

The Widening Academic Achievement Gap Between the Rich and the Poor:

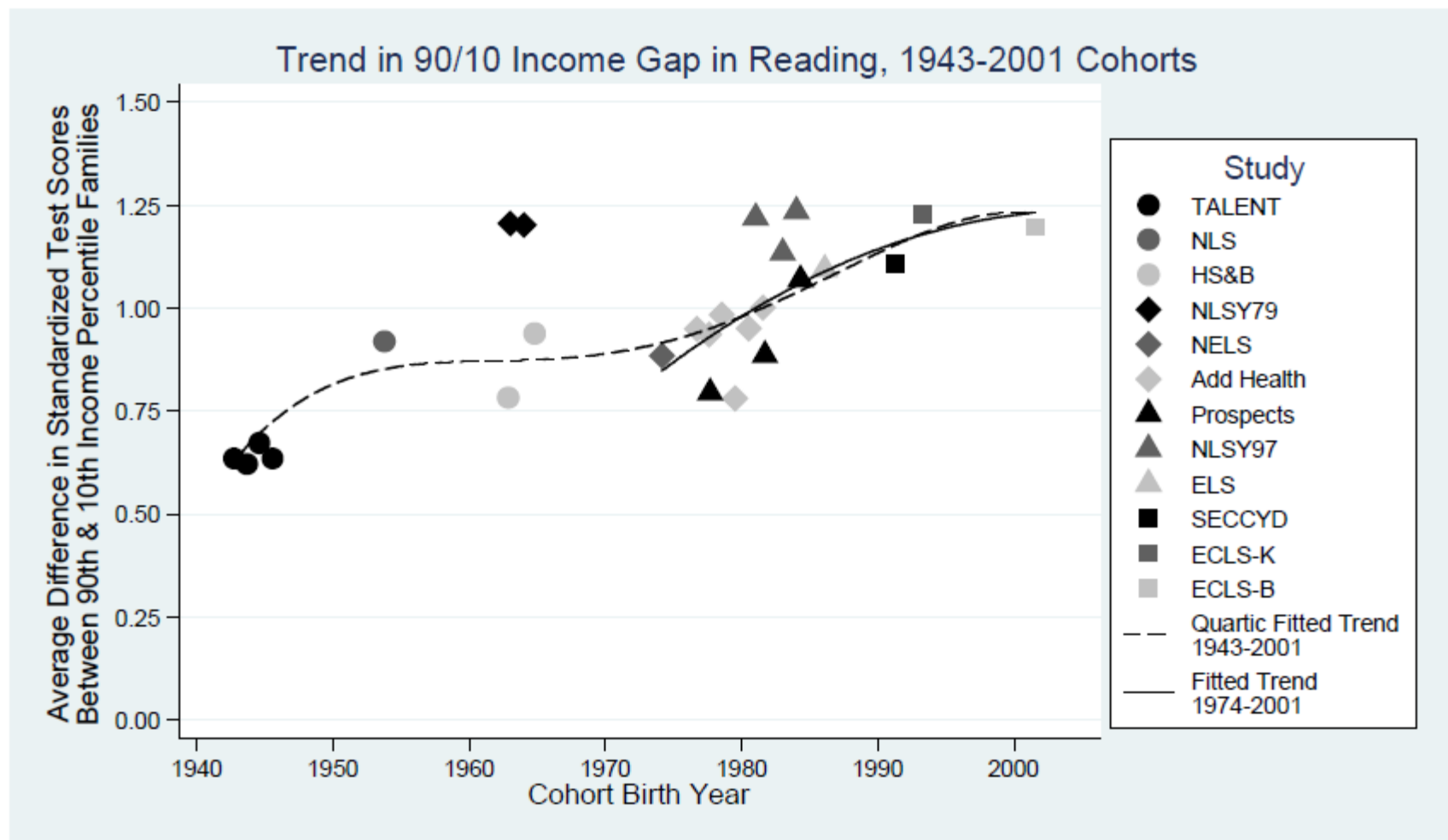
New Evidence and Possible Explanations

By Sean F. Reardon. Presentation given at Stanford University (July, 2011).
In G.J. Duncan and R.J. Murnane (eds.), *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*, Chapter 5, pp.91-116. New York: Russell Sage Foundation.

James J. Heckman
University of Chicago

AEA Continuing Education Program, ASSA Course:
Microeconomics of Life Course Inequality, San
Francisco, CA, January 5-7, 2016

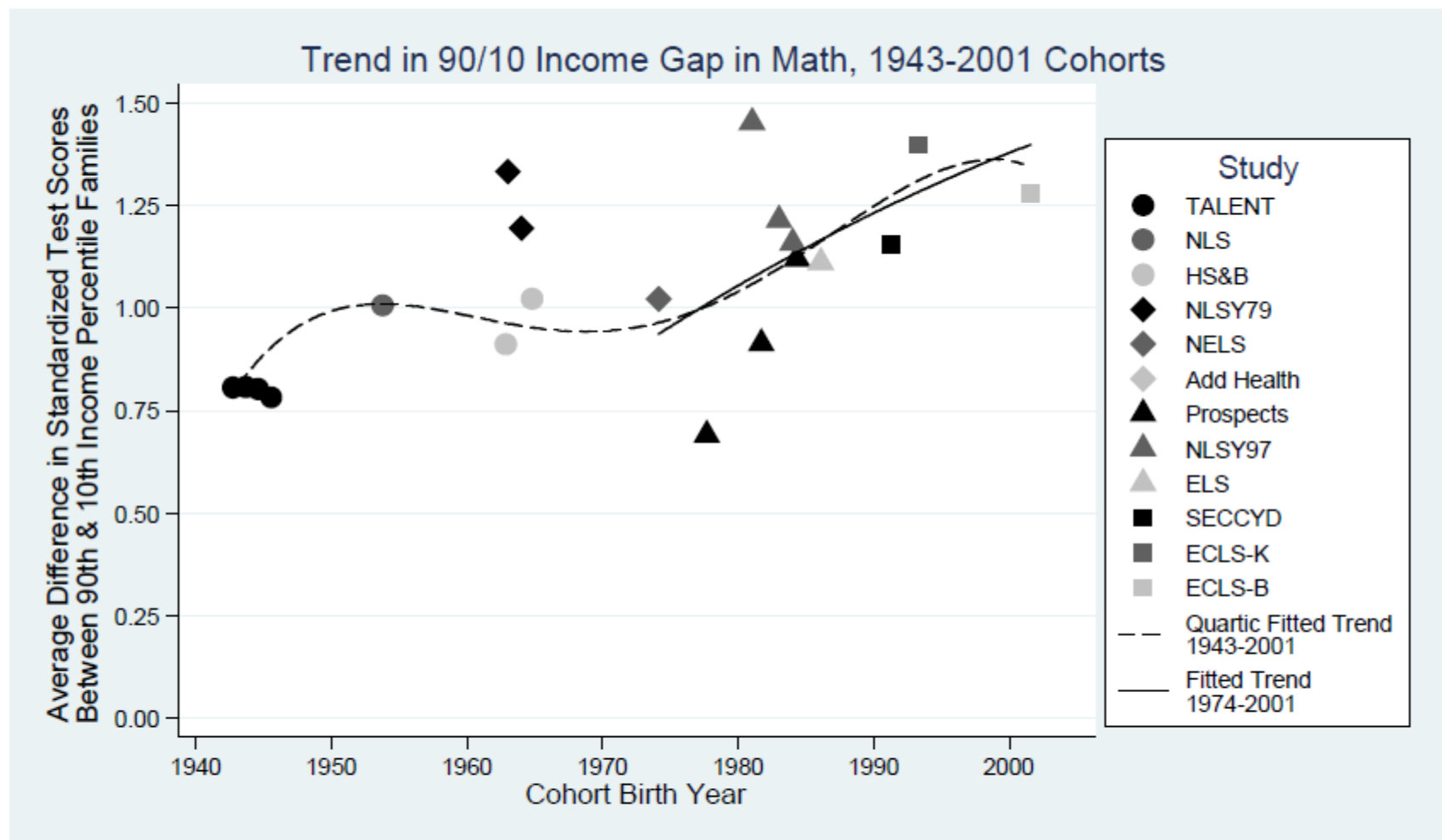
FIGURE 5.1 *Trend in 90/10 Income Achievement Gap in Reading, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).

Note: See note 4 and online appendix for further details.

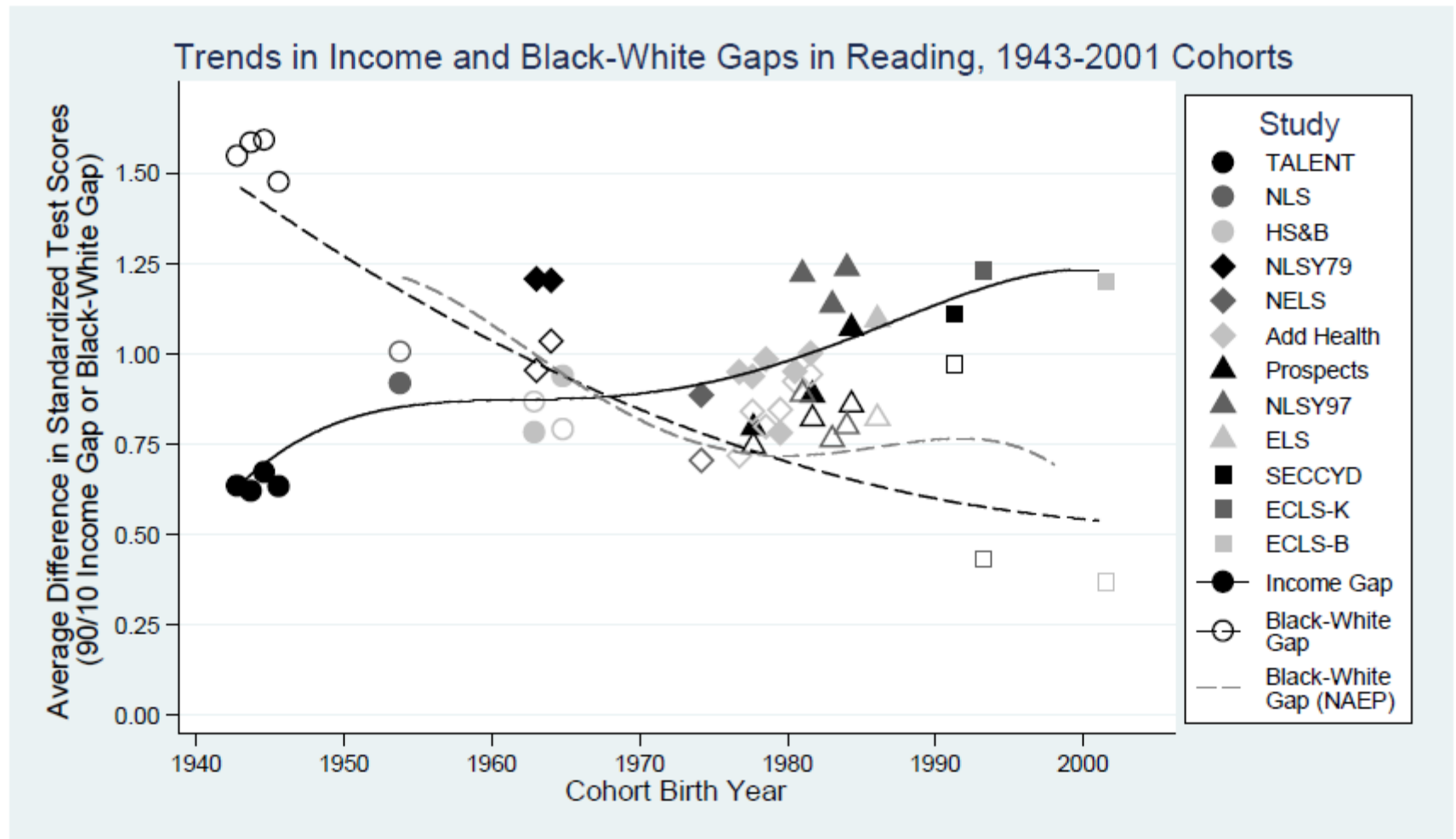
FIGURE 5.2 *Trend in 90/10 Income Achievement Gap in Math, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

Note: See note 4 and online appendix for further details.

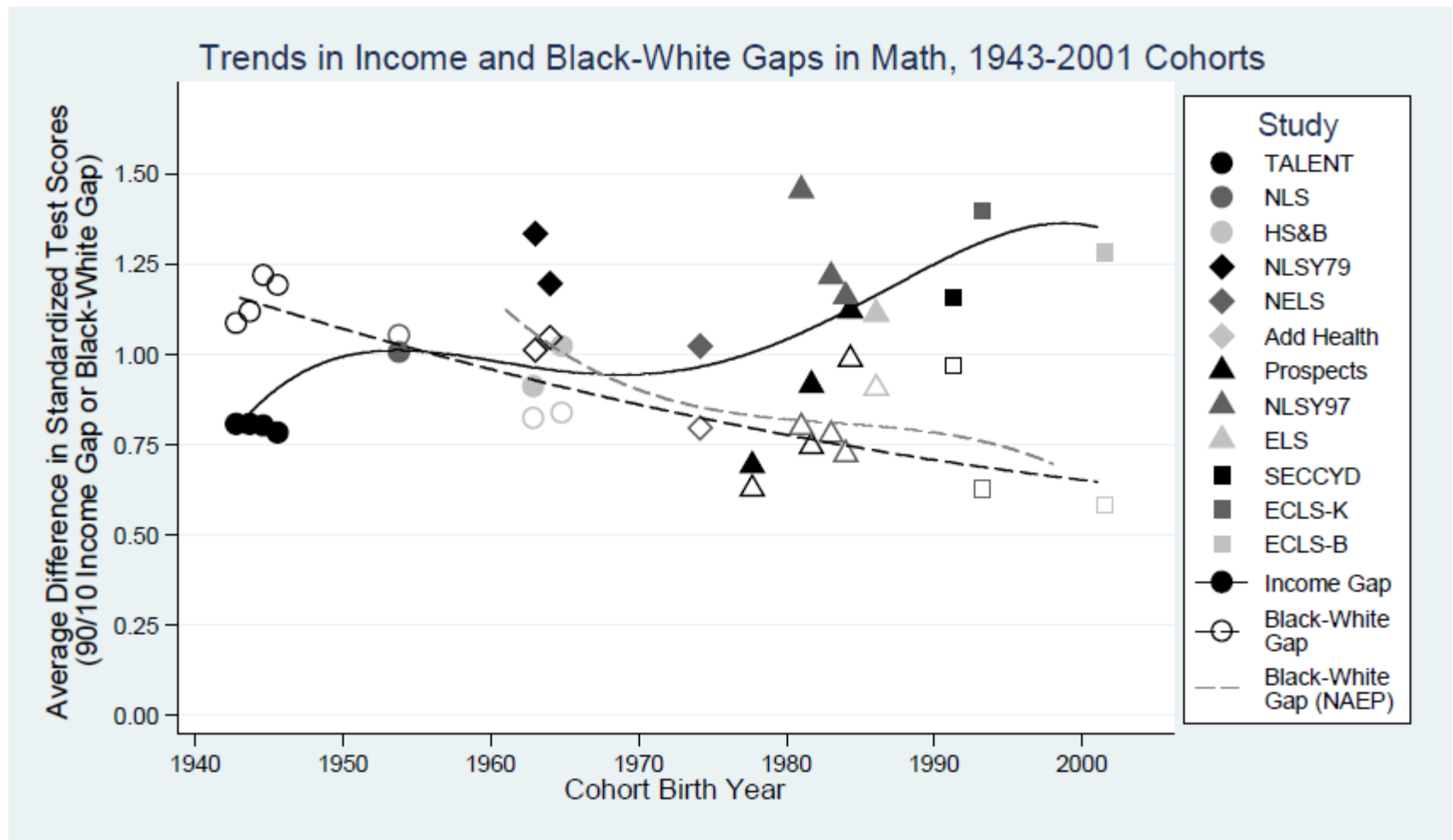
FIGURE 5.3 *Comparison of Income and Black-White Reading-Gap Trends (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, NAEP, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics n.d., 1999, 2000, 2001, 2004, 2005, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).

Note: Solid symbols represent 90/10 income achievement gaps; hollow symbols denote black-white achievement gaps. See note 6 and online appendix section 5.A5 for further details.

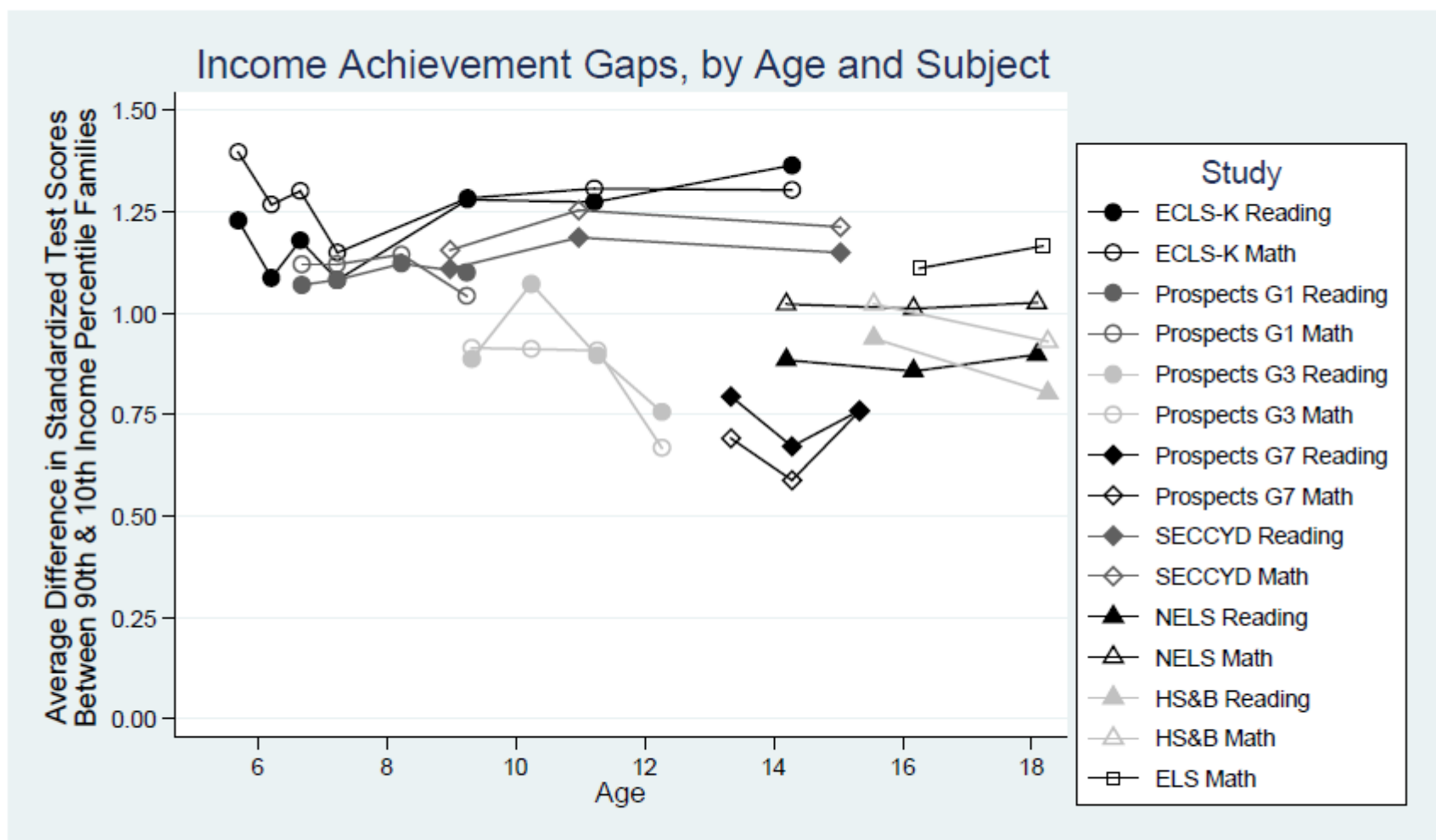
FIGURE 5.4 *Comparison of Income and Black-White Math-Gap Trends (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, NAEP, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics n.d., 1999, 2000, 2001, 2004, 2005, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).

Note: Solid symbols represent 90/10 income achievement gaps; hollow symbols denote black-white achievement gaps. See note 6 and online appendix section 5.A5 for further details.

FIGURE 5.5 *Income achievement Gradient, by Age and Subject, All Longitudinal Studies*



Source: Author's compilation based on data from HS&B, NELS, ELS, ECLS-K (U.S. Department of Education, Center for Education Statistics 2000, 2001, 2004, 2010); Prospects (U.S. Department of Education 1995); and SECCYD (National Institute of Child Health and Human Development 2010).

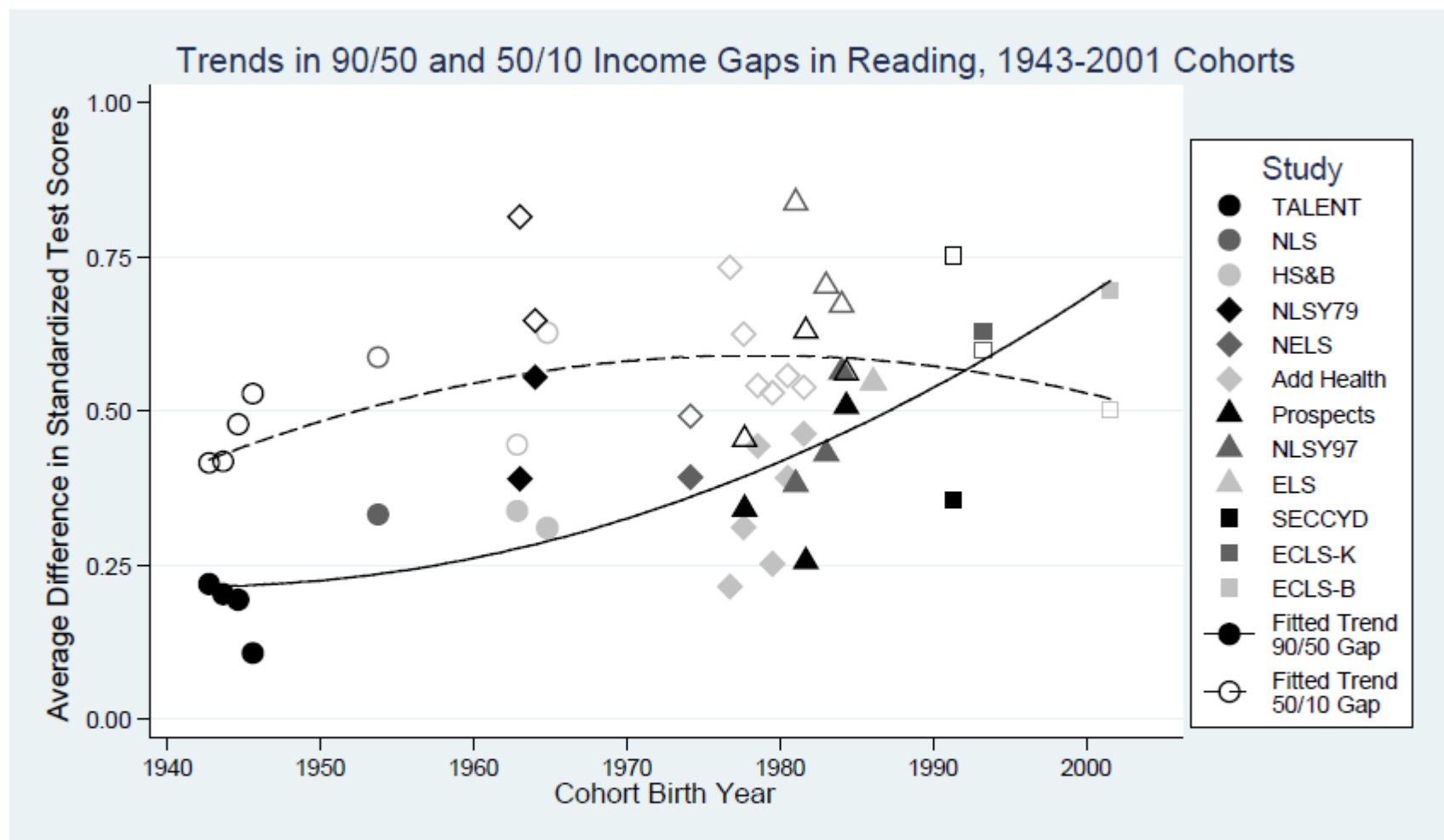
FIGURE 5.6 Trends in Family-Income Inequality Among School-Age Children, 1967 to 2008
(Weighted by Number of School-Age Children)



Source: Author's calculations, based on U.S. Bureau of the Census (King et al. 2010).

Note: Each line shows the trends in the ratio of household incomes at two percentiles of the income distribution. All trends are divided by their value in 1967 in order to put the trends on a common scale.

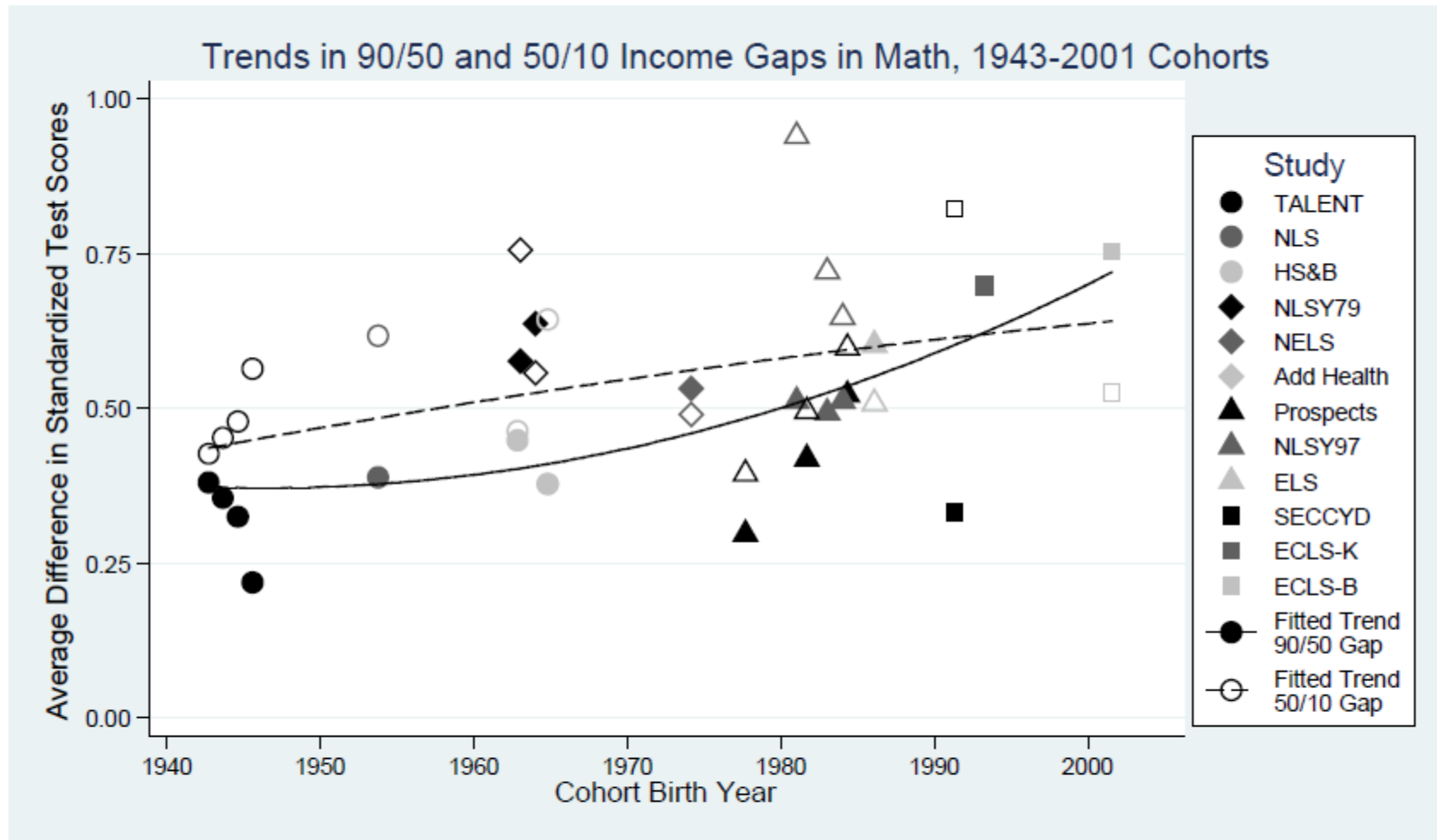
FIGURE 5.7 Trend in 90/50 and 50/10 Income Achievement Gap, Reading, by Birth Year (1943 to 2001 Cohorts)



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).

Note: Solid symbols represent 90/50 income achievement gaps; hollow symbols represent 50/10 income achievement gaps.

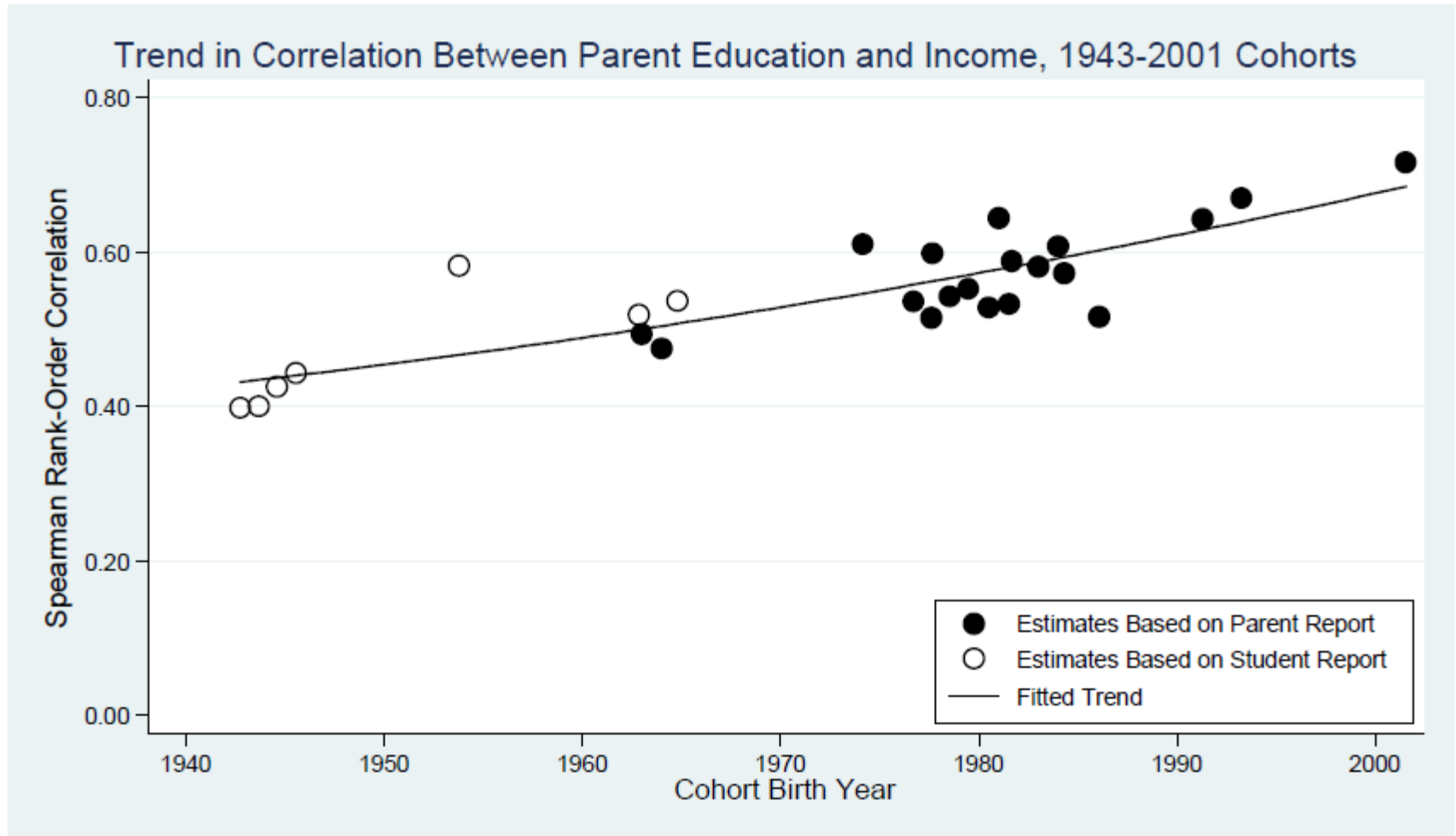
FIGURE 5.8 Trends in 90/50 and 50/10 Income Achievement Gap in Math, by Birth Year (1943 to 200 Cohorts)



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

Note: Solid symbols represent 90/50 income achievement gaps; hollow symbols represent 50/10 income achievement gaps.

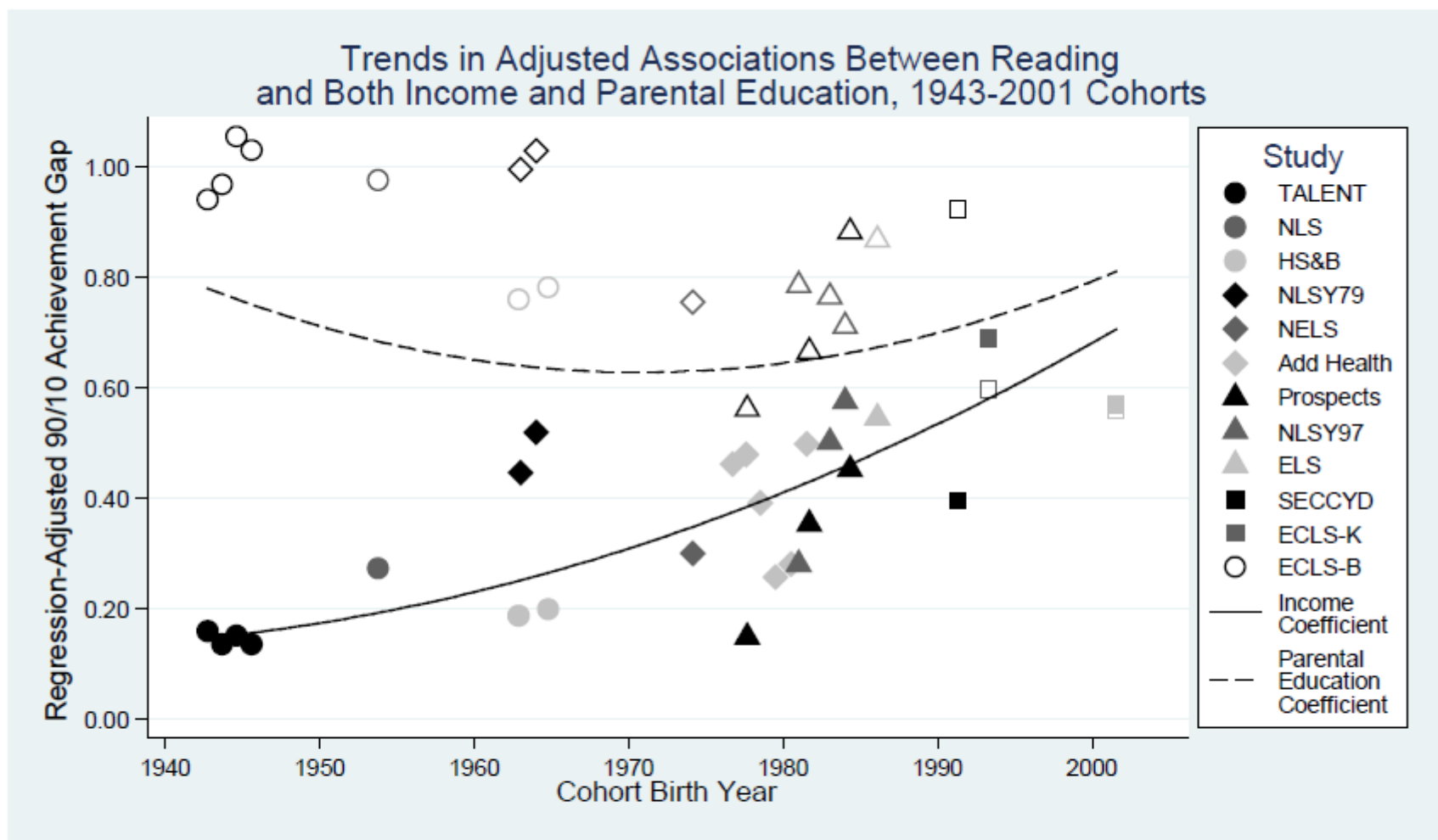
FIGURE 5.9 *Trend in Correlation Between Parental Education and Family Income (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); SECCYD (National Institute of Child Health and Human Development 2010); and Add Health (Harris 2009, reading only).

Note: See note 12 for further details.

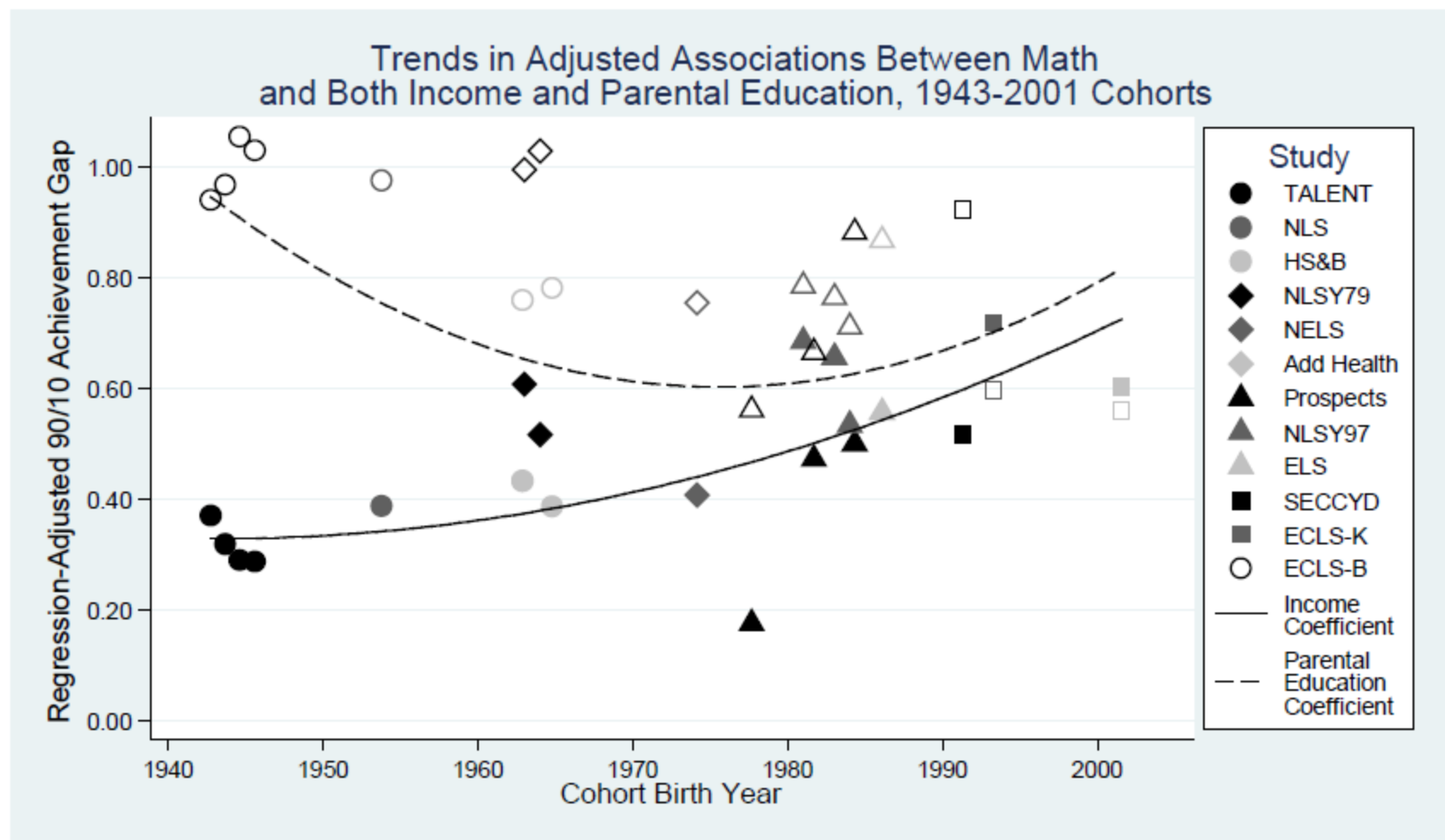
FIGURE 5.10 *Estimated Partial Associations Between Reading Test Scores and Both Income and Parental Education, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

Note: Solid symbols represent regression-adjusted 90/10 income coefficients; hollow symbols represent regression-adjusted parental education coefficients. See note 12 for further details.

FIGURE 5.11 *Estimated Partial Associations Between Math Test Scores and Both Income and Parental Education, by Birth Cohort (1943 to 2001 Cohorts)*



Source: Author's compilation based on data from Project Talent (Flanagan et al. n.d.); NLS, HS&B, NELS, ELS, ECLS-K, ECLS-B (U.S. Department of Education, Center for Education Statistics 1999, 2000, 2001, 2004, 2009, 2010); Prospects (U.S. Department of Education 1995); NLSY79, NLSY97 (U.S. Bureau of Labor Statistics 1980, 1999); and SECCYD (National Institute of Child Health and Human Development 2010).

Note: Solid symbols represent regression-adjusted 90/10 income coefficients; hollow symbols represent regression-adjusted parental education coefficients. See note 12 for further details.