Specifying the Notation in the CEHD

Center for the Economics of Human Development

First Draft: October 21, 2014
This Draft: October 24, 2014

The objective of this brief document is to describe the notation we use in the CEHD. Commit to this notation to avoid confusions. Some remarks follow.

1. Never use the same letter for two different cases. There are enough letters since we use two alphabets, calligraphic, bold, etc.
2. Add new notation to the table, inform the group on the change, and update the date of the draft.
3. Index you variables accordingly. For example, κ stands for fixed effect. If it is a time fixed effect index it with t, which indexes time periods.

Notation Table

Up	Meaning	Low	Meaning	Up greek	Meaning	Low greek	Meaning
A	Attrition indicator	a	Value of a			α	Significance
$\mathbf{A}$	Croon's correction matrix						
B		b				β	Regression coefficient
C		c				χ	
$\mathbb{C}$	Covariance matrix					χ^2	χ^2-statistic
$\mathfrak{C}$	Correlation Matrix						
D	Choice indicator	d	Value of D	Δ	Treatment effect	δ	
E		e	Early intervention			ε	Regression error
$\mathbb{E}$	Expectation					ϵ	Error in measure
F	Factor	f	Factor index	Φ	CDF normal	ϕ	PDF normal
$\mathbf{F}$	Matrix of factors					φ	
$\mathcal{F}$	Set of factors						
$\#\mathcal{F}$	# of factors						
$\mathfrak{F}$	F-stat						
G	Goods	g	Value of G	Γ		γ	Coeff. Aux. Reg.
$\mathcal{G}$	Permutation set						
H	Stays at home indicator	h	Value of H			η	Measurement error
I	# of Individuals	i	Individual index			ι	Vector of ones
$\mathbf{I}$	Identity matrix						
$\mathcal{I}$	Set of individuals						
$\mathbb{I}$	Indicator function						
J		j					
$\mathcal{J}$							
K	# of control variables	k	Control variables index			κ	Individual fixed effect
L	# of outcomes	l	Outcomes index	Λ	Matrix of factor loadings	λ	loading
M	Measures	m	Measures index			μ	Constant in measure
$\mathbf{M}$	Matrix of measures						
$\mathcal{M}$	Set of measures						
$\#\mathcal{M}$	# of measures						
N	Months preschool	n	Value of N			ν	Random utility
O		o				$\o$	
P	Preschool	p	price	Π		π	Bijection
$\mathbb{P}$	Probability						
						ϖ	
Q		q		Θ	Set of skills	θ	Skill
						ϑ	Non-random utility
R	Randomization indicator	r				ρ	Correlation
						ϱ	
S	Skills	s	Skills index	Σ	Sum	σ	Standard deviation
$\mathcal{S}$	Set of Skills					ς	Value of S
$\#\mathcal{S}$	# of Skills						
T	Time with Mom	t	Time period			τ	t-statistic
$\mathcal{T}$	Generic statistic						
U	Utility	u		Ψ	Generic CDF	ψ	Generic PDF
V		v					
$\mathbb{V}$	Variance						
W		w		Ω		ω	
X	Control variables	x	Value of X	Ξ		ξ	Error Aux. Reg.
Y	Main outcome	y		Υ	Total Time	υ	
Z	Exclusion restriction	z	Value of Z			ζ	