

Unhappiness is Unpredictability/Instability

Online Appendix (Supplementary Online Material)

Wednesday 18th February, 2026 14:32

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1 Relationships among variables, choice of controls, and overcontrol bias

We stick with the regressions in the paper for several reasons. First, the reviewers did not suggest that we adjust the models for unpredictability/instability antecedents and overcontrol bias—changing the approach completely seems too dramatic at this stage. But we do see merit in antecedent and overcontrol bias exploration, so we take a middle way approach, explored here, and summarized in paper.

Most importantly—we think our original models mostly abide—there are antecedents, and overcontrol bias is avoided. There is not much difference in the results and when there is, we say so in the paper. The most problematic overcontrol bias variable 'paid by the hour' is left in the original models till the last specification (and there is substantial significance and effect size in earlier models on unpredictability/instability). Including income as a control is a standard practice and it is unclear if the variable is problematic (especially family income which we use), but we explore further here.

$UI =$ Unpredictability and Instability

— \geq is antecedent of (predicts)

We are considering here whether a potential control is also an antecedent of unpredictability/instability. From SIR editorial, "what we really need,to identify/estimate $X -> Y$, is to control for other determinants of Y that are also antecedents of X (so, $W -> X$)."

We argue, using logic/reasoning (and literature in the next subsection), that these are the antecedents:

- more income and education (and some occupations) — $>$ higher-end jobs with either less (or chosen/preferred UI)
- male and paid by the hour — $>$ UI
- decide working hours: if one can decide schedule — $>$ less UI
- union membership — $>$ less UI (see next subsection on literature)

But, as the SIR editorial warns, "if we include controls where the relationship goes the other way ($X -> W$),we will exacerbate bias in our estimate of $X -> Y$ [overcontrol bias]"—then:

- maybe: $UI ->$ income (e.g., extra pay for UI jobs; also UI may predict greater variability in income; still family income used in paper is less affected than personal income)
- probably!: $UI ->$ paid by the hour (if little idea how many hrs then need to pay by hr)
- maybe: $UI ->$ union membership (UI can cause workers to unionize; there may be union because there was no UI in the first place, etc)

So we will be careful with the above 3 variables. But the other ones are unlikely:

- not $UI ->$ education; as education typically precedes job
- not $UI ->$ occupation; as occupation would rather define UI
- not $UI ->$ decide or set schedule; decision making on schedules defines UI, not the other way round
- not $UI ->$ male; definitely not

Next we move to re-estimating paper regressions taking into account the above information. Model a1 is repeated for reference from the body of the paper. Model a2 includes antecedents as theorized above. Results are similar, slightly stronger. We then proceed to include problematic variables. In a3 we add income. Now the results are stronger, especially on "fewest hrs per week past month/usual hours"—this may be result of overcontrol. In a4 we removed income and add the most problematic variable "paid by the hour." It kills significance on both main variables. Finally, in a5 we add back income. Now, the results are again similar to a3. We conclude that indeed both income and "paid by the hour" do change the results, and results with these variables controlled for should be interpreted with caution. The main "final" result would be in a2, which is similar to what we report in the body of the paper. Finally in a6 we repeat

the "full" model a2 but add union membership dummies, where the base case is "yes, respondent belongs," and the results remain very similar relative to a2 (and this will be the case throughout for subsequent unpredictability/instability models). There is negative effect from "most hrs per week past month/usual hours" at about -.16, but not so much from "fewest hrs per week past month/usual hours."

| | a1 | a2 | a3 | a4 | a5 | a6 |
|--|---------|---------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.13 | 0.16 | 0.24* | 0.15 | 0.23* | 0.16 |
| most hrs per week past month/usual hours | -0.14+ | -0.16* | -0.19* | -0.13 | -0.17* | -0.15* |
| male | 0.11+ | 0.04 | 0.11+ | 0.04 | 0.11+ | 0.11+ |
| decide working hours | -0.00 | -0.01 | -0.00 | -0.01 | -0.02 | -0.00 |
| highest year of school completed | -0.00 | -0.01 | -0.01 | -0.00 | 0.00 | 0.00 |
| professional | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 |
| clerical | -0.20* | -0.16 | -0.13 | -0.11 | -0.20* | |
| sales | -0.19+ | -0.14 | -0.13 | -0.10 | -0.19+ | |
| service | -0.13 | 0.02 | -0.08 | 0.05 | -0.12 | |
| agriculture | -0.33 | -0.20 | -0.24 | -0.13 | -0.32 | |
| production,transport | -0.12 | -0.03 | -0.01 | 0.05 | -0.13 | |
| craft, technical | -0.24* | -0.22+ | -0.21+ | -0.20 | -0.24* | |
| family income in \$1986, millions | | 4.25*** | | 3.60*** | | |
| paid by the hour | | | -0.20** | -0.17* | | |
| yes, respondent belongs | | | | | 0.00 | |
| yes, spouse belongs | | | | | 0.18 | |
| yes, both belong | | | | | 0.16 | |
| no, neither belong | | | | | -0.00 | |
| constant | 2.26*** | 2.34*** | 2.30*** | 2.51*** | 2.44*** | 2.35*** |
| N | 488 | 482 | 456 | 466 | 441 | 481 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 1: OLS regressions of life satisfaction. The base case for union membership is "yes, respondent belongs."

We do a similar exercise for the remaining main independent variables. The rest of the results are substantively similar as those reported in the body of the paper except on the last main independent variable "what is your working schedule" in table 4. The dummy "daily working times are decided at short notice" is not significant when only controlling for its antecedents in d2, and only becomes significant when controlling for income in d3. Thus, these results are not robust.

| | b1 | b2 | b3 | b4 | b5 | b6 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| (mosthrs-leasthrs)/usualhrs | -0.14+ | -0.16* | -0.21** | -0.14+ | -0.19* | -0.16* |
| male | 0.11+ | 0.05 | 0.11+ | 0.05 | 0.11+ | 0.11+ |
| decide working hours | -0.00 | -0.01 | -0.00 | -0.01 | 0.00 | |
| highest year of school completed | -0.00 | -0.01 | -0.01 | -0.02 | -0.00 | |
| professional | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 | |
| clerical | -0.20* | -0.16 | -0.13 | -0.11 | -0.20* | |
| sales | -0.19+ | -0.14 | -0.12 | -0.09 | -0.19+ | |
| service | -0.13 | 0.01 | -0.08 | 0.04 | -0.12 | |
| agriculture | -0.33 | -0.20 | -0.24 | -0.14 | -0.32 | |
| production,transport | -0.12 | -0.03 | -0.01 | 0.06 | -0.13 | |
| craft, technical | -0.24* | -0.22+ | -0.21+ | -0.20 | -0.24* | |
| family income in \$1986, millions | | 4.22*** | | 3.56*** | | |
| paid by the hour | | | -0.20** | -0.17* | | |
| yes, respondent belongs | | | | | 0.00 | |
| yes, spouse belongs | | | | | 0.18 | |
| yes, both belong | | | | | 0.16 | |
| no, neither belong | | | | | -0.00 | |
| constant | 2.24*** | 2.34*** | 2.35*** | 2.53*** | 2.50*** | 2.36*** |
| N | 488 | 482 | 456 | 466 | 441 | 481 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 2: OLS regressions of life satisfaction. The base case for union membership is "yes, respondent belongs."

| | c1 | c2 | c3 | c4 | c5 | c6 |
|---|---------|---------|---------|---------|---------|---------|
| never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | -0.06 | -0.03 | -0.01 | -0.02 | 0.00 | -0.03 |
| 2 days-1 wk | -0.20* | -0.20* | -0.19* | -0.18* | -0.18* | -0.20* |
| 1 wks- | -0.15* | -0.14+ | -0.14+ | -0.11 | -0.11 | -0.14+ |
| male | 0.11+ | 0.05 | 0.11+ | 0.05 | 0.05 | 0.11+ |
| decide working hours | -0.00 | -0.01 | -0.00 | -0.01 | -0.01 | 0.00 |
| highest year of school completed | -0.01 | -0.02 | -0.01 | -0.02+ | -0.01 | |
| professional | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.04 | 0.05 | 0.03 | 0.04 | 0.04 | |
| clerical | -0.20* | -0.16 | -0.14 | -0.11 | -0.21* | |
| sales | -0.19+ | -0.14 | -0.13 | -0.09 | -0.20+ | |
| service | -0.11 | 0.01 | -0.07 | 0.06 | -0.11 | |
| agriculture | -0.46 | -0.35 | -0.36 | -0.27 | -0.46 | |
| production,transport | -0.17 | -0.08 | -0.04 | 0.01 | -0.17 | |
| craft, technical | -0.26* | -0.23* | -0.22+ | -0.20 | -0.25* | |
| family income in \$1986, millions | | 4.11*** | | 3.44*** | | |
| paid by the hour | | | -0.20** | -0.18* | | |
| yes, respondent belongs | | | | | 0.00 | |
| yes, spouse belongs | | | | | 0.14 | |
| yes, both belong | | | | | 0.15 | |
| no, neither belong | | | | | 0.00 | |
| constant | 2.28*** | 2.47*** | 2.45*** | 2.63*** | 2.59*** | 2.47*** |
| N | 497 | 491 | 462 | 473 | 446 | 490 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust | | | | | | |
| std err | | | | | | |

Table 3: OLS regressions of life satisfaction. The base case for union membership is “yes, respondent belongs.”

| | d1 | d2 | d3 | d4 | d5 | d6 |
|---|---------|---------|---------|---------|---------|---------|
| schedule or shift regularly changes | -0.04 | -0.10 | -0.11 | -0.12 | -0.14 | -0.10 |
| daily working times are decided at short notice | -0.20+ | -0.18 | -0.29* | -0.13 | -0.26+ | -0.19 |
| male | 0.14* | 0.08 | 0.13* | 0.08 | 0.14* | |
| decide working hours | 0.00 | -0.01 | -0.00 | -0.01 | 0.01 | |
| highest year of school completed | -0.01 | -0.02 | -0.02 | -0.02+ | -0.01 | |
| professional | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | |
| clerical | -0.22* | -0.17+ | -0.14 | -0.12 | -0.22* | |
| sales | -0.18+ | -0.13 | -0.12 | -0.09 | -0.19+ | |
| service | -0.18 | -0.04 | -0.11 | 0.02 | -0.17 | |
| agriculture | -0.38 | -0.24 | -0.29 | -0.17 | -0.37 | |
| production,transport | -0.16 | -0.07 | -0.05 | 0.02 | -0.16 | |
| craft, technical | -0.24* | -0.21+ | -0.21+ | -0.19 | -0.24* | |
| family income in \$1986, millions | | 4.08*** | | 3.28** | | |
| paid by the hour | | | -0.22** | -0.19** | | |
| yes, respondent belongs | | | | | 0.00 | |
| yes, spouse belongs | | | | | 0.16 | |
| yes, both belong | | | | | 0.20 | |
| no, neither belong | | | | | 0.01 | |
| constant | 2.20*** | 2.39*** | 2.39*** | 2.61*** | 2.58*** | 2.39*** |
| N | 751 | 484 | 456 | 468 | 441 | 484 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust | | | | | | |
| std err | | | | | | |

Table 4: OLS regressions of life satisfaction. The base case for union membership is “yes, respondent belongs.”

1.0.1 Additional antecedents of unpredictability and instability according to the literature

Further, based on the literature, there are multiple antecedents of the following unpredictability/instability categories:

Unstable hours / work-hour volatility; (Week-to-week or month-to-month fluctuations in total hours worked)

- Hourly-paid status (vs. salaried)
- Low wages / low earnings
- Part-time and involuntary part-time employment
- Service-sector occupations (retail, food service, hospitality)
- Weak worker bargaining power (nonunion status, slack labor markets)
- Early-career / short tenure
- Employer use of “just-in-time” staffing

Core empirical studies:

- Volatility is concentrated among low-wage, hourly, nonunion workers when worker power is weak. LaBriola, J., & Schneider, D. (2019). Worker power and class polarization in intra-year work hour volatility. *Social Forces*, 98(3), 973-999. <https://doi.org/10.1093/sf/soz011>
- Occupational and gender stratification in hour volatility, net of macro conditions. Cai, J. Y. (2024). Labor market volatility and worker financial wellbeing: An occupational and gender perspective. Institute for New Economic Thinking Working Paper No. 217.
- Persistence of volatility post-pandemic, especially among low-wage hourly workers. Cai, J. Y. (2023). Work-hour volatility by the numbers. Federal Reserve Bank of Boston, Community Development Issue Brief.

Schedule unpredictability / advance notice; (Short notice of schedules, last-minute changes, on-call shifts, cancellations)

- Retail and food-service employment
- Large-chain employers using algorithmic scheduling
- Hourly pay + low job control
- Nonunion status
- Race/ethnicity (workers of color disproportionately exposed)
- Younger and early-career workers

Core empirical studies

- One of the first national mappings of predictors of short notice and last-minute changes. Lambert, S. J., Fugiel, P. J., & Henly, J. R. (2014). Schedule unpredictability among early career workers in the U.S. labor market. University of Chicago Working Paper.
- Uses Shift Project data; shows unpredictability is driven by employer practices, not worker preferences. Schneider, D., & Harknett, K. (2019). Consequences of routine work-schedule instability for worker health and well-being. *American Sociological Review*, 84(1), 82-114.
- Identifies advance notice, on-call shifts, and cancellations as key mechanisms linking jobs to hardship. Schneider, D., & Harknett, K. (2021). Routine schedule unpredictability and material hardship among service-sector workers. *Social Forces*, 99(4), 1682-1709.

Schedule inflexibility / non-responsiveness to worker preferences (Employer refusal or inability to adjust hours or timing in response to worker needs or stated preferences)

- Low worker input or voice over schedules
- Managerial discretion without formal constraints
- Algorithmic scheduling systems
- Low-wage hourly jobs
- Absence of unions or formal scheduling rights
- Gendered care-giving constraints (especially for women)

Core empirical studies:

- Mismatch between preferred and actual hours as a defining feature of low-quality jobs. Golden, L. (2015). Irregular work scheduling and its consequences. Economic Policy Institute Briefing Paper No. 394.
- Inflexibility is organizationally chosen, not technologically inevitable. Williams, J. C., Lambert, S. J., & Kesavan, S. (2018). Stable scheduling increases productivity and sales. Center for WorkLife Law & University of Chicago report.
- Workers' stated preferences are often overridden by managerial practices. Henly, J. R., & Lambert, S. J. (2014). Unpredictable work timing in retail jobs. *Industrial & Labor Relations Review*, 67(3), 986-1008.
- Links inflexibility directly to perceived disrespect and loss of autonomy. Woods, T. (2025). Schedule instability as a threat to perceived dignity in the service sector. *Social Problems*. Advance online publication.

These variables are either already in the model(s) or they are not in our dataset, except for union membership. We add it to the robustness checks in the section above.

1.1 Initial Analysis and Reasoning [Background Only; Skip]

We left the original tables in the body of the manuscript as sequential elaboration of the models with predictors of the dependent variable in addition to main (unpredictability/instability) independent variables is the usual practice. But here we elaborate and use various "robustness" and "sensitivity" checks and provide more discussion.

While overall, some negative effect of the unpredictability/instability measures on SWB often holds, there are many nuances as elaborated here.

Specifically, we address the editorial by Bartram et al. (2024) as per choice of control variables. We explore what may predict unpredictability/instability.

We proceed as follows: We start with pairwise correlations to get an overall sense of relationships. Then, we use Specification Curves Analysis (SCA) to find out how model specification affects statistical significance and effect size of the main (unpredictability/instability) independent variables. Then, having identified key control variables with pairwise correlations and SCA we focus on these in additional sensitivity/robustness models.

1.1.1 Pairwise correlations

We take the main hours variables from the first 2 tables and also 2 main scheduling variables from the last 2 tables and control variables from our regressions.

In table 5 high correlations are mostly among the main independent variables measuring unpredictability/instability that are in the regressions separately¹ Most others are small $|0 - .3|$, with a few exceptions:

- income is most correlated with other controls, no wonder it then changes significance a lot when introduced in our—it correlates with following, all as expected:
 - married .4
 - education .4
 - paid by the hour -.4
- paid by the hour correlates with education at -.4, also as expected

¹With the exception of the first regression table, where we have both “fewest hrs per week past month/usual hours” and “most hrs per week past month/usual hours” that correlate at .4.

- a control we introduce in specification #4 in each table, “number of hours worked last week” correlates highly at .6 to .8 with key unpredictability/instability independent variables based on working hours, as expected: “most hrs/week worked in past month”, “fewest hrs/week worked in past month”, and “how many hrs/week do you usually work”.

Table 5: Cross-correlation table

| Variables | SWB | most hrs/wee worked in past month | fewest hrs/wee worked in past month | how many hrs/wee do you usu- ally work | fewest hrs per week | most hrs per past month/ hours | (mosthr leastrhs) | family in- come in \$1986, mil- lions | age | age squared | married | highest year of school com- pleted | male | number of per- sons in house- hold | white | number of hours worked last week | health | decide work- ing hours |
|--|-----|---|---|---|---------------------------|--|----------------------|---|------|-------------|---------|---|------|--|-------|---|--------|---------------------------------|
| SWB | | 1.0 | | | | | | | | | | | | | | | | |
| most hrs/week worked in past month | | 0.0 | 1.0 | | | | | | | | | | | | | | | |
| fewest hrs/week worked in past month | | 0.1 | 0.6 | 1.0 | | | | | | | | | | | | | | |
| how many hrs/week do you usually work | | 0.1 | 0.7 | 0.6 | 1.0 | | | | | | | | | | | | | |
| fewest hrs per week past month/usual hours | | 0.0 | 0.1 | 0.7 | -0.1 | 1.0 | | | | | | | | | | | | |
| most hrs per week past month/usual hours | | -0.0 | 0.4 | 0.1 | -0.2 | 0.4 | 1.0 | | | | | | | | | | | |
| (mosthrs- leastrhs)/usualhrs | | -0.1 | 0.3 | -0.5 | -0.1 | -0.5 | 0.6 | 1.0 | | | | | | | | | | |
| family income in \$1986, millions | | 0.2 | 0.1 | 0.1 | 0.2 | -0.1 | -0.0 | 0.0 | 1.0 | | | | | | | | | |
| age | | 0.1 | -0.2 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.2 | 1.0 | | | | | | | | |
| age squared | | 0.1 | -0.2 | -0.1 | -0.2 | 0.0 | -0.1 | -0.1 | 0.2 | 1.0 | 1.0 | | | | | | | |
| married | | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | -0.0 | 0.4 | 0.2 | 0.2 | 1.0 | | | | | | |
| highest year of school completed | | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.1 | 0.1 | 1.0 | | | | | | |
| male | | 0.0 | 0.3 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | -0.1 | -0.1 | 0.1 | -0.1 | 1.0 | | | | |
| number of persons in household | | 0.0 | 0.0 | 0.0 | 0.0 | -0.0 | -0.0 | 0.2 | -0.2 | -0.2 | 0.3 | -0.1 | 0.0 | 1.0 | | | | |
| white | | 0.1 | -0.0 | -0.0 | 0.0 | -0.1 | -0.1 | -0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.0 | 1.0 | | | |
| number of hours worked last week | | 0.1 | 0.8 | 0.6 | 0.8 | 0.0 | 0.1 | 0.0 | 0.1 | -0.0 | 0.0 | 0.1 | 0.2 | -0.0 | 0.0 | 1.0 | | |
| health | | 0.2 | -0.0 | 0.1 | -0.0 | 0.1 | 0.0 | -0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.2 | -0.0 | 0.1 | -0.0 | 1.0 | |
| decide working hours | | 0.0 | 0.1 | -0.1 | 0.1 | -0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.1 | -0.0 | 0.0 | 0.1 | 0.0 | 1.0 |
| paid by the hour | | -0.2 | -0.1 | -0.1 | -0.2 | 0.0 | 0.1 | 0.0 | -0.4 | -0.1 | -0.0 | -0.1 | -0.4 | -0.1 | 0.0 | -0.1 | -0.1 | -0.2 |

1.1.2 Specification Curves Analysis (SCA)

Here we use Stata’s speccurve to analyze effect size and statistical significance by specification.

Just to orient discussion, in the SCAs below we designate as main in red color the middle specification #3, somewhat balancing under-fitting and over-fitting, from each regression table in the body of the paper.

Figures 1 2 show that family income ‘‘realinc’’ is the most important variable—subtraction of income in later specifications across the x axis decreases both significance and effect size most substantially of all variables.

In figure 3—here health decreases in significance and effect size as opposed to income earlier, and does so very clearly—once health is added, the drop (towards 0) is clear.

In figure 4 the pattern is more complex—first, dropping health and then dropping income decrease the effect size and significance.

To summarize, clearly both health and income matter for the unpredictability/instability’s effect and significance and both can make unpredictability/instability more or less bearable (in terms of SWB).

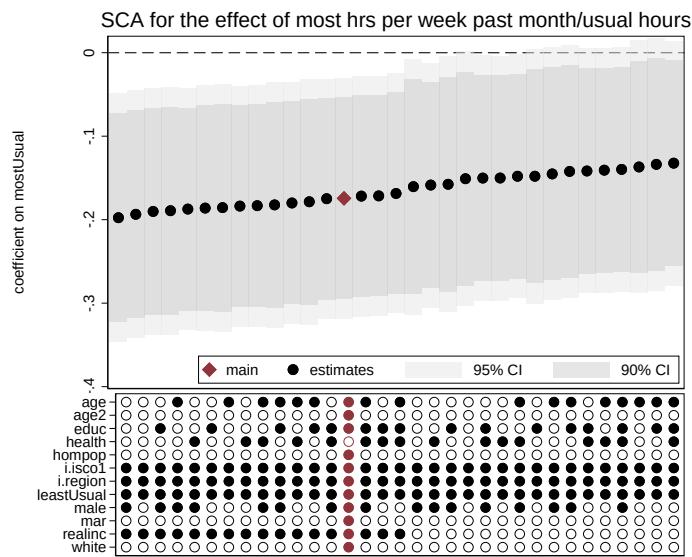


Figure 1

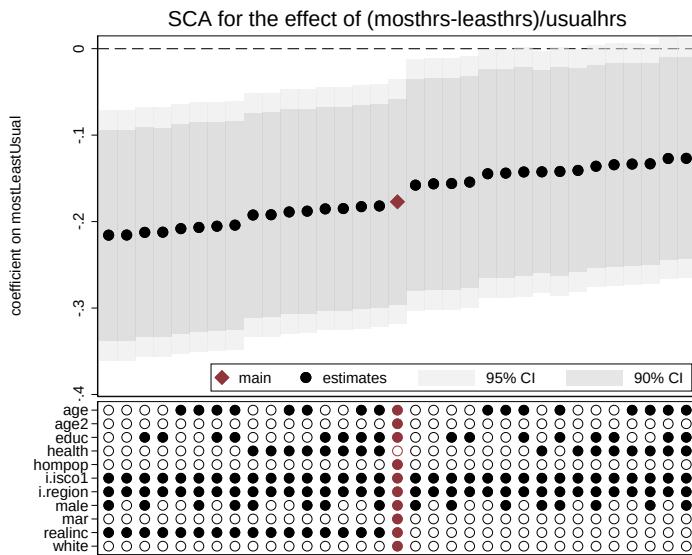


Figure 2

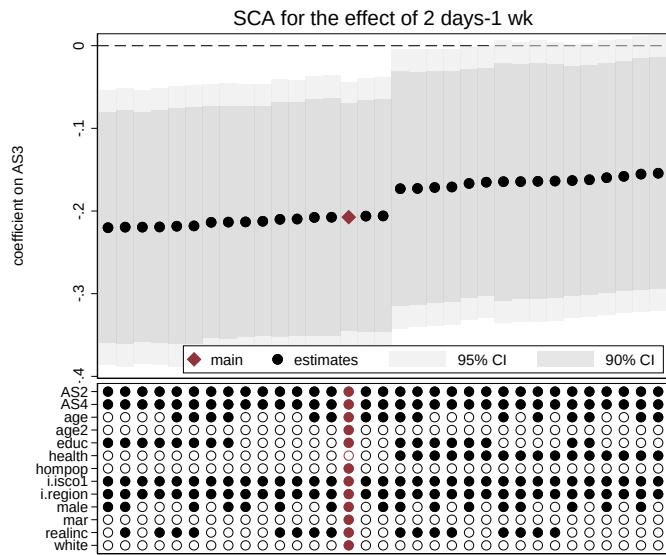


Figure 3

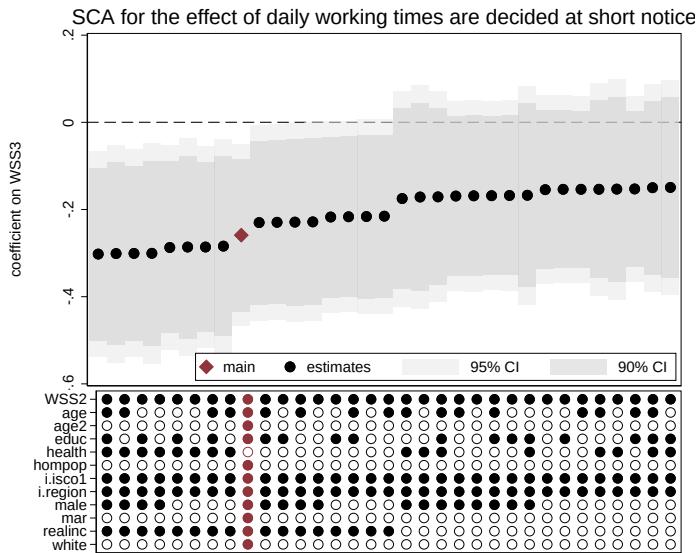


Figure 4

1.1.3 Additional sensitivity/robustness models

Finally, as per SCA we focus on health and income and rerun the regressions from the body of the paper below. We also focus on industry dummies here (which are also explored in greater detail in the subsequent section).

All in all, across specifications results from the body of the paper mostly hold, but depending on the unpredictability/instability variable, the significance and effect sizes can vary as discussed below.

In table 6 the range of estimates on ‘‘most hrs per week past month/usual hours’’ is -.14 to -.18 sig at least at 10%. Controlling for industry dummies in e5 doesn’t change much the results relative to e1.

| | e1 | e2 | e3 | e4 | e5 |
|---|---------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.13 | 0.23* | 0.08 | 0.18 | 0.17 |
| most hrs per week past month/usual hours | -0.14+ | -0.18* | -0.14+ | -0.16* | -0.15* |
| family income in \$1986, millions | | 4.33*** | | 3.52*** | |
| health | | | 0.20*** | 0.16*** | |
| professional | | | | | 0.00 |
| administrative/managerial | | | | | 0.00 |
| clerical | | | | | -0.22* |
| sales | | | | | -0.23* |
| service | | | | | -0.14 |
| agriculture | | | | | -0.27 |
| production,transport | | | | | -0.07 |
| craft, technical | | | | | -0.22* |
| constant | 2.26*** | 2.06*** | 1.70*** | 1.63*** | 2.34*** |
| N | 488 | 461 | 488 | 461 | 484 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | | |

Table 6: OLS regressions of life satisfaction.

In table 7 (mosthrs-leasthrs)/usualhrs range from -.12 to -.19 sig at least at 10%, except for the p-value slightly higher at .102 when only controlling for health. Controlling for industry dummies in f5 the results are slightly stronger than in f1.

| | f1 | f2 | f3 | f4 | f5 |
|---|---------|---------|---------|---------|---------|
| (mosthrs-leasthrs)/usualhrs | -0.14+ | -0.19** | -0.12 | -0.17* | -0.16* |
| family income in \$1986, millions | | 4.31*** | | 3.50*** | |
| health | | | 0.19*** | 0.16*** | |
| professional | | | | | 0.00 |
| administrative/managerial | | | | | 0.00 |
| clerical | | | | | -0.22* |
| sales | | | | | -0.23* |
| service | | | | | -0.14 |
| agriculture | | | | | -0.27 |
| production,transport | | | | | -0.07 |
| craft, technical | | | | | -0.22* |
| constant | 2.24*** | 2.11*** | 1.65*** | 1.65*** | 2.36*** |
| N | 488 | 461 | 488 | 461 | 484 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | | |

Table 7: OLS regressions of life satisfaction.

In table 8 we see more unstable results, as high as .2 without controls, and insignificant when controlling for health, or for health and income. Controlling for industry dummies in g5 yields similar findings as in g1.

| | g1 | g2 | g3 | g4 | g5 |
|---|---------|---------|---------|---------|---------|
| -1 day | -0.06 | -0.03 | 0.00 | 0.02 | -0.02 |
| 2 days-1 wk | -0.20* | -0.16+ | -0.13 | -0.11 | -0.19* |
| 1 wk- | -0.15* | -0.14+ | -0.12 | -0.11 | -0.15* |
| family income in \$1986, millions | | 4.20*** | | 3.61*** | |
| health | | | 0.17*** | 0.14*** | |
| professional | | | | | 0.00 |
| administrative/managerial | | | | | 0.00 |
| clerical | | | | | -0.22* |
| sales | | | | | -0.23* |
| service | | | | | -0.11 |
| agriculture | | | | | -0.38 |
| production,transport | | | | | -0.10 |
| craft, technical | | | | | -0.22* |
| constant | 2.28*** | 2.12*** | 1.73*** | 1.69*** | 2.39*** |
| N | 497 | 467 | 497 | 467 | 492 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | | |

Table 8: OLS regressions of life satisfaction.

In table 9 the results are as strong as -.24; when controlling for health it becomes insignificant, but controlling for both health and for income brings back the significance. The industry dummies kill the significance in h5 v bivariate h1.

| | h1 | h5 | h2 | h3 | h4 |
|---|----------|---------|---------|---------|---------|
| schedule or shift regularly changes | -0.04 | -0.03 | -0.04 | -0.04 | -0.05 |
| daily working times are decided at short notice | -0.20+ | -0.16 | -0.24* | -0.14 | -0.26* |
| professional | 0.00 | | | | |
| administrative/managerial | -0.04 | | | | |
| clerical | -0.20* | | | | |
| sales | -0.20* | | | | |
| service | -0.22* | | | | |
| agriculture | -0.31 | | | | |
| production, transport | -0.13 | | | | |
| craft, technical | -0.30*** | | | | |
| family income in \$1986, millions | | 4.29*** | | | 3.90*** |
| health | | | 0.18*** | 0.14*** | |
| constant | 2.20*** | 2.35*** | 2.05*** | 1.67*** | 1.65*** |
| N | 751 | 745 | 705 | 498 | 469 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 9: OLS regressions of life satisfaction.

1.1.4 Unpredictability/Instability means by income, health, and occupations

Here we provide some additional descriptive statistics. First by income and health. Second, by occupations.

Income and health

Here we split income at median in table 10: realinc2 category # being income above the median. In that category there is slightly less unpredictability/instability on ‘‘most hrs per week past month/usual hours’’, ‘‘most hrs per week past month/usual hours’’, and ‘‘daily working times are decided at short notice’’. And there is a big difference on ‘‘2 days-1 wk’’ – it is almost 2x lower for those with income above median – unpredictability/instability on this measure is much lower for high earners.

In table 11, those in good or excellent health (v poor or fair), have actually more instability on the first 2 metrics, but slightly less on the following 2, and much less on the last one (‘‘2 days-1 wk’’).

| realinc2 | fewest hrs per week | most hrs per week | most hrs per week | daily working times | 2 days-1 wk |
|----------|------------------------|------------------------|------------------------|-----------------------------|-------------|
| | past month/usual hours | past month/usual hours | past month/usual hours | are decided at short notice | |
| 1 | 0.85 | 1.19 | 0.34 | 0.05 | 0.25 |
| 2 | 0.85 | 1.16 | 0.31 | 0.04 | 0.13 |

Table 10

| gooExcHea | fewest hrs per week | most hrs per week | most hrs per week | daily working times | 2 days-1 wk |
|-----------|------------------------|------------------------|------------------------|-----------------------------|-------------|
| | past month/usual hours | past month/usual hours | past month/usual hours | are decided at short notice | |
| 0.8 | 1.15 | 0.34 | 0.06 | 0.29 | |
| 1 | 0.86 | 1.2 | 0.33 | 0.05 | 0.18 |

Table 11

Occupations

Here we use International Standard Classification of Occupations (ISCO) that we collapsed to 1-digit groupings.

Clearly unpredictability/instability is an attribute of occupations. Hence, it is a key variable to consider here. While in the body of the paper we do include in more elaborate specifications these dummies, here we provide more information: means (and counts) of each unpredictability/instability measure by occupation.

Note, there are very few people in agriculture – hence we can't interpret the results for agriculture.

On leastUI ‘‘fewest hrs per week past month/usual hours’’ not much difference except that service is slightly lower. So service varies more than others – the lowest hours for service are lower than elsewhere relative to usual hours.

On mostUsl ‘‘most hrs per week past month/usual hours’’ and mostLel ‘‘(mosthrs-leasthrs)/usualhrs’’ there’s not much of a difference, but production/transport is slightly higher. Production/transport hours highest hours are higher than for other occupations relative to usual hours. And in production/transport there is also a bigger difference between most and least hours relative to usual hours ((mosthrs-leasthrs)/usualhrs) versus other occupations.

On WSS3 ‘‘daily working times are decided at short notice’’: production/transport and especially craft/technical are much higher, 2x or more than the rest.

On AS3 ‘‘2 days-1 wk’’ is higher on professional and craft/technical, but especially on service, 2x or more higher.

Thus, while there are different patterns across unpredictability/instability metrics, production/transport, craft/technical, and service show different levels. Most, if not all, of these are probably as expected. We do not make too much out of it as occupational sectors are not the focus of the paper, rather are control variables; and cell sizes are quite small in the table below:

```
. tabstat leastUsual mostUsual mostLeastUsual WSS3 AS3, by(isco1)format(%9.2f)note stat(mean n)
```

Summary statistics: Mean, N
Group variable: isco1 (1 digit occupation)

| isco1 | leastU1 | mostUsl | mostLel | WSS3 | AS3 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| professional | 0.83 74 | 1.16 74 | 0.34 74 | 0.03 110 | 0.24 74 |
| administrative/ managerial | 0.83 107 | 1.20 107 | 0.34 106 | 0.04 159 | 0.14 108 |
| clerical | 0.88 86 | 1.18 85 | 0.30 85 | 0.04 128 | 0.16 85 |
| sales | 0.88 53 | 1.16 53 | 0.28 53 | 0.04 79 | 0.19 53 |
| service | 0.78 61 | 1.16 62 | 0.38 61 | 0.04 94 | 0.36 66 |
| agriculture | 0.68 3 | 1.28 3 | 0.60 3 | 0.25 4 | 0 3 |
| production/transpo | 0.88 39 | 1.28 39 | 0.39 39 | 0.07 69 | 0.15 39 |
| craft/technical | 0.87 65 | 1.17 64 | 0.30 64 | 0.11 103 | 0.22 65 |

2 Using personal income instead of family income

In the body of the paper we have used family income; now as a robustness check we use personal income (they correlate at .73).

Note that using family income in the body of the paper as opposed to a person’s income is somewhat adjusted by controlling for the size of the household.

Income is an important variable as per discussion in this appendix in other sections. Likewise, using personal income v family income has a large effect on many estimates as elaborated below.

Results on “most hrs per week past month/usual hours” are cut by as much as half. Still the sign is the same, but we mostly lost the statistical significance. In fact, in both tables 12 and 13 we have lost statistical significance on the unpredictability/instability measures.

| | a1 | a2 | a3 | a4 | a5 |
|--|---------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.13 | 0.08 | 0.06 | 0.04 | 0.02 |
| most hrs per week past month/usual hours | -0.14+ | -0.09 | -0.11 | -0.10 | -0.08 |
| r's income in constant usd | | 0.00+ | 0.00 | 0.00 | -0.00 |
| age | | | 0.00 | 0.00 | 0.01 |
| age squared | | | -0.00 | -0.00 | -0.00 |
| married | | | 0.34*** | 0.31*** | 0.33*** |
| highest year of school completed | | | -0.02 | -0.03* | -0.04** |
| male | | | 0.09 | 0.08 | 0.07 |
| number of persons in household | | | -0.02 | -0.02 | -0.02 |
| white | | | 0.04 | 0.03 | 0.03 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | -0.02 | -0.01 | 0.01 |
| clerical | | | -0.14 | -0.17 | -0.11 |
| sales | | | -0.23+ | -0.25* | -0.19+ |
| service | | | -0.14 | -0.11 | -0.08 |
| agriculture | | | -0.16 | -0.04 | 0.04 |
| production,transport | | | -0.12 | -0.10 | 0.02 |
| craft, technical | | | -0.18 | -0.18 | -0.16 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.11 | -0.05 | -0.03 |
| east north central | | | -0.31* | -0.23+ | -0.24+ |
| west north central | | | -0.34* | -0.31* | -0.33* |
| south atlantic | | | -0.30* | -0.28* | -0.28* |
| east south atlantic | | | -0.21 | -0.12 | -0.10 |
| west south central | | | -0.19 | -0.13 | -0.13 |
| mountain | | | -0.11 | -0.06 | -0.03 |
| pacific | | | -0.29* | -0.18 | -0.17 |
| number of hours worked last week | | | 0.00 | 0.00 | 0.00 |
| health | | | | 0.19*** | 0.19*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.18* |
| constant | 2.26*** | 2.19*** | 2.58*** | 2.07*** | 2.29*** |
| N | 488 | 415 | 412 | 412 | 396 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 12: OLS regressions of life satisfaction.

| | b1 | b2 | b3 | b4 | b5 |
|----------------------------------|---------|---------|---------|---------|---------|
| (mosthrs-leasthrs)/usualhrs | -0.14+ | -0.09 | -0.09 | -0.08 | -0.05 |
| r's income in constant usd | | 0.00+ | 0.00 | 0.00 | -0.00 |
| age | | | 0.00 | 0.00 | 0.01 |
| age squared | | | -0.00 | -0.00 | -0.00 |
| married | | | 0.34*** | 0.31*** | 0.33*** |
| highest year of school completed | | | -0.02 | -0.03* | -0.04** |
| male | | | 0.09 | 0.08 | 0.07 |
| number of persons in household | | | -0.02 | -0.01 | -0.02 |
| white | | | 0.05 | 0.04 | 0.03 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | -0.02 | -0.02 | 0.00 |
| clerical | | | -0.15 | -0.17 | -0.11 |
| sales | | | -0.23+ | -0.25* | -0.20+ |
| service | | | -0.14 | -0.11 | -0.08 |
| agriculture | | | -0.15 | -0.03 | 0.05 |
| production,transport | | | -0.13 | -0.11 | 0.02 |
| craft, technical | | | -0.18 | -0.18 | -0.17 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.11 | -0.05 | -0.04 |
| east north central | | | -0.31* | -0.23+ | -0.24+ |
| west north central | | | -0.34* | -0.31* | -0.34* |
| south atlantic | | | -0.29* | -0.28* | -0.28* |
| east south atlantic | | | -0.20 | -0.12 | -0.10 |
| west south central | | | -0.20 | -0.13 | -0.14 |
| mountain | | | -0.11 | -0.06 | -0.03 |
| pacific | | | -0.29* | -0.18 | -0.18 |
| number of hours worked last week | | | 0.00 | 0.00 | 0.00 |
| health | | | | 0.19*** | 0.19*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.18* |
| constant | 2.24*** | 2.18*** | 2.54*** | 2.02*** | 2.24*** |
| N | 488 | 415 | 412 | 412 | 396 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 13: OLS regressions of life satisfaction.

But then on the last 2 measures there is a great deal of effect. In table 14 ‘‘2 days-1 wk’’ is actually more significant than with family income in the body of the manuscript. And then in table 15 we see about the same significance as with family income in the body of the manuscript.

| | c1 | c2 | c3 | c4 | c5 |
|----------------------------------|---------|---------|---------|---------|---------|
| never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | -0.06 | -0.02 | -0.02 | 0.01 | 0.02 |
| 2 days-1 wk | -0.20* | -0.21* | -0.24** | -0.20* | -0.21* |
| 1 wks- | -0.15* | -0.15+ | -0.15+ | -0.12 | -0.08 |
| r's income in constant usd | | 0.00+ | 0.00 | 0.00 | -0.00 |
| age | | | -0.01 | -0.01 | 0.00 |
| age squared | | | 0.00 | 0.00 | -0.00 |
| married | | | 0.33*** | 0.31*** | 0.32*** |
| highest year of school completed | | | -0.02+ | -0.03** | -0.04** |
| male | | | 0.09 | 0.08 | 0.07 |
| number of persons in household | | | -0.01 | -0.01 | -0.01 |
| white | | | 0.06 | 0.05 | 0.05 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | 0.00 | 0.01 | 0.02 |
| clerical | | | -0.13 | -0.16 | -0.11 |
| sales | | | -0.26* | -0.27* | -0.22+ |
| service | | | -0.14 | -0.12 | -0.07 |
| agriculture | | | -0.22 | -0.11 | -0.02 |
| production,transport | | | -0.17 | -0.16 | -0.02 |
| craft, technical | | | -0.20 | -0.21+ | -0.18 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.08 | -0.03 | -0.01 |
| east north central | | | -0.30* | -0.23+ | -0.24+ |
| west north central | | | -0.38* | -0.36* | -0.33* |
| south atlantic | | | -0.30* | -0.28* | -0.27* |
| east south atlantic | | | -0.19 | -0.11 | -0.07 |
| west south central | | | -0.17 | -0.12 | -0.12 |
| mountain | | | -0.09 | -0.05 | -0.01 |
| pacific | | | -0.29* | -0.19 | -0.18 |
| number of hours worked last week | | | 0.00 | 0.00 | |
| health | | | | 0.18*** | 0.19*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.18* |
| constant | 2.28*** | 2.23*** | 2.85*** | 2.35*** | 2.42*** |
| N | 497 | 418 | 415 | 415 | 399 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 14: OLS regressions of life satisfaction.

| | d1 | d2 | d3 | d4 | d5 |
|---|---------|---------|---------|---------|---------|
| schedule or shift regularly changes | -0.04 | 0.01 | -0.00 | -0.02 | -0.06 |
| daily working times are decided at short notice | -0.20+ | -0.26* | -0.30** | -0.28* | -0.30** |
| r's income in constant usd | 0.00** | 0.00 | 0.00 | 0.00 | 0.00 |
| age | | -0.01 | -0.01 | -0.01 | -0.00 |
| age squared | | 0.00 | 0.00 | 0.00 | 0.00 |
| married | | 0.33*** | 0.31*** | 0.32*** | |
| highest year of school completed | | -0.02 | -0.03* | -0.03* | -0.04** |
| male | | 0.08 | 0.11+ | 0.09 | |
| number of persons in household | | -0.03 | -0.01 | -0.01 | |
| white | | 0.00 | 0.02 | 0.03 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | -0.08 | -0.01 | 0.01 | |
| clerical | | -0.16+ | -0.18+ | -0.13 | |
| sales | | -0.19+ | -0.23* | -0.21+ | |
| service | | -0.19+ | -0.16 | -0.12 | |
| agriculture | | -0.00 | 0.06 | 0.16 | |
| production,transport | | -0.21* | -0.12 | 0.01 | |
| craft, technical | | -0.22* | -0.18 | -0.17 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.01 | -0.05 | -0.03 | |
| east north central | | -0.22* | -0.24+ | -0.24+ | |
| west north central | | -0.17 | -0.38* | -0.37* | |
| south atlantic | | -0.13 | -0.29* | -0.28* | |
| east south atlantic | | -0.10 | -0.13 | -0.11 | |
| west south central | | -0.17 | -0.12 | -0.14 | |
| mountain | | 0.07 | -0.07 | -0.04 | |
| pacific | | -0.19+ | -0.21 | -0.19 | |
| number of hours worked last week | | | 0.00 | 0.00 | |
| health | | | | 0.18*** | 0.18*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.21** |
| constant | 2.20*** | 2.14*** | 2.73*** | 2.24*** | 2.50*** |
| N | 751 | 632 | 628 | 418 | 396 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 15: OLS regressions of life satisfaction.

3 Beta (fully standardized) coefficients

| | aa1 | aa2 | aa3 | aa4 | aa5 |
|--|--------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.06 | 0.10* | 0.08 | 0.07 | 0.06 |
| most hrs per week past month/usual hours | -0.08+ | -0.09* | -0.09* | -0.09* | -0.08* |
| family income in \$1986, millions | | 0.21*** | 0.10+ | 0.07 | 0.05 |
| age | | | 0.14 | 0.11 | 0.14 |
| age squared | | | -0.13 | -0.10 | -0.14 |
| married | | | 0.24*** | 0.22*** | 0.23*** |
| highest year of school completed | | | -0.07 | -0.11+ | -0.13* |
| male | | | 0.06 | 0.04 | 0.04 |
| number of persons in household | | | -0.02 | -0.00 | 0.00 |
| white | | | 0.04 | 0.04 | 0.03 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | 0.02 | 0.02 | 0.03 |
| clerical | | | -0.08 | -0.08 | -0.06 |
| sales | | | -0.07 | -0.07 | -0.05 |
| service | | | 0.02 | 0.03 | 0.04 |
| agriculture | | | -0.05 | -0.04 | -0.03 |
| production,transport | | | -0.03 | -0.01 | 0.03 |
| craft, technical | | | -0.10+ | -0.10+ | -0.09 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.07 | -0.04 | -0.04 |
| east north central | | | -0.14+ | -0.10 | -0.11 |
| west north central | | | -0.11* | -0.10+ | -0.11+ |
| south atlantic | | | -0.17* | -0.16* | -0.17* |
| east south atlantic | | | -0.08 | -0.05 | -0.05 |
| west south central | | | -0.09 | -0.07 | -0.06 |
| mountain | | | -0.06 | -0.04 | -0.04 |
| pacific | | | -0.13* | -0.08 | -0.08 |
| number of hours worked last week | | | | 0.04 | 0.03 |
| health | | | | 0.20*** | 0.20*** |
| decide working hours | | | | | -0.02 |
| paid by the hour | | | | | -0.11* |
| constant | *** | *** | *** | *** | *** |
| N | 488 | 461 | 455 | 454 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 16: OLS regressions of life satisfaction.

| | bb1 | bb2 | bb3 | bb4 | bb5 |
|-----------------------------------|--------|---------|---------|---------|---------|
| (mosthrs-leastrhs)/usualhrs | -0.08+ | -0.11** | -0.10* | -0.09* | -0.08+ |
| family income in \$1986, millions | | 0.21*** | 0.10+ | 0.07 | 0.06 |
| age | | | 0.14 | 0.11 | 0.14 |
| age squared | | | -0.13 | -0.10 | -0.13 |
| married | | | 0.24*** | 0.22*** | 0.23*** |
| highest year of school completed | | | -0.07 | -0.11+ | -0.13* |
| male | | | 0.06 | 0.04 | 0.04 |
| number of persons in household | | | -0.02 | -0.00 | 0.00 |
| white | | | 0.04 | 0.04 | 0.04 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | 0.02 | 0.02 | 0.03 |
| clerical | | | -0.08 | -0.08 | -0.06 |
| sales | | | -0.07 | -0.07 | -0.05 |
| service | | | 0.02 | 0.03 | 0.04 |
| agriculture | | | -0.05 | -0.04 | -0.03 |
| production,transport | | | -0.03 | -0.01 | 0.03 |
| craft, technical | | | -0.10+ | -0.10+ | -0.09 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.07 | -0.04 | -0.04 |
| east north central | | | -0.14+ | -0.10 | -0.11 |
| west north central | | | -0.11* | -0.10+ | -0.11+ |
| south atlantic | | | -0.17* | -0.16* | -0.17* |
| east south atlantic | | | -0.08 | -0.05 | -0.05 |
| west south central | | | -0.09 | -0.07 | -0.07 |
| mountain | | | -0.06 | -0.04 | -0.04 |
| pacific | | | -0.13* | -0.08 | -0.08 |
| number of hours worked last week | | | | 0.04 | 0.03 |
| health | | | | 0.19*** | 0.20*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.11* |
| constant | *** | *** | *** | *** | *** |
| N | 488 | 461 | 455 | 454 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 17: OLS regressions of life satisfaction.

| | cc1 | cc2 | cc3 | cc4 | cc5 |
|-----------------------------------|--------|---------|---------|---------|--------|
| never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | -0.03 | -0.01 | -0.01 | 0.00 | 0.02 |
| 2 days-1 wk | -0.12* | -0.10+ | -0.13* | -0.10* | -0.10+ |
| 1 wks- | -0.10* | -0.09+ | -0.11* | -0.09+ | -0.05 |
| family income in \$1986, millions | | 0.20*** | 0.09+ | 0.07 | 0.05 |
| age | | 0.02 | 0.01 | 0.10 | |
| age squared | | -0.01 | -0.00 | -0.09 | |
| married | | 0.23*** | 0.22*** | 0.23*** | |
| highest year of school completed | | -0.10 | -0.13* | -0.15* | |
| male | | 0.06 | 0.05 | 0.04 | |
| number of persons in household | | -0.01 | -0.00 | 0.01 | |
| white | | 0.06 | 0.05 | 0.05 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | 0.03 | 0.03 | 0.03 | |
| clerical | | -0.07 | -0.08 | -0.06 | |
| sales | | -0.08 | -0.07 | -0.05 | |
| service | | 0.02 | 0.02 | 0.05 | |
| agriculture | | -0.07 | -0.06 | -0.05 | |
| production,transport | | -0.05 | -0.03 | 0.01 | |
| craft, technical | | -0.11+ | -0.11+ | -0.09 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.06 | -0.03 | -0.03 | |
| east north central | | -0.14+ | -0.11 | -0.12 | |
| west north central | | -0.14* | -0.13* | -0.12* | |
| south atlantic | | -0.16* | -0.16* | -0.17* | |
| east south atlantic | | -0.08 | -0.06 | -0.05 | |
| west south central | | -0.08 | -0.07 | -0.07 | |
| mountain | | -0.06 | -0.04 | -0.03 | |
| pacific | | -0.14* | 0.11 | 0.10 | |
| number of hours worked last week | | | 0.05 | 0.03 | |
| health | | | 0.17** | 0.18*** | |
| decide working hours | | | | -0.02 | |
| paid by the hour | | | | -0.12* | |
| constant | *** | *** | *** | *** | *** |
| N | 497 | 467 | 460 | 459 | 443 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust

std err

Table 18: OLS regressions of life satisfaction.

| | dd1 | dd2 | dd3 | dd4 | dd5 |
|---|---------|---------|---------|---------|---------|
| schedule or shift regularly changes | -0.02 | -0.02 | -0.03 | -0.06 | -0.07 |
| daily working times are decided at short notice | -0.07+ | -0.08* | -0.09* | -0.11** | -0.11** |
| family income in \$1986, millions | 0.21*** | 0.11* | 0.08 | 0.04 | |
| age | | -0.15 | 0.03 | 0.08 | |
| age squared | | 0.16 | 0.01 | -0.06 | |
| married | | 0.24*** | 0.23*** | 0.24*** | |
| highest year of school completed | | -0.07 | -0.12* | -0.15* | |
| male | | 0.07+ | 0.08+ | 0.07 | |
| number of persons in household | | -0.06 | -0.00 | 0.01 | |
| white | | 0.00 | 0.02 | 0.03 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | -0.03 | 0.03 | 0.03 | |
| clerical | | -0.08+ | -0.08 | -0.06 | |
| sales | | -0.07 | -0.05 | -0.05 | |
| service | | -0.05 | 0.01 | 0.03 | |
| agriculture | | -0.04 | -0.04 | -0.03 | |
| production,transport | | -0.07 | -0.02 | 0.02 | |
| craft, technical | | -0.14** | -0.09 | -0.08 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.03 | -0.04 | -0.04 | |
| east north central | | -0.09 | -0.11 | -0.12 | |
| west north central | | -0.03 | -0.14* | -0.13* | |
| south atlantic | | -0.07 | -0.17* | -0.18* | |
| east south atlantic | | -0.03 | -0.06 | -0.05 | |
| west south central | | -0.07 | -0.07 | -0.07 | |
| mountain | | 0.00 | -0.05 | -0.04 | |
| pacific | | -0.09+ | -0.12+ | -0.11+ | |
| number of hours worked last week | | | 0.03 | 0.01 | |
| health | | | 0.17*** | 0.18*** | |
| decide working hours | | | | -0.02 | |
| paid by the hour | | | | -0.13* | |
| constant | *** | *** | *** | *** | *** |
| N | 751 | 705 | 697 | 460 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust

std err

Table 19: OLS regressions of life satisfaction.

4 Interactions by groups

We postpone them to the appendix and we do not make much of them as the sample size is relatively small at about 450 observations and accordingly, statistical power is low as well.

Furthermore our focus in the manuscript is on the main effect. Future research, when more data becomes available, can focus on specific effects by groups. Nevertheless, here we provide some preliminary results:

4.1 Gender

In table 20 for males there is some positive effect from 'fewest hours,' and insignificant from 'most hours.'

| | x1 | x2 | x3 | x4 | x5 |
|---|---------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | -0.10 | -0.01 | -0.05 | -0.11 | -0.12 |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male | -0.43+ | -0.48+ | -0.52+ | -0.59* | -0.61* |
| male | | | 0.00 | 0.00 | 0.00 |
| 0 × fewest hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × fewest hrs per week past month/usual hours | 0.37+ | 0.37+ | 0.35 | 0.40+ | 0.36 |
| most hrs per week past month/usual hours | -0.35* | -0.37* | -0.40** | -0.41** | -0.42** |
| 0 × most hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × most hrs per week past month/usual hours | 0.20 | 0.19 | 0.26 | 0.27 | 0.31 |
| family income in \$1986, millions | 4.27*** | 1.90+ | 1.40 | 1.04 | |
| age | | 0.00 | 0.00 | 0.00 | |
| age squared | | -0.00 | -0.00 | -0.00 | |
| married | | 0.29*** | 0.27*** | 0.29*** | |
| highest year of school completed | | -0.01 | -0.02+ | -0.03* | |
| number of persons in household | | -0.01 | 0.00 | 0.00 | |
| white | | 0.08 | 0.07 | 0.06 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | 0.01 | 0.01 | 0.03 | |
| clerical | | -0.14 | -0.15 | -0.11 | |
| sales | | -0.15 | -0.14 | -0.11 | |
| service | | 0.01 | 0.03 | 0.05 | |
| agriculture | | -0.38 | -0.30 | -0.26 | |
| production,transport | | -0.07 | -0.04 | 0.05 | |
| craft, technical | | -0.22+ | -0.22* | -0.20+ | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.15 | -0.10 | -0.10 | |
| east north central | | -0.26* | -0.20 | -0.21 | |
| west north central | | -0.32* | -0.30* | -0.33* | |
| south atlantic | | -0.29* | -0.28* | -0.29* | |
| east south atlantic | | -0.23 | -0.17 | -0.15 | |
| west south central | | -0.21 | -0.18 | -0.16 | |
| mountain | | -0.17 | -0.14 | -0.12 | |
| pacific | | -0.29* | -0.21+ | -0.20 | |
| number of hours worked last week | | | 0.00 | 0.00 | |
| health | | | 0.17*** | 0.18*** | |
| decide working hours | | | | -0.01 | |
| paid by the hour | | | | -0.14+ | |
| constant | 2.63*** | 2.46*** | 2.80*** | 2.39*** | 2.54*** |
| N | 488 | 461 | 455 | 454 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 20: OLS regressions of life satisfaction.

In table 21 for males there is no significant effect.

| | x1 | x2 | x3 | x4 | x5 |
|------------------------------------|---------|---------|---------|---------|---------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male | 0.15+ | 0.08 | 0.08 | 0.07 | 0.05 |
| (mosthrs-leasthrs)/usualhrs | -0.11 | -0.18 | -0.17 | -0.14 | -0.14 |
| 0 × (mosthrs-leasthrs)/usualhrs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × (mosthrs-leasthrs)/usualhrs | -0.07 | -0.05 | -0.01 | -0.04 | -0.00 |
| family income in \$1986, millions | | 4.24*** | 1.95+ | 1.51 | 1.13 |
| age | | 0.01 | 0.00 | 0.01 | |
| age squared | | -0.00 | -0.00 | -0.00 | |
| married | | 0.30*** | 0.28*** | 0.29*** | |
| highest year of school completed | | -0.01 | -0.02+ | -0.03* | |
| number of persons in household | | -0.01 | -0.00 | 0.00 | |
| white | | 0.06 | 0.05 | 0.05 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | 0.03 | 0.03 | 0.04 | |
| clerical | | -0.13 | -0.14 | -0.10 | |
| sales | | -0.15 | -0.14 | -0.10 | |
| service | | 0.03 | 0.06 | 0.09 | |
| agriculture | | -0.37 | -0.30 | -0.26 | |
| production,transport | | -0.06 | -0.02 | 0.08 | |
| craft, technical | | -0.20+ | -0.20+ | -0.17 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.13 | -0.07 | -0.07 | |
| east north central | | -0.23+ | -0.17 | -0.18 | |
| west north central | | -0.29* | -0.26+ | -0.29+ | |
| south atlantic | | -0.28* | -0.26* | -0.28* | |
| east south atlantic | | -0.21 | -0.14 | -0.12 | |
| west south central | | -0.18 | -0.15 | -0.14 | |
| mountain | | -0.14 | -0.10 | -0.08 | |
| pacific | | -0.25* | -0.16 | -0.16 | |
| number of hours worked last week | | | 0.00 | 0.00 | |
| health | | | 0.17*** | 0.17*** | |
| decide working hours | | | | -0.01 | |
| paid by the hour | | | | -0.15* | |
| constant | 2.17*** | 2.08*** | 2.30*** | 1.84*** | 1.99*** |
| N | 488 | 461 | 455 | 454 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust

std err

Table 21: OLS regressions of life satisfaction.

Likewise, in table 22 and 23 for males there is no significant effect.

| | x1 | x2 | x3 | x4 | x5 |
|-----------------------------------|---------|---------|---------|---------|---------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male | 0.08 | 0.06 | 0.10 | 0.10 | 0.10 |
| never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | -0.10 | -0.06 | -0.00 | 0.07 | 0.08 |
| 2 days-1 wk | -0.18 | -0.10 | -0.13 | -0.08 | -0.09 |
| 1 wks- | -0.20+ | -0.17+ | -0.19+ | -0.15 | -0.08 |
| 0 × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 × -1 day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 × 2 days-1 wk | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 × 1 wks- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × -1 day | 0.05 | 0.03 | -0.03 | -0.11 | -0.08 |
| male × 2 days-1 wk | -0.04 | -0.13 | -0.17 | -0.18 | -0.14 |
| male × 1 wks- | 0.16 | 0.12 | 0.08 | 0.07 | 0.00 |
| family income in \$1986, millions | | 4.10*** | 1.84+ | 1.45 | 0.99 |
| age | | 0.00 | 0.00 | 0.00 | |
| age squared | | -0.00 | 0.00 | -0.00 | |
| married | | 0.31*** | 0.29*** | 0.31*** | |
| highest year of school completed | | -0.02+ | -0.03* | -0.03* | |
| number of persons in household | | -0.01 | -0.00 | 0.00 | |
| white | | 0.08 | 0.07 | 0.07 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | 0.04 | 0.04 | 0.05 | |
| clerical | | -0.11 | -0.12 | -0.10 | |
| sales | | -0.16 | -0.15 | -0.11 | |
| service | | 0.03 | 0.04 | 0.10 | |
| agriculture | | -0.53 | -0.45 | -0.38 | |
| production,transport | | -0.11 | -0.07 | 0.04 | |
| craft, technical | | -0.22+ | -0.22+ | -0.18 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.10 | -0.06 | -0.06 | |
| east north central | | -0.23+ | -0.18 | -0.19 | |
| west north central | | -0.33* | -0.32* | -0.30* | |
| south atlantic | | -0.27* | -0.25* | -0.26* | |
| east south atlantic | | -0.21 | -0.15 | -0.12 | |
| west south central | | -0.18 | -0.16 | -0.15 | |
| mountain | | -0.12 | -0.09 | -0.07 | |
| pacific | | -0.27* | -0.20 | -0.19 | |
| number of hours worked last week | | | 0.00 | 0.00 | |
| health | | | 0.15** | 0.16*** | |
| decide working hours | | | | -0.01 | |
| paid by the hour | | | | -0.16* | |
| constant | 2.24*** | 2.09*** | 2.51*** | 2.05*** | 2.09*** |
| N | 497 | 467 | 460 | 459 | 443 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust

std err

Table 22: OLS regressions of life satisfaction.

| | x1 | x2 | x3 | x4 | x5 |
|--|---------|---------|---------|---------|---------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male | 0.11* | 0.08 | 0.09+ | 0.10 | 0.09 |
| male | | | 0.00 | 0.00 | 0.00 |
| schedule or shift regularly changes=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| schedule or shift regularly changes=1 | -0.11 | -0.07 | -0.10 | -0.17 | -0.18 |
| 0 × schedule or shift regularly changes=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 × schedule or shift regularly changes=1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × schedule or shift regularly changes=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × schedule or shift regularly changes=1 | 0.13 | 0.08 | 0.07 | 0.13 | 0.12 |
| daily working times are decided at short notice=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| daily working times are decided at short notice=1 | 0.01 | 0.05 | -0.06 | -0.11 | -0.08 |
| 0 × daily working times are decided at short notice=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 × daily working times are decided at short notice=1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × daily working times are decided at short notice=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| male × daily working times are decided at short notice=1 | -0.35 | -0.43 | -0.28 | -0.31 | -0.39 |
| family income in \$1986, millions | 4.17*** | 2.20* | 1.78 | 0.87 | |
| age | -0.01 | 0.00 | 0.00 | | |
| age squared | 0.00 | 0.00 | -0.00 | | |
| married | 0.31*** | 0.29*** | 0.30*** | | |
| highest year of school completed | -0.01 | -0.02+ | -0.03* | | |
| number of persons in household | -0.03 | -0.00 | 0.01 | | |
| white | 0.00 | 0.03 | 0.04 | | |
| professional | 0.00 | 0.00 | 0.00 | | |
| administrative/managerial | -0.04 | 0.04 | 0.05 | | |
| clerical | -0.13 | -0.13 | -0.10 | | |
| sales | -0.13 | -0.10 | -0.08 | | |
| service | -0.09 | 0.03 | 0.07 | | |
| agriculture | -0.28 | -0.29 | -0.21 | | |
| production,transport | -0.15 | -0.04 | 0.06 | | |
| craft, technical | -0.25** | -0.17 | -0.15 | | |
| new england | 0.00 | 0.00 | 0.00 | | |
| middle atlantic | -0.07 | -0.08 | -0.08 | | |
| east north central | -0.15 | -0.18 | -0.19 | | |
| west north central | -0.08 | -0.34* | -0.33* | | |
| south atlantic | -0.12 | -0.28* | -0.29* | | |
| east south atlantic | -0.07 | -0.16 | -0.14 | | |
| west south central | -0.15 | -0.14 | -0.14 | | |
| mountain | 0.01 | -0.10 | -0.09 | | |
| pacific | -0.17+ | -0.21+ | -0.21 | | |
| number of hours worked last week | 0.00 | 0.00 | | | |
| health | | 0.15*** | 0.16*** | | |
| decide working hours | | | -0.01 | | |
| paid by the hour | | | -0.18* | | |
| constant | 2.15*** | 2.02*** | 2.57*** | 1.98*** | 2.16*** |
| N | 751 | 705 | 697 | 460 | 438 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | | |

Table 23: OLS regressions of life satisfaction.

4.2 Age

```
gen a20=0
```

```
replace a20=1 if age<30
```

```
replace a20=. if age>=.
```

```
gen a30_54=0
```

```
replace a30_54=1 if age>29 & age <55
```

```
replace a20=. if age>=.
```

gen a55=0

replace a55=1 if age>54 & age <200

replace a55=. if age>=.

| | y1 | y2 | y3 | y4 | y5 |
|--|---------|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.15 | 0.27+ | 0.23 | 0.17 | 0.15 |
| a20=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 | -0.44 | -0.38 | -0.29 | -0.25 | -0.20 |
| a20=0 × fewest hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 × fewest hrs per week past month/usual hours | 0.29 | 0.16 | 0.06 | 0.11 | 0.08 |
| most hrs per week past month/usual hours | -0.14 | -0.18+ | -0.20* | -0.16+ | -0.16 |
| a20=0 × most hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 × most hrs per week past month/usual hours | 0.14 | 0.23 | 0.24 | 0.18 | 0.17 |
| fewest hrs per week past month/usual hours | 0.00 | | | | |
| a55=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 | 0.43 | 0.49+ | 0.25 | 0.46 | 0.38 |
| a55=0 × fewest hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 × fewest hrs per week past month/usual hours | -0.32 | -0.23 | -0.10 | -0.13 | -0.12 |
| fewest hrs per week past month/usual hours | | | | | 0.00 |
| fewest hrs per week past month/usual hours | | | | 0.00 | |
| fewest hrs per week past month/usual hours | | | 0.00 | | |
| most hrs per week past month/usual hours | 0.00 | | | | |
| a55=0 × most hrs per week past month/usual hours | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 × most hrs per week past month/usual hours | -0.11 | -0.23 | -0.14 | -0.29 | -0.23 |
| most hrs per week past month/usual hours | | | | | 0.00 |
| most hrs per week past month/usual hours | | | | 0.00 | |
| most hrs per week past month/usual hours | | | 0.00 | | |
| family income in \$1986, millions | 4.53*** | 2.25+ | 1.78 | 1.37 | |
| married | | 0.30*** | 0.28*** | 0.30*** | |
| highest year of school completed | | -0.01 | -0.02+ | -0.03* | |
| male | | 0.06 | 0.04 | 0.04 | |
| number of persons in household | | -0.01 | -0.00 | 0.00 | |
| white | | 0.06 | 0.05 | 0.05 | |
| professional | | 0.00 | 0.00 | 0.00 | |
| administrative/managerial | | 0.02 | 0.03 | 0.04 | |
| clerical | | -0.13 | -0.14 | -0.10 | |
| sales | | -0.15 | -0.13 | -0.10 | |
| service | | 0.01 | 0.03 | 0.06 | |
| agriculture | | -0.32 | -0.23 | -0.18 | |
| production,transport | | -0.06 | -0.02 | 0.08 | |
| craft, technical | | -0.20+ | -0.20+ | -0.17 | |
| new england | | 0.00 | 0.00 | 0.00 | |
| middle atlantic | | -0.12 | -0.06 | -0.06 | |
| east north central | | -0.22+ | -0.16 | -0.17 | |
| west north central | | -0.27+ | -0.24 | -0.27+ | |
| south atlantic | | -0.27* | -0.25+ | -0.27* | |
| east south atlantic | | -0.20 | -0.11 | -0.11 | |
| west south central | | -0.19 | -0.15 | -0.14 | |
| mountain | | -0.13 | -0.08 | -0.08 | |
| pacific | | -0.25* | -0.15 | -0.16 | |
| number of hours worked last week | | 0.00 | 0.00 | | |
| health | | | 0.17*** | 0.18*** | |
| decide working hours | | | | -0.01 | |
| paid by the hour | | | | -0.15+ | |
| constant | 2.23*** | 2.01*** | 2.42*** | 1.92*** | 2.09*** |
| N | 485 | 458 | 455 | 454 | 438 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | | |

Table 24: OLS regressions of life satisfaction.

| | y1 | y2 | y3 | y4 | y5 |
|-------------------------------------|---------|---------|---------|---------|---------|
| (mosthrs-leasthrs)/usualhrs | -0.14 | -0.21* | -0.21* | -0.17+ | -0.16 |
| a20=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 | -0.02 | 0.00 | -0.00 | 0.03 | 0.04 |
| a20=0 × (mosthrs-leasthrs)/usualhrs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 × (mosthrs-leasthrs)/usualhrs | -0.05 | 0.05 | 0.12 | 0.06 | 0.07 |
| (mosthrs-leasthrs)/usualhrs | 0.00 | | | | |
| a55=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 | 0.01 | 0.03 | 0.02 | 0.04 | 0.03 |
| a55=0 × (mosthrs-leasthrs)/usualhrs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 × (mosthrs-leasthrs)/usualhrs | 0.11 | -0.01 | -0.02 | -0.07 | -0.04 |
| (mosthrs-leasthrs)/usualhrs | | | | | 0.00 |
| (mosthrs-leasthrs)/usualhrs | | | 0.00 | | |
| (mosthrs-leasthrs)/usualhrs | | | | 0.00 | |
| family income in \$1986, millions | | 4.43*** | 2.11+ | 1.68 | 1.28 |
| married | | | 0.31*** | 0.29*** | 0.30*** |
| highest year of school completed | | | -0.01 | -0.02+ | -0.03* |
| male | | | 0.07 | 0.04 | 0.04 |
| number of persons in household | | | -0.01 | 0.00 | 0.00 |
| white | | | 0.06 | 0.05 | 0.05 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | 0.03 | 0.03 | 0.04 |
| clerical | | | -0.13 | -0.14 | -0.10 |
| sales | | | -0.16 | -0.15 | -0.11 |
| service | | | 0.02 | 0.05 | 0.08 |
| agriculture | | | -0.34 | -0.25 | -0.20 |
| production,transport | | | -0.05 | -0.01 | 0.09 |
| craft, technical | | | -0.20 | -0.20+ | -0.17 |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.12 | -0.07 | -0.07 |
| east north central | | | -0.23+ | -0.17 | -0.18 |
| west north central | | | -0.29* | -0.27+ | -0.30* |
| south atlantic | | | -0.27* | -0.26* | -0.27* |
| east south atlantic | | | -0.21 | -0.14 | -0.12 |
| west south central | | | -0.19 | -0.16 | -0.15 |
| mountain | | | -0.14 | -0.10 | -0.09 |
| pacific | | | -0.25* | -0.16 | -0.16 |
| number of hours worked last week | | | 0.00 | 0.00 | 0.00 |
| health | | | | 0.17*** | 0.17*** |
| decide working hours | | | | | -0.01 |
| paid by the hour | | | | | -0.15* |
| constant | 2.24*** | 2.10*** | 2.44*** | 1.93*** | 2.10*** |
| N | 485 | 458 | 455 | 454 | 438 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 25: OLS regressions of life satisfaction.

In table 26 one could be tempted to read into significant estimates on $a20 = 1x - 1day$, but there are only 11 such persons, and in the actual estimation in specification y5 there's only 11 due to missing data on other variables:

| | a20 | | |
|--------|-----|-----|-------|
| -1 day | 0 | 1 | Total |
| 0 | 321 | 92 | 413 |
| 1 | 69 | 13 | 82 |
| Total | 390 | 105 | 495 |

| | a20 | | |
|--------|-----|----|-------|
| -1 day | 0 | 1 | Total |
| 0 | 296 | 82 | 378 |
| 1 | 54 | 11 | 65 |

Thus, we abort these exercises here.

| | y1 | y2 | y3 | y4 | y5 |
|-----------------------------------|---|---------|---------|---------|---------|
| a20=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 | 0.05 | 0.15 | 0.15 | 0.15 | 0.13 |
| never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | -0.02 | 0.09 | 0.13 | 0.14 | 0.19 |
| 2 days-1 wk | -0.19 | -0.17 | -0.18 | -0.16 | -0.14 |
| 1 wks- | -0.25* | -0.21* | -0.23* | -0.19+ | -0.14 |
| a20=0 × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=0 × -1 day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=0 × 2 days-1 wk | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=0 × 1 wks- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a20=1 × -1 day | -0.24 | -0.42* | -0.40* | -0.38+ | -0.36+ |
| a20=1 × 2 days-1 wk | -0.11 | -0.10 | -0.10 | -0.08 | -0.07 |
| a20=1 × 1 wks- | -0.08 | -0.16 | -0.07 | -0.04 | 0.01 |
| a55=0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 | -0.06 | -0.01 | 0.02 | 0.03 | 0.04 |
| a55=0 × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=0 × -1 day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=0 × 2 days-1 wk | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=0 × 1 wks- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 × never | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| a55=1 × -1 day | 0.02 | -0.17 | -0.27 | -0.25 | -0.31 |
| a55=1 × 2 days-1 wk | 0.10 | 0.04 | -0.08 | -0.02 | -0.09 |
| a55=1 × 1 wks- | 0.37* | 0.28 | 0.25 | 0.20 | 0.17 |
| family income in \$1986, millions | | 4.43*** | 2.11+ | 1.74 | 1.29 |
| married | | | 0.31*** | 0.30*** | 0.32*** |
| highest year of school completed | | | -0.02+ | -0.03* | -0.03* |
| male | | | 0.07 | 0.05 | 0.04 |
| number of persons in household | | | -0.00 | 0.00 | 0.01 |
| white | | | 0.07 | 0.07 | 0.06 |
| professional | | | 0.00 | 0.00 | 0.00 |
| administrative/managerial | | | 0.05 | 0.05 | 0.06 |
| clerical | | | -0.13 | -0.14 | -0.11 |
| sales | | | -0.17 | -0.16 | -0.13 |
| service | | | 0.02 | 0.03 | 0.08 |
| agriculture | | | -0.54 | -0.46 | -0.41 |
| production,transport | | | -0.13 | -0.10 | 0.01 |
| craft, technical | | | -0.23* | -0.23* | -0.20+ |
| new england | | | 0.00 | 0.00 | 0.00 |
| middle atlantic | | | -0.08 | -0.05 | -0.05 |
| east north central | | | -0.18 | -0.14 | -0.16 |
| west north central | | | -0.29* | -0.28* | -0.28+ |
| south atlantic | | | -0.23+ | -0.22+ | -0.25+ |
| east south atlantic | | | -0.15 | -0.10 | -0.09 |
| west south central | | | -0.11 | -0.10 | -0.10 |
| mountain | | | -0.08 | -0.06 | -0.05 |
| pacific | | | -0.25+ | -0.19 | -0.19 |
| number of hours worked last week | | | | 0.00 | 0.00 |
| health | | | | 0.14** | 0.15** |
| decide working hours | | | | | -0.02 |
| paid by the hour | | | | | -0.16* |
| constant | 2.29*** | 2.09*** | 2.48*** | 2.03*** | 2.19*** |
| N | 494 | 464 | 460 | 459 | 443 |
| std err | + 0.10 * 0.05 ** 0.01 *** 0.001; robust | | | | |

Table 26: OLS regressions of life satisfaction.

5 Exploring “decide working hours ('who sets the schedule')”

We thank an anonymous reviewer for making the following point:

Wouldn't it make more sense to exclude the participants who can control their schedule and analyze only the effect of employer-friendly flexibility? In case you are arguing that unpredictability is bad for the SWB independently of who is controlling the schedule, this should be explicitly stated and the argumentation should be straightened throughout the paper.

In general, in the paper we simply explore the effect of unpredictability and instability on happiness. There are many ways to approach it and subset the sample. As the reviewer points out, yes, indeed, effectively we are arguing that “unpredictability is bad for SWB independently of who is controlling the schedule”—this is due to the fact that we control for “decide working hours ('who sets the

'schedule')." But it also makes sense, as the reviewer advises, to "exclude the participants who can control their schedule and analyze only the effect of employer-friendly flexibility." This is what we do in this section (and a few other checks). The discussion is postponed here as we already have 6 tables in the body of the paper and also the sample size gets from small to even smaller. (Still we report key points from this section in the body of the paper).

As reported in the paper, the 'decide working hours' ('who sets the schedule') variable measures increasing degrees of decision latitude on the part of an employee. But it deserves some robustness checks as there are 2 interesting categories—the first one is 'no latitude whatsoever' (also on the part of the employer) and the last one is 'full latitude on the part of an employee.' Below is the frequency table:

| decide working hours | Freq. | Percent | Cum. |
|---------------------------------------|-------|---------|--------|
| employer decides with little/no input | 28 | 5.63 | 5.63 |
| | 224 | 45.07 | 50.70 |
| | 134 | 26.96 | 77.67 |
| | 91 | 18.31 | 95.98 |
| | 20 | 4.02 | 100.00 |
| Total | 497 | 100.00 | |

Excluding participants who (fully) control their schedule would mean dropping 20 people in the last category (however, note there are degrees of controlling schedule).

We conduct several robustness checks.

First, we repeat for reference the specification from the body of the paper (a5). Second, instead of treating the variable as continuous as in the body, we dummy it out (a5D) with the base "employer decides with little/no input." Results are similar. Next, in a5no0 we drop the observation in the 1st category "outside of my/employer control," and again the results are similar. Finally in a5no4 we drop "i decide without limits" and here the results are different—we lose significance on 'most hrs per week past month/usual hours.' Finally, we are dropping both ends where the employer has no latitude—to see how the results may change if we look at a subsample where the employer has discretion in column a5no04—results are similar to previous column a5no4.

| | a5 | a5D | a5no0 | a5no4 |
|---|---------|---------|---------|---------|
| fewest hrs per week past month/usual hours | 0.12 | 0.10 | 0.11 | 0.07 |
| most hrs per week past month/usual hours | -0.16* | -0.14+ | -0.17* | -0.13 |
| family income in \$1986, millions | 1.09 | 0.95 | 0.94 | 0.85 |
| age | 0.01 | 0.01 | 0.01 | 0.00 |
| age squared | -0.00 | -0.00 | -0.00 | 0.00 |
| married | 0.30*** | 0.29*** | 0.30*** | 0.28*** |
| highest year of school completed | -0.03* | -0.03* | -0.03+ | -0.03+ |
| male | 0.05 | 0.05 | 0.09 | 0.05 |
| number of persons in household | 0.00 | 0.01 | 0.01 | -0.00 |
| white | 0.05 | 0.05 | 0.05 | 0.07 |
| number of hours worked last week | 0.00 | 0.00 | 0.00 | 0.00 |
| health | 0.17*** | 0.17*** | 0.17*** | 0.17*** |
| decide working hours | -0.01 | | | |
| paid by the hour | -0.14* | -0.14* | -0.15* | -0.13+ |
| professional | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.04 | 0.04 | 0.05 | 0.05 |
| clerical | -0.10 | -0.09 | -0.10 | -0.12 |
| sales | -0.10 | -0.12 | -0.09 | -0.15 |
| service | 0.08 | 0.08 | 0.04 | 0.04 |
| agriculture | -0.26 | -0.27 | -0.29 | -0.30 |
| production,transport | 0.08 | 0.07 | 0.06 | 0.04 |
| craft, technical | -0.17 | -0.19 | -0.15 | -0.20+ |
| new england | 0.00 | 0.00 | 0.00 | 0.00 |
| middle atlantic | -0.07 | -0.08 | -0.09 | -0.05 |
| east north central | -0.18 | -0.20 | -0.20 | -0.14 |
| west north central | -0.29+ | -0.31* | -0.28+ | -0.25+ |
| south atlantic | -0.28* | -0.29* | -0.26* | -0.24+ |
| east south atlantic | -0.12 | -0.14 | -0.12 | -0.11 |
| west south central | -0.14 | -0.15 | -0.14 | -0.04 |
| mountain | -0.09 | -0.10 | -0.09 | -0.03 |
| pacific | -0.16 | -0.17 | -0.18 | -0.16 |
| sethrs==outside of my/employer control | 0.01 | | | |
| sethrs==employer decides with input | -0.06 | | | |
| sethrs==i decide within limits | 0.04 | | | |
| sethrs==i decide without limits | -0.15 | | | |
| constant | 2.02*** | 2.07*** | 2.05*** | 2.04*** |
| N | 438 | 438 | 414 | 421 |
| + 0.10 * 0.05 ** 0.01 *** 0.001; robust std err | | | | |

Table 27: OLS regressions of life satisfaction.

Next, we repeat the exercise for the other main independent variables. With dummies, '(mosthrs-leasthrs)/usualhrs' remains marginally significant at p-value of about .1. Like in the previous table, we lose statistical significance if we exclude "i decide without limits," and

similarly in the last column when we also drop “outside of my/employer control.”

| | b5 | b5D | b5no0 | b5no4 |
|--|---------|---------|---------|---------|
| (mosthrs-leasthrs)/usualhrs | -0.14+ | -0.13 | -0.15* | -0.11 |
| family income in \$1986, millions | 1.13 | 1.00 | 1.01 | 0.92 |
| age | 0.01 | 0.01 | 0.01 | 0.00 |
| age squared | -0.00 | -0.00 | -0.00 | 0.00 |
| married | 0.29*** | 0.28*** | 0.30*** | 0.28*** |
| highest year of school completed | -0.03* | -0.03* | -0.03+ | -0.03* |
| male | 0.05 | 0.04 | 0.09 | 0.05 |
| number of persons in household | 0.00 | 0.01 | 0.01 | -0.00 |
| white | 0.05 | 0.05 | 0.05 | 0.07 |
| number of hours worked last week | 0.00 | 0.00 | 0.00 | 0.00 |
| health | 0.17*** | 0.17*** | 0.17*** | 0.17*** |
| decide working hours | -0.01 | | | |
| paid by the hour | -0.15* | -0.15* | -0.15* | -0.14+ |
| professional | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.04 | 0.04 | 0.05 | 0.05 |
| clerical | -0.10 | -0.10 | -0.10 | -0.12 |
| sales | -0.10 | -0.12 | -0.09 | -0.15 |
| service | 0.09 | 0.08 | 0.04 | 0.04 |
| agriculture | -0.26 | -0.26 | -0.28 | -0.29 |
| production,transport | 0.08 | 0.07 | 0.05 | 0.04 |
| craft, technical | -0.17 | -0.19 | -0.15 | -0.20+ |
| new england | 0.00 | 0.00 | 0.00 | 0.00 |
| middle atlantic | -0.07 | -0.08 | -0.09 | -0.05 |
| east north central | 0.18 | 0.20 | 0.20 | -0.14 |
| west north central | -0.29+ | -0.31* | -0.28+ | -0.25+ |
| south atlantic | -0.28* | -0.29* | -0.26* | -0.23+ |
| east south atlantic | -0.12 | -0.14 | -0.12 | -0.10 |
| west south central | -0.14 | -0.15 | -0.14 | -0.04 |
| mountain | -0.08 | -0.10 | -0.09 | -0.03 |
| pacific | -0.16 | -0.18 | -0.18 | -0.16 |
| sethrs==outside of my/employer control | 0.02 | | | |
| sethrs==employer decides with input | -0.06 | | | |
| sethrs==i decide within limits | 0.04 | | | |
| sethrs==i decide without limits | -0.15 | | | |
| constant | 1.99*** | 2.03*** | 2.01*** | 2.01*** |
| N | 438 | 438 | 414 | 421 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 28: OLS regressions of life satisfaction.

In table 29 dummies do not change much and dropping the first category results are slightly stronger on “2 days-1 wk.” And again like earlier results, dropping the 4th category kills significance, and remains insignificant when we also drop the first category.

| | c5 | c5D | c5no0 | c5no4 |
|--|---------|---------|---------|---------|
| never | 0.00 | 0.00 | 0.00 | 0.00 |
| -1 day | 0.03 | 0.04 | 0.09 | 0.06 |
| 2 days-1 wk | -0.16+ | -0.15+ | -0.18* | -0.11 |
| 1 wks- | -0.08 | -0.08 | -0.09 | -0.08 |
| family income in \$1986, millions | 0.97 | 0.86 | 0.85 | 0.89 |
| age | 0.00 | 0.00 | 0.00 | 0.00 |
| age squared | -0.00 | -0.00 | -0.00 | 0.00 |
| married | 0.30*** | 0.29*** | 0.30*** | 0.29*** |
| highest year of school completed | -0.03* | -0.03* | -0.03* | -0.03* |
| male | 0.06 | 0.05 | 0.10 | 0.05 |
| number of persons in household | 0.00 | 0.01 | 0.01 | -0.00 |
| white | 0.08 | 0.08 | 0.08 | 0.10 |
| number of hours worked last week | 0.00 | 0.00 | 0.00 | 0.00 |
| health | 0.16*** | 0.16*** | 0.15** | 0.16*** |
| decide working hours | -0.01 | | | |
| paid by the hour | -0.16* | -0.16* | -0.16* | -0.15* |
| professional | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.05 | 0.05 | 0.06 | 0.06 |
| clerical | -0.10 | -0.10 | -0.10 | -0.12 |
| sales | -0.11 | -0.13 | -0.10 | -0.16 |
| service | 0.10 | 0.09 | 0.06 | 0.05 |
| agriculture | -0.38 | -0.38 | -0.43 | -0.39 |
| production,transport | 0.03 | 0.02 | -0.01 | -0.00 |
| craft, technical | -0.18 | -0.20+ | -0.18 | -0.21+ |
| new england | 0.00 | 0.00 | 0.00 | 0.00 |
| middle atlantic | -0.07 | -0.07 | -0.09 | -0.04 |
| east north central | -0.19 | -0.21 | -0.22+ | -0.15 |
| west north central | -0.32* | -0.33* | -0.31* | -0.26+ |
| south atlantic | -0.27* | -0.28* | -0.25+ | -0.21 |
| east south atlantic | -0.12 | -0.14 | -0.12 | -0.10 |
| west south central | -0.15 | -0.16 | -0.15 | -0.05 |
| mountain | -0.08 | -0.09 | -0.08 | -0.02 |
| pacific | -0.19 | -0.21 | -0.22 | -0.19 |
| sethrs==outside of my/employer control | 0.00 | | | |
| sethrs==employer decides with input | -0.06 | | | |
| sethrs==i decide within limits | 0.03 | | | |
| sethrs==i decide without limits | -0.19 | | | |
| constant | 2.10*** | 2.13*** | 2.13*** | 2.04*** |
| N | 443 | 443 | 419 | 426 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 29: OLS regressions of life satisfaction.

Finally, in table 30 the results remain of similar magnitude and significance throughout.

| | d5 | d5D | d5no0 | d5no4 |
|---|---------|---------|---------|---------|
| schedule or shift regularly changes | -0.13 | -0.12 | -0.09 | -0.09 |
| daily working times are decided at short notice | -0.34** | -0.35** | -0.29* | -0.33** |
| family income in \$1986, millions | 0.85 | 0.77 | 0.71 | 0.88 |
| age | 0.00 | 0.00 | 0.00 | 0.00 |
| age squared | -0.00 | -0.00 | -0.00 | -0.00 |
| married | 0.30*** | 0.29*** | 0.29*** | 0.28*** |
| highest year of school completed | -0.03* | -0.03* | -0.03* | -0.03* |
| male | 0.09 | 0.08 | 0.12+ | 0.07 |
| number of persons in household | 0.01 | 0.01 | 0.01 | 0.01 |
| white | 0.04 | 0.04 | 0.04 | 0.07 |
| number of hours worked last week | 0.00 | 0.00 | 0.00 | 0.00 |
| health | 0.16*** | 0.16*** | 0.15** | 0.16*** |
| decide working hours | -0.01 | | | |
| paid by the hour | -0.18* | -0.17* | -0.18* | -0.15* |
| professional | 0.00 | 0.00 | 0.00 | 0.00 |
| administrative/managerial | 0.05 | 0.05 | 0.05 | 0.06 |
| clerical | -0.11 | -0.10 | -0.11 | -0.12 |
| sales | -0.10 | -0.12 | -0.12 | -0.15 |
| service | 0.06 | 0.06 | 0.01 | 0.04 |
| agriculture | -0.27 | -0.26 | -0.32 | -0.28 |
| production,transport | 0.05 | 0.04 | 0.01 | 0.02 |
| craft, technical | -0.16 | -0.18 | -0.17 | -0.19 |
| new england | 0.00 | 0.00 | 0.00 | 0.00 |
| middle atlantic | -0.08 | -0.09 | -0.11 | -0.06 |
| east north central | -0.20 | -0.22+ | -0.23+ | -0.18 |
| west north central | -0.34* | -0.36* | -0.35* | -0.31+ |
| south atlantic | -0.29* | -0.31* | -0.28* | -0.26+ |
| east south atlantic | -0.14 | -0.16 | -0.15 | -0.13 |
| west south central | -0.15 | -0.16 | -0.17 | -0.06 |
| mountain | -0.09 | -0.12 | -0.12 | -0.05 |
| pacific | -0.22+ | -0.24+ | -0.25+ | -0.22+ |
| sethrs==outside of my/employer control | 0.03 | 0.00 | 0.01 | |
| sethrs==employer decides with input | -0.07 | -0.07 | -0.07 | |
| sethrs==i decide within limits | 0.04 | 0.04 | 0.03 | |
| sethrs==i decide without limits | -0.14 | -0.15 | 0.00 | |
| constant | 2.16*** | 2.21*** | 2.24*** | 2.09*** |
| N | 438 | 438 | 414 | 423 |

+ 0.10 * 0.05 ** 0.01 *** 0.001; robust
std err

Table 30: OLS regressions of life satisfaction.

Hence, we conclude that only the last variable “what is your working schedule” predicts SWB in the sample excluding “i decide without limits.” For the first three variables, while the sign remains the same, and the effect size is cut by no more than about 35%, still the loss of statistical significance is notable. The important conclusion here is that the sign remains the same, and the decrease in effect size, while sizable, is not close to zero. Thus, the results reported in the body of the paper retain substantial validity despite important nuances in this sensitivity check.

6 Descriptive Statistics

6.1 Distributions of Variables

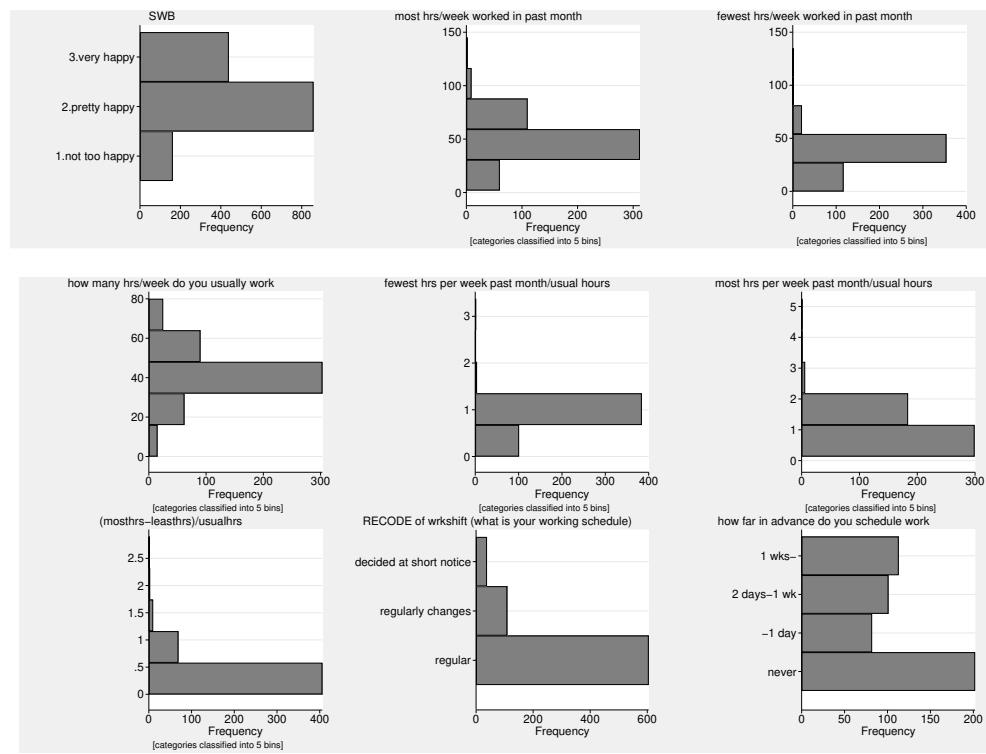


Figure 5: Variables' distribution.

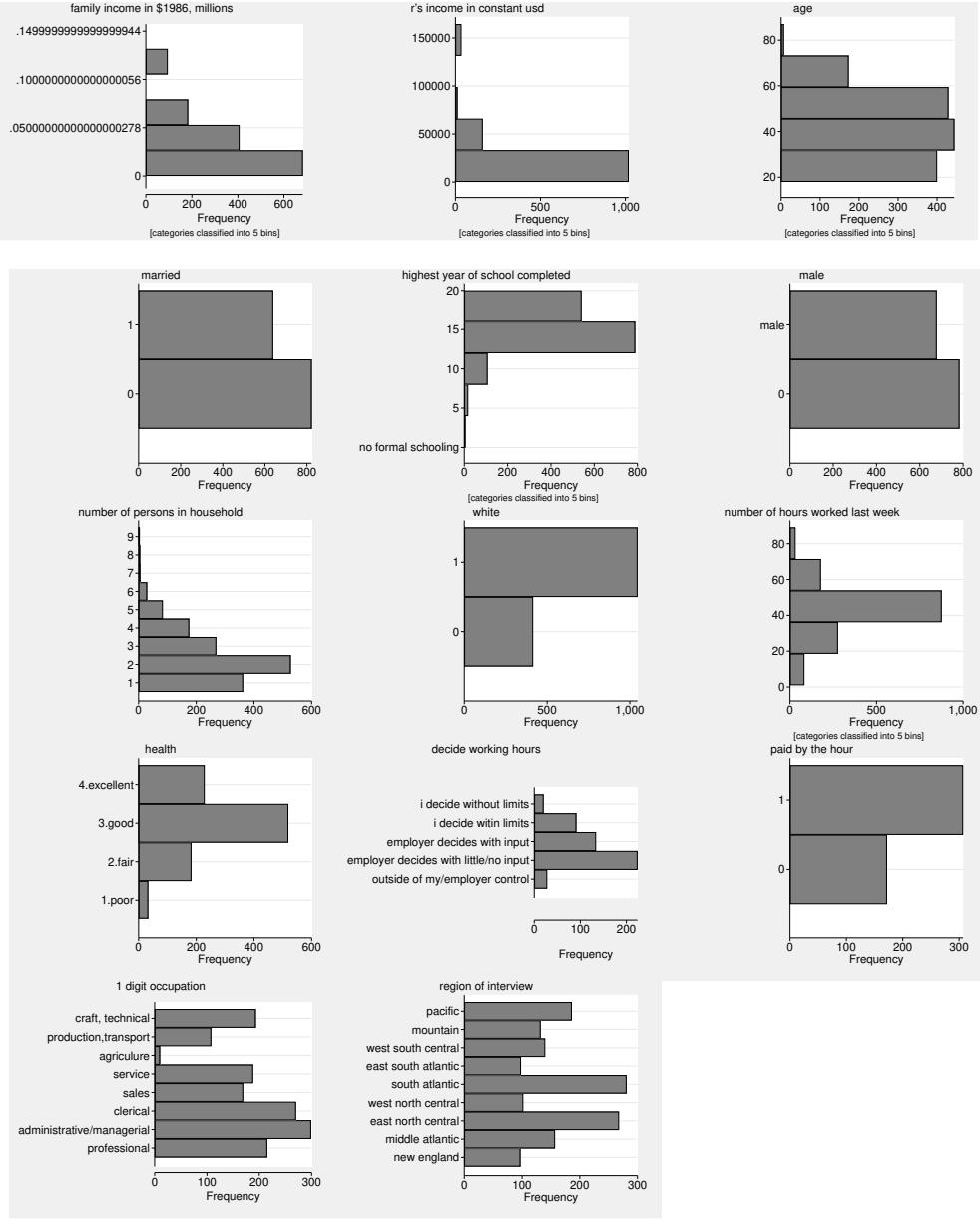


Figure 6: Variables' distribution.

7 Other/minor points

7.1 Directionality of effect from health and income to SWB

The direction of causality of some SWB determinants such as health may be disputed, i.e., whether health predicts happiness or happiness predicts health (Diener 2015). But recent evidence supports our assumption that health causing happiness is predominant (Liu et al. 2016). The same logic applies to the role of income in SWB estimation and whether it is income that predicts SWB or vice versa (Easterlin 1974, Helliwell et al. 2004). While in general it is assumed that income predicts SWB (e.g., Okulicz-Kozaryn 2011, 2016), longitudinal and (quasi) experimental designs are recommended to tackle reverse causality (Diener 1994, Helliwell et al. 2004).

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