NOT FOR PUBLICATION

Do wage cuts damage work morale? Evidence from a natural field experiment

Online Appendix[1]

Content:

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[1] All documents are translated versions of the German originals.

TABLE 1. Summary statistics and randomization check.

Variable	PayCut (N=22) Mean	Std. Dev.	Baseline (N=25) Mean	Std. Dev.	PayRaise (N=21) Mean	Std. Dev.	Full Sample (N=68) Mean	Std. Dev.	Kruskal-Wallis/ χ^2 p-value
Age	23.182	2.557	24.480	4.022	23.190	2.804	23.662	3.254	0.317
Male	0.409	0.503	0.680	0.476	0.429	0.507	0.515	0.503	0.114
Math and Physics	0.091	0.294	0.000	0.000	0.190	0.402	0.088	0.286	0.076
Engineering and IT	0.318	0.477	0.280	0.458	0.190	0.402	0.265	0.444	0.623
Arts and Social Science	0.182	0.395	0.360	0.490	0.286	0.463	0.279	0.452	0.396
Economics	0.364	0.492	0.360	0.490	0.286	0.463	0.338	0.477	0.829
Previous wage (Euro/h)	10.498	2.679	11.287	5.259	9.662	2.560	10.550	3.895	0.826
Room A	0.273	0.456	0.320	0.476	0.048	0.218	0.221	0.418	0.066
Room B	0.091	0.294	0.200	0.408	0.238	0.436	0.176	0.384	0.416
Room C	0.364	0.492	0.240	0.436	0.381	0.498	0.324	0.471	0.529
Room D	0.136	0.351	0.080	0.277	0.190	0.402	0.132	0.341	0.544
Room E	0.136	0.351	0.160	0.374	0.143	0.359	0.147	0.357	0.972
Starting time	9.557	0.592	9.500	0.515	9.679	0.475	9.574	0.527	0.464

Notes: The last column of this table contains p-values from Pearson's χ^2 tests for binary and Kruskal-Wallis tests for non-binary controls. Due to item non-response concerning previous wage levels the corresponding sample sizes are lower than for the other variables: PayCut (N=13), Baseline (N=19) and PayRaise (N=15).

TABLE 2. Summary statistics for treatment PieceRate.

Variable	PieceRate (N=18)	
	Mean	Std. Dev.
Age	23.611	2.500
Male	0.667	0.485
Math and Physics	0.111	0.323
Engineering and IT	0.222	0.428
Arts and Social Science	0.111	0.323
Economics	0.556	0.511
Previous wage (Euro/h)	10.978	4.442
Room A	0.000	0.000
Room B	0.000	0.000
Room C	0.444	0.511
Room D	0.000	0.000
Room E	0.000	0.000
Room F	0.556	0.511
Starting time	10.236	0.348

Notes: Due to item non-response concerning previous wage levels the corresponding sample sizes are lower than for the other variables (N=14).

TABLE 3. Control variables: Wording and coding (translated from German to English.)

Variable	Definition	Question wording [Possible answers in brackets]
Socioeconomic		
Age	years	Age? [free form]
Male	1=yes; 0=no	Gender? [free form]
Math and Physics	1=yes ; 0=no	Subject of studies? [free form]
Engineering and Computer Science	1=yes ; 0=no	
Arts and Social Science	1=yes ; 0=no	
Economics	1=yes ; 0=no	
Previous wage		
Previous wage	Euro per hour	What was your hourly wage on your last job? [free form]

TABLE 4. Summary data: Treatments PayCut, Baseline, and PayRaise.

	PayCut			Baseline			PayRaise	
Participant	# books	Quality ratio	Participant	# books	Quality ratio	Participant	# books	Quality ratio
1	149	.966	23	288	.885	48	221	.945
2	192	.869	24	210	.847	49	226	.964
3	203	.945	25	147	.727	50	211	.791
4	252	.936	26	164	.914	51	180	.844
5	118	.915	27	223	.618	52	188	.835
6	203	.896	28	159	.924	53	144	.930
7	103	.961	29	189	.888	54	229	.829
8	79	.911	30	272	.886	55	252	.829
9	100	.920	31	196	.913	56	210	.871
10	162	.913	32	291	.666	57	259	.911
11	251	.940	33	195	.979	58	173	.797
12	163	.754	34	248	.899	59	271	.863
13	252	.928	35	99	.909	60	180	.961
14	176	.829	36	251	.928	61	252	.837
15	147	.972	37	266	.751	62	308	.883
16	181	.900	38	284	.838	63	201	.890
17	159	.911	39	194	.932	64	190	.910
18	181	.883	40	213	.896	65	291	.920
19	203	.960	41	208	.875	66	250	.816
20	207	.859	42	172	.517	67	182	.939
21	134	.888	43	245	.734	68	173	.849
22	185	.832	44	216	.884			
			45	337	.875			
			46	177	.875			
			47	240	.925			
Average	172.7	.904		219.36	.844		218.6	.877

TABLE 5. Summary data: Treatment PieceRate.

Participant	# books	Quality ratio
	———— PieceRate ————	
69	301	0.821
70	247	0.850
71	305	0.748
72	267	0.760
73	269	0.825
74	275	0.727
75	166	0.789
76	275	0.796
77	286	0.920
78	271	0.812
79	236	0.589
80	284	0.838
81	275	0.935
82	331	0.921
83	306	0.908
84	291	0.893
85	244	0.947
86	295	0.905
Average	*273.6*	*.832*

Earn money during the summer break!

Students wanted!

We are looking for students for the period 14th of August until 14th of September to catalog the library of our economic chair. It is a **one-time job-opportunity for one day** (6 hours). The hourly wage is projected to be 15 Euro.[2]

If you are interested, please send an email with preferred working date to…

[email-address here]

[Address of Institute here]
[Date of Announcement here]

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[2] The exact German word was „voraussichtlich".

III. Confirmation E-mail

Subject: Your application for ‚Earn money during the summer break'

Thank you that you applied to catalog the chair's library. Your date of work is the XXth of MONTH. Please show up at this date at XX o'clock in room XX in building XX for 6 hours of work (one-time). The hourly wage is projected to be 15€

If you have problems showing up at that date or if you have other questions, please mail to [Email-Address here].

Sincerely Yours
[Name here]

IV. Instructions for the Experimenter

In general:
- Do not mention that there are multiple students working today!
- Do not report anything about former students!
- Do not give benchmarks how many books other students enter!
- Do not give benchmarks how many books are expected.
- **By no means invent any reason for anything!**
- Always give the same answer to comparable questions!
- Always stick to this protocol!

- Reception
- **Provide background information:**
  o Chair's library moves, so it is necessary to take stock
  o Only one-time job-opportunity (meaning that one cannot work for an additional day)
- **Explain task**
  o Show books, show program
  o Enter
    ▪ Titel (as stated)
    ▪ Author (always first name given name)
    ▪ Further authors (first name given name; first name given name; …)
    ▪ publisher
    ▪ ISBN - Number
    ▪ Year
  o Jump to next field using tabulator button!
  o Enter data - then save entry by click on corresponding button
  o If program is closed, restart by clicking twice on program shortcut
  o Enter as many books as possible in 6h. If all books are logged ahead of time, continue with those books in the box. If these are also logged ahead of time, let me know so I can provide you with more books (Should never occur due to the large amount of books!)
  o Refer to instructions provided!
- Make sure that the task is fully understood and that there are no further questions!

Announce work schedule
- 9:00 until 15:00
- Or: 9:30 until 15:30
- Or: 9:45 until 15:45
- Or: 10:00 until 16:00
- Or: 10:30 until 16:30

,You can take a break whenever necessary, for example to go to the restroom, get yourself something to drink or alike. There is no scheduled lunch break.'

Announce wage
15€Treatment: We pay you an hourly wage of 15€ Your hourly wage is thus 15€'
20€Treatment: We pay you an hourly wage of 20€ Your hourly wage is thus 20€instead of 15€'
10€Treatment: We pay you an hourly wage of 10€ Your hourly wage is thus 10€instead of 15€'

IMPORTANT!!!!
Do not invent any reasons, especially not concerning the wage change. If subjects ask:
    ‚Regrettably, I am unable to tell you why. That's just the way it is.'
Point to the announcement, and say:
    ‚The announcement read ‚The hourly wage is <u>projected</u> to be 15 Euro'. This was also mentioned in the email that was send to you.'

‚After 6h, we will pay you in this room. If you have any questions, feel free to ask anytime. You will find someone in room 216.'

If somebody is not willing to work for 10 Euro, note it and let her/him go!

- Shortly before 6h passed, keep the **questionnaire** ready and wait in front of the room.
- When the time is up, enter the room.

- Ask the subject to answer the questionnaire:
‘For the purpose of quality control we are interested in how you perceived the job. We kindly ask you to answer this questionnaire. It will be stored electronically for further evaluations. Afterwards, you will be paid your money in cash.'

- Take the questionnaire after subject is ready.

Pay Subject:

- During payment, **first let subject sign a receipt**, and make sure that subject enters her/his name and address legibly (first name and given name), and give the money to subject afterwards.

!!!!!!!!SAVE DATA!!!!!!!!!!!!!!!
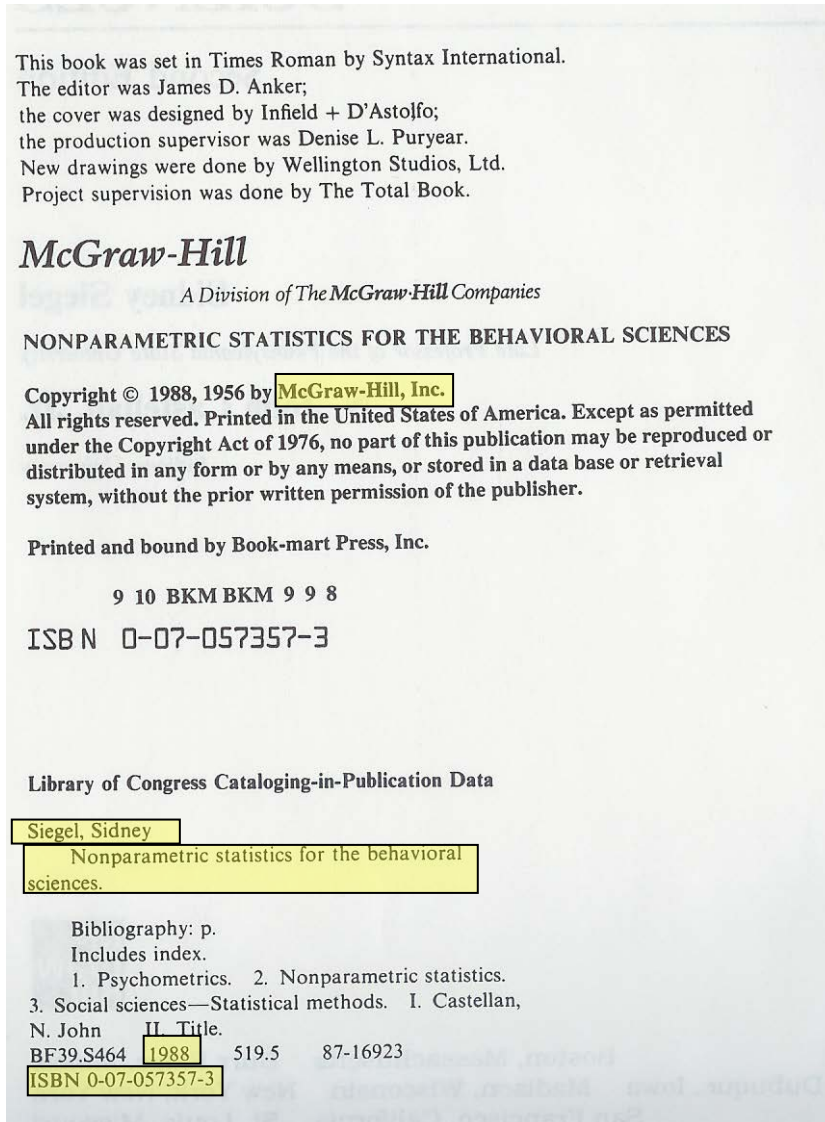[Explanation for research assistant how and where to store the data]
!!!!!!!!!!!!!!!!!!!!

- After the last subject has left, move all catalogued books into library
- Refill the books in each room; also refill the box if necessary.

V. Instructions for the Worker

On the first page of each book, you will find a page like this:

The corresponding entry would be:

On the first page of each book, you will find a page like this:
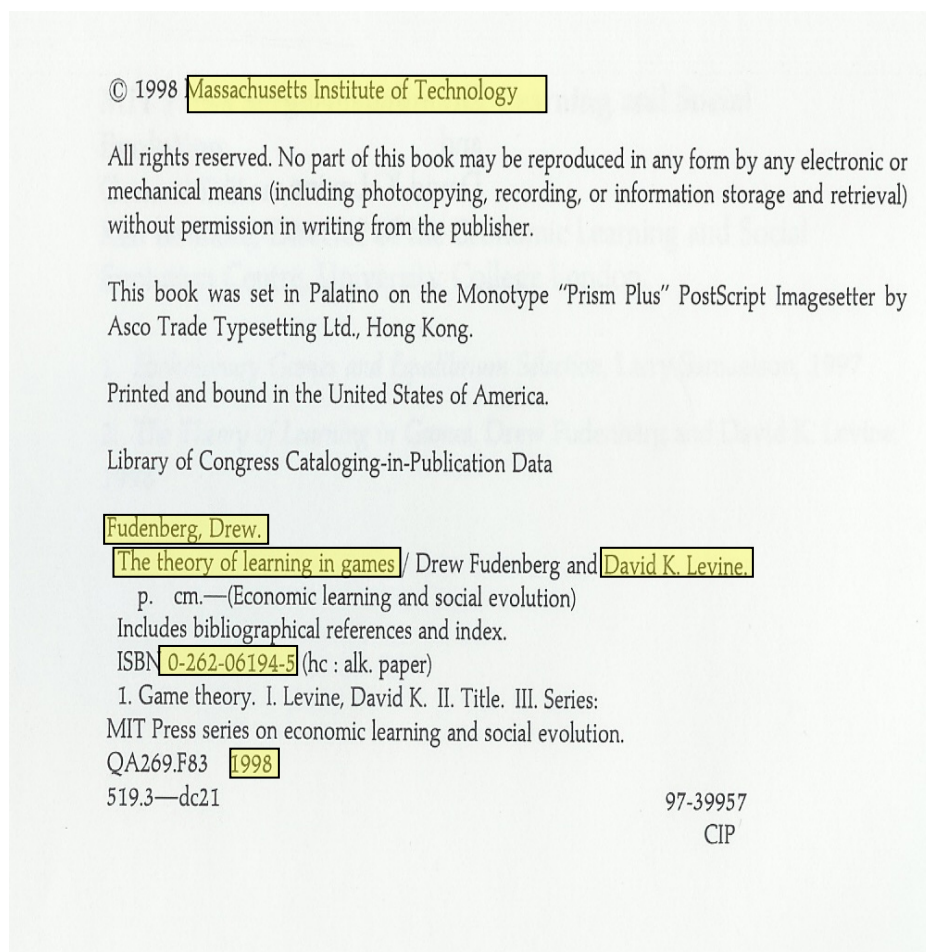
The corresponding entry would be:

> **In general:**
> - Enter the ISBN number without – sign
> - Authors always *first name   given name*
> - Divide multiple further authors by semicolon *first name   given name; first name given name*
> - If you cannot find a specific attribute (e.g. the ISBN-number of old books), please enter a "*?*" into the corresponding field.