

# **Chicago Longitudinal Study: Updated Report on Juvenile Delinquency Outcomes**

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**CLS Delinquency Outcome Overview:** The Chicago Longitudinal Study (CLS) has updated its previous January 2001 Report on Juvenile Delinquency Outcomes based on several changes. First, the sample size increased from 1404 to 1406 due to updates from Cook County juvenile court personnel and young adult self-report data. This sample is comprised of study participants who resided in the Chicago area at the age of 10 or older, or for whom delinquency data from outside the Chicago area, e.g., Milwaukee and Madison, could be verified. Second, 16 new cases were coded as delinquent based on the updated Cook County information, changing the number of delinquent cases in the study sample from 278 to 294. Third, a completed survey with the CLS adult sample (N=1142) provided new information on juvenile arrest from which updated self-report and combined self-report/official report variables could be created. Tables 1-3 of this revised report incorporate these sample updates while also including additional delinquency outcomes relative to the original report.

**Indicators:** Table 1 reports unadjusted descriptive statistics along with unadjusted mean group comparisons for various delinquency indicators. We have added, from the original delinquency report, School age Program participation as a category for mean comparisons to go along with the previously listed categories: gender, CPC Preschool Program participation, and CPC Extended Program participation. We have also added the following variables as new delinquency indicators: any drug arrest/petition, any non-violent arrest/petition only, total number of juvenile arrests, total number of violent juvenile charges, total number of drug juvenile charges, any self-report juvenile arrest ages 22-24, any self-report juvenile arrest ages 22-24 combined with self-reports from ages 15, and a combined measure of any self-report with any official report of juvenile arrest incorporating the ages 22-24 measure, socioemotional maturity ages 9-11, and socioemotional maturity ages 6-11. Dropped from this table were the following: adult incarceration and number of years of school infractions. Current results show that 20.9% of the sample had an official juvenile arrest/petition by age 18, 12.5% had an official juvenile violent arrest, and 32.0% had an official or self-reported juvenile arrest. Each of these rates represents an increase from those previously published in the January 2001 report. Mean group comparisons for gender reveal that boys and girls differ significantly on each indicator in the expected direction; boys having significantly poorer outcomes than girls. CPC Preschool program participation is associated with lower rates or scores on delinquency outcomes on all but the following indicators: total number of violent charges, total number of drug charges, acting out, school infractions, and self-report arrest. Notably, the CPC Preschool Program group still has significantly lower rates, versus the comparison group, on all dichotomous indicators of official juvenile arrest and on a combined measure of self-report and official juvenile arrests. The Preschool Program group also has mean scores indicating significantly higher functioning on nearly all socioemotional and behavioral measures relative to the comparison group. Mean comparisons among School age Program groups and CPC Extended Program groups show significant differences in the expected direction on several of the early school problem behavior measures and on the any school infraction measure.

**Correlates:** Table 2 presents a correlation matrix with the following: early risk indicators, grade 8 reading achievement, high school completion, and five delinquency measures. The delinquency measures include any official arrest, any self-report arrest, combined official and self-report arrest, any official violent arrest, and any official drug arrest. Notably, all delinquency measures are strongly and significantly correlated with each other. Also, the high school completion measure, along with the grade 8 reading measure, is significantly negatively correlated with all delinquency measures. Last, early risk factors that correlate significantly and positively with three or more delinquency measures include family risk index, single parent status, mother unemployment status, TANF/AFDC participation, free school lunch eligibility, and four or more risk factors from ages 0-3.

**Subgroup Comparisons:** Table 3a and 3b highlight subgroup comparisons on two outcomes: the official juvenile arrest measure and the combined self-report/official juvenile arrest measure. These tables include rates of arrest for high versus low risk groups using various risk/protective factors to define these groups. Each dichotomized group is also split on gender, CPC Preschool Program participation, School Age Program participation and CPC Extended Intervention to determine differential rates of arrest by program or gender subgroup. The following factors appear to produce notable and consistent differential unadjusted rates of arrest: gender, family structure, mother's educational attainment, poverty status defined by school free/reduced lunch program participation, AFDC status, multiple risk status, socioemotional classroom adjustment, peer social skills, reading achievement, school mobility, grade retention, and child welfare history.

**Comparison to National Norms:** Please see January 2001 delinquency report.

Table 1: *Indicators of Delinquency and Problem Behavior by Age 24*

Delinquency measure	N	Total	Gender		CPC Preschool		School-age Program		CPC Extended		
		Sample N=1406	Boys N=699	Girls N=707	Any N=911	None N=495	Any N=811	None N=595	4 to 6 N=540	1 to 3 N=527	None N=339
		Mean									
<u>Juvenile Arrest by Age 18 (%)</u>											
Any juvenile arrest/petition	1406	20.9	34.3	7.6**	17.9	26.5**	20.2	21.8	18.3	21.4	24.2
Any violent arrest/petition	1406	12.5	20.3	4.8**	10.6	16.0**	11.8	13.4	9.8	14.4	13.9
Any drug arrest/petition	1406	11.1	21.0	1.3**	9.9	13.3*	11.7	10.3	10.7	11.4	11.2
Any non-violent arrest/petition	1406	17.2	30.3	4.2**	14.6	22.0**	16.8	17.8	14.8	18.2	19.5
Any non-violent arrest/petition only	1406	8.1	13.7	2.5**	7.0	10.1*	8.3	7.9	8.3	6.8	9.7
Early first arrest (by age 13)	1406	3.8	6.6	1.0**	2.7	5.7**	3.7	3.9	2.4	5.1	3.8
Late first arrest (after age 13)	1406	16.9	27.3	6.5**	14.9	20.4**	16.4	17.5	15.9	15.7	20.1
<u>Number of Juvenile Arrests by Age 18</u>											
Total number of juvenile arrests	1406	0.63	1.12	0.14**	0.54	0.78*	0.61	0.64	0.52	0.71	0.66
Total number of viol. juvenile charges	1406	0.30	0.52	0.08**	0.26	0.36	0.29	0.31	0.24	0.35	0.24
Total number of drug juvenile charges	1406	0.26	0.49	0.03*	0.24	0.31	0.27	0.25	0.23	0.31	0.25
<u>Early School Problem Behavior</u>											
Socio-emotional maturity (ages 6-8)	1356	19.1	17.8	20.3**	19.6	18.2**	19.5	18.5**	20.1	18.4	18.4**
Socio-emotional maturity (ages 9-11)	1218	18.7	17.4	20.1**	19.1	18.1**	19.1	18.2**	19.5	18.3	18.2**
Socio-emotional maturity (ages 6-11)	1380	18.9	17.6	20.2**	19.4	18.1**	19.4	18.3**	19.9	18.4	18.2**
Positive peer interaction (ages 7-11)	1356	3.1	3.0	3.3**	3.2	3.0**	3.2	3.1*	3.2	3.1	3.0**
Behavioral composite (ages 7-8)	1284	3.2	2.9	3.4**	3.2	3.0**	3.2	3.1*	3.3	3.1	3.1**
TCRS Acting out (ages 12-13)	1052	12.3	13.9	10.8**	12.1	12.8	12.2	12.5	11.9	12.7	12.5
Frustration tolerance (ages 12-13)	1052	14.3	13.4	15.3**	14.6	13.9*	14.4	14.2	14.7	14.0	14.2
Total competence (ages 12-13)	1052	60.8	57.6	64.6**	61.8	58.9**	61.5	59.9	62.7	59.6	59.6**
<u>School Infractions (grades 7-12)</u>											
Total infractions	1266	1.14	1.51	0.76**	1.12	1.16	1.04	1.27	1.05	1.23	1.14
Any infractions, %	1266	39.5	46.0	33.1**	38.4	41.6	37.1	42.7*	35.3	43.3	40.5*
Any level 4-5 infractions, %	1266	16.2	21.2	11.2**	15.2	18.2	14.9	17.9	14.1	16.8	18.8
<u>Self-Report Arrest Data (%)</u>											
Any arrested in past year, reported age 15	857	13.3	20.6	7.7**	12.5	15.1	13.0	13.7	12.9	13.4	13.9
Any juvenile arrest, reported age 22-24	1142	21.5	37.9	7.7**	20.1	24.2	21.1	22.1	20.5	20.8	24.5
Any juvenile arrest, reported age 15, 22-24	1292	25.3	40.3	11.9**	23.9	27.9	25.2	25.4	24.9	24.3	27.5
Any self report arrest or juvenile petition	1474	32.0	48.6	15.5**	29.6	36.3**	31.4	32.7	30.3	31.5	35.2

\*Mean difference  $p < .05$

\*\*Mean difference  $p < .01$

Table 2: Correlation Matrix Juvenile Delinquency

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Family risk index	--																	
2. Single parent status	.448*	--																
3. Mother is less than 18	.387*	.223*	--															
4. Mother did not completed HS	.552*	.110*	.324*	--														
5. Mother not employed	.691*	.177*	.063*	.183*	--													
6. 4 or more children in household	.130*	-.226*	-.203*	.043	.009	--												
7. TANF/AFDC participation	.726*	.249*	.104*	.192*	.668*	-.046	--											
8. Eligible for free lunch	.541*	.112*	.059*	.154*	.330*	.021	.395*	--										
9. 60% or greater poverty in school attendance area	.330*	.055*	-.030	.016	.086*	.025	.077*	.057*	--									
10. Four or more risk factors, 0-3	.810*	.352*	.219*	.383*	.643*	.080*	.668*	.499*	.202*	--								
11. Family child welfare services, 0-3	.063*	.057*	.020	.088*	.017	.020	.014	.042	-.005	.058*	--							
12. ITBS8 Read $\geq$ 88 norms	-.189*	-.048	-.049	-.148*	-.113*	-.052	-.122*	-.145*	-.051	-.157*	-.026	--						
13. HS Completion (including GED)	-.212*	-.071*	-.080*	-.169*	-.133*	-.040	-.197*	-.082*	-.009	-.138*	-.020	.324*	--					
14. Any official delinquency petition	.124*	.076*	.023	.073*	.076*	.004	.122*	.065*	.013	.071*	.038	-.208*	-.309*	--				
15. Any self-reported delinquency	.053	.020	.011	.049	.056	.017	.057*	.003	-.018	.029	-.001	-.117*	-.225*	.412*	--			
16. Any official or self-reported delinquency	.097*	.054*	.020	.098*	.056*	.013	.087*	.056*	-.015	.055*	.036	-.156*	-.279*	.741*	.846*	--		
17. Any violent delinquency petition (official)	.084*	.069*	-.014	.048	.056*	.002	.081*	.044	.005	.050	.033	-.148*	-.197*	.736*	.319*	.545*	--	
18. Any drug delinquency petition (official)	.117*	.068*	.039	.041	.110*	-.019	.127*	.072*	-.004	.087*	.021	-.189*	-.260*	.687*	.329*	.509*	.475*	--

\*Mean difference  $p < .05$

\*\*Mean difference  $p < .01$

Table 3a: Proportions of CLS Sample with Official Delinquency Petition

Factor	Total Sample N=1406	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 4	0
<b>Black</b>	1309	21.0	34.5	7.8	17.9	26.7	20.4	21.8	18.5	21.5	24.3
Other	97	19.6	32.1	4.5	17.5	23.5	17.3	22.2	16.2	20.0	23.3
<b>Male</b>	699	34.3	--	--	31.2	39.5	33.7	35.2	30.9	36.3	36.4
Female	707	7.6	--	--	5.9	11.4	7.1	8.4	7.0	6.2	11.0
Single-Parent Family	1053	22.7	36.6	8.9	19.5	28.7	22.0	23.7	20.1	23.0	26.3
Other Family Structure	313	15.3	26.6	4.4	13.9	17.9	14.2	16.9	13.7	15.2	18.2
Mother Not H.S. Complete	740	23.9	37.7	9.6	20.4	29.5	22.2	26.0	21.1	23.7	27.9
Mother H.S. Complete	620	17.9	30.8	5.7	16.5	21.2	18.6	16.8	16.9	18.8	18.5
Mother Not Employed FT/PT	834	22.4	37.2	9.3	18.9	29.4	23.3	21.2	21.5	22.5	23.9
Mother Employed FT/PT	472	16.1	27.3	4.0	14.5	18.9	13.4	19.7	12.5	14.7	22.9
Mother Teen Parent < 18	233	23.2	36.3	8.3	19.3	29.5	25.2	20.4	23.8	22.4	23.6
Mother Not Teen Parent < 18	1143	20.6	34.0	7.7	18.0	25.7	19.4	22.4	17.7	21.3	24.5
Four or More Children	229	21.4	34.9	9.8	21.0	22.1	19.0	24.3	16.1	26.8	21.7
Less Than Four Children	1137	20.9	34.3	7.4	17.7	27.0	20.4	21.7	19.1	20.2	25.0
Free/Reduced Lunch	1166	21.8	36.6	8.0	18.9	27.2	21.8	21.7	20.0	21.9	24.5
No Free/Reduced Lunch	231	14.7	22.5	4.9	10.8	21.7	12.1	18.2	10.0	15.2	21.0
60% K School Poverty	1070	21.2	34.8	8.5	18.3	26.9	19.8	23.1	18.3	20.9	26.5
< 60% K School Poverty	336	19.9	33.0	4.5	16.6	25.2	21.6	17.5	18.5	23.0	17.4
AFDC Receipt	877	24.4	39.4	10.2	20.3	32.0	24.8	23.9	22.9	23.8	27.9
No AFDC Receipt	520	14.2	25.2	2.8	12.8	16.8	12.3	16.7	10.5	15.5	18.0
Four or More Risks	1028	22.7	37.0	9.2	18.7	30.0	22.0	23.6	19.5	23.5	26.4
Less Than Four Risks	378	16.1	27.7	2.8	15.6	17.0	15.3	17.3	15.2	14.6	19.2
SEMAT16D < avg.	731	28.9	40.9	9.9	24.9	34.8	29.6	28.0	27.1	28.5	31.6
SEMAT16D > avg.	649	11.2	20.6	5.8	10.2	13.8	11.0	11.7	11.3	9.9	13.1
Peer social skills < top quintile	973	24.0	37.5	9.1	21.5	28.8	24.0	24.1	22.5	24.0	26.5
Peer social skills, top quintile*	296	8.1	16.8	2.7	5.1	14.1	7.9	8.4	7.1	6.2	12.5
ITBS6 Read < 88 norms	585	29.2	42.7	11.2	25.2	35.7	30.6	27.6	29.9	26.5	32.5
ITBS6 Read ≥ 88 norms	617	12.3	23.0	4.9	11.9	13.3	12.7	11.6	11.6	14.0	11.2
ITBS8 Read < 88 norms	661	28.9	43.5	9.8	25.4	34.1	30.0	27.7	28.5	27.4	31.6
ITBS8 Read ≥ 88 norms	677	12.1	21.1	5.6	11.1	14.6	11.9	12.5	11.7	12.1	13.0
School mobility (age 4-8), ≥ 3	126	40.5	59.5	13.5	35.7	44.3	43.6	38.0	31.8	47.1	37.7
School mobility (age 4-8), < 3	1227	18.3	30.5	6.9	16.3	22.4	18.3	18.4	17.8	17.7	20.4
Retained ≥ 1 grade	384	30.7	41.6	10.4	29.2	32.7	35.0	27.0	37.6	27.0	29.8
Not retained	1022	17.2	30.3	7.0	14.4	23.2	16.0	19.2	13.9	19.0	20.9
Child welfare case history, 0-3	56	28.6	44.0	16.1	20.0	38.5	25.0	33.3	26.7	20.8	41.2
No child welfare history, 0-3	1350	20.6	34.0	7.2	17.8	25.8	20.0	21.4	18.1	21.5	23.3

\*Note. Peer social skills combines a composite scale from teacher ratings in grades 6 and 7, imputed with data from t45q10 for missing cases.

\*Mean difference  $p < .05$

\*\*Mean difference  $p < .01$

Table 3b: Proportions of CLS Sample with Juvenile Self-Reported Arrest or Official Delinquency Petition

Factor Age 0-3	Total Sample N=1474	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 4	0
<b>Black</b>	1372	32.0	49.0	15.4	29.9	35.9	31.3	32.9	30.4	31.7	35.0
Other	102	31.4	42.9	17.4	25.8	41.7	32.1	30.6	29.0	28.1	37.5
<b>Male</b>	733	48.6	--	--	46.4	52.2	48.8	48.3	47.3	48.8	50.0
Female	741	15.5	--	--	14.3	18.1	14.2	17.3	15.2	13.1	19.8
Single-Parent Family	1086	33.4	50.5	16.9	31.0	38.0	32.1	35.2	31.8	32.5	37.4
Other Family Structure	345	27.5	42.9	11.8	26.2	29.8	29.8	24.7	27.3	26.9	28.7
Mother Not H.S. Graduate	766	36.3	52.1	20.1	33.6	40.5	35.3	37.5	35.7	33.6	41.1
Mother H.S. Graduate	659	27.2	44.3	10.7	26.3	29.1	28.1	25.8	26.7	28.2	26.2
Mother Not Employed FT/PT	836	33.7	51.7	17.8	30.5	40.1	32.7	35.3	32.0	33.2	37.8
Mother Employed FT/PT	491	28.3	43.7	12.1	28.3	28.3	27.0	30.0	27.0	26.5	32.1
Mother Teen Parent < 18	240	34.2	52.8	13.3	30.9	39.6	34.3	34.0	34.6	31.7	37.9
Mother Not Teen Parent < 18	1202	31.7	47.9	16.0	29.6	35.7	31.1	32.5	29.9	31.5	34.9
Four or More Children	246	33.3	53.1	16.5	34.0	32.3	34.9	31.6	34.4	31.1	34.9
Less Than Four Children	1185	31.7	47.7	15.5	29.0	36.8	30.9	32.8	30.0	31.2	35.3
Free/Reduced Lunch	1178	33.3	51.6	16.2	31.0	37.7	33.0	33.7	32.2	32.4	36.4
No Free/Reduced Lunch	246	26.4	38.8	11.6	23.9	30.8	23.4	30.3	21.1	28.4	31.4
60% K School Poverty	1125	31.6	47.9	16.2	29.0	36.5	30.1	33.4	28.9	31.0	36.7
< 60% K School Poverty	349	33.2	50.5	13.0	31.6	35.8	35.3	30.3	34.9	33.3	30.8
AFDC Receipt	884	35.3	53.6	18.2	31.8	41.8	34.7	36.4	34.1	33.7	40.1
No AFDC Receipt	538	27.0	42.5	10.9	26.5	27.8	25.6	28.6	24.0	28.5	29.1
Four or More Risks	1067	33.6	51.2	17.2	30.3	39.6	32.6	34.8	31.6	32.7	38.2
Less Than Four Risks	407	27.8	42.5	10.6	27.7	27.9	27.9	27.6	27.1	27.7	28.7
SEMAT16D < avg.	747	40.8	54.0	19.8	37.9	45.3	40.5	41.3	38.7	41.0	43.2
SEMAT16D > avg.	671	22.4	39.2	12.7	21.7	23.9	22.3	22.4	23.7	18.5	25.5
Peer social skills < top quintile	973	36.1	51.6	18.9	34.7	38.7	35.1	37.4	35.4	35.2	38.5
Peer social skills, top quintile*	296	17.6	33.6	7.7	14.2	24.2	18.6	16.0	16.5	15.5	22.2
ITBS6 Read < 88 norms	586	41.3	55.2	22.7	38.0	46.7	42.0	40.5	42.1	38.0	45.2
ITBS6 Read ≥ 88 norms	618	24.0	41.7	11.8	24.0	23.8	23.9	24.1	23.9	24.0	24.0
ITBS8 Read < 88 norms	661	39.6	56.0	19.2	37.0	43.6	39.4	39.9	40.9	54.9	47.2
ITBS8 Read ≥ 88 norms	678	25.1	40.5	14.0	24.4	26.6	24.8	25.6	30.3	29.1	33.3
School mobility (age 4-8), ≥ 3	126	49.2	71.6	17.3	44.6	52.9	50.9	47.9	39.3	37.4	43.5
School mobility (age 4-8), < 3	1229	30.5	46.5	15.6	29.0	33.6	30.1	31.2	25.1	24.6	25.9
Retained ≥ 1 grade	385	42.9	56.0	18.5	42.4	43.5	45.6	40.5	48.5	40.6	41.1
Not retained	1089	28.1	44.7	14.9	25.8	32.9	27.4	29.1	26.2	27.9	32.1
Child welfare case history, 0-3	57	40.4	65.4	19.4	30.0	51.9	40.6	40.0	40.0	33.3	50.0
No child welfare history, 0-3	1417	31.6	48.0	15.4	29.6	35.4	31.0	32.4	30.0	31.4	34.4

\*Note. Peer social skills combines a composite measure of teacher ratings from grades 6 and 7, imputed with data from t45q10 for missing cases.

\*Mean difference  $p < .05$

\*\*Mean difference  $p < .01$