

Month of Birth and Children's Health in India

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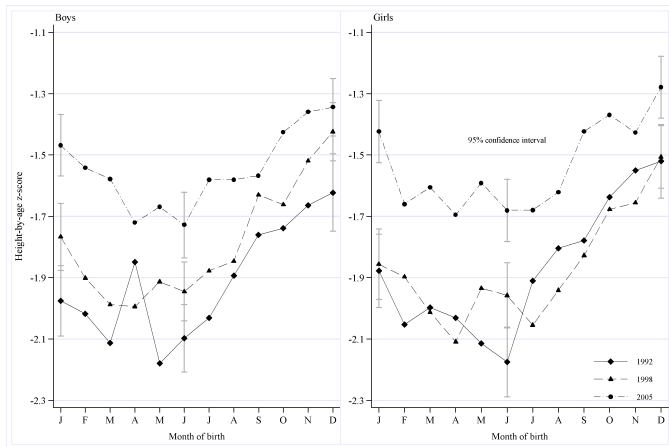
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Height-for-age Z-score by month of birth



Regressions of HAZ on month of birth with controls

$$Z_i = \sum_{k=1}^{11} \alpha_k M_{ik} + \pi \bar{X}_i + \epsilon_i$$

	OLS Boys		OLS Girls		FE	
	Coeff.	SE	Coeff.	SE	Coeff.	SE
January	-0.372***	0.078	-0.324***	0.08	-0.192	0.158
February	-0.362***	0.083	-0.487***	0.085	-0.692***	0.165
March	-0.489***	0.079	-0.364***	0.08	-0.580***	0.163
April	-0.281***	0.082	-0.410***	0.083	-0.502***	0.167
May	-0.588***	0.082	-0.586***	0.084	-0.704***	0.165
June	-0.492***	0.079	-0.602***	0.079	-0.482***	0.154
July	-0.443***	0.075	-0.400***	0.077	-0.366**	0.157
August	-0.311***	0.073	-0.253***	0.073	-0.447***	0.144
September	-0.222***	0.076	-0.208***	0.078	-0.341**	0.149
October	-0.126*	0.072	-0.074	0.073	-0.109	0.145
November	-0.072	0.075	0.02	0.076	-0.081	0.145
December	<i>Reference month</i>					
N Obs.	10,341		9,946		3,686	
R2	0.167		0.181		0.291	

Probability to be born in a certain month as a function of "child desirability".

$$\text{Prob}(M_{ik} = 1) = f(\eta_k D_i + \pi_k \bar{X}_i + \epsilon_i k), k = 1, \dots, 11$$

(Coefficients on "desirability dummy").

	1992 Boys		1992 Girls	
	Coeff.	SE	Coeff.	SE
	<i>Specification with "desirable pregnancy" dummy</i>			
January	0.049	0.096	-0.001	0.092
February	0.004	0.102	0.079	0.099
March	0.058	0.099	0.036	0.095
April	-0.004	0.100	0.126	0.097
May	-0.028	0.102	-0.078	0.097
June	0.105	0.100	0.111	0.098
July	-0.009	0.096	0.022	0.094
August	-0.043	0.093	0.049	0.089
September	0.096	0.098	-0.117	0.093
October	0.055	0.093	-0.028	0.088
November	0.028	0.095	-0.056	0.091
December	<i>Reference month</i>			

Probit estimates of probability of survival till age of one.

$$S_i^* = \sum_{k=1}^{11} M_{ik}[\alpha + \gamma_k W_i] + \beta W_i + \pi X_i + \epsilon_i$$

$$S_i = 1 \quad \text{if} \quad S_i^* > 0; \quad S_i = 0 \quad \text{if} \quad S_i^* \leq 0$$

(Coefficients on interaction terms).

	1992 Boys		1992 Girls	
	Coeff.	SE	Coeff.	SE
<i>Interactions of month-of-birth dummies and weight at birth</i>				
January	-0.182	0.196	0.173	0.195
February	-0.227	0.205	-0.270	0.201
March	-0.235	0.202	0.096	0.206
April	-0.289	0.201	0.163	0.202
May	-0.273	0.206	0.064	0.202
June	-0.057	0.203	0.177	0.197
July	-0.524***	0.196	0.166	0.197
August	-0.283	0.188	-0.077	0.184
September	-0.291	0.198	0.173	0.187
October	-0.391	0.186	0.104	0.186
November	-0.228	0.192	0.183	0.187
December	<i>Reference month</i>			
N Obs.	12,531		11,889	

MLogit of the probability of a child to be born in a certain month of the year

$$Prob(M_{ik} = 1) = f(\beta_k I_i + \gamma_k E_i + \pi_k \bar{X}_i + \epsilon_{ik}), k = 1, \dots, 11$$

(Coefficients on interactions of month-of-birth and wealth).

	1992 Boys		1992 Girls	
	Coeff.	SE	Coeff.	SE
January	0.113	0.086	-0.011	0.086
February	0.161*	0.092	-0.155	0.092
March	0.120	0.088	-0.097	0.089
April	0.147	0.090	-0.030	0.090
May	0.163*	0.091	-0.018	0.090
June	0.189**	0.088	-0.058	0.090
July	0.230***	0.086	-0.055	0.087
August	0.097	0.084	-0.069	0.083
September	0.147	0.086	-0.095	0.088
October	0.332	0.083	-0.095	0.083
November	0.085	0.085	-0.094	0.085
December	<i>Reference month</i>			
LR test	22.313**		5.510	

Nutrition-Disease Hypothesis F- and χ^2 -tests

$$Z_i = \sum_{k=1}^{11} M_{ik}[\alpha_k + \beta_k I_i + \gamma_k E_i] + \pi \bar{X}_i + \epsilon_i$$

	Specification 1		Specification 2		Specification 3
	Boys	Girls	Boys	Girls	Boys&Girls
Wealth					
1992	2.313***	1.992**	1.263	1.353	21.476**
1998	2.944***	3.478***	1.467	1.890**	36.454***
2005	3.091***	2.070**	-	-	15.274
Education					
1992	1.457	1.922**	1.582*	1.689*	27.169***
1998	3.156***	2.595***	2.395***	1.641*	19.100*
2005	2.818***	2.584***	-	-	15.654
Wealth and Education					
1992	1.794**	1.664**	1.359	1.351	35.285**
1998	2.350***	2.458***	1.589**	1.565**	45.753***
2005	2.463***	2.632***	-	-	32.968*