the new SWB questions were asked about 20 minutes after the last time participants indicated a choice in the scenarios. Nonetheless, subject to these caveats, our possibly-broader measures of SWB did not predict choice better than our main SWB measures (i)-(v).

#### *AV.B. Heterogeneity across decision scenarios*

As discussed in the main text, the simple theoretical framework in section III implies that the coefficients from the regression equation (3) should be essentially the same, regardless of which scenario is used to estimate (3). Table 4 shows OLS regressions of choice on SWB and non-SWB aspects estimated separately by scenario. Evidently there is heterogeneity of coefficients across scenarios, and an  $F$ -test rejects the hypothesis that the coefficient on “own happiness” is equal across scenarios ( $p = 0.000$ ).

A possible explanation for why we estimate different coefficients across different scenarios is that the first-order approximation in equation (2) fails to hold for some scenarios. Equation (2) will be a better approximation to the extent that  $\Delta H$  and  $\Delta X$  are small. To test whether variation in the regression coefficients across scenarios is due to the failure of this approximation, we identify three of the scenarios as containing particularly “non-local tradeoffs,” where we think the two options would likely lead to quite different SWB and non-SWB aspect ratings: Scenario 1 (sleep versus income), Scenario 3 (absolute income versus relative income), and Scenario 4 (legacy versus income). The first column of table A19 shows the regression of choice on SWB and the non-SWB aspects (repeating our preferred specification from table 3 in the main text), while the second column restricts the sample to scenarios with non-local tradeoffs. Despite the theoretical possibility of different results, the coefficient estimates are in fact for the most part quite similar, and a two sample  $t$ -test cannot reject equality of coefficient on “own happiness” ( $p = 0.63$ ).

Another possible explanation for why the coefficients vary across scenarios is that different scenarios make different factors salient, and factors that a participant thinks about more are more likely to influence the participant’s choice. For example, we suspect that in a decision about whether to eat an apple or an orange, factors such as sense of purpose, control, and social status typically do not enter the deliberation. While the theory in section III implies the regression should still recover the same coefficients, if instead such non-salient factors simply do not affect the decision at all for some people, then the regression coefficients will be smaller. We provide evidence on this possibility by testing whether non-SWB factors matter more in major life decisions, where we suspect they are salient, than in everyday, minor decisions, where we suspect the non-SWB factors we measure are not salient. We categorize six of our decision scenarios as being “everyday/minor decisions”: Scenario 2 (concert versus birthday), Scenario 5



(apple versus orange), Scenario 6 (money versus time), Scenario 7 (socialize versus sleep), and Scenario 8 (family versus money). The third column of table A19 repeats the regression from table 3, but with the sample restricted to observations from decision scenarios featuring everyday/minor decisions. We do indeed find that SWB has a higher coefficient here than in the full sample (two-sample  $t$ -test  $p$ -value is 0.001).

For comparison, we generated decision scenarios that are common and important in our participants' lives by asking students at the University of Chicago and at Cornell University to tell us about some of the top decisions they faced. The fourth column of table A19 restricts the sample to scenarios chosen to be more representative of important decisions for college students: Scenario 7 (socialize versus sleep), Scenario 8 (family versus money), Scenario 9 (education versus social life) and Scenario 10 (interest versus career). The regression coefficient on SWB is smaller in the representative scenarios than in the full sample (two-sample  $t$ -test  $p$ -value is 0.000), and non-SWB factors appear to matter more than in the everyday/minor decisions. The contrast between the third and fourth columns of table A19 is especially striking, given that both include Scenarios 7 and 8.

Despite the variation in coefficients across scenarios, the same basic pattern of results holds across all scenarios: non-SWB factors significantly predict choice controlling for SWB, but SWB is by far the single best predictor of choice.

Table A19: OLS Regressions of Choice on All Aspects: Results by Scenario Classification

	Full Sample	Non-local Tradeoffs	Representative Scenarios	Minor Decisions
Own happiness	0.46 <sup>***</sup> (0.010)	0.45 <sup>***</sup> (0.018)	0.37 <sup>***</sup> (0.015)	0.52 <sup>***</sup> (0.015)
Family happiness	0.08 <sup>***</sup> (0.015)	0.08 <sup>***</sup> (0.022)	0.10 <sup>***</sup> (0.022)	0.01 (0.027)
Health	0.00 (0.019)	-0.06 (0.035)	0.02 (0.026)	0.07 <sup>**</sup> (0.027)
Life's level of romance	-0.01 (0.021)	0.04 (0.037)	0.00 (0.030)	-0.03 (0.032)
Social life	-0.03 (0.018)	-0.01 (0.032)	-0.03 (0.027)	-0.03 (0.027)
Control over your life	0.08 <sup>***</sup> (0.015)	0.05 <sup>*</sup> (0.025)	0.10 <sup>***</sup> (0.020)	0.08 <sup>***</sup> (0.024)
Life's level of spirituality	-0.02 (0.021)	0.01 (0.034)	-0.05 (0.032)	-0.08 <sup>*</sup> (0.035)
Life's level of fun	0.05 <sup>*</sup> (0.018)	0.06 <sup>*</sup> (0.029)	0.01 (0.030)	0.06 <sup>*</sup> (0.029)
Social status	0.06 <sup>***</sup> (0.014)	0.04 (0.021)	0.10 <sup>***</sup> (0.021)	0.05 (0.028)
Life's non-boringness	-0.01 (0.017)	0.03 (0.027)	-0.01 (0.028)	-0.03 (0.028)
Physical comfort	0.04 <sup>**</sup> (0.014)	0.04 (0.024)	0.00 (0.021)	0.04 (0.022)
Sense of purpose	0.12 <sup>***</sup> (0.013)	0.14 <sup>***</sup> (0.023)	0.13 <sup>***</sup> (0.018)	0.07 <sup>**</sup> (0.023)
Observations	6217	1859	2494	3111
$R^2$	0.41	0.46	0.35	0.41
Chow Test p-value		0.00	0.00	0.00

Notes: Standard errors in parentheses. The above table provides OLS regressions of 6-point choice on 7-point values of happiness and one additional aspect. Each column after the first restricts the regression to a particular class of scenarios. The second column restricts the regression to scenarios involving a non-local tradeoff. The third column restricts the regression to scenarios that were generated to be representative of typical decisions students face. The fourth column restricts the regression to scenarios involving low-stakes or minor decisions. The p-value of a chow test of structural break is reported for each subgroup. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios included. All variables are demeaned at the question level, equivalent to including question fixed effects. The reported incremental  $R^2$ s are the increase in explained variation of this regression over a regression of just choice on happiness or choice on the aspect. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A20: Influence-Robust Regressions of Choice on All Aspects: Results by Scenario

	All questions	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10
Own happiness	0.52*** (0.010)	0.40*** (0.032)	0.51*** (0.031)	0.60*** (0.031)	0.52*** (0.030)	0.80*** (0.035)	0.62*** (0.035)	0.37*** (0.031)	0.67*** (0.028)	0.40*** (0.028)	0.28*** (0.031)
Family happiness	0.09*** (0.014)	0.08* (0.033)	0.06 (0.070)	0.15*** (0.044)	0.07 (0.040)	0.05 (0.158)	0.16** (0.058)	-0.09 (0.051)	0.07 (0.042)	0.13*** (0.036)	0.22*** (0.042)
Health	0.01 (0.018)	-0.05 (0.056)	-0.12 (0.075)	-0.05 (0.074)	-0.02 (0.056)	0.11 (0.065)	0.01 (0.074)	0.16** (0.052)	0.07 (0.048)	0.00 (0.042)	-0.05 (0.065)
Life's level of romance	-0.01 (0.021)	0.08 (0.061)	-0.02 (0.063)	0.01 (0.075)	0.03 (0.064)	-0.82*** (0.226)	-0.08 (0.084)	0.10 (0.052)	-0.02 (0.058)	0.00 (0.052)	-0.00 (0.075)
Social life	-0.05* (0.018)	-0.03 (0.057)	0.01 (0.043)	-0.01 (0.054)	-0.07 (0.056)	0.12 (0.223)	-0.01 (0.070)	-0.04 (0.063)	-0.06 (0.046)	-0.03 (0.052)	0.01 (0.055)
Control over your life	0.08*** (0.014)	0.02 (0.044)	0.05 (0.052)	0.06 (0.054)	0.09* (0.038)	-0.05 (0.092)	0.08 (0.050)	0.10* (0.042)	0.03 (0.042)	0.09* (0.037)	0.07* (0.036)
Life's level of spirituality	-0.04 (0.021)	-0.06 (0.051)	-0.05 (0.060)	-0.18* (0.087)	0.10 (0.053)	0.83*** (0.219)	-0.15 (0.089)	-0.13 (0.074)	-0.11* (0.053)	0.02 (0.052)	0.00 (0.070)
Life's level of fun	0.06*** (0.018)	0.06 (0.044)	0.15** (0.051)	0.05 (0.064)	0.07 (0.046)	-0.19 (0.126)	0.13 (0.067)	0.06 (0.070)	0.06 (0.051)	0.05 (0.055)	0.01 (0.059)
Social status	0.05*** (0.014)	-0.01 (0.037)	0.05 (0.044)	0.04 (0.039)	0.04 (0.035)	-0.49* (0.225)	0.02 (0.060)	0.10 (0.057)	0.03 (0.051)	0.03 (0.028)	0.18*** (0.045)
Life's non-boringness	-0.02 (0.017)	0.05 (0.038)	-0.00 (0.054)	0.20** (0.075)	-0.02 (0.046)	0.05 (0.120)	-0.04 (0.058)	0.13* (0.060)	-0.06 (0.052)	-0.04 (0.053)	0.04 (0.057)
Physical comfort	0.04* (0.014)	0.09* (0.038)	-0.00 (0.059)	-0.04 (0.052)	-0.03 (0.041)	0.18** (0.065)	0.01 (0.048)	0.07 (0.046)	-0.05 (0.035)	0.02 (0.039)	-0.03 (0.050)
Sense of purpose	0.12*** (0.013)	0.17*** (0.039)	0.13** (0.047)	0.10* (0.042)	0.13** (0.040)	0.34** (0.118)	0.04 (0.049)	0.03 (0.043)	0.09* (0.040)	0.19*** (0.036)	0.19*** (0.030)
Observations	6217	615	621	620	624	624	619	622	625	626	621

Notes: Standard errors in parenthesis. Iteratively-reweighted influence-robust regressions of 6-point choice on 7-point aspects of life. Based on 633 Cornell respondents. The leftmost column aggregates data across choice scenarios; each of the other columns corresponds to a specific scenario. Each observation is a respondent's ratings for one scenario; there are 10 observations per respondent corresponding to the 10 scenarios in the questionnaires. All variables are demeaned at the scenario level, generating coefficients equivalent to including scenario fixed effects. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

AV.C. Preference heterogeneity across respondents

Table A21: Demographic and Personality Predictors of Choice-SWB Discrepancies

	Denver	CNSS	Cornell	Cornell
Female	0.09 (0.082)	-0.02 (0.124)	0.06 (0.039)	
Age	0.03 (0.016)	-0.02 (0.021)	-0.01 (0.006)	
Age Squared/100	-0.03 (0.016)	0.01 (0.020)		
Race: White	-0.27 (0.178)	0.13 (0.360)	0.01 (0.086)	
Race: Hispanic	-0.29 (0.233)	0.23 (0.239)	0.01 (0.111)	
Race: Black	-0.05 (0.225)	0.18 (0.389)	0.25* (0.099)	
Race: Asian	0.06 (0.306)	0.12 (0.451)	0.05 (0.087)	
College Graduate	0.07 (0.069)	0.09 (0.138)		
High School Graduate	0.47 (0.496)	0.00 (0.310)		
Ln(Income)	-0.04 (0.057)	0.13 (0.093)		
Extraversion				-0.00 (0.024)
Agreeableness				0.01 (0.024)
Conscientiousness				-0.08*** (0.024)
Neuroticism				0.07** (0.025)
Openness				-0.03 (0.023)
Scenario Fixed Effects	Yes	No	Yes	Yes
Observations	2241	915	6148	4157
Pseudo $R^2$	0.01	0.01	0.04	0.05

Notes: Standard errors in parentheses. The above table reports coefficients from probit regressions of the probability of choosing a non-happiness maximizing option on demographic and personality variables. Gender, race and education are represented with dummy variables. The big five personality ratings are normalized. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## *AVI. Applications to ongoing empirical work*

We envision our scenario-based survey methodology as being useful for assessing specific applications of SWB data in empirical work. Recall from section II in the main text that SWB seems a better proxy for utility in some scenarios than in others. Specifically, it seems a better proxy in scenarios where there is little variation in non-SWB factors, such as everyday, minor decisions, compared with major life decisions. However, the focus of the empirical work that uses SWB data (e.g., the work we cite in the introduction, and additional work we discuss shortly) is rarely such minor decisions. Our findings hence suggest that such work should be especially cautious in drawing welfare conclusions from SWB data.

In order to provide more specific guidance for applied work, we provide analysis of data from four additional scenarios, intended specifically to address important ongoing issues in the economics of happiness literature. We emphasize that these data have greater limitations than our main data. First, we posed these scenarios at the end of our Cornell repeat-survey, so the sample size is smaller, and respondents' fatigue may have been greater. Second, our Cornell sample consists of undergraduate students, while the relevant empirical work focuses on broader populations. Finally, a thorough exploration would include multiple scenarios related to a given issue, while we ask a single scenario per issue. Nonetheless, we think that these data are illustrative and suggestive.

*The Easterlin paradox.* Easterlin (1974, 1995) famously found that while SWB (measured in various ways) is positively related to income in cross-sectional data, there is no upward trend in SWB in time-series data. While researchers disagree about the time-series evidence for a number of countries (Stevenson and Wolfers, 2008), there is agreement that for the U.S., happiness has not increased on average during the past several decades. To begin to address how the time-series SWB evidence relates to utility, we present the following scenario to participants:

Suppose you were given the choice between being born into a random American life in 1950 and being born into a random American life in 1990. Between these two options, taking all things together, which do you think would give you a happier life as a whole?

Table A22: Choice and Happiness in Policy Questions

	<u>Choice Scenario</u>	Easterlin	Inflation	Female	Complementary
	<i>For exact phrasing, see text</i>	Paradox	vs Unemployment	Liberation	Health and Wealth
	<b>Within</b>	Higher SWB: Option 1 Chosen: Option 1	12%	22%	81%
	Higher SWB: Option 2 Chosen: Option 2	78%	71%	7%	47%
	Higher SWB: Option 2 Chosen: Option 1	1%	4%	10%	15%
	Higher SWB: Option 1 Chosen: Option 2	9%	3%	2%	7%
	<i>p</i> -value of Liddell Exact Test	0.000	1.000	0.007	0.115
		<i>n</i> = 209	<i>n</i> = 72	<i>n</i> = 174	<i>n</i> = 91

We then ask participants which option they would choose. The first column of table A21 reports, like the analogous data in table 2, the fraction of respondents who prefer each option choice-wise and who rank each option higher in terms of happiness, as well as the Liddell exact test *p*-value for the null hypothesis that respondents rank the options identically across the choice and happiness questions. In both questions, participants overwhelmingly prefer being born in 1990 (87 and 78 percent in the choice and happiness questions respectively), perhaps indicating that participants mistakenly believe that average happiness increased over this time period in the U.S. At the same time, the Liddell test *p*-value is 0.0004, indicating that the 9 percent of participants who choose 1990 despite believing they would be happier in 1950 is statistically significantly larger than the 1 percent exhibiting the reverse response pattern. These results may suggest that people prefer being born in 1990 rather than 1950 also for other reasons, in addition to whatever effect being born later might have on happiness.

*Inflation-unemployment tradeoff.* Using panel data on lifetime happiness in a range of countries, DiTella, MacCulloch, and Oswald (2003) estimate the effect of GDP growth, inflation, and other macroeconomic variables on SWB. To assess how well lifetime happiness proxies for preferences regarding such variables, we present the following scenario:

Suppose you were voting on economic policy. The issue is inflation and unemployment. For the purposes of this question, assume that whatever is chosen is sustainable in the long run. The choices are:

**Option 1:** 4% inflation and 6% unemployment.

**Option 2:** 2% inflation and 7% unemployment.

Respondents are asked for which alternative they would vote, and which alternative they think would make them happier with life as a whole. Option 2 is preferred by 74 and 75 percent of respondents, respectively, in the choice (or vote) and happiness questions. These almost identical proportions (Liddell  $p = 1.000$ ) may suggest that in this scenario, happiness is a better proxy for choice than in other scenarios.

*The paradox of declining female happiness.* In recent work, Stevenson and Wolfers (2009) find that despite the increases in objective measures of well-being for women in the U.S. since 1970, measures of happiness with life as a whole and life satisfaction have declined both relative to men and absolutely. To better understand the link between SWB and utility with respect to the social changes in men's and women's lives since the 1970s, we ask:

In the 1970's, the "Women's Liberation" movement profoundly changed life for women—and for men—in the United States. A wider range of choices opened up for women, particularly in the types of jobs they could hope to get and in their pay. However, by and large, while women on average worked more for pay, the amount of housework and childcare they ended up doing remained high, as men on average increased the amount of housework and childcare they did only very gradually. Thus, many women experienced a time crunch due to the large total amount of things they felt they needed to do. Women's Liberation also brought many profound changes to the lives of men as women asserted themselves in new ways and competed with men on the job market. Whether you are a woman or a man, we would like to know how you think your life would have been different if Women's Liberation had never happened. If you had to start your life over in the year you were born without knowing exactly how things would turn out for you, would you choose to be born into a world in which Women's Liberation happened or into a world in which Women's Liberation never happened?

Respondents indicate a strong preference for a world with Women's Liberation: 91 and 83 percent, respectively, rank it higher in a choice question and in a question on happiness during a typical week in that world. The null hypothesis that people treat the two questions symmetrically is easily rejected ( $p = .007$ ). (The corresponding proportions are 87 and 76 percent among men,

and 93 and 86 percent among women.) As in the scenario above, on being born in 1950 versus 1990, the fact that our respondents live in a world where Women's Liberation actually occurred may bias their responses. Moreover, if the social desirability of saying one would choose to live in a world with Women's Liberation is greater than the social desirability of saying that one would be happier in such a world, then our results could be further biased. That said, the response patterns we find are consistent with the interpretation that people (both men and women) find the political and economic advances for women over the last few decades desirable also for other reasons, in addition to the direct effects on happiness. For example, Women's Liberation may have increased women's sense of purpose, an aspect of life not measured in the data Stevenson and Wolfers (2009) use. Unfortunately, since our questionnaire does not measure non-SWB aspects for this scenario, we cannot directly test this idea.

*Complementarity between health and wealth.* Interpreting responses to a "felt happiness" question as a proxy for utility, Finkelstein, Luttmer, and Notowidigdo (2008) estimate that a decline in health is associated with an economically substantial decrease in the marginal utility of consumption. To explore the relationship between happiness and choice in this domain, we ask:

Imagine that an evil genie gave you a choice that would determine what kind of life you will live. The choice will determine your total annual income from your job, as well as your health throughout your life. For this question, "good health" means fewer than average health problems. "Bad health" means frequent health problems that are sometimes painful, limit mobility, and have no available treatment or cure. In both cases you have full health insurance, so you do not have to pay for any healthcare costs.

We then offer a choice between two gambles. Alternative 1 is a coin toss giving a 50% chance of (A) \$100,000 a year and a lifetime of good health, and a 50% chance of (B) \$40,000 a year and a lifetime of bad health. Alternative 2 is a coin toss giving a 50% chance of (A) \$100,000 a year and a lifetime of bad health, and a 50% chance of (B) \$40,000 a year and a lifetime of good health. In order to help participants understand the options, the survey includes graphics depicting the gambles. Finally, we ask: "Which do you think would make you happier in your life as a whole, after averaging over the two possible outcomes of the coin toss?" Alternative 2 is chosen by 54 percent of respondents, while 63 percent anticipate that it would lead to greater happiness, and there is some evidence that participants answer the choice and happiness



questions differently ( $p = 0.115$ ), suggesting that using SWB as a proxy for utility may *underestimate* the degree of complementarity between health and wealth.