

**Chicago Longitudinal Study:  
School Support Mediators**

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**CLS School Support Variables Overview:** The following report describes the school support variables in the Chicago Longitudinal Study (CLS). Data sources include student reports to a survey administered to them during grades 3-6 and administrative records.

**Indicators:** Table 1 reports unadjusted descriptive statistics and reveals the following: children who attended CPC programs reported significantly higher ratings of school climate during 6<sup>th</sup> grade than those who did not attend CPC programs. In addition, the CPC group attended magnet schools at a higher rate than the non-CPC group. The percentage of children in the school who were above grade level in reading and math was higher for the CPC group than for the non-CPC group. Children who attended CPC programs also had significantly less school moves than their counterparts who did not attend CPC programs.

As for gender differences, females attended magnet schools at a higher rate than males. The schools that females attended had a significantly higher percentage of pupils who were above grade level in reading and math than the schools that their male counterparts attended. Lastly, females had significantly less school moves than males.

School-age program comparisons evidenced significant differences in respect to the number of magnet schools attended, percentage of pupils in the school above grade level in reading and math, and annual per pupil expenditure during grade 5, with those who attended the school-age program reporting higher levels of these outcomes. The school-age program group also reported significantly less school moves. Interestingly, the percentage of teachers in the school with a Master's degree was significantly lower in the school-age program group than in the group who did attend the program.

**Correlates:** Table 2 lists correlations between select explanatory variables and the following school support variables: students' perceptions of how much gets done in class during grades 5-6, magnet school attendance during grades 4-8, magnet/career academy/technical school attendance during grades 9-12, percent of pupils in the school above grade level in reading, and school moves. Students' perceptions of how much gets done in class seem to be unrelated to various risk index factors, and interestingly, also unrelated to the other school support variables. Magnet elementary and middle school attendance is negatively related to the family risk factor variable, mother not completing HS, mother not being employed, TANF/AFDC participation, and being eligible for free lunch. Magnet/career academy/technical high school attendance is only weakly related to the aforementioned risk factors. The percentage of pupils in the school with reading skills above grade level is negatively related to the family risk index, single parent status, mother not completing HS, mother not being employed, TANF/AFDC participation, and being eligible for free lunch. Lastly, having school moves is positively related to family risk index, single parent status, mother being less than 18 years of age at the time of birth, and mother not completing high school.

**Subgroup Comparisons:** Tables 3a and 3b show the mean rates of enrollment in a magnet school during grades 4-8 and school moves in the CLS sample, as they vary by important background characteristics. One of the main trends seems to be that both low

and high risks groups exhibited higher rates of magnet school enrollment after participating in CPC programs as opposed to not receiving the preschool program intervention. Interestingly, it even seems as though effects of the preschool on magnet school enrollment are stronger for low risk groups than high risk groups. For example, children whose mothers were H.S. graduates experienced a 12.4% gain in magnet school enrollment if they participated in the CPC preschool programs, whereas their counterparts whose mothers were not H.S. graduates only experienced a 5.6% increase; children who were not eligible for free/reduced lunch experienced a 22.3% gain in magnet school enrollment if they participated in the CPC preschool programs, whereas their counterparts who were eligible for free/reduced lunch only experienced a 7.4% increase. Other risk factor and background characteristics that seemed to be differentially related to magnet school enrollment included single parent family structure, mother's employment status, mother being a teen parent, having 4 or more children in the family, AFDC/TANF receipt, child welfare case history, and ITBS reading scores from 6<sup>th</sup> and 8<sup>th</sup> grades.

As for rates of changing schools, it seems as though both low risk and high groups in respect to e.g., mother's employment status, family structure, AFDC receipt changed schools less frequently if they were enrolled in CPC programs as opposed to if they were not. Particularly striking differences in school moves were observed for children with 4 or more risks who attended CPC programs, as they experienced a 16.3% decrease in school moves. Children who were eligible for free/reduced lunch experienced a 15% decrease in school moves if they attended CPC programs. Other background characteristics did not produce differences between the low risk group and the high groups in terms of how much they benefited from the preschool program intervention; for example, children originating from single-parent families experienced a 15.1% decrease in school moves if they attended CPC programs, their counterparts from non-single parent homes experienced a 14.5% decrease in school moves if they attended CPC programs.

In respect to gender differences, all in all, regardless of belonging to a particular low or high risk group, males evidenced higher rates of school moves than females. Interestingly, more striking gender differences were observed between males and females who belonged to low as opposed to high risk groups; for example there was a 13.9% difference between males and females in the NO AFDC group, and only a .9% difference between males and females whose families were receiving AFDC.

Table 1 School Support Variables from the Chicago Longitudinal Study

Measure	N	Total Sample Mean	Males	Females	CPC Preschool		School-age program		CPC Extended Intervention		
					Any	None	Any	None	4-6 years	1-3 years	None
Students' perception of how much gets done in class (years 5 & 6)	1051	3.17	3.18	3.15	3.15	3.19	3.16	3.17	3.17	3.14	3.20
Teacher expectations	1055	3.77	3.74+	3.79	3.79+	3.73	3.78	3.75	3.81	3.75	3.74
School Climate (year 6)	788	20.58	20.63	20.54	20.78*	20.21	20.67	20.45	20.81	20.46	20.33
School Climate (year 10)	790	22.75	23.13*	22.48	22.73	22.80	22.63	22.92	22.64	22.68	23.06
Number of magnet elementary schools (4-8)	1361	.45	.32**	.57	.59**	.17	.66**	.14	.87**	.22	.11
Ever enrolled in a magnet school (4-8)	1361	.11	.08**	.14	.15**	.04	.15**	.05	.19	.16	.03
Ever enrolled in a magnet school, career academy, or technical school (9-12)	1244	.36	.29**	.43	.39**	.30	.43**	.29	.48**	.28	.31
Ever enrolled in a magnet school (9-12)	1244	.14	.10**	.18	.16**	.10	.17**	.11	.20**	.10	.11
Percent in the school above grade level in reading	1243	18.01	17.19*	18.78	19.55**	15.04	19.31**	16.16	21.02**	16.75	14.86
Percent in the school above grade level in math	1243	24.30	23.37*	25.17	26.21**	20.62	26.29**	21.47	28.48**	22.39	20.19
Number of school moves (4-8)	1361	.97	1.05**	.89	.84**	1.20	.83**	1.16	.69**	1.06	1.27
Ever had school moves (4-8)	1361	.61	.63+	.58	.56**	.70	.55**	.70	.49**	.65	.73
Number of school moves (k-12)	1377	3.42	3.59**	3.25	3.22**	3.79	2.97**	4.05	2.53**	4.06	3.91
Percent of teachers with a Master's in the school (year 5)	1237	24.97	25.78	24.21	25.22	24.49	22.29**	28.81	19.89*	28.90	27.56
Annual per pupil expenditure (year 5)	1237	4319	4352	4288	4317	4322	4422**	4171	4371**	4390	4121

\*\*p<.01; \*p<.05; +p<.10

*Table 2 Correlation Matrix for School Support Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Family risk index														
2. Single parent status	.45													
3. Mother is less than 18	.40	.23												
4. Mother did not complete HS	.55	.12	.34											
5. Mother not employed	.69	.18	.07	.18										
6. 4 or more children in household	.12	-.22	-.20	.06	.00									
7. TANF/AFDC participation	.72	.25	.11	.20	.67	-.05								
8. Eligible for free lunch	.54	.12	.06	.16	.33	.02	.40							
9. 60% or greater poverty in school area	.32	.07	-.01	.04	.09	.04	.08	.06						
10. Students' perceptions of how much gets done in class (years 5&6)	-.03	-.04	.03	.06	-.07	.02	-.07	.00	-.01					
11. Ever attended magnet elementary schools (4-8)	-.15	-.08	-.09	-.17	-.15	-.05	-.14	-.09	.12	.01				
12. Ever attended a magnet school, career academy, or technical school (9-12)	-.06	-.08	-.02	-.01	-.05	.00	-.05	-.03	-.06	.02	.11			
13. Percent in the school above grade level in reading	-.25	-.10	-.08	-.20	-.18	-.03	-.20	-.20	.04	.03	.64	.07		
14. Ever had school moves (4-8)	.12	.10	.10	.09	.06	-.03	.08	.01	.06	-.03	-.16	-.02	-.18	

Table 3a. Proportions of CLS Sample Ever Enrolled in a Magnet School during Grades 4-8

Factor Age 0-3	Total Sample N=1413	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 3	0
Black	1269	11.2	8.0	14.2	14.7	4.5	16.0	4.4	20.1	6.1	3.4
Other	92	4.4	4.1	4.7	5.0	3.1	2.0	7.1	2.8	7.1	3.6
Male	671	7.8	--	--	10.5	3.2	10.7	3.6	14.7	4.3	2.4
Female	690	13.6	--	--	17.3	5.9	19.3	5.6	23.7	8.0	4.4
Single-Parent Family	1018	9.2	5.8	12.7	12.2	3.5	12.9	4.2	17.4	4.2	4.4
Other Family Structure	306	14.4	13.6	15.1	18.9	6.4	20.8	4.9	25.0	10.3	2.7
Mother Not H.S. Graduate	725	5.7	4.6	6.7	7.8	2.2	7.9	2.8	11.8	1.8	3.2
Mother H.S. Graduate	595	16.3	11.2	21.0	20.3	7.9	22.2	6.6	27.0	10.1	4.1
Mother Not Employed FT/PT	826	7.3	4.4	9.8	10.0	1.8	10.6	2.6	13.9	3.4	2.3
Mother Employed FT/PT	445	17.3	13.6	21.2	22.7	8.0	24.1	7.6	29.8	12.7	4.1
Mother Teen Parent < 18	225	4.0	3.3	4.8	6.3	0	6.9	0	8.8	2.2	0
Mother Not Teen Parent < 18	1110	11.7	8.4	14.9	15.2	5.0	16.3	5.2	21.0	6.3	4.2
Four or More Children	228	7.9	6.7	8.9	10.6	3.5	11.8	3.0	16.1	2.5	3.3
Less Than Four Children	1096	11.0	7.7	14.2	14.3	4.3	15.3	4.7	19.8	6.1	3.5
Free/Reduced Lunch	1157	9.3	5.7	12.7	11.9	4.5	13.4	3.7	16.8	5.5	3.7
No Free/Reduced Lunch	204	18.6	17.7	19.8	26.5	4.2	24.6	9.8	33.3	11.1	3.7
60% K School Poverty	1035	13.1	9.9	16.1	17.2	5.2	19.6	4.2	25.0	6.5	3.4
< 60% K School Poverty	326	3.1	1.7	4.6	3.5	2.4	1.0	6.0	.8	5.0	3.5
AFDC Receipt	871	7.4	4.7	9.8	9.5	3.3	10.5	2.8	13.9	3.3	3.1
No AFDC Receipt	489	16.8	12.9	20.8	22.4	6.4	23.5	7.7	29.2	12.1	3.9
Four or More Risks	1009	7.6	4.9	10.1	10.2	2.9	11.2	2.6	15.3	3.1	2.6
Less Than Four Risks	352	19.6	15.1	24.6	25.4	8.9	26.0	10.4	30.4	17.4	5.3
SEMAT16D < avg.	714	8.1	6.2	11.1	11.8	2.5	12.5	2.8	17.3	4.8	1.6
SEMAT16D > avg.	636	13.4	10.3	15.1	16.3	6.4	17.6	6.0	21.2	7.8	4.5
ITBS6 Read < 88 norms	588	5.4	4.8	6.3	8.0	1.3	8.2	2.2	10.7	3.8	1.3
ITBS6 Read ≥ 88 norms	617	16.5	11.5	20.0	19.7	8.9	22.1	6.7	26.0	9.5	5.7
ITBS8 Read < 88 norms	664	5.1	3.5	7.3	6.8	2.6	7.8	2.0	10.3	3.3	1.7
ITBS8 Read ≥ 88 norms	678	16.2	13.3	18.3	20.3	6.5	21.3	7.6	25.7	9.8	5.0
School mobility (age 4-8), ≥ 3	128	3.9	1.3	7.6	3.5	4.2	0	6.9	0	3.9	5.6
School mobility (age 4-8), < 3	1233	11.4	8.6	14.1	14.8	4.5	16.2	4.3	20.3	6.4	3.0
Retained ≥ 1 grade	384	3.4	2.4	5.3	4.6	1.8	5.6	1.5	8.9	1.3	1.6
Not retained	977	13.6	11.0	5.3	17.2	5.9	17.9	6.4	21.9	8.5	4.5
Child welfare case history	53	3.8	0	7.1	6.9	0	6.3	0	13.3	0	0
No child welfare case history	1299	11.1	8.1	14.0	14.4	4.7	15.5	4.8	20.0	6.5	3.6
<i>Did not complete HS</i>	429	4.2	3.3	5.7	6.0	1.7	6.8	1.0	10.1	1.2	1.7
Completed HS	862	14.2	11.0	16.4	17.8	6.3	19.4	6.3	23.2	9.4	4.1
Depression Symptoms	162	6.2	4.8	7.6	8.2	3.1	5.4	7.3	8.6	4.5	5.4
No Depression Symptoms	873	12.5	8.9	15.2	16.4	4.6	18.2	4.2	21.7	8.0	2.4

Table 3b. Proportions of CLS Sample Ever Changed Schools during Grades 4-8

Factor Age 0-3	Total Sample N=1413	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 3	0
Black	1269	60.4	62.1	58.9	55.8	69.2	53.7	70.0	48.4	65.7	72.3
Other	92	63.0	79.6	44.2	55.0	78.1	60.0	66.7	55.6	57.1	78.6
Male	671	63.3	--	--	59.2	70.2	50.0	69.2	52.2	68.9	71.7
Female	690	58.0	--	--	52.7	69.2	58.3	70.4	45.9	61.5	74.0
Single-Parent Family	1018	63.0	65.7	60.3	57.8	72.9	55.5	73.3	49.1	69.6	75.3
Other Family Structure	306	51.6	54.4	49.1	46.4	60.9	48.1	56.9	45.2	50.5	64.0
Mother Not H.S. Graduate	725	64.0	65.9	62.0	58.8	72.5	57.8	71.7	51.4	68.6	74.2
Mother H.S. Graduate	595	55.8	60.1	51.8	51.5	65.8	49.6	65.9	45.3	60.8	69.9
Mother Not Employed FT/PT	826	61.6	63.8	59.7	55.7	73.6	54.0	77.9	46.8	68.4	76.3
Mother Employed FT/PT	445	56.4	61.4	51.2	53.9	60.7	51.5	67.7	49.7	57.8	64.8
Mother Teen Parent < 18	225	70.7	71.7	69.5	67.4	76.5	65.4	77.9	57.5	78.5	76.9
Mother Not Teen Parent < 18	1110	58.2	61.0	55.5	53.1	68.1	51.5	67.7	47.0	62.0	71.5
Four or More Children	228	57.5	61.0	54.5	53.5	64.0	54.3	61.4	52.9	55.6	66.7
Less Than Four Children	1096	61.0	63.6	58.4	55.6	71.4	53.6	71.5	47.2	67.4	74.0
Free/Reduced Lunch	1157	60.8	63.4	58.3	55.6	70.6	53.6	70.7	47.7	66.1	73.7
No Free/Reduced Lunch	204	59.8	62.8	56.0	56.8	65.3	56.6	64.6	55.2	58.7	68.5
60% K School Poverty	1035	62.0	64.1	60.1	56.4	73.2	54.2	73.0	49.8	65.1	78.2
< 60% K School Poverty	326	56.1	61.1	50.3	53.5	60.3	53.9	59.4	45.9	65.6	57.7
AFDC Receipt	871	63.3	63.7	62.8	58.0	73.3	56.2	73.4	50.2	68.6	76.8
No AFDC Receipt	489	55.8	62.7	48.8	51.7	63.4	50.2	63.5	46.7	58.2	66.7
Four or More Risks	1009	62.4	64.6	60.4	56.8	73.1	55.7	71.8	49.5	67.0	76.4
Less Than Four Risks	352	55.4	60.0	50.3	52.6	60.5	49.5	63.9	47.3	58.7	64.2
SEMAT16D < avg.	714	66.0	68.3	62.4	62.2	71.8	60.5	72.7	55.3	69.0	74.9
SEMAT16D > avg.	636	54.1	53.5	54.5	49.0	66.1	47.9	64.8	43.8	59.2	69.2
ITBS6 Read < 88 norms	588	63.3	65.4	60.5	58.3	71.2	55.5	72.5	49.2	67.2	75.0
ITBS6 Read ≥ 88 norms	617	48.8	48.8	48.8	45.3	57.2	43.8	57.6	40.8	52.7	61.3
ITBS8 Read < 88 norms	664	68.4	72.3	63.2	64.7	74.0	63.3	74.3	59.4	69.9	77.0
ITBS8 Read ≥ 88 norms	678	51.9	50.2	53.2	47.4	62.8	45.6	62.8	41.0	58.5	66.2
School mobility (age 4-8), ≥ 3	--	--	--	--	--	--	--	--	--	--	--
School mobility (age 4-8), < 3	--	--	--	--	--	--	--	--	--	--	--
Retained ≥ 1 grade	384	72.9	76.1	66.9	68.4	78.9	68.3	77.0	61.4	75.0	79.7
Not retained	977	55.8	55.7	55.8	51.6	64.8	49.9	65.8	46.0	60.6	68.7
Child welfare case history	53	67.9	76.0	60.7	62.1	75.0	75.0	57.1	60.0	73.9	66.7
No child welfare case history	1299	60.1	62.6	57.6	55.2	69.3	53.0	69.9	48.5	64.4	72.9
<i>Did not complete HS</i>	429	69.2	69.1	69.4	65.3	74.2	63.1	76.7	56.8	73.4	77.8
Completed HS	862	54.3	56.3	52.9	49.8	64.2	47.6	64.3	44.0	57.6	68.7
Depression Symptoms	162	66.7	69.9	63.3	63.3	71.9	57.0	79.7	55.2	70.2	78.4
No Depression Symptoms	873	55.2	57.0	53.9	50.4	65.0	49.5	63.5	44.7	59.9	67.3