

Chicago Longitudinal Study
Summary Report on Educational Attainment

February, 2005

Suh-Ruu Ou

Educational Attainment

Indicators of Educational Attainment

The Chicago Longitudinal Study (CLS) has collected a number of indicators of educational attainment including school dropout, high school completion, highest grade completed, college attendance, and GED obtainment. These indicators were measured at different points, cumulating in August of 2003. This most recent data is the basis for this report. Since the number of cases whose educational attainment available by August is 1,368, the sample size for this report is 1,368.

Descriptive Statistics

The descriptive statistics of educational attainment indicators are shown in Table 1. Overall, the high school completion rate for the sample is 67 percent. Table 1 also shows descriptive statistics by the following subgroups: gender, CPC preschool participation, school-age program participation, and extent of participation. The preschool groups had a higher rate of high school completion (70.3% vs. 61%) and 4-year college attendance (15.7% vs. 10.0%) than the non-preschool group, and those differences are statistically significant at .01 level. In terms of gender, there are significant differences between females and males ($p < .01$) among different indicators. Females had a higher rate of high school completion (76.3% vs. 57.4%) and college attendance (37.1% vs. 22.7%) than males. In terms of extended groups, the group of 4-6 years of participation had the highest rate of high school completion than the group of 1-3 years and the no participation group, and those differences are significant too ($p < .05$). Previous measures by May 2002 and January 2003 are also presented in Table 1.

Indicators Correlations

The correlations between major indicators and explanatory variables are listed in Table 2a. Explanatory variables examined in this report include child demographics, family characteristics, neighborhood characteristics, family experiences, school performance, school life, social adjustment, and school commitment. The correlations among indicators are shown in Table 2b.

Major Indicators by Demographic/Achievement Variables and Subgroups

Of the indicators of educational attainment, high school completion and attendance in 4-year college are used as major indicators in this report. The proportions of the sample who completed high school are shown by demographic, socioeconomic, early achievement variables (race, parent education, free lunch status, neighborhood poverty) and by subgroups (preschool participation, gender, and extent of participation) in Table 3a. The proportions of the sample who attended 4-year college are compared by the same variables and subgroups in Table 3b.

Comparisons to Selected Samples

High school completion and dropout rates for selected comparison groups are shown in Figures 1 and 2 respectively. Although the high school completion rates of CLS sample are lower than other groups, the CLS sample is living in an environment that has multiple risks, such as high proportions of single-parent families and low-income families. Figure 3 presents the rates of high school completion by groups over time. The differences between CPC preschool group and comparison group have stayed at around 10 percent point.

Reference

CPS (1999).

U.S. Department of Education, National Center for Education Statistics. (2004). *Dropout Rates in the United States, 2001*. Washington, DC.

Table 1 Educational Attainment at Age 22-23 in the Chicago Longitudinal Study (August, 2003)

Education	N	Total Sample	Males	Females	CPC Preschool		School-age program		CPC Extended Intervention		
		Mean			Any	None	Any	None	4-6 years	1-3 years	None
May 2002	1,334	--	652	682	765	508	758	576	504	489	322
High school completion, %	1,334	61.8	53.7**	69.5	65.8**	54.2	63.6	59.4	68.1**	58.4	57.0
Highest grade completed	1,315	11.19 (1.71)	10.9** (1.78)	11.46 (1.60)	11.33** (1.67)	10.92 (1.77)	11.26 (1.72)	11.11 (1.71)	11.44* (1.61)	11.02 (1.79)	11.04 (1.71)
College attendance, % of total sample	1,334	21.9	15.6**	28.4	23.8**	18.3	22.8	20.7	25.7*	19.0	21.5
College attendance, % of HS completers	824	35.4	28.3**	40.7	36.2	33.7	35.9	34.8	37.6*	31.8	36.9
2-year college attendance, % of total sample	1,315	7.9	5.0**	10.6	8.4	7.1	8.7	6.9	9.0	6.6	8.1
4-year college attendance, % of total sample	1,315	9.6	12.2**	6.8	10.3	8.2	10.0	9.0	11.2	8.5	8.7
High School graduation (GED was coded 0)	1,334	49.0	40.7**	56.8	51.7**	43.9	50.5	46.9	53.8*	46.5	45.1
G.E.D, % of total sample	1,334	9.5	7.5	11.3	10.0	8.4	8.3	10.9	14.3	11.9	11.9
G.E.D, % of HS completers	824	20.8	24.3*	18.1	21.5	19.1	20.5	21.1	21.0	20.4	20.9
January 2003	1,345	--	659	686	875	470	763	582	512	502	331
High school completion, %	1,345	64.2	56.3**	71.7	67.4**	58.1	65.4	62.5	69.5**	60.8	61.0
Highest grade completed*	1,324	11.4 (1.86)	11.1** (1.90)	11.7 (1.77)	11.5** (1.82)	11.2 (1.92)	11.46 (1.87)	11.36 (1.85)	11.6** (1.77)	11.2 (1.94)	11.3 (1.86)
College attendance, % of total sample [†]	1,345	27.5	20.2**	34.5	29.0	24.7	28.1	26.8	30.3**	24.9	27.2
College attendance, % of HS completers	863	42.9	35.9**	48.2	43.1	42.5	42.9	42.8	46.4	43.6	48.5
2-year college attendance, % of total sample	994	21.7	16.1**	26.9	21.3	22.6	21.6	21.9	21.7	20.2	24.1

Education	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
4-year college attendance, % of total sample	994	16.8	12.6**	20.7	19.4**	12.3	17.4	16.0	20.1	15.3	14.1
High School graduation (GED was coded 0)	1,345	50.3	42.1**	58.1	52.5*	46.2	51.1	49.1	54.3	47.8	47.7
G.E.D, % of total sample	1,345	13.9	14.3	13.6	15.0	11.9	14.3	13.4	15.2	13.0	13.3
G.E.D, % of HS completers	863	21.7	25.3*	18.9	22.2	20.5	22.2	20.5	21.9	21.3	21.8
August 2003	1,368	--	669	699	888	480	778	590	380	323	214
High school completion, %	1,368	67.0	57.4**	76.3	70.3**	61.0	68.4	65.3	72.8**	63.3	63.7
Highest grade completed*	1,355	11.63 (1.81)	11.17** (1.88)	12.05 (1.62)	11.76** (1.78)	11.39 (1.84)	11.67 (1.83)	11.57 (1.77)	11.89** (1.73)	11.45 (1.88)	11.51 (1.77)
College attendance, % of total sample [†]	1,368	30.0	22.7**	37.1	31.6	27.1	31.4	28.3	33.3	27.5	28.9
College attendance, % of HS completers	917	49.7	44.3**	53.7	50.0	49.1	51.3	47.5	51.6	48.0	49.1
2-year college attendance, % of total sample	1,035	24.4	18.6**	30.2	24.6	24.3	25.2	23.4	26.0	22.5	25.0
2-year college attendance, % of total sample	1,368	18.5	14.2**	22.6	18.2	19.0	19.3	17.5	19.5	17.1	19.1
4-year college attendance, % of total sample	1,035	18.1	13.1**	22.9	21.1**	12.8	19.2	16.6	22.1*	16.3	14.5
4-year college attendance, % of total sample	1,368	13.7	9.9**	17.3	15.7**	10.0	14.7	12.4	16.7*	12.4	11.0
High School graduation	1,368	51.4	41.6**	60.7	54.1**	46.5	52.8	49.5	57.1**	47.7	48.2
G.E.D, % of total sample	1,368	15.6	15.6	15.7	16.2	14.6	15.6	15.8	15.7	15.7	15.5
G.E.D, % of HS completers	917	23.3	27.1*	20.6	23.1	23.9	22.7	24.2	21.6	24.8	24.3

[†] Need to have at least 1 credit

Note. Standard Deviation is in parentheses.

** p < .01 * p<.05

Table 2a Correlation Matrix for Predictors and measures of Educational Attainment

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Family risk index (child's age 0-3)	--																		
2. Single parent status	.467*	--																	
3. Mother is less than 18	.395*	.234*	--																
4. Mother did not completed HS	.560*	.118*	.331*	--															
5. Mother not employed	.698*	.188*	.073*	.189*	--														
6. 4 or more children in household	.116*	-.226*	-.205*	.041	-.003	--													
7. TANF/AFDC participation	.727*	.254*	.108*	.192*	.675*	-.053*	--												
8. Eligible for free lunch	.555*	.136*	.063*	.158*	.352*	.008	.410*	--											
9. 60% or greater poverty in school attendance area	.322*	.045	-.017	.035	.085*	.015	.073*	.056*	--										
10. ITBS word analysis at kindergarten	-.155*	-.027	-.062*	-.159*	-.078*	-.020	-.089*	-.087*	-.063*	--									
11. Classroom adjustment at first grade	-.095*	-.014	-.057*	-.141*	-.065*	-.021	-.057*	-.024	.014	.422*	--								
12. Number of years classroom adjustment above average	-.099*	-.034	-.019	-.095*	-.050	-.007	-.059*	.015	-.050*	.283*	.620*	--							
13. Number of years parent involvement above average	-.176*	-.107*	-.051	-.151*	-.084*	.001	-.128*	-.025	-.091*	.246*	.359*	.606*	--						
14. ITBS reading scores at 8 th grade	-.229*	-.087*	-.058*	-.178*	-.145*	-.060*	-.144*	-.175*	-.032	.438*	.525*	.514*	.386*	--					
15. School commitment	-.061*	-.042	.026	-.018	-.042	-.013	-.053	-.032	-.046	.174*	.298*	.335*	.214*	.326*	--				
16. If expected to go to college	-.068*	-.012	-.016	-.082*	-.046	-.012	-.048	-.057	.011	.158*	.181*	.169*	.129*	.238*	.141*	--			
17. High school completion by August 2003	-.202*	-.065*	-.080*	-.166*	-.134*	-.039	-.197*	-.082*	-.006	.200*	.264*	.298*	.268*	.334*	.152*	.159*	--		
18. Highest grade completed by August 2003	-.224*	-.090*	-.062*	-.206*	-.151*	-.035	-.196*	-.097*	-.001	.230*	.319*	.329*	.309*	.382*	.220*	.185*	.797*	--	
19. College attendance by August 2003	-.194*	-.096*	-.041	-.186*	-.126*	-.001	-.169*	-.097*	-.015	.145*	.213*	.247*	.250*	.322*	.175*	.160*	.460*	.643*	--
20. 4-year college attendance by August 2003	-.159*	-.099*	-.029	-.156*	-.107*	-.005	-.141*	-.043	-.003	.166*	.235*	.237*	.242*	.327*	.197*	.121*	.279*	.532*	.593*

Table 2b. Correlation Matrix for Measures of Educational Attainment

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. High school completion by May 2002	--															
2. Highest grade completed by May 2002	.851*	--														
3. College attendance by May 2002	.416*	.525*	--													
4. 2-year college attendance by May 2002	.226*	.259*	.549*	--												
5. 4-year college attendance by May 2002	.251*	.368*	.609*	-.095*	--											
6. High school completion by Jan. 2003	.948*	.816*	.396*	.215*	.239*	--										
7. Highest grade completed by Jan 2003	.791*	.927*	.547*	.236*	.427*	.830*	--									
8. College attendance by Jan 2003	.440*	.512*	.860*	.475*	.521*	.460*	.620*	--								
9. 2-year college attendance by Jan. 2003	.438*	.363*	.428*	.539*	-.141*	.496*	.381*	.561*	--							
10. 4-year college attendance by Jan 2003	.433*	.467*	.544*	-.022	.780*	.423*	.553*	.589*	-.237*	--						
11. High school completion by August 2003	.892*	.779*	.371*	.201*	.224*	.934*	.789*	.430*	.456*	.389*	--					
12. High school graduation by August 2003	.676*	.621*	.437*	.220*	.293*	.679*	.628*	.462*	.372*	.466*	.721*	--				
13. Highest grade completed by August 2003	.727*	.853*	.549*	.223*	.444*	.754*	.931*	.619*	.338*	.558*	.797*	.652*	--			
14. College attendance by August 2003	.433*	.497*	.805*	.442*	.491*	.444*	.593*	.927*	.527*	.554*	.460*	.481*	.643*	--		
15. 2-year college attendance by August 2003	.264*	.251*	.392*	.478*	-.102*	.308*	.275*	.499*	.915*	-.248*	.334*	.271*	.285*	.554*	--	
16. 4-year college attendance by August 2003	.293*	.380*	.538*	.035	.738*	.287*	.485*	.585*	-.202*	.962*	.279*	.357*	.532*	.593*	.121*	--

Table 3a. Proportions of CLS Sample who completed high school by August 2003

Factor Age 0-3	Total Sample N=1,368	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 4	0
Black	1277	66.3	56.7	75.3	69.0	61.1	67.3	64.9	71.5	62.5	63.6
Other	91	78.0	65.2	91.1	89.3	60.0	86.7	69.6	93.3	76.7	64.5
Male	670	57.3	--	--	62.3	49.2	56.7	58.2	62.5	55.2	53.2
Female	698	76.4	--	--	77.3	74.3	79.4	72.3	81.2	71.7	74.6
Single-Parent Family	1010	65.1	54.5	75.1	68.3	58.8	66.9	62.6	71.1	61.6	60.7
Other Family Structure	317	72.2	64.5	79.6	75.7	66.1	73.6	70.5	78.3	68.7	68.3
Mother Not H.S. Complete	715	59.4	50.1	68.7	63.4	53.1	61.4	57.1	65.2	56.5	56.3
Mother H.S. Complete	608	75.2	64.6	84.9	76.7	71.8	75.7	74.4	79.8	71.1	72.7
Mother Not Employed FT/PT	456	76.1	51.7	73.0	67.1	54.9	65.2	60.1	70.3	59.2	57.2
Mother Employed FT/PT	799	63.1	68.1	84.1	78.8	71.7	76.3	75.9	80.3	73.6	73.1
Mother Teen Parent < 18	225	58.2	51.3	65.7	63.6	48.8	59.5	56.4	67.5	54.3	50.9
Mother Not Teen Parent < 18	1112	68.4	58.0	78.0	71.2	63.0	69.9	66.3	73.5	64.9	65.2
Four or More Children	231	62.8	51.9	71.7	62.7	62.9	62.7	62.9	71.8	48.8	69.4
Less Than Four Children	1096	67.6	57.8	77.2	71.5	60.1	69.6	64.9	73.0	66.2	61.1
Free/Reduced Lunch	1122	65.2	54.2	75.1	68.2	59.7	66.6	63.4	71.3	60.9	62.3
No Free/Reduced Lunch	225	75.6	69.7	82.5	81.1	65.9	77.2	73.5	79.8	76.4	68.8
60% K School Poverty	1029	66.9	56.0	76.7	70.1	60.3	69.4	63.6	73.4	63.8	61.1
< 60% K School Poverty	339	67.6	60.8	75.3	70.8	62.8	65.5	70.4	71.0	61.8	70.7
AFDC Receipt	841	59.8	48.5	70.2	63.3	53.1	61.5	57.4	66.0	56.1	55.6
No AFDC Receipt	503	78.9	70.8	87.0	82.5	72.7	80.4	77.1	84.5	76.8	73.9
Four or More Risks	995	63.2	52.4	73.0	66.5	57.0	64.9	61.0	69.6	59.6	59.0
Less Than Four Risks	373	77.2	69.0	86.4	80.6	71.3	78.0	76.2	81.0	75.6	73.8
SEMAT16D < avg.	705	52.9	46.5	62.6	56.0	48.2	53.6	52.1	60.0	48.1	51.6
SEMAT16D ≥ avg.	634	82.5	77.1	85.5	84.1	78.8	82.7	82.2	83.2	83.5	79.6
ITBS6 Read < avg.	566	55.7	47.8	65.9	37.8	49.5	55.8	55.5	59.6	55.3	51.3
ITBS6 Read ≥ avg.	602	78.7	70.6	84.3	62.2	75.1	79.6	77.2	81.4	76.3	76.4
ITBS8 Read < avg.	632	51.4	41.9	63.4	55.0	46.1	52.2	50.5	32.8	46.1	50.0
ITBS8 Read ≥ avg.	644	81.8	76.0	85.9	82.7	79.8	82.1	81.4	81.5	84.3	78.8
School mobility (age 4-8), ≥ 3	121	43.8	26.1	67.3	45.3	42.6	42.3	44.9	52.4	35.4	48.1
School mobility (age 4-8), < 3	1170	69.2	60.4	77.1	71.9	63.5	70.5	67.1	73.6	66.4	65.4
Retained ≥ 1 grade	368	47.6	39.9	60.7	50.5	25.3	45.8	49.0	48.9	45.8	48.8
Not retained	1000	74.2	66.6	80.1	76.2	74.7	74.6	73.6	77.8	71.0	72.3
Child welfare case history	52	61.5	40.9	76.7	67.9	54.2	64.5	57.1	71.4	65.2	46.7
No child welfare case history	1275	67.1	57.5	76.5	70.3	61.1	68.6	65.1	72.9	63.0	64.1
Not expected to attend college	218	56.9	48.7	66.7	62.1	48.8	58.9	55.0	64.4	55.6	50.0
Expected to attend college	901	75.0	65.7	82.2	77.3	70.2	75.6	74.1	77.2	74.5	71.8
ITBS K Word analysis < avg.	705	59.6	49.2	18.2	63.6	54.2	62.7	56.5	69.3	53.7	57.3
ITBS K Word analysis ≥ avg.	659	75.3	67.5	81.8	76.0	73.3	73.1	79.3	75.2	74.5	77.0

Table 3b. Proportions of CLS Sample who Attended 4-year College by August 2003

Factor Age 0-3	Total Sample N=1,368	Mean	Gender		CPC Preschool		School Age		CPC Extended Intervention		
			Males	Females	Any	None	Any	None	4 to 6	1 to 4	0
Black	1277	13.1	9.6	16.4	15.0	9.4	11.6	14.2	16.5	11.5	10.2
Other	91	22.0	13.0	31.1	25.0	17.1	21.7	22.2	20.0	26.7	19.4
Male	670	9.9	--	--	11.3	7.5	10.4	9.2	11.3	10.0	7.6
Female	698	17.3	--	--	19.5	12.8	18.7	15.5	21.3	14.7	14.6
Single-Parent Family	1010	11.9	9.6	14.1	13.7	8.4	13.0	10.4	14.7	10.8	9.1
Other Family Structure	317	19.9	11.6	27.8	22.3	15.7	20.8	18.7	24.2	17.4	17.1
Mother Not H.S. Complete	715	8.8	7.6	10.1	10.9	5.5	9.0	8.6	10.1	9.1	6.8
Mother H.S. Complete	608	19.6	12.7	25.9	20.7	17.0	21.0	17.5	23.3	16.5	17.4
Mother Not Employed FT/PT	456	11.1	7.0	14.8	12.7	8.0	12.7	8.9	13.9	9.8	8.7
Mother Employed FT/PT	799	18.9	15.3	22.5	21.9	13.9	19.5	18.1	21.9	19.4	14.2
Mother Teen Parent < 18	225	14.2	11.1	12.0	15.4	4.9	13.0	9.6	18.8	7.6	7.6
Mother Not Teen Parent < 18	1112	11.6	9.9	18.3	15.8	11.2	15.0	13.1	16.4	13.6	11.7
Four or More Children	231	13.4	9.6	16.5	14.1	12.4	9.5	18.1	11.8	13.1	9.9
Less Than Four Children	1096	13.9	10.1	17.5	16.0	9.7	15.9	11.1	18.0	12.2	16.1
Free/Reduced Lunch	1122	12.9	9.4	16.1	15.1	8.9	14.4	10.9	16.2	11.9	9.3
No Free/Reduced Lunch	225	16.9	9.8	25.2	18.2	14.6	16.5	17.4	19.1	13.9	17.2
60% K School Poverty	1029	13.6	9.2	17.6	16.5	7.9	15.8	10.7	17.6	12.9	8.2
< 60% K School Poverty	339	13.9	11.6	16.5	12.9	15.3	11.2	17.6	13.7	10.6	18.5
AFDC Receipt	841	9.9	6.5	13.0	11.4	6.9	11.4	7.7	12.9	8.6	6.9
No AFDC Receipt	503	19.9	14.4	25.3	22.8	14.8	20.7	18.8	23.3	19.1	16.2
Four or More Risks	995	11.7	9.5	13.6	13.7	7.9	12.8	10.1	14.4	11.3	7.9
Less Than Four Risks	373	19.0	10.7	28.4	21.1	15.4	19.6	18.3	22.5	16.0	17.8
SEMAT16D < avg.	705	3.8	3.8	3.9	5.7	1.1	4.2	3.4	4.8	5.0	1.0
SEMAT16D ≥ avg.	634	24.0	20.3	26.0	24.9	21.8	24.6	22.9	26.1	21.4	23.4
ITBS6 Read < avg.	566	6.7	5.9	7.7	8.9	3.2	7.0	6.4	6.9	8.9	3.3
ITBS6 Read ≥ avg.	602	21.1	15.9	24.7	21.4	20.3	21.4	20.6	23.2	17.5	22.0
ITBS8 Read < avg.	632	3.5	2.8	4.3	4.0	2.8	3.6	3.4	4.0	3.1	3.5
ITBS8 Read ≥ avg.	644	23.5	18.7	26.8	25.0	19.7	23.8	22.9	24.8	23.3	20.5
School mobility (age 4-8), ≥ 3	121	5.0	2.9	7.7	9.4	1.5	5.8	4.4	9.5	6.3	1.9
School mobility (age 4-8), < 3	1170	14.6	10.6	18.3	16.1	11.6	15.5	13.4	17.0	13.0	12.7
Retained ≥ 1 grade	368	4.6	3.4	6.7	6.4	2.4	6.0	3.5	4.4	6.5	2.4
Not retained	1000	17.0	13.3	19.9	18.4	14.0	17.1	16.9	19.2	14.9	16.0
Child welfare case history	52	1.9	4.6	0.0	3.6	0.0	3.2	0.0	7.1	0.0	0.0
No child welfare case history	1275	14.0	9.7	18.2	16.0	10.4	15.1	12.6	16.8	12.9	11.3
Not expected to attend college	218	6.4	5.0	8.1	6.8	5.8	6.5	6.3	8.2	4.9	6.3
Expected to attend college	901	17.4	12.7	21.1	19.2	13.7	18.3	16.2	19.6	16.4	15.1
ITBS K Word analysis < avg.	705	8.8	6.6	11.2	11.1	5.7	8.6	9.0	9.8	10.4	5.9
ITBS K Word analysis ≥ avg.	659	19.0	13.9	23.3	19.5	17.6	19.7	17.7	21.5	14.6	21.2

Figure 1. High School Completion Rates for Selected Groups, 2001

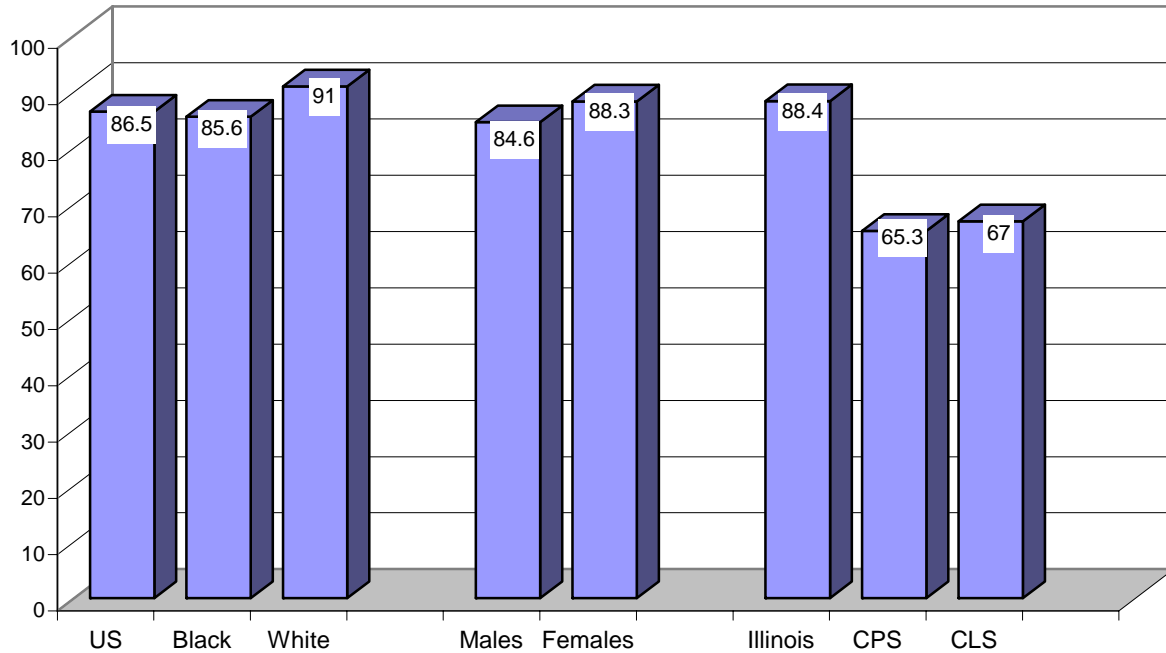
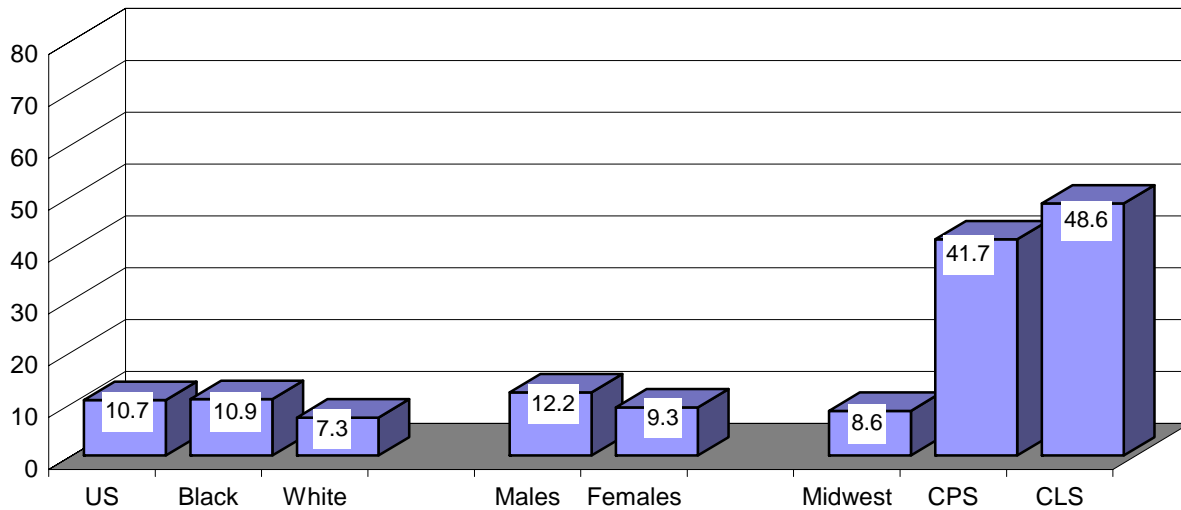


Figure 2. High School Dropout Rates for Selected Groups, 2001



Note. U.S. dropout and HS completion rates (U.S. Department of Education, 2004) are for Oct. 2001. HS completion rates are the proportion of 18- through 24-year olds who have graduated from high school. HS completion rates include GED. U.S. dropout rates are the proportion of 16- through 24-year olds who have left school before graduation. Chicago rate (CPS, 1999) is for 1998. CLS rate is for August, 2003. CPS and CLS data are cohort rates.

Figure 3. Rates of High School Completion by Groups

