

School readiness and later achievement review essay



**ASSIGN
BUSTER**

Duncan, G. J. , Claessens, A. , Huston, A. C.

, Pagani, L. S. , Engel, M. , Sexton, H. , Dowsett, C. J.

, Magnuson, K. , Klebanov, P. , Feinstein, L. , Brooks-Gunn, J.

, Duckworth, K. , & Japel, C. (2007). School Readiness and Later Achievement. *Developmental Psychology*, 6, 1428-1446.

Purpose of the Study and Hypotheses The researchers of this study wanted to estimate links between key elements of school readiness-school-entry academic, attention, and socioemotional skills-and later school reading and math achievement. In particular, they wanted to find out what factors would and would not affect later education success in early childhood stages-pre-kindergarten through third grade. The hypothesis was that six areas would have an effect on a child's ability to develop advanced cognitive skill-reading, mathematics, attention, internalizing, externalizing, and social skills.

Theory/PhilosophyIn this study, the researchers took six different data sets to study taking into account several different variables-the outcomes for reading and math, achievement for language/verbal ability, and math, attention skills/problems, socioemotional behaviors including externalizing and internalizing problems and social skills, prior cognitive/achievement, and prior attention/socioemotional behavior.

Four of the data sets were collected from the United States, one from Montreal, Canada, and one from Great Britain. Many studies have been done to compare the relationships between achievement, attention, and behavior and later achievement, but there has not been any studies done to compare

<https://assignbuster.com/school-readiness-and-later-achievement-review-essay/>

which can be emphasized to create a healthier academic career in adolescence and beyond. Methods and Procedures The Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) uses a nationally representative sample of 21, 260 children who were in kindergarten from 1998-1999 and collected data up to and including their third grade year. Data that was used was collected from direct achievement tests and surveys of parents, teachers, and school administrators The Children of the National Longitudinal Survey of Youth (NLSY) were 1, 756 children of female participants of the NLSY born around 1986 with an overrepresentation of black, Hispanic, and low-income families.

Data that was collected was from math and reading test scores and maternal reports of children's behavior problems. Key control variables included receptive vocabulary and child's temperament at age 3. The National Institute of Child Health and Human Development Study of Early Child Care and Youth Development (NICHD SECCYD) study are from multi-site births in 1991 which is not nationally representative, but closely matches census and national tract records. Achievement tests and attention/impulsivity tests were administered at age 4. 5 in a laboratory setting and attention problems, internalizing, and social skills were measured by teacher report in the fall of their kindergarten year. Key control variables include cognitive ability, language skills, impulsivity, and internalizing and externalizing language problems.

An average of 950 children were used in the data sets in first, third, and fifth grade. The Infant Health and Development Program (IHDP) study evaluated later achievement of an eight site efficacy of 985 low birth weight (LBW) <https://assignbuster.com/school-readiness-and-later-achievement-review-essay/>

premature infants not to include extremely low birth weight (ELBW) infants with data from questionnaires, home visits, and laboratory tests. Key control variables included cognitive ability, sustained attention, and behavior problems at age 3. The Montreal Longitudinal-Experimental Preschool Study (MLEPS) came from data including direct cognitive assessments, number knowledge and receptive vocabulary tests, of 767 children and surveys of parents and teachers. Key control variables included number knowledge and vocabulary. The 1970 British Birth Cohort Study (BCS) was a nationally representative study of 9,000 to 10,000 children born within a one-week period in 1970 to evaluate vocabulary and copying skills tests and maternal reports of attention and externalizing and internalizing behavior at five years of age.

Key control variables include measures of basic skills and behavior at 22 to 42 months. Analysis and Results In order to summarize the findings across all six studies, it was necessary to conduct a meta-analysis of the standardized regression coefficients from the individual study regressions. Once this analysis was complete, it is clear that of the six school-entry measures only three predict reading and math achievement: reading/language, math, and attention. Contrary to the hypothesis, socioemotional skills do not play a major factor in later achievement. Also, rudimentary mathematics plays a more important role than either reading or attention, not to say that either are unimportant.

The statistical data shows that when math was a specific school-entry measure, that reading was increased by .02 as compared to an emphasis on reading alone. Things to take into consideration that may have allowed for <https://assignbuster.com/school-readiness-and-later-achievement-review-essay/>

favoritism of the school-entry achievement measures include: the capability of measuring attention and socioemotional skills, maternal reports may be less accurate than that of teacher reports due to lack of contact during the day, models may overcontrol impacts of attention and socioemotional skills, socioemotional skills may be of more concern for school-related outcomes than test scores, most measurements stopped at middle-childhood and do not include changes into adolescence, socioemotional measures are restricted to a narrow range, and participant attrition may bias the study's views. Self-Reflect The study for the most part covers all avenues of later achievement into middle-childhood, but later achievement also extends into adolescence and young adulthood.

I was very intrigued to learn that rudimentary mathematics is possibly one of the principal factors of achievement. Statistically speaking, I believe that a bigger breakdown into race and socio-economic status would provide a greater understanding of how school readiness can affect a child's ability to succeed in middle-childhood. One of the data sets that should not have been inclusive to this study is the BCS. It was inclusive to children that were born in 1970, while the remainder of the studies were from the late-80s to the mid-90s.

There is a significant change in teaching methods over those 15 – 20 years, therefore the data included cannot be considered equal to that of the other data sets. Based on the conclusions of this study, a parent and/or pre-kindergarten teacher may want to add more focus on the rudimentary math lessons, or set up activities that would promote math cognition, as opposed to reading.

<https://assignbuster.com/school-readiness-and-later-achievement-review-essay/>