

# WEB APPENDIX

to:

“Conclusions Regarding Cross-Group Differences in  
Happiness Depend on Difficulty of Reaching  
Respondents”

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## Appendix A: The Index of Consumer Sentiment, the Sex Gap, and Difficulty to Reach Respondents

While our focus in this paper is on a happiness question, most economists who use the SOC focus on the Index of Consumer Sentiment (ICS). Published monthly by Thomson Reuters and the University of Michigan, and considered a closely-watched leading indicator of the U.S. economy, the index summarizes responses—favorable, unfavorable, or neither—to five questions: respondents’ financial situation at present relative to a year ago; respondents’ beliefs about their financial situation “a year from now” relative to the present; “business conditions in the country as a whole . . . during the next 12 months”; “good times” in the country as a whole vs. unemployment or depression “during the next 5 years or so”; and whether “now is a good or a bad time for people to buy major household items.”

Figure A1 reports six versions of the top right plot in Figure 1—the women vs. men plot—replacing “percent happy” on the y-axis with the ICS (plot (a)) and its five component questions (plots (b)–(f)). The captions of plots (b)–(f) reproduce the full text of the five questions. The responses to the questions are coded 100 for favorable answers,  $-100$  for unfavorable answers, and 0 otherwise. The index in plot (a) is constructed by adding together the (unweighted) coded responses to the five questions, and applying a normalizing linear transformation used by the publishers of the ICS.

Summarizing the data reported in plot (a), two points are noteworthy. First, consistent with Curtin, Presser, and Singer (2000), we find dramatically higher ICS values among men than among women, and we find higher values among harder-to-reach than among easier-to-reach respondents.<sup>1</sup> Second, in contrast with what we found regarding happiness (see Figure 1), we do not find that the trends in Figure A1 vary significantly by sex.

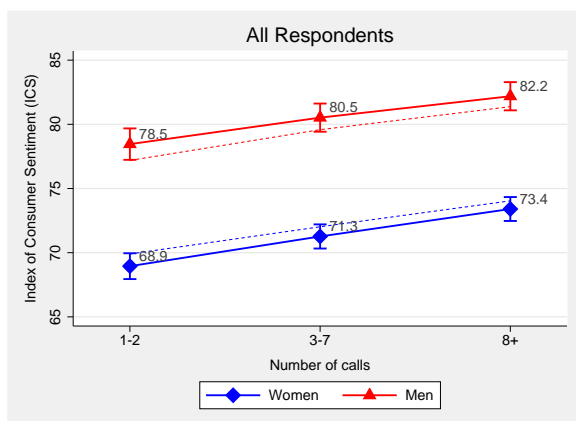
Summarizing plots (b)–(f) we additionally point out that the responses of men are dramatically more favorable than those of women in each of the five component questions and in each of the three number-of-calls categories reported in the figure. However, the relation-

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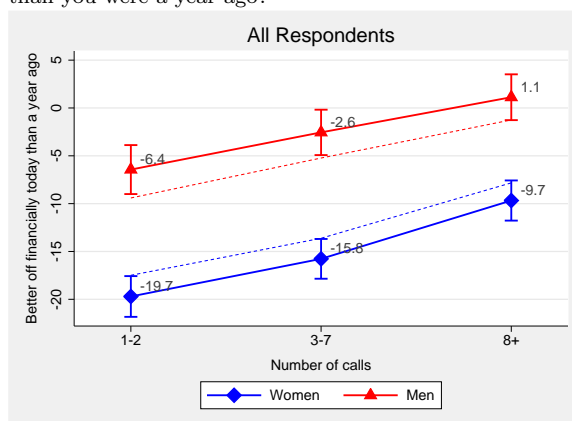
<sup>1</sup>In contrast with our analysis and main interest, Curtin, Presser, and Singer (2000) do not analyze their data separately for different demographic groups and do not allow difficulty-to-reach trends to differ by group (they sometimes include control variables for demographics, but they do not interact them with other variables).

Figure A1: Index of Consumer Sentiment and Its Components by Sex and Number of Calls

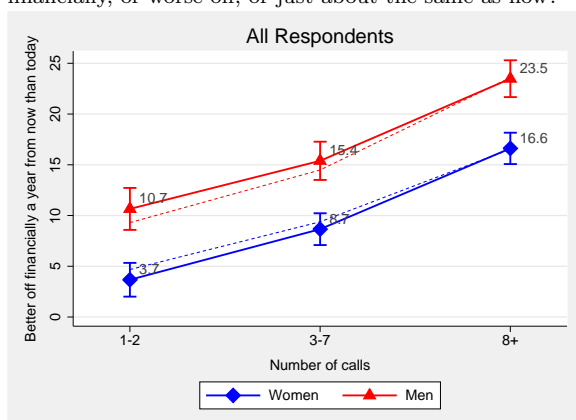
(a) Index of Consumer Sentiment



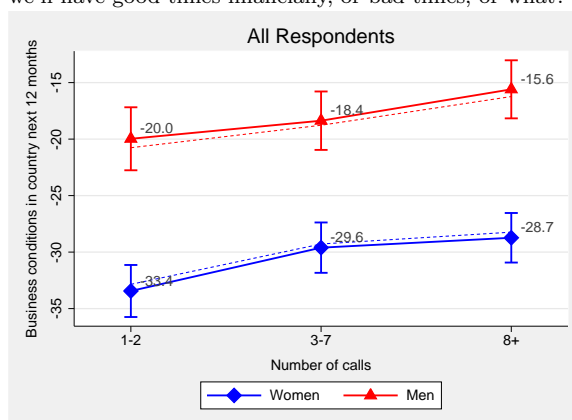
(b) We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?



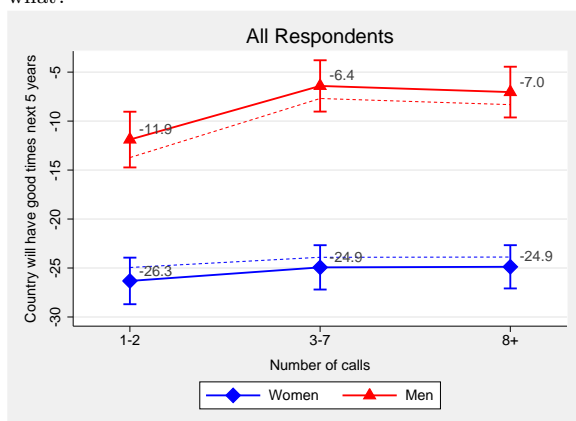
(c) Now looking ahead—do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now?



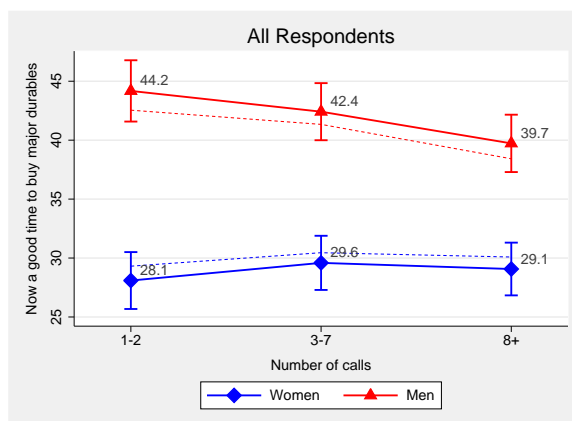
(d) Now turning to business conditions in the country as a whole—do you think that during the next 12 months we'll have good times financially, or bad times, or what?



(e) Looking ahead, which would you say is more likely—that in the country as a whole we'll have continuous good times during the next 5 years or so, or that we will have periods of widespread unemployment or depression, or what?



(f) About the big things people buy for their homes—such as furniture, a refrigerator, stove, television, and things like that. Generally speaking, do you think now is a good or a bad time for people to buy major household items?



**Notes:** Plot (a): Index of Consumer Sentiment (ICS), based on 32,246 observations divided into three groups by number of calls: 1–2 calls (9,663 observations), 3–7 (10,999), and 8 or more (11,584). Plots (b)–(f): responses to the five questions of which the ICS is composed, coded 100 for favorable answer, –100 for unfavorable answer, and 0 otherwise. Solid lines; unadjusted means. Capped ranges: 95% confidence intervals. Dashed lines: adjusted means (see notes to Figure 1, but here we use OLS). Source: University of Michigan's Survey of Consumers, August 2005–November 2010.

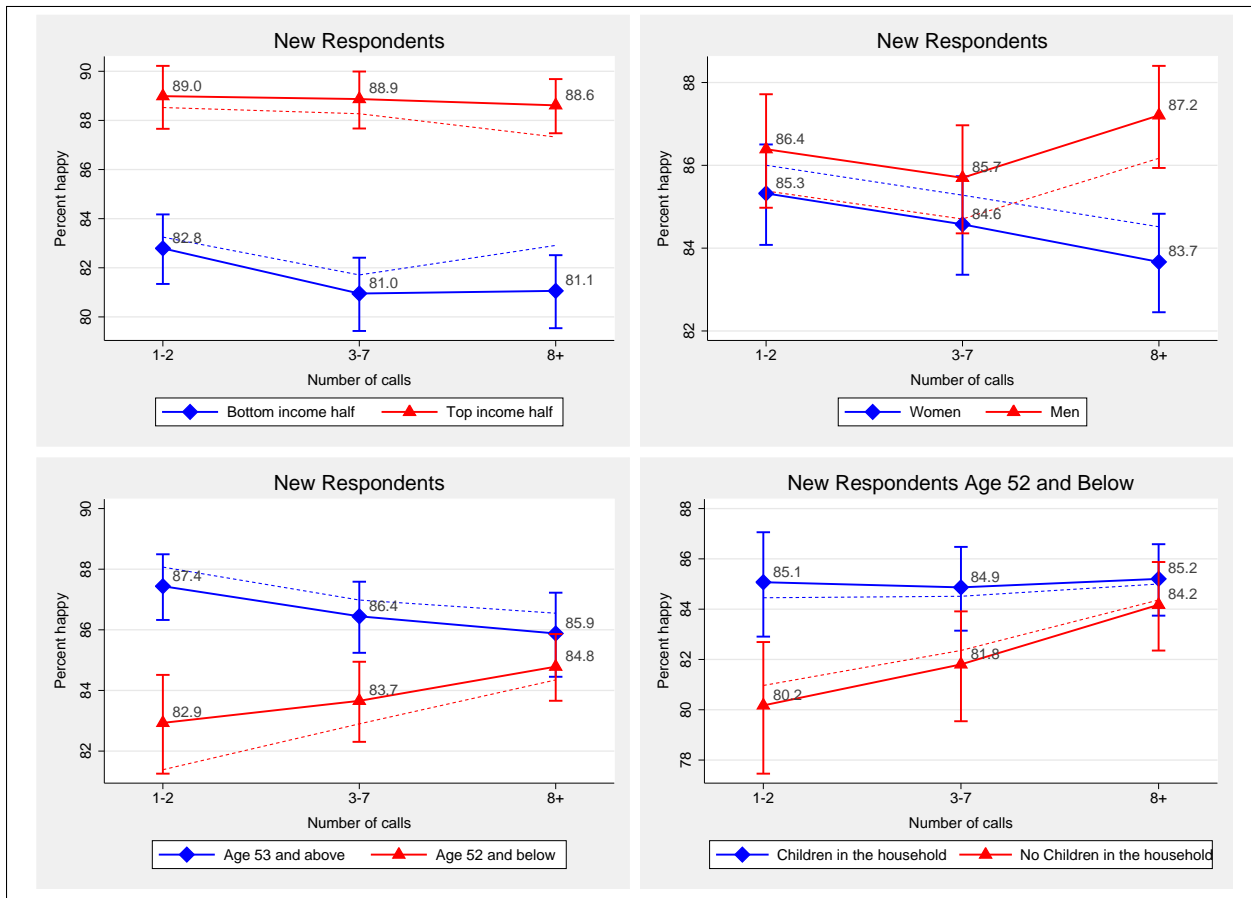
ship between number of calls and favorability of responses varies substantially across the five questions (compare, e.g., plot (c) and plot (f)) and, to a much lesser extent and in no consistent direction, perhaps also across men and women in plots (e) and (f).

## **Appendix B: Excluding Reinterviews from the Analysis**

Figure B1 and Tables B1 and B2 replicate, respectively, Figure 1 and Tables 2 and 4, but exclude reinterviews (roughly 39% of our data). The specifications in these new versions of the figure and tables are identical to those of the original figure and tables; the only difference is that the analyses are based on only the 18,987 new interviews (rather than on all 31,003 interviews) with non-missing data.

While the new-respondents-only point estimates are seen to move around relative to the all-respondents estimates, and while the new standard errors are larger and statistical significance lower, our qualitative findings are seen to remain similar to those based on the entire sample.

Figure B1: Happiness by Demographics and Number of Calls (New Respondents)



**Notes:** Based on 18,987 new interviews. Solid lines: unadjusted means. Capped ranges: 95% (binomial) confidence intervals. Dashed lines: adjusted means, using probit regressions with sets of indicator variables for race/ethnicity (5 categories), education (6), marital status (6), region (9), metropolitan status (5), sex (2; excluded in top-right graph), income (5; excluded in top-left graph), age (5; excluded in two bottom graphs), children in the household for respondents in bottom two age categories (2; excluded in two bottom graphs), and indicators for missing data. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

Table B1: Demographic Happiness Gaps by Number of Calls (Separate, New Respondents)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	2	3	4	5–6	7–9	10–13	14–20	21+
Inc. below \$30,000	-0.100*** (0.022)	-0.036 (0.024)	-0.052* (0.031)	-0.031 (0.035)	-0.086*** (0.028)	-0.092*** (0.031)	-0.103*** (0.032)	-0.078** (0.034)	-0.023 (0.028)
Inc. \$30,000–49,999	-0.050** (0.021)	0.011 (0.021)	-0.003 (0.028)	-0.022 (0.033)	-0.038 (0.026)	-0.049* (0.028)	-0.041 (0.028)	-0.006 (0.029)	-0.059** (0.029)
Inc. \$75,000–109,999	0.005 (0.019)	0.029 (0.022)	0.051** (0.025)	0.044 (0.030)	-0.013 (0.024)	0.048** (0.023)	-0.018 (0.026)	0.016 (0.026)	0.024 (0.025)
Inc. \$110,000 and up	0.018 (0.019)	0.013 (0.023)	0.050* (0.026)	0.012 (0.032)	0.011 (0.024)	0.025 (0.025)	-0.035 (0.028)	0.055** (0.024)	0.032 (0.025)
Female	0.000 (0.013)	0.011 (0.014)	0.009 (0.017)	-0.023 (0.019)	0.012 (0.015)	0.004 (0.016)	-0.012 (0.018)	0.007 (0.017)	-0.039** (0.016)
Age 18–39	-0.015 (0.032)	-0.029 (0.034)	-0.005 (0.036)	0.010 (0.040)	0.017 (0.031)	0.043 (0.030)	0.030 (0.034)	0.072** (0.032)	-0.010 (0.028)
Age 40–49	-0.046 (0.029)	-0.071** (0.031)	-0.004 (0.033)	-0.004 (0.039)	-0.025 (0.031)	0.015 (0.030)	0.032 (0.033)	0.044 (0.032)	-0.022 (0.028)
Age 60–69	0.056*** (0.020)	0.036* (0.020)	0.080*** (0.024)	0.039 (0.030)	0.073*** (0.023)	0.042 (0.026)	0.069** (0.029)	0.117*** (0.028)	0.018 (0.028)
Age 70 and up	0.103*** (0.019)	0.088*** (0.019)	0.106*** (0.025)	0.078** (0.031)	0.080*** (0.023)	0.081*** (0.027)	0.117*** (0.030)	0.126*** (0.033)	0.026 (0.035)
Age ≤ 49 & Children	0.033 (0.021)	0.037* (0.021)	0.036 (0.024)	-0.013 (0.032)	0.018 (0.023)	-0.016 (0.025)	0.020 (0.025)	-0.015 (0.024)	-0.026 (0.023)
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3201	2614	1939	1458	2188	2148	1826	1781	1783

**Notes:** Average marginal effects from probit regressions, conducted on subsamples based on number-of-calls category. All regressions include the following additional control variables (not reported): sets of indicators for race/ethnicity (5 categories), education (6), marital status (6), region (9), metropolitan status (5), and indicators for missing data (if indicator perfectly predicts dep. variable, observations are dropped). Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

Table B2: Demographic Happiness Gaps by Number of Calls (Cumulative, New Respond.)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	≤ 2	≤ 3	≤ 4	≤ 6	≤ 9	≤ 13	≤ 20	All
Inc. below \$30,000	-0.100*** (0.022)	-0.072*** (0.016)	-0.069*** (0.014)	-0.064*** (0.013)	-0.069*** (0.012)	-0.072*** (0.011)	-0.076*** (0.011)	-0.077*** (0.010)	-0.072*** (0.010)
Inc. \$30,000–49,999	-0.050** (0.021)	-0.021 (0.015)	-0.018 (0.013)	-0.019 (0.012)	-0.023** (0.011)	-0.026** (0.010)	-0.027*** (0.010)	-0.025*** (0.009)	-0.028*** (0.009)
Inc. \$75,000–109,999	0.005 (0.019)	0.016 (0.014)	0.025** (0.012)	0.028** (0.011)	0.021** (0.010)	0.024*** (0.009)	0.019** (0.009)	0.019** (0.008)	0.019** (0.008)
Inc. \$110,000 and up	0.018 (0.019)	0.017 (0.015)	0.024* (0.013)	0.022* (0.012)	0.021* (0.011)	0.020** (0.010)	0.014 (0.009)	0.019** (0.009)	0.020** (0.008)
Female	0.000 (0.013)	0.006 (0.010)	0.006 (0.008)	0.001 (0.008)	0.003 (0.007)	0.002 (0.006)	0.001 (0.006)	0.001 (0.006)	-0.003 (0.005)
Age 18–39	-0.015 (0.032)	-0.023 (0.023)	-0.018 (0.019)	-0.015 (0.017)	-0.007 (0.015)	0.004 (0.013)	0.005 (0.012)	0.014 (0.011)	0.013 (0.011)
Age 40–49	-0.046 (0.029)	-0.059*** (0.021)	-0.044** (0.018)	-0.039** (0.016)	-0.036** (0.014)	-0.027** (0.013)	-0.020* (0.012)	-0.012 (0.011)	-0.011 (0.010)
Age 60–69	0.056*** (0.020)	0.046*** (0.014)	0.054*** (0.012)	0.052*** (0.011)	0.055*** (0.010)	0.054*** (0.009)	0.055*** (0.009)	0.060*** (0.009)	0.056*** (0.008)
Age 70 and up	0.103*** (0.019)	0.095*** (0.014)	0.098*** (0.012)	0.096*** (0.011)	0.094*** (0.010)	0.093*** (0.009)	0.095*** (0.009)	0.097*** (0.008)	0.091*** (0.008)
Age ≤ 49 & Children	0.033 (0.021)	0.036** (0.015)	0.036*** (0.013)	0.028** (0.012)	0.027** (0.010)	0.019** (0.010)	0.020** (0.009)	0.015* (0.008)	0.011 (0.008)
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3201	5815	7754	9212	11400	13554	15410	17191	18987

**Notes:** Average marginal effects from probit regressions, conducted on subsamples based on number-of-calls categories of increasing size. All regressions include the following additional control variables (not reported): sets of indicators for race/ethnicity (5 categories), education (6), marital status (6), region (9), metropolitan status (5), and indicators for missing data (if indicator perfectly predicts dep. variable, observations are dropped). Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

## Appendix C: Definitions of Demographic Controls

**Race/ethnicity:** 5 categories (+ indicator for missing data): White except Hispanic (omitted category), Black except Hispanic, Hispanic (incl. interviews in Spanish), American Indian or Alaskan Native, Asian or Pacific Islander.

**Education:** 6 categories (+ indicator for missing data): Grades 0-8 and no high school diploma, Grades 9-12 and no high school diploma, Grades 0-12 with high school diploma (omitted category), Grades 13-17 with no college degree, Grades 13-16 with college degree, Grade 17 with college degree.

**Marital status:** 6 categories (+ indicator for missing data): Married (living with a partner), Separated, Divorced, Widowed, Never married (omitted category), Married, but spouse away in service, in nursing home, or living in a separate location.

**Region:** 9 census divisions (no missing data): New England (omitted category), Mid-Atlantic, East North Central, West North Central, South-Atlantic, East South Central, West South Central, Mountain, Pacific.

**Metropolitan status:** 5 categories (+ indicator for missing data): In the center city of an MSA (omitted category), Outside the center city of an MSA but inside the county containing center city, Inside a suburban county of the MSA, In an MSA that has no city center, Not in an MSA.

## Appendix D: OLS Regressions

Tables D1–D4 replicate, respectively, Tables 1–4, replacing the probit specification with OLS. The dependent variable is coded “Yes”=100 and “No”=0.



Table D1: Demographic Happiness Gaps by Number of Calls (Separate, OLS)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	2	3	4	5–6	7–9	10–13	14–20	21+
Inc. below \$30,000	-9.6*** (1.5)	-8.7*** (1.6)	-9.4*** (2.0)	-7.0*** (2.3)	-11.6*** (1.9)	-9.0*** (2.0)	-15.0*** (2.2)	-11.1*** (2.1)	-9.3*** (2.0)
Inc. \$30,000–49,999	-4.1** (1.6)	-1.3 (1.7)	-1.4 (2.1)	1.1 (2.3)	-5.0** (2.0)	-4.2** (2.1)	-2.6 (2.3)	-3.0 (2.2)	-4.1** (2.0)
Inc. \$75,000–109,999	-0.7 (1.7)	1.9 (1.7)	4.2** (2.1)	2.9 (2.4)	-0.4 (1.9)	3.0 (2.0)	1.9 (2.1)	2.5 (2.0)	0.8 (1.9)
Inc. \$110,000 and up	0.6 (1.8)	1.9 (1.7)	3.8* (2.1)	4.2* (2.3)	0.8 (1.9)	2.2 (1.9)	1.2 (2.1)	5.2*** (2.0)	3.5* (1.9)
Constant	88.3*** (1.1)	88.3*** (1.2)	86.0*** (1.4)	85.4*** (1.6)	88.5*** (1.4)	86.6*** (1.4)	86.4*** (1.5)	86.7*** (1.4)	87.2*** (1.3)
$R^2$	0.012	0.013	0.019	0.011	0.016	0.015	0.026	0.024	0.015
Female	-1.4 (1.0)	0.8 (1.0)	-2.2* (1.3)	-3.2** (1.4)	-2.0* (1.2)	-1.3 (1.2)	-4.5*** (1.4)	-3.9*** (1.3)	-3.9*** (1.2)
Constant	86.0*** (0.8)	86.3*** (0.8)	86.5*** (0.9)	87.2*** (1.1)	86.3*** (0.9)	86.1*** (0.9)	86.4*** (1.0)	88.0*** (1.0)	88.2*** (0.9)
$R^2$	0.000	0.000	0.001	0.002	0.001	0.000	0.004	0.003	0.003
Age 18–39	3.0* (1.8)	0.2 (1.7)	3.3* (2.0)	-0.4 (2.2)	3.3* (1.8)	2.4 (1.8)	2.2 (1.9)	1.9 (1.8)	1.0 (1.7)
Age 40–49	0.5 (1.7)	-3.2* (1.7)	-0.1 (2.0)	-0.2 (2.3)	0.0 (1.8)	0.9 (1.8)	2.7 (2.0)	0.9 (1.9)	-1.1 (1.8)
Age 60–69	4.9*** (1.5)	2.1 (1.6)	5.5*** (1.9)	3.3 (2.2)	5.6*** (1.9)	3.7* (1.9)	4.5** (2.3)	6.6*** (2.2)	4.0* (2.2)
Age 70 and up	8.1*** (1.5)	3.9** (1.5)	5.7*** (1.9)	5.2** (2.2)	3.1* (1.8)	1.7 (2.0)	4.5* (2.4)	5.2* (2.6)	1.8 (2.7)
Constant	81.2*** (1.1)	85.8*** (1.1)	82.4*** (1.3)	83.8*** (1.5)	82.9*** (1.2)	83.8*** (1.3)	81.4*** (1.4)	83.7*** (1.3)	85.3*** (1.3)
$R^2$	0.008	0.005	0.005	0.005	0.004	0.001	0.002	0.005	0.002
Age ≤ 49 & Children	4.6** (1.9)	7.0*** (1.9)	4.6** (2.2)	3.2 (2.4)	3.0 (1.9)	1.3 (1.9)	2.4 (2.0)	-0.4 (1.8)	1.5 (1.7)
Age > 50	5.8*** (1.6)	8.0*** (1.6)	4.9*** (1.9)	5.1** (2.1)	2.9* (1.8)	0.8 (1.7)	1.5 (1.9)	1.2 (1.7)	2.4 (1.6)
Constant	80.2*** (1.5)	79.9*** (1.5)	81.2*** (1.7)	81.5*** (1.9)	82.6*** (1.6)	84.6*** (1.5)	82.4*** (1.6)	85.4*** (1.4)	84.4*** (1.3)
$R^2$	0.003	0.006	0.002	0.003	0.001	0.000	0.001	0.001	0.001
Observations	4974	4289	3140	2473	3612	3457	2978	2916	3164

**Notes:** Each column reports results from four different OLS regressions, separated by horizontal lines. Regressions within a column are conducted on the same subsample, based on number-of-calls category indicated in top row; size of each subsample is indicated in bottom row. Dependent variable coding: “Yes”=100, “No”=0. Regressions also include indicators for missing data (not reported). Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

Table D2: Demographic Happiness Gaps by Number of Calls (Separate, OLS)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	2	3	4	5–6	7–9	10–13	14–20	21+
Inc. below \$30,000	-9.4*** (1.7)	-7.2*** (1.8)	-6.8*** (2.2)	-5.7** (2.6)	-9.4*** (2.1)	-9.4*** (2.2)	-11.5*** (2.4)	-7.9*** (2.3)	-6.2*** (2.2)
Inc. \$30,000–49,999	-4.5*** (1.6)	-0.7 (1.7)	-0.7 (2.1)	1.1 (2.4)	-4.5** (2.1)	-4.7** (2.1)	-1.6 (2.3)	-2.1 (2.2)	-4.0** (2.0)
Inc. \$75,000–109,999	-0.2 (1.7)	2.0 (1.8)	4.8** (2.1)	2.4 (2.4)	-0.8 (2.0)	2.7 (2.0)	0.6 (2.2)	2.5 (2.1)	0.3 (1.9)
Inc. \$110,000 and up	1.9 (1.8)	1.9 (1.8)	4.9** (2.2)	3.6 (2.4)	0.1 (2.0)	1.9 (2.0)	-0.9 (2.2)	4.3** (2.1)	2.6 (2.0)
Female	0.2 (1.0)	2.5** (1.1)	-0.5 (1.3)	-1.5 (1.5)	-0.9 (1.2)	0.2 (1.2)	-2.5* (1.4)	-1.7 (1.3)	-2.8** (1.3)
Age 18–39	0.7 (2.2)	-4.6** (2.3)	2.0 (2.6)	-0.4 (2.9)	2.3 (2.4)	3.3 (2.3)	1.4 (2.5)	3.5 (2.3)	0.0 (2.1)
Age 40–49	-1.7 (2.0)	-7.2*** (2.0)	-2.4 (2.4)	-2.0 (2.8)	-1.8 (2.3)	1.0 (2.2)	0.9 (2.4)	1.4 (2.2)	-2.6 (2.1)
Age 60–69	6.2*** (1.5)	3.5** (1.6)	6.5*** (2.0)	4.6** (2.2)	7.0*** (1.9)	5.5*** (2.0)	6.0*** (2.3)	8.2*** (2.2)	5.2** (2.2)
Age 70 and up	12.6*** (1.6)	8.0*** (1.7)	9.7*** (2.1)	10.4*** (2.5)	6.8*** (2.1)	6.5*** (2.3)	8.4*** (2.6)	9.8*** (2.9)	4.9* (2.9)
Age ≤ 49 & Children	2.8 (2.0)	5.7*** (2.0)	3.1 (2.3)	1.6 (2.5)	1.9 (2.1)	0.2 (2.0)	2.2 (2.1)	-1.8 (1.9)	0.8 (1.8)
Constant	76.1*** (3.5)	80.7*** (3.6)	75.9*** (4.2)	79.7*** (4.6)	81.1*** (4.0)	79.9*** (4.1)	84.3*** (4.4)	78.0*** (4.2)	84.1*** (3.9)
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4974	4289	3140	2473	3612	3457	2978	2916	3164
$R^2$	0.043	0.040	0.048	0.040	0.042	0.031	0.050	0.045	0.042

**Notes:** OLS regressions, conducted on subsamples based on number-of-calls category. Dependent variable coding: “Yes”=100, “No”=0. All regressions include the following additional control variables (not reported): sets of indicators for race/ethnicity (5 categories), education (6), marital status (6), region (9), metropolitan status (5), and indicators for missing data. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

Table D3: Demographic Happiness Gaps by Number of Calls (Cumulative, OLS)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	≤ 2	≤ 3	≤ 4	≤ 6	≤ 9	≤ 13	≤ 20	All
Inc. below \$30,000	-9.6*** (1.5)	-9.2*** (1.1)	-9.2*** (1.0)	-8.9*** (0.9)	-9.4*** (0.8)	-9.3*** (0.8)	-9.9*** (0.7)	-10.0*** (0.7)	-9.9*** (0.6)
Inc. \$30,000–49,999	-4.1** (1.6)	-2.8** (1.2)	-2.4** (1.0)	-1.8** (0.9)	-2.4*** (0.9)	-2.7*** (0.8)	-2.6*** (0.7)	-2.7*** (0.7)	-2.8*** (0.7)
Inc. \$75,000–109,999	-0.7 (1.7)	0.5 (1.2)	1.5 (1.0)	1.7* (1.0)	1.3 (0.9)	1.5** (0.8)	1.6** (0.7)	1.7** (0.7)	1.6** (0.7)
Inc. \$110,000 and up	0.6 (1.8)	1.3 (1.2)	1.9* (1.1)	2.3** (1.0)	2.0** (0.9)	2.0** (0.8)	1.9** (0.7)	2.3*** (0.7)	2.4*** (0.6)
Constant	88.3*** (1.1)	88.3*** (0.8)	87.7*** (0.7)	87.3*** (0.6)	87.5*** (0.6)	87.4*** (0.5)	87.3*** (0.5)	87.2*** (0.5)	87.2*** (0.5)
$R^2$	0.012	0.013	0.014	0.013	0.013	0.013	0.015	0.015	0.015
Female	-1.4 (1.0)	-0.4 (0.7)	-0.9 (0.6)	-1.3** (0.6)	-1.4*** (0.5)	-1.4*** (0.5)	-1.8*** (0.5)	-2.0*** (0.4)	-2.2*** (0.4)
Constant	86.0*** (0.8)	86.2*** (0.6)	86.3*** (0.5)	86.4*** (0.4)	86.4*** (0.4)	86.3*** (0.4)	86.3*** (0.3)	86.5*** (0.3)	86.7*** (0.3)
$R^2$	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
Age 18–39	3.0* (1.8)	1.7 (1.2)	2.1** (1.1)	1.6* (1.0)	2.0** (0.8)	2.1*** (0.8)	2.1*** (0.7)	2.1*** (0.7)	2.0*** (0.6)
Age 40–49	0.5 (1.7)	-1.3 (1.2)	-0.9 (1.0)	-0.8 (0.9)	-0.6 (0.8)	-0.3 (0.8)	0.1 (0.7)	0.2 (0.7)	0.1 (0.6)
Age 60–69	4.9*** (1.5)	3.5*** (1.1)	4.0*** (1.0)	3.9*** (0.9)	4.2*** (0.8)	4.1*** (0.7)	4.2*** (0.7)	4.4*** (0.7)	4.3*** (0.6)
Age 70 and up	8.1*** (1.5)	6.1*** (1.1)	6.1*** (0.9)	5.9*** (0.8)	5.5*** (0.8)	5.1*** (0.7)	5.1*** (0.7)	5.1*** (0.7)	4.8*** (0.6)
Constant	81.2*** (1.1)	83.4*** (0.8)	83.1*** (0.7)	83.3*** (0.6)	83.2*** (0.6)	83.3*** (0.5)	83.0*** (0.5)	83.1*** (0.5)	83.4*** (0.4)
$R^2$	0.008	0.006	0.006	0.005	0.005	0.004	0.004	0.004	0.003
Age ≤ 49 & Children	4.6** (1.9)	5.8*** (1.4)	5.4*** (1.1)	5.0*** (1.0)	4.6*** (0.9)	4.0*** (0.8)	3.7*** (0.8)	3.1*** (0.7)	2.9*** (0.6)
Age > 50	5.8*** (1.6)	6.8*** (1.1)	6.3*** (1.0)	6.1*** (0.9)	5.5*** (0.8)	4.6*** (0.7)	4.3*** (0.7)	3.8*** (0.6)	3.5*** (0.6)
Constant	80.2*** (1.5)	80.1*** (1.0)	80.4*** (0.9)	80.6*** (0.8)	81.0*** (0.7)	81.7*** (0.6)	81.8*** (0.6)	82.4*** (0.6)	82.7*** (0.5)
$R^2$	0.003	0.004	0.004	0.003	0.003	0.002	0.002	0.001	0.001
Observations	4974	9263	12403	14876	18488	21945	24923	27839	31003

**Notes:** Each column reports results from four different OLS regressions, separated by horizontal lines. Regressions within a column are conducted on the same subsample, based on number-of-calls categories of increasing size, indicated in top row; size of each subsample is indicated in bottom row. Dependent variable coding: “Yes”=100, “No”=0. Regressions also include indicators for missing data (not reported). Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.

Table D4: Demographic Happiness Gaps by Number of Calls (Cumulative, OLS)

Dep. Variable: “much of the time during the past week, you were happy. Would you say yes or no?”

Number of Calls:	1	≤ 2	≤ 3	≤ 4	≤ 6	≤ 9	≤ 13	≤ 20	All
Inc. below \$30,000	-9.4*** (1.7)	-8.5*** (1.2)	-8.2*** (1.1)	-7.8*** (1.0)	-8.2*** (0.9)	-8.4*** (0.8)	-8.7*** (0.8)	-8.6*** (0.7)	-8.4*** (0.7)
Inc. \$30,000–49,999	-4.5*** (1.6)	-2.8** (1.2)	-2.3** (1.0)	-1.8* (0.9)	-2.3*** (0.9)	-2.6*** (0.8)	-2.5*** (0.7)	-2.4*** (0.7)	-2.6*** (0.7)
Inc. \$75,000–109,999	-0.2 (1.7)	0.8 (1.2)	1.8* (1.1)	1.9** (1.0)	1.4 (0.9)	1.6** (0.8)	1.5** (0.7)	1.6** (0.7)	1.4** (0.7)
Inc. \$110,000 and up	1.9 (1.8)	1.9 (1.3)	2.6** (1.1)	2.8*** (1.0)	2.3*** (0.9)	2.2*** (0.8)	1.8** (0.8)	2.1*** (0.7)	2.2*** (0.7)
Female	0.2 (1.0)	1.3* (0.7)	0.9 (0.6)	0.5 (0.6)	0.2 (0.5)	0.2 (0.5)	-0.1 (0.5)	-0.3 (0.4)	-0.6 (0.4)
Age 18–39	0.7 (2.2)	-1.7 (1.6)	-0.7 (1.4)	-0.8 (1.2)	-0.1 (1.1)	0.6 (1.0)	0.6 (0.9)	1.1 (0.8)	1.1 (0.8)
Age 40–49	-1.7 (2.0)	-4.3*** (1.4)	-3.8*** (1.2)	-3.6*** (1.1)	-3.2*** (1.0)	-2.4*** (0.9)	-2.0** (0.9)	-1.5* (0.8)	-1.5** (0.7)
Age 60–69	6.2*** (1.5)	4.9*** (1.1)	5.3*** (1.0)	5.2*** (0.9)	5.5*** (0.8)	5.5*** (0.7)	5.6*** (0.7)	5.8*** (0.7)	5.6*** (0.6)
Age 70 and up	12.6*** (1.6)	10.4*** (1.2)	10.3*** (1.0)	10.3*** (0.9)	9.9*** (0.8)	9.6*** (0.8)	9.5*** (0.8)	9.5*** (0.7)	9.1*** (0.7)
Age ≤ 49 & Children	2.8 (2.0)	4.2*** (1.4)	3.8*** (1.2)	3.5*** (1.1)	3.2*** (0.9)	2.6*** (0.9)	2.6*** (0.8)	1.9*** (0.7)	1.8*** (0.7)
Constant	76.1*** (3.5)	78.1*** (2.5)	77.8*** (2.1)	78.2*** (1.9)	78.8*** (1.7)	79.0*** (1.6)	79.7*** (1.5)	79.5*** (1.4)	79.9*** (1.3)
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4974	9263	12403	14876	18488	21945	24923	27839	31003
$R^2$	0.043	0.038	0.038	0.036	0.035	0.032	0.033	0.033	0.032

**Notes:** OLS regressions, conducted on subsamples based on number-of-calls categories of increasing size. Dependent variable coding: “Yes”=100, “No”=0. All regressions include the following additional control variables (not reported): sets of indicators for race/ethnicity (5 categories), education (6), marital status (6), region (9), metropolitan status (5), and indicators for missing data. Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Source: University of Michigan’s Survey of Consumers, August 2005–November 2010.