

# Forgot about your (home)work!?

## The Confounding Effect of Inaccuracy in Productivity and Stress Recollection on Work-from-Home Evaluation

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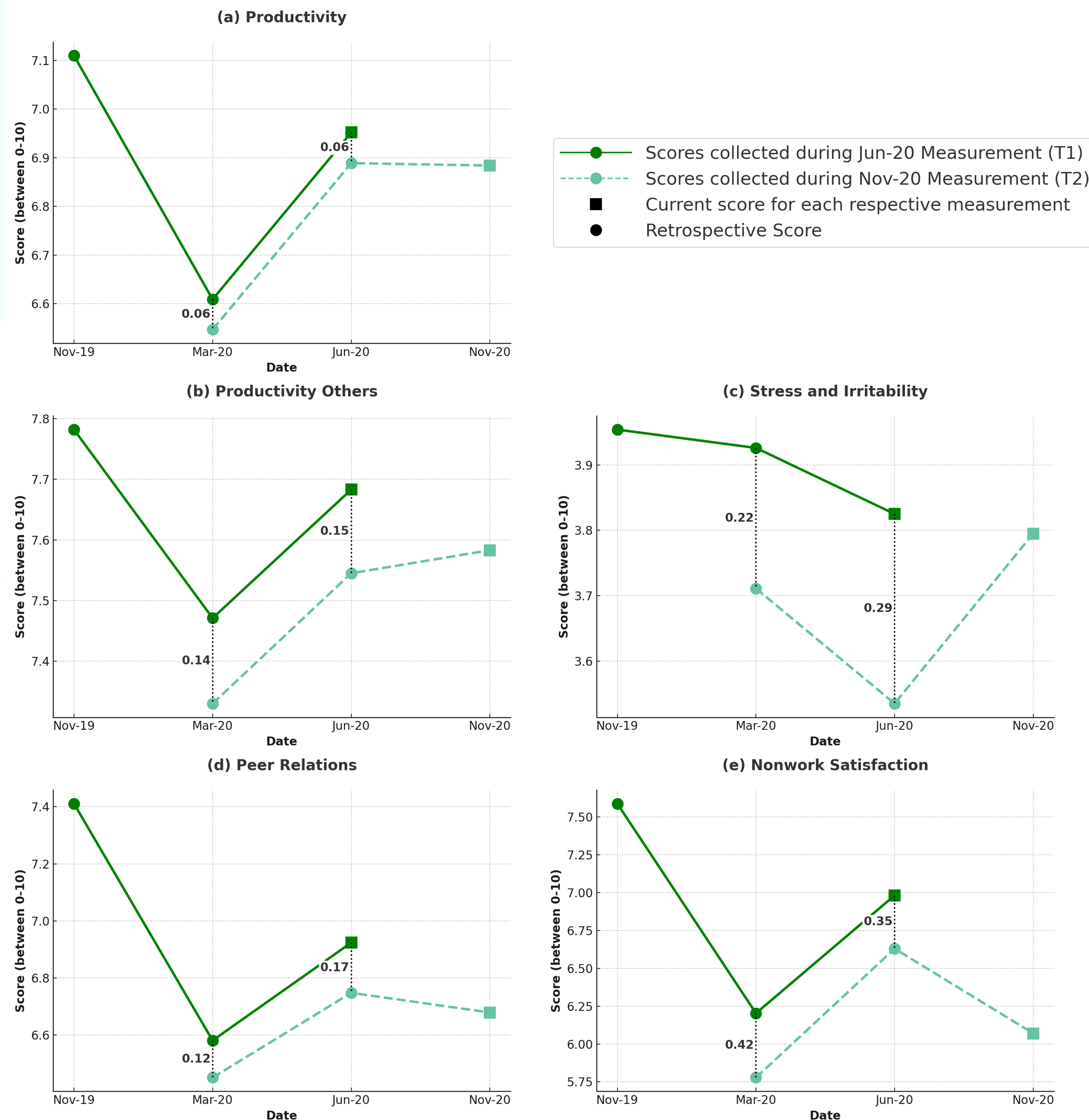
### Introduction

The prevalent use of self-reported productivity and satisfaction as key metrics for gauging working-from-home success has influenced the formulation of many detailed WFH policies. Initial reports based on self-reported productivity find a positive impact of 7,4%, yet **accumulating evidence indicates a persistent divergence between perceived and quantifiable WFH productivity**, with the latter frequently exhibiting a downward trend.

A weakness of self-reports, seemingly overlooked in the work-from-home literature, is whether the autobiographical memory of productivity is accurate. This paper investigates whether recollection inaccuracy taints the current working-from-home evaluation.

### Objective

#### How accurate is self-reported Work from Home recollection?



- ### Results
- For all factors recollection scores **consistently underestimate past scores**.
  - The recollected scores **are closer to the current** score than the targeted score (Binominal)
  - The recollected scores have a **greater magnitude impact** on the recollection scores than the targeted score (OLS)
  - Exploration of trends additionally suggests that, although the absolute scores are influenced by the current reference point, **the relative changes seem structural** over time. (Pairwise comp.)

Table 1. Tests Binominal Accuracy tests (a) and Retrospective consistency (Delta) pairwise comparison (b)

	N	Observed prop/ $\Delta$	p-value
<b>Productivity</b>			
a. 737	$ \Delta RT1-T1 >  \Delta  RT1-T2$ : (more biased)	.62	prop .000***
b. 772	$\Delta RT1-T1 = \Delta MT2-MT1$ : (difference in recollective $\Delta$ )	.00	$\Delta$ .83
<b>Nonwork Satisfaction</b>			
a. 678	$ \Delta RT1-T1 >  \Delta  RT1-T2$ : (more biased)	.60	prop .000***
b. 772	$\Delta RT1-T1 = \Delta MT2-MT1$ : (difference in recollective $\Delta$ )	.07	$\Delta$ .15
<b>Stress and Irritability</b>			
a. 742	$ \Delta RT1-T1 >  \Delta  RT1-T2$ : (more biased)	.69	prop .000***
b. 772	$\Delta RT1-T1 = \Delta MT2-MT1$ : (difference in recollective $\Delta$ )	.07	$\Delta$ .04
<b>Peer Relations</b>			
a. 641	$ \Delta RT1-T1 >  \Delta  RT1-T2$ : (more biased)	.74	prop .000***
b. 742	$\Delta RT1-T1 = \Delta MT2-MT1$ : (difference in recollective $\Delta$ )	.05	$\Delta$ .05
<b>Productivity by Others</b>			
a. 584	$ \Delta RT1-T1 >  \Delta  RT1-T2$ : (more biased)	.81	prop .000***
b. 772	$\Delta RT1-T1 = \Delta MT2-MT1$ : (difference in recollective $\Delta$ )	.01	$\Delta$ .47

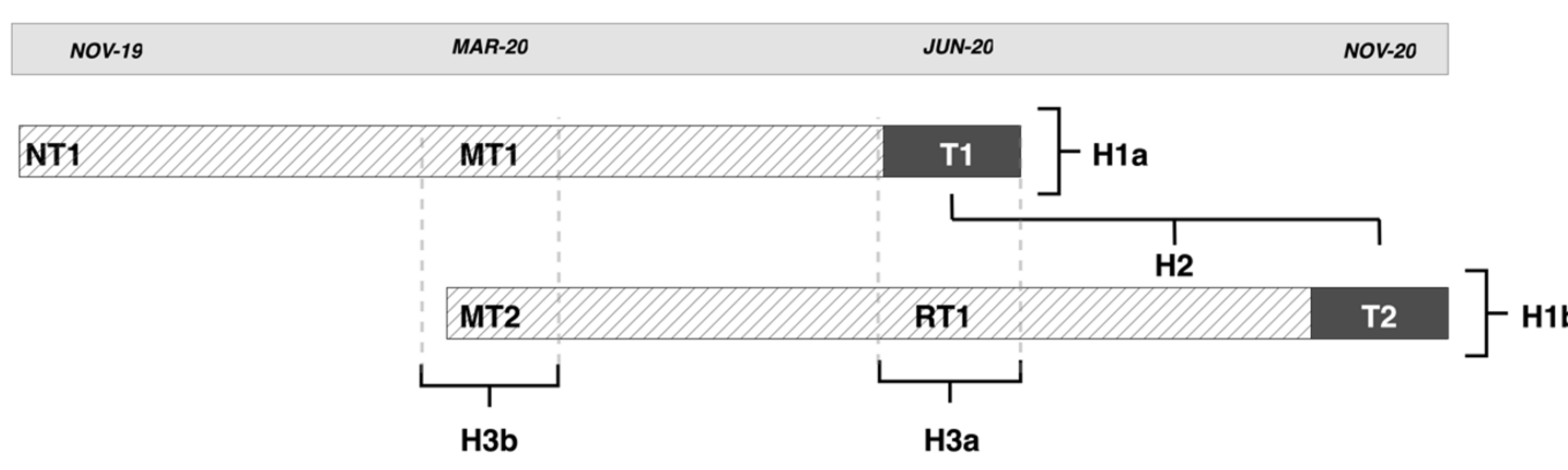
Note. For a: Binominal tests exclude the observations in which T1 = T2. Significance indicates that the proportion of cases in which RT1 (recollection) is closer (smaller delta) to R2 than R1 is larger than vice versa. For b: Z scores for pairwise Wilcoxon Signed Rank Test. Significance indicates that the difference in memory inaccuracy between June and March would be different. Significance is corrected by a Bonferroni multiple testing correction: \*(.05).01, \*\*(.01).002, and \*\*\*(.001).0004

### Conclusion and Impact

**Self-reported working-from-home evaluations are subject to inaccurate recollection: the current state colors the recollection of the past.** At times, conclusions drawn from recollection are the complete opposite of the conclusions drawn from measurements at that time.

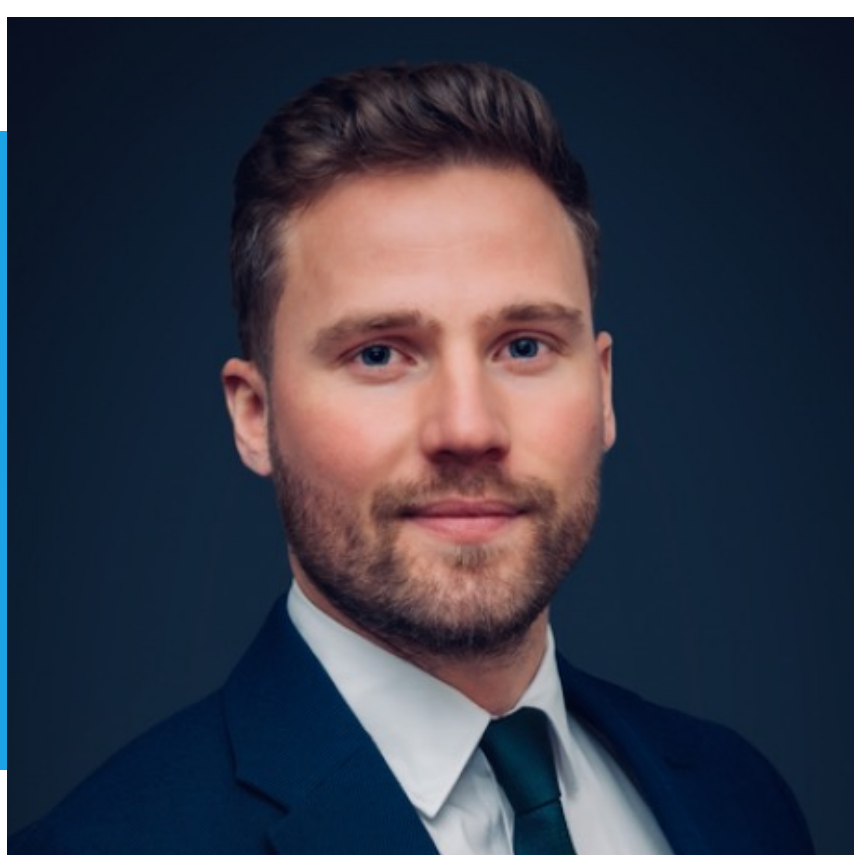
First, these findings show that the sole reliance on **self-reported WFH productivity evaluations does not seem justified** without acknowledging human recollection inaccuracy. Second, Self-reports have been scrutinized in the psychological context, but the psychological limitations of self-reports within the organizational and economic research domain have largely remained overlooked. This **paper reconciles the large body of behavioral research** with the applied setting of **economically relevant productivity**.

### Measurement waves and schematic overview hypotheses



### Methods

- A within-subject repeated-measures online survey in June (T1) and November 2020 (T2) amongst 772 Dutch home workers.
- Using a **five-factor productivity** scale assessing WFH evaluation.
- A **binominal model** tests whether the recollecting score (RT1) is proportionally closer to the targeted score (T1) or the current score (T2).
- Non-parametric pairwise comparison** test the consistency of the delta between the recollected score in T1 and T2 over time.
- Additional OLS approach both evaluate the predictive value of the targeted score compared to the current (inaccurate) score.



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