Hi Jordan,

Very nice to meet you.

As I wrote briefly in email, the project aims to examine whether the method could identify dementia.

May I share my screen with you?

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So basically, we create a cognitive measure based on how the respondents answer the numerical questions. We focus particularly open-ended financial questions

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We use the respondents participating between 2004 and 2018 waves, but excludes the proxy response. There are two problems using ADAMS sample because of this, but I will talk later.

We selected 10 financial questions and characterize each response.

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We characterize each response in three ways. The baseline theory is satisficing theory.

First, the level of rounding. I assume the more the rounding, the respondents would have put less efforts. Hence, it may have the negative relationship between the level of rounding and the cognitive effort. However, it is hard to assume the linear relationship between the number of significant digits, so I only focus on whether the respondents having the maximal rounding such as 1,000 or 100 or 70,000.

Second, the opting out. This is because HRS provides this option.

Third, just a number response other than the maximal rounding

I assign 0, 1 and 2 to opt-out, maximal rounding and the number response for the selected question. And take the average of them.

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I label it as Moon. I label Gideon for just using the level of rounding. And Knapuer for the opt out only. They are not the measures. I just checked them

Two problems

I only tested its performance using cognitive measures in the HRS. In fact I didn’t know the ADAMS sample at the moment. So I’d really appreciate it if I can contribute to this literature with you guys.

One problem is as you just saw, I sampled my data set after 2004. I can follow the individual patterns after, but it is a bit tough to know the previous patterns because the HRS questionnaires changed between 2000 and 2002. I could not find the similar questions in those two surveys, which are the major samples from ADAMS wave A.

I tried to find the ADAMS participants in my HRS samples. From wave A, I matched 314 respondents; and from waves B, C, and D, I found 255 respondents. The original number of participants in ADAMS is 856, and the difference mainly comes from the fact that my sample excluded the proxy respondents. The participants from the B, C, D were selected among those without a dementia diagnosis in wave A, so I guess the participants in wave A would have low cognitive functioning. I performed the two-sample t-test with unequal variances, based on the moon proxy, between wave A and the other waves (H\_0: diff = 0 and H\_a: diff < 0, that is, moon\_waveA < moon\_waveBCD). I rejected the null at 10 % (p-value is about 0.07).

I could generate the my Moon proxy score for the proxy respondents, but given my method mechanisms based on the survey response. If somebody answers for the respondents, my method would have no use.