Health Effects of Extreme Heat Among Senior Residents of Affordable Housing *

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Extreme heat events are increasing in frequency, severity and intensity due to climate change. Exposure to high temperatures might be exacerbated by the high thermal inertia of buildings constructed with retention of heat gains in mind. We followed senior residents of affordable housing living in two types of buildings (window AC, n=XX; central AC, n=YY) before and during and extreme heat event. Occupants of non-AC units report an increase of YY% in heat related health symptoms, as well as other symptom groups (i.e., mental health, respiratory) compared to AC occupants. Moreover, we found that a differential reporting of symptoms based on existing preconditions, such as YY1, YY2, YY3. A closer look into the hourly indoor temperature profiles, units where AC was used earlier after the onset of extreme heat decrease thermal exposures in XX C/day. This exposure reduction reflects in the prevalence of different health symptom groups. Building characteristics modify the health condition of seniors during extreme heat events. Given the importance of indoor heat exposures, we propose the creation of a metric that quantifies the risk associated to their residential space and existing preconditions

Keywords: extreme heat, indoor temperature, vulnerable populations, health effects

Introduction

1) Talk about the increasing number of heat events in the last 10 years or so, and stress the point that heat is the greatest contributor to mortality associated to natural disasters.
2) Few field studies monitoring indoor temperatures and behavior.
3) Increased thermal mass prolonguing heat exposures beyond official heatwave duration.

Methods

Baseline and daily surveys

Baseline administered by recruitment team and self-administered daily surveys. Type of questions, (e.g, time-activity log, symptoms, sleep quality,etc).

Environmental sampling

Netamos, parameters, logging rate. Criteria for installation, etc.

Personal monitoring

Basis watches

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Results

Start placing demographic table and indoor env. quality parameters here

Table 1. Findings from someone else

Table 1: A Handsome Table

	Dependent variable:
	vote
z.age	0.575^{***}
	(0.151)
female	0.310^{**}
	(0.151)
z.education	0.459^{**}
	(0.184)
z.income	0.739^{***}
	(0.170)
Constant	1.706^{***}
	(0.110)
Observations	1,500
Log Likelihood	−592.801
Akaike Inf. Crit.	1,195.602
Note:	*p<0.1; **p<0.05; ***p<0.01

More results

Notes Adding `echo="FALSE"` inside the brackets to start the R chunk will omit the presentation of the R commands. It will just present the table. This provides substantial opportunity for authors in doing their analyses. Now, the analysis and presentation in the form of a polished manuscript can be effectively simultaneous.[1]

[1] We never use footnotes, but just in case we do here is the format.

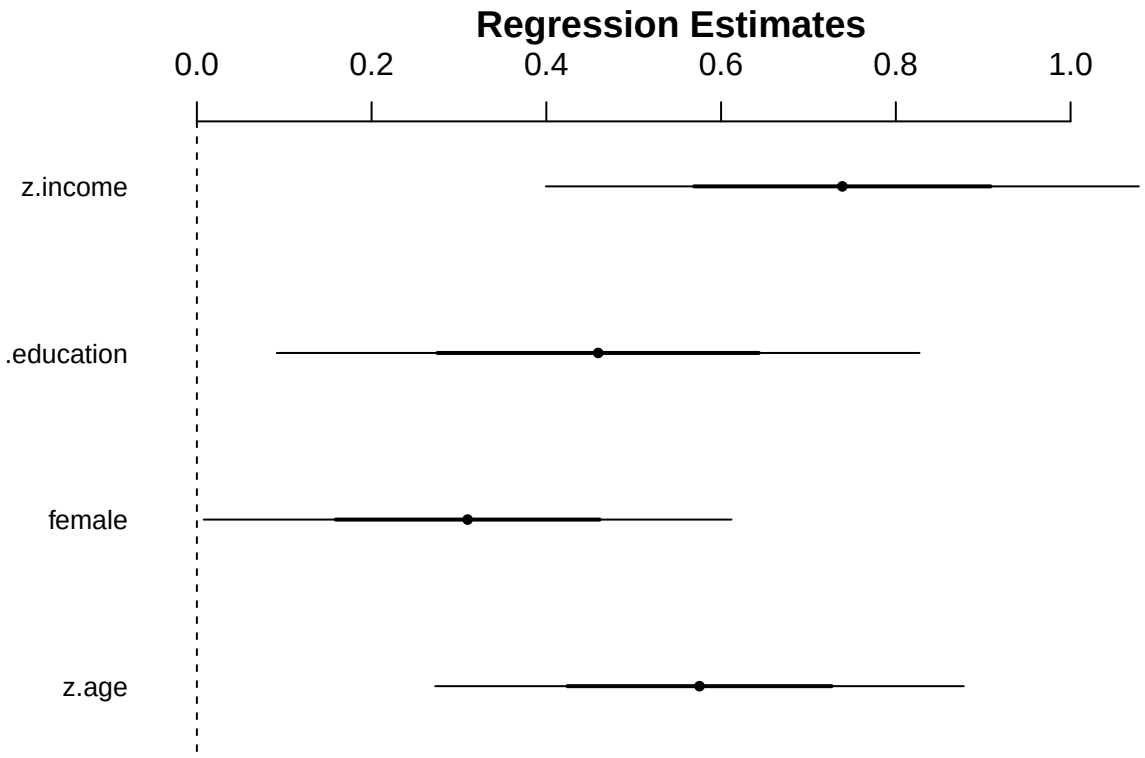

Figure 1: A Coefficient Plot

References