

## Appendix A

Table A1: Robustness check on strength of routine

	Twice in nine weeks	Three times in six weeks
RD Estimate	-0.472	-0.914
P-value	(0.014)	(0.000)
Drop in % relative to week 10	11,53 %	18.67 %
N	3,307	1,823

Note: The N reported is the number of members times the number of weeks included in the analysis

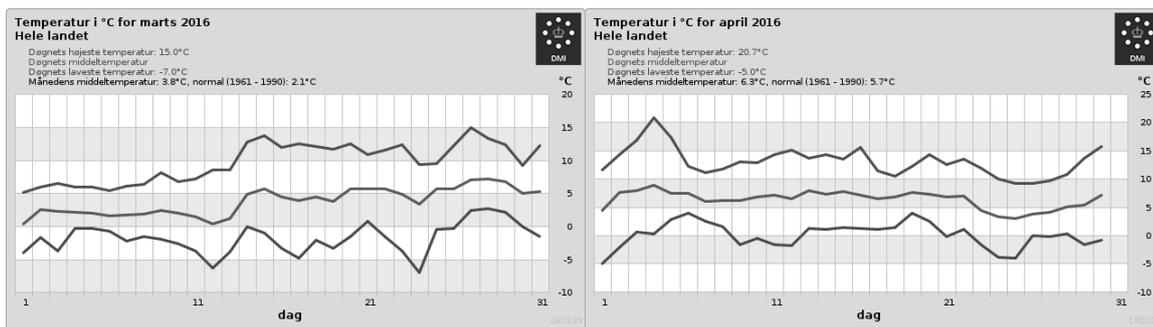
## Appendix B

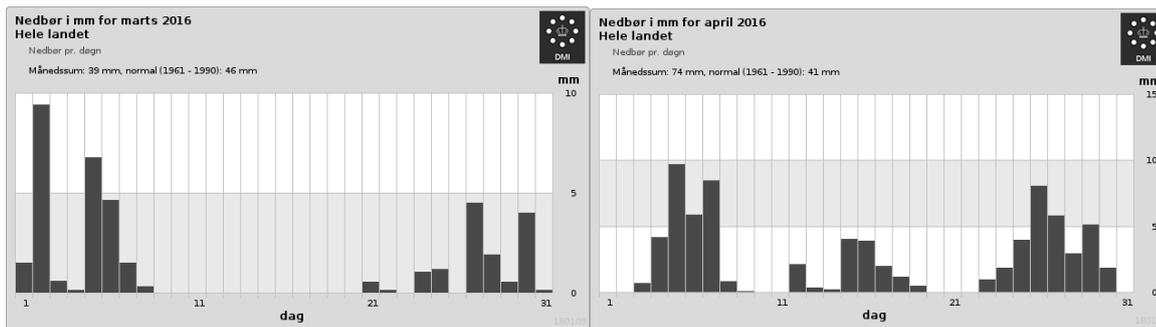
### Possible confounders: Weather and illness

A main concern challenging the identification is that attendance rates may have been affected by improved weather and members of fitness.dk chose to work out outside instead of checking in to the gym. Another problem could be that the flu season in that year had a peak during the Easter break and some members may therefore have been too sick to go to the gym.

We first looked at weather data for March and April 2016 (figure 3). We observed that there was a short but substantial increase in maximum temperature and increase in rainfall in the beginning of April right after the Easter break. Overall, no discontinuous jump was recognized.

Figure A1: Temperature and rainfall in Denmark during March and April 2016

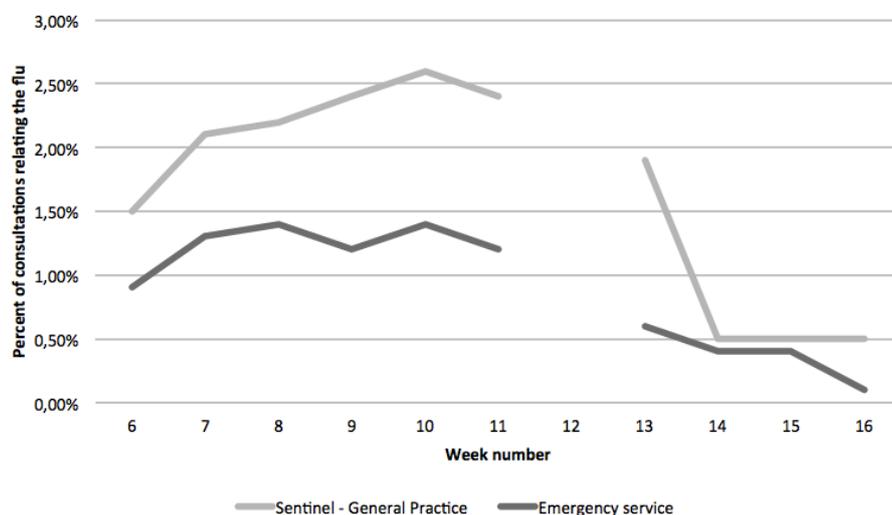




Figures from <http://www.dmi.dk/vejr/arkiver/vejrarkiv/> accessed on January 9, 2018

The National Serum Institute (SSI) collects data on the number of flu-related consultations from approximately 140 physicians in general practice and from emergency service doctors and calculates the percentage of consultations related to the flu. The development of these flu consultations in weeks 6 to 16 can be seen in figure 4. Data for week 12 are missing, as this was the Easter break. There was an increase in flu activity in the weeks before the Easter break while following the Easter break there was a rapid decline in the number of flu cases.

Figure A2: Development in percentage of consultations due to the flu reported in general practice or by emergency services in the weeks 6 to 16 in 2016



Data from <https://www.ssi.dk/Aktuelt/Nyhedsbreve/INFLUENZA-NYT/2015-2016.aspx> accessed on January 9, 2018