Tests

```r
# read in master data
bhet_master_data <- osf_retrieve_node("vxur5")
bhet_master_data %>%
  osf_ls_files("Master Dataset (Seasons 1-4)",
               pattern = "csv") %>%
  osf_download(path = here("data-clean"),
               conflicts = "overwrite")

# read in data for Aim 1
aim_1 <- osf_retrieve_node("qsmbr")
aim_1 %>%
  osf_ls_files("Air pollution",
    pattern = "csv") %>%
  osf_download(path = here("data-clean"),
               conflicts = "overwrite")
```

Read in data

Make a table

See **?@tbl-table1** for details.

Now try for the kable version:

Another DiD table

See **?@tbl-table3** for more.

The source profiles for the four-factor solution are presented in Figure X. The first source was identified as dust by high percentages of crustal elements like wi-Ca, Si, and wi-Mg. The second source was constituted of non-sulfate sulfur as well as secondary inorganic ions (ammonium, nitrate, and sulfate). Non-sulfate sulfur is a tracer for primary coal combustion, while secondary inorganic ions indicate a secondary source. Since coal combustion is a major source of energy in our study area, it is likely that the second source is a mixture of primary and secondary emissions that originate from coal and other sulfurous fuel combustion.

Additionally, in Figure [1] for details. the mean source contribution of the second source is higher in outdoor than personal exposure measurements. Secondary formation occurs outdoors in the presence of sunlight, so higher outdoor concentrations compared to personal exposure further support our naming the second source and sulfur secondary. The third source had high percentages of ws-Ca nd Al, which in our study region, has been found to be indicative of transported
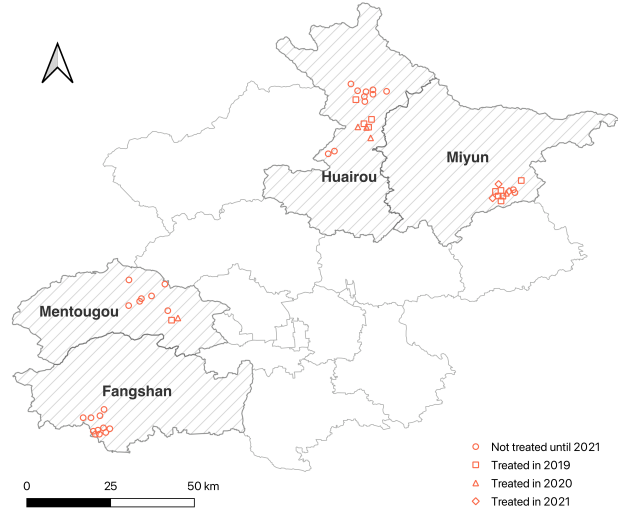

Figure 1: Google scholar metrics

dust from dust storms that can occur in the spring. While our samples were collected during winter months only, it is possible that transported dust from previous years still remained. The fourth source was characterized by high percentages of tracers for both coal (OC, wi-K, chloride, Pb) and biomass combustion (EC, ws-K). Coal and biomass combustion is common in our study setting so this source is likely a mixture of the two combustion sources.

Another example

Table 1: Policy impacts on self-reported fuel use (kg)

Cohort	Time	Coal[a] ATT	(95%CI)	Biomass[b] ATT	(95%CI)
Average ATT					
All	All	-2361	(-2677, -2044)	-487	(-805, -168)
Cohort-Time ATTs					
2019	2019	-2631	(-2913, -2348)	-653	(-991, -315)
2019	2021	-2416	(-2847, -1984)	-633	(-1201, -64)
2020	2021	-2018	(-2474, -1562)	-350	(-701, 0)
2021	2021	-1961	(-2895, -1027)	338	(-30, 705)

[a] Joint test that all ATTs are equal: $F_{(3, 2886)}= 1.856$, $p= 0.135$
[b] Joint test that all ATTs are equal: $F_{(3, 2886)}= 5.545$, $p= 0.001$

| | | Adjusted Total Effect[a] | | CDE Mediated By:[b] | | | | | |
| | | | | Indoor PM | | Indoor Temp | | PM + Temp | |
Cohort	Time	ATT	(95%CI)	ATT	(95%CI)	ATT	(95%CI)	ATT	(95%CI)
Brachial SBP									
2019	2019	-2.36	(-5.23, 0.50)	-2.15	(-5.14, 0.84)	-1.69	(-4.54, 1.15)	-1.24	(-4.20, 1.72)
2019	2021	-1.51	(-4.01, 0.98)	-1.27	(-4.01, 1.47)	-0.41	(-2.92, 2.10)	0.01	(-2.71, 2.74)
2020	2021	-1.26	(-4.97, 2.45)	-0.54	(-4.25, 3.17)	0.43	(-2.86, 3.73)	1.04	(-2.59, 4.67)
2021	2021	2.39	(-0.49, 5.28)	2.68	(-0.42, 5.79)	1.95	(-1.74, 5.64)	1.88	(-1.92, 5.67)
Central SBP									
2019	2019	-2.03	(-4.69, 0.63)	-1.75	(-4.61, 1.11)	-1.40	(-4.06, 1.27)	-0.89	(-3.73, 1.95)
2019	2021	-1.96	(-4.45, 0.52)	-1.65	(-4.40, 1.11)	-0.93	(-3.18, 1.32)	-0.44	(-2.95, 2.07)
2020	2021	-1.78	(-5.07, 1.52)	-1.00	(-4.36, 2.36)	-0.15	(-3.18, 2.88)	0.47	(-2.95, 3.89)
2021	2021	2.11	(-1.09, 5.31)	2.45	(-0.83, 5.73)	1.66	(-1.73, 5.05)	1.63	(-1.82, 5.08)
Brachial DBP									
2019	2019	-2.66	(-4.67, -0.65)	-2.47	(-4.70, -0.25)	-2.29	(-4.18, -0.40)	-1.94	(-4.03, 0.14)
2019	2021	-2.37	(-4.01, -0.72)	-2.10	(-4.09, -0.11)	-1.81	(-3.21, -0.41)	-1.50	(-3.28, 0.27)
2020	2021	0.20	(-1.54, 1.94)	0.31	(-1.43, 2.04)	1.14	(-0.65, 2.94)	1.23	(-0.70, 3.15)
2021	2021	0.78	(-0.48, 2.05)	1.05	(-0.59, 2.69)	0.20	(-1.21, 1.62)	0.36	(-1.34, 2.06)
Central DBP									
2019	2019	-2.67	(-4.57, -0.78)	-2.43	(-4.58, -0.28)	-2.52	(-4.34, -0.70)	-2.13	(-4.18, -0.08)
2019	2021	-2.55	(-4.15, -0.94)	-2.20	(-4.18, -0.22)	-2.18	(-3.60, -0.76)	-1.80	(-3.58, -0.03)
2020	2021	0.11	(-1.67, 1.90)	0.22	(-1.58, 2.01)	1.07	(-0.74, 2.87)	1.16	(-0.80, 3.13)
2021	2021	1.09	(-0.06, 2.23)	1.39	(-0.16, 2.94)	0.51	(-0.80, 1.82)	0.70	(-0.94, 2.34)

Note: Results combined across 30 multiply-imputed datasets. ATT = Average Treatment Effect on the Treated, CDE = Controlled Direct Effect, DBP = Diastolic blood pressure, SBP = Systolic blood pressure.
[a] Adjusted for age, sex, waist circumference, smoking, alcohol consumption, and use of blood pressure medication.
[b] Mediators were set to the mean value for untreated participants at baseline.

	Cohort	Time	ATT	(95%CI)
Mean indoor temperature (°C)				
All	2019	2019	0.43	(-0.71, 1.57)
	2019	2020	0.52	(-0.22, 1.26)
	2019	2021	0.79	(0, 1.57)
	2020	2020	0.87	(-0.2, 1.93)
	2020	2021	0.58	(-0.66, 1.82)
	2021	2021	1.06	(0.32, 1.79)
Daytime	2019	2019	0.44	(-0.96, 1.83)
	2019	2020	1.26	(0.36, 2.17)
	2019	2021	1.5	(0.55, 2.46)
	2020	2020	0.28	(-1.45, 2.02)
	2020	2021	0.13	(-1.7, 1.97)
	2021	2021	1.44	(0.64, 2.25)
Heating season	2019	2019	1.05	(-0.1, 2.2)
	2019	2020	1.23	(-0.11, 2.58)
	2019	2021	2.07	(0.88, 3.27)
	2020	2020	2.71	(2.04, 3.37)
	2020	2021	2.48	(1.33, 3.62)
	2021	2021	1.97	(0.53, 3.41)
Daytime heating season	2019	2019	0.8	(-0.48, 2.09)
	2019	2020	1.43	(0.04, 2.83)
	2019	2021	2.33	(1.03, 3.62)
	2020	2020	2.63	(1.87, 3.39)
	2020	2021	2.46	(1.46, 3.46)
	2021	2021	2.13	(0.67, 3.59)
Minimum indoor temperature (°C)				
All	2019	2019	1.96	(0.43, 3.48)
	2019	2020	2.42	(0.54, 4.3)
	2019	2021	4.93	(2.28, 7.58)
	2020	2020	5	(3.22, 6.79)
	2020	2021	6.87	(4.35, 9.39)
	2021	2021	2.04	(0.08, 4)
Heating season	2019	2019	1.94	(0.42, 3.47)
	2019	2020	2.41	(0.53, 4.3)
	2019	2021	5.34	(2.66, 8.02)
	2020	2020	4.35	(3.17, 5.53)
	2020	2021	6.27	(3.73, 8.81)
	2021	2021	2.23	(0.26, 4.21)

(a)

(b)

(c)
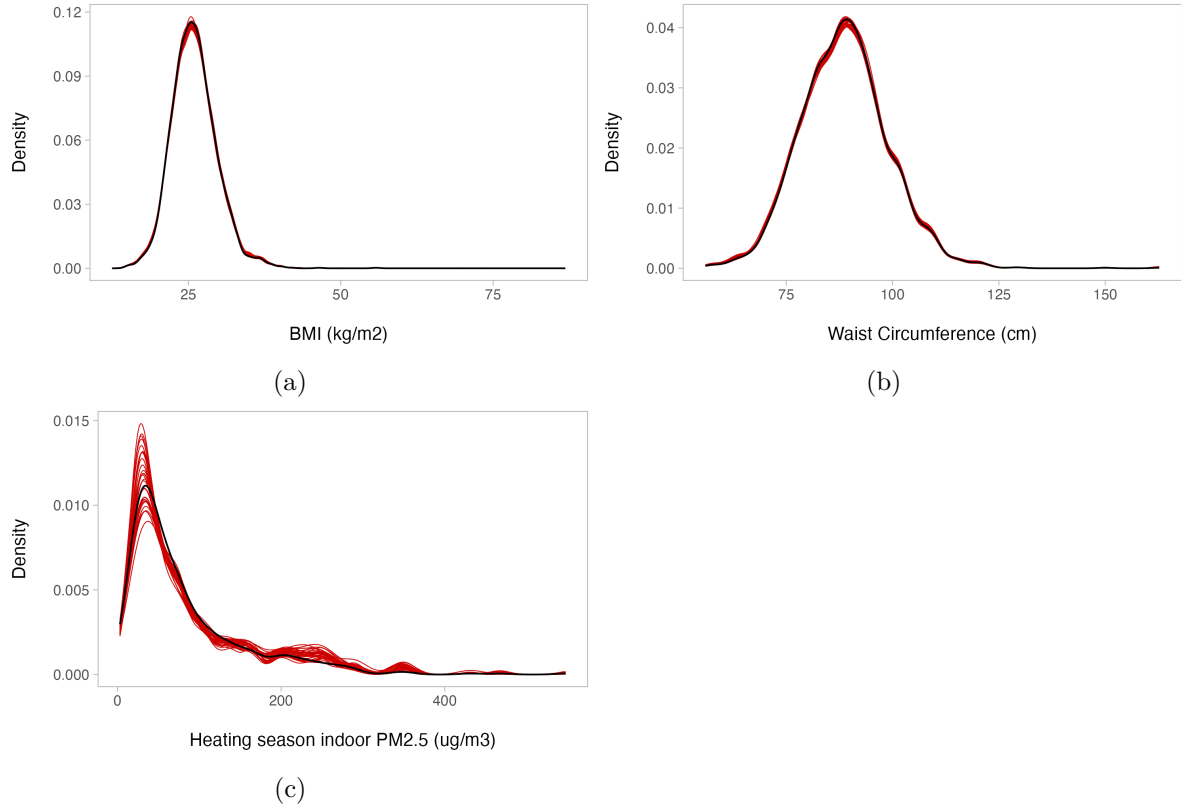
Figure 2: Kernal density plots showing distribution of multiply-imputed values for BMI, waist circumference (cm), and indoor $PM_{2.5}$ (µg/m^3) (red lines) and observed values (heavy black line)