

Work

Trevor Freeland

April 25, 2018

SNUM: subject ID SYS: systolic blood pressure (mmHg) (**Response Variable**) DIA: diastolic blood pressure (mmHg)

HRT: heart rate (beats per minute)

MNACT5: activity level (frequency of movements in 1-minute intervals, over a 10-minute period)

PHASE: menstrual phase (follicular—beginning with the end of menstruation and ending with ovulation, or luteal—beginning with ovulation and ending with pregnancy or menstruation)

DAY: workday or non-workday

POSTURE: position during blood pressure measurement—either sitting, standing, or reclining

STR, HAP, TIR: self-ratings by each nurse of their level of stress, happiness and tiredness at the time of each blood pressure measurement on a 5-point scale, with 5 being the strongest sensation of that feeling and 1 the weakest

AGE: age in years

FH123: coded as either NO (no family history of hypertension), YES (1 hypertensive parent), or YESYES (both parents hypertensive)

time: in minutes from midnight

timept: number of the measurement that day (approximately 50 for each subject)

timepass: time in minutes beginning with 0 at time point 1

Results

Model:

Level 1:

Level 2:

Stuff I need:

Dependent variable:	
SYS	
DAYW	17.420*** (6.659)
AGE	3.216** (1.339)
HRT	1.294** (0.534)
HAP	1.167** (0.543)
MNACT5	0.525*** (0.087)

POSTURESIT	9.203** (4.196)
POSTURESTAND	16.570*** (4.290)
PHASEL	-1.606 (1.444)
FH123YES	-2.434* (1.340)
FH123YESYES	5.990** (2.529)
timept	-0.357* (0.210)
DAYW:AGE	-3.924** (1.737)
HRT:POSTURESIT	0.294 (0.548)
HRT:POSTURESTAND	-0.619 (0.546)
HAP:POSTURESIT	-1.370** (0.545)
HAP:POSTURESTAND	-1.388** (0.551)
MNACT5:POSTURESIT	-0.285*** (0.089)
MNACT5:POSTURESTAND	-0.266*** (0.097)
MNACT5:PHASEL	0.107** (0.046)
FH123YES:timept	0.922*** (0.332)
FH123YESYES:timept	0.222 (0.628)
Constant	79.244*** (6.544)

Observations

7,859

Log Likelihood	-31,055.720
Akaike Inf. Crit.	62,163.440
Bayesian Inf. Crit.	62,344.640

=====

Note: *p<0.1; **p<0.05; ***p<0.01