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Children's Homework Time—Do Parents' Investments Make a Difference?

Miriam R. Linver
Montclair State University

Jeanne Brooks-Gunn
Jodie L. Roth
Teachers College, Columbia University

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Corresponding author: Miriam R. Linver
Phone: (973) 655-6841
e-mail: Miriam.Linver@montclair.edu

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Abstract

This article describes the homework time of 2024 children in school grades 1 through 12, using time diary data from a national dataset, the Panel Study of Income Dynamics-Child Development Supplement (PSID-CDS). As part of the PSID-CDS, time diary data were collected for one randomly selected weekday and weekend day. Data were analyzed with an investment model perspective, where parental time, money, and human capital were expected to influence children's and adolescents' homework time. About 2/3 of children did any homework. Logistic regression revealed that ethnicity was the primary predictor of whether or not children in elementary school and junior high school did any homework, although some investment model variables, in particular time (number of children in household) was significant for elementary school children, and money (family income) was influential for junior high school students. All three investment constructs predicted whether or not high school students did any homework. Students who did any spent 1-2 hours on homework depending on school grade. Hierarchical regression revealed few investment model predictors predicted to amount of homework children did above control variables. Number of children in household was significant for elementary school students, where as parental education was the investment model predictor that made a difference for junior high and high school student's homework time.

Homework—teachers assign and grade it; some parents monitor and some assist their children with it; some children complain about, some enjoy, and some complete it. Recent media headlines declare that children are spending an inordinate amount of time doing homework. “Too Much Homework,” the *New York Times* announced (Seal, 2001). Another *New York Times* article entitled “As Homework Load Grows, One District Says ‘Enough’” discussed how the school board in Piscataway, New Jersey, under pressure from parents, limited elementary school homework time to 30 minutes per night (Zernike, 2000). In Southern California, concern about children’s homework prompted a school district to review its homework policy: “Conejo Valley trustees will consider parents’ complaints that students are overworked” (Ragland, 2002); a proposal would limit homework time to 20 minutes per night for first- and second-graders, and 50 minutes for third- fourth- and fifth-graders. “Some call homework load at middle school excessive” (Massey, 2001) in Boston, MA. A recently published book, *The End of Homework*, questioned the benefit for children of doing any homework (Kralovec & Buell, 2000). In this paper, we describe the national trends in homework participation, as well as parental involvement in homework. Using an investment model perspective (Haveman & Wolfe, 1994), we propose parents with more time, money, and human capital will have children who spend more time doing homework. First, research on the potential benefits of homework is reviewed. Next, we describe the investment model. We then present research questions that take into account this model, before describing our methodology and analysis results. Finally, we discuss how well the investment model predicts how much time children spend doing homework.

Potential benefits of homework. Research on children’s time doing homework indicates that spending more time on homework is associated with higher achievement (i.e., measured by

school grades) for students in elementary school (Cooper, 2001; Cooper, Lindsay, Nye, & Greathouse, 1998; Gorges & Elliott, 1995; Paschal, Weinstein, & Walberg, 1984), middle/junior high school (Cooper et al., 1998; Cooper, Valentine, Nye, & Lindsay, 1999; Leone & Richards, 1989), and high school (Cool & Keith, 1991; T. Z. Keith, 1988; T. Z. Keith, Reimers, Fehrmann, Pottebaum, & Aubey, 1986). Homework may also be important in laying the groundwork for skills essential for the work world; Warton (1997), for example, concluded that homework helps children learn about responsibility. Other research has been mixed; some researchers have found no association between homework and achievement at the elementary school level (Chen & Stevenson, 1989; Smith, 1990). Still others criticize the time children spend on homework; McDermott and colleagues (McDermott, Goldman, & Varenne, 1984) hypothesized that homework can be composed of meaningless, negative tasks not geared toward learning (although these researchers did not provide data-based evidence for this claim).

For the most part, research demonstrates positive connections between children's homework and achievement. Under optimal conditions, advocates for homework argue, homework can further children's learning and achievement through reinforcement and application, and homework can help children develop independent work and study habits (Cooper, 1989, 2001). It is difficult to infer causality in such associations, however; few if any researchers can pronounce with certainty that doing homework promotes better work habits and boost achievement, or that those with better work habits and achievement levels do more homework.

The Investment Model

Economists have proposed children's success is a result of both the biological endowments they inherit from their parents, as well as the resources, in the form of money and

time, that parents invest in their children (Becker, 1981; Becker & Thomes, 1986; Haveman & Wolfe, 1994; Mayer, 1997). Investments can take the form of monetary investments (if parents have more money, they can purchase goods and services that can enhance children's success, such as private school); time investments (children can reap benefits of parents who spend more time interacting with them); and human capital investments (parents who have higher human capital, such as ability level or education level, presumably can have higher level interactions with their children). We propose that as parents have more money, time, and human capital to invest, their children will benefit by spending more time doing homework.

Research Questions

Just as no researchers have examined the amount of time parents spend helping their children with homework, little is known about the variability in homework time. Even though the issue of children's and adolescents' homework time has been extensively covered by the media, these reports rely on anecdotal evidence rather than empirical data about children's homework time and their parents' involvement in homework time. The present paper addresses these issues, using the second wave of Panel Study of Income Dynamics-Child Development Supplement (PSID-CDS), a large national sample of elementary school children and their families seen in 2003.

The PSID-CDS data provide a unique opportunity for examining children's homework time. The dataset included information collected from a time diary for up to two children in each family, for two 24-hour time periods: one weekday and one weekend day. Parents and their children listed each activity the child participated in during the day, as well as where they were doing the activity, and with whom. Note that in the present study, we focus on a description of current trends and investment model correlates of homework time. From the time diary data, we

were able to address several descriptive questions about children's and adolescents' homework time. The first set of questions is derived from recent media attention to children's homework time: How many children in the U.S. are *doing any homework*? Are investment model constructs associated with doing any homework?

Our second set of research questions focuses on *how much time* children are spending on homework—for those who do any homework. Which children are doing more homework, and do investment measures predict amount of homework time? Two nationally representative studies used time diary data to report on the amount of time children spend on homework. One found that in 1981, children aged six to eight completed 45 minutes per week (Timmer, Eccles, & O'Brien, 1985). The other (from the first wave of the data reported in this paper) found that in 1997, six- to eight-year-old children completed 2 hours of homework per week, on average (Hofferth & Sandberg, 2001). For nine to twelve year old children, weekly homework time has gone from 2 hours and 50 minutes (in 1981) to 3 hours 40 minutes (in 1997). This comparison reveals that older children spend more time in homework than younger children, and that there is a trend toward spending more time on homework today compared to 15 years ago. Researchers have found that girls spend more time on homework than boys in elementary school (Timmer et al., 1985), junior high school (Leone & Richards, 1989), and high school (Hagborg, 1991; T. Z. Keith, 1988).

Researchers who have examined investment model constructs have found that parents with more money and time have children who spend more time doing homework. Using time diary data from 214 teenagers in Utah, Zick and Allen (1996) found those in single-mother families spent less time on homework than those in two-parent families. Using a path analytical technique with the High School and Beyond data, Keith and colleagues (Fehrmann et al., 1987;

T. Z. Keith, 1988) found that high school students whose parents have higher income report spending more time on homework; this research group measured homework time with one self-report item, “Approximately what is the average amount of time you spend on homework a week?”

Method

Design

The PSID, begun in 1968, is a longitudinal survey of a representative sample of U.S. men, women, and children and the families in which they reside; data were collected annually until 1997, and bi-annually beginning in 1999. The data emphasize the dynamic aspects of economic and demographic behavior; data on employment, income, wealth, housing, food expenditures, transfer income, and marital and fertility behaviors are collected at each wave. In 1997, the PSID reduced the core sample and added a refresher sample of immigrants so the data are representative of the current United States population. Also in 1997, the PSID supplemented the existing longitudinal study with the CDS, collecting information on parents and their children from birth to age 12 (Hofferth, Davis-Kean, Davis, & Finkelstein, 1997). A second wave of CDS data was collected in 2003 (CDS-II). Up to two children per PSID family in the CDS age range were recruited to participate in the CDS.

Data and Sample

In the present study, we used data from the PSID-CDS-II; strengths of the dataset include a national sample and the availability of time diary data. The full CDS-II sample includes 2,907 children from ages 5 to 18; of these, 2,654 were in grades 1 through 12. Of these, 2,336 completed the weekday time diary. Because this paper focuses on homework time, we included only the 2,024 children and adolescents who attended school on the day they completed their

time diary (87% of the 2,336). Homework is considered differently at different school levels; we divided our sample into three subsamples, roughly corresponding to elementary school (1st-5th grades, $n=895$), middle/junior high school (6th-8th grades; $n=499$) and high school (9th -12th grades; $n=630$).

Procedure

CDS-II interview procedure. A field interviewer was assigned to each family unit who participated in the CDS-II. The field interviewer contacted the family, explained the study, identified the primary and secondary caregivers, made an appointment for the interview, and mailed the advance time diary and introductory letter. The interviewer then visited the household, obtained written permission to interview the children, administered child assessment(s) and interview(s), and administered the primary caregiver assessment and interview.

Time diary procedure. The time diary instrument for assessing time use is a chronological report about the child's activities over a specified recent 24-hour time period, beginning at midnight. The family was mailed an advance copy of the time diary to assist them, but the final diary was administered by the interviewer. The time diary included questions about the child's flow of activities, including what they were doing, when the activity began and ended, what else they were doing (if they were engaged in multiple activities), where they were during the activity, and whom the child was with during the activity. Time diaries were collected for one randomly selected weekday and one randomly selected weekend day from the same week. A coding scheme was developed based on Juster and Stafford's (1985) time use study to define all recorded activities for the first wave of CDS. CDS-II expanded on these codes, providing

more detail about each activity. Additional variables were developed for the first wave of the CDS to describe the location of the activities and the others participating in activities.

Measures

For the present study, we examined children's homework time, children's homework time spent with a parent actively involved, control variables, and investment model constructs. All analyses reported in this paper are based on a weighted sample, so results are generalizable to the national population.

Time diaries. We used data from the weekday (Monday through Friday) and weekend (Saturday and Sunday) time diaries to assess children's homework time. Homework time was calculated as the sum of time spent in activities coded as "using the computer for homework, studying, research," as well as all "homework" related codes, including "general category for homework," "homework, non-computer related," "studying, research reading," "went to the library," and "reviewing homework with parent/caregiver." For each activity listed in the time diary, participants reported who was doing the activity with the child. For the present study, we examined homework whether or not children did any homework, and total amount of time spent doing homework for those who did any homework.

Control variables. We included three child-level characteristics as controls: gender, ethnicity, and school grade level. Gender was dummy coded (1=*female*); 50% of the children were girls. Ethnicity was coded as European American (63%), African American (16%), Latino (13%) and other (8%). Child's grade level in school ranged from 1st through 12th, and was approximately evenly split between the 12 grade levels. Our final control variable was Friday versus other days of the week, as we assumed that time spent doing homework may be very

different on Friday compared to other weekdays; this variable was dummy coded (1=*Friday*). Nineteen percent of weekday diaries were completed on Friday.

Investment model characteristics. We evaluated three types of investment model variables: money, time, and human capital. Money variables included family income and whether the child attended a public or private school. Family income is derived from the 2000 PSID data, and is the sum of five income sources from that year: taxable income of family head and wife; transfer income of family head and wife, taxable income of other family members, transfer income of other family members, and social security income. Family income was collapsed into five categories for the present study: less than \$14,000 (8%), \$14,000-\$27,999 (15%), \$28,000-\$49,999 (23%), \$50,000-\$69,999 (18%), and \$70,000 or greater (37%). Public versus private school was dummy coded (1=*public*); 10% of children attended private schools. Time variables included number of children in the household, 1-parent versus 2-parent family, and mother employment status outside the home. Number of children in the household ranged from 1-7; we topcoded the number of children in household at 4. Twenty-one percent of families had only 1 child in the household, 42% had 2 children, 26% had 3 children, and 11% had 4 or more. Number of parents in the home was dummy coded (1=*2-parent*); sixty-five percent of children lived in 2-parent homes. Mother's work status was coded as not working (21%), part-time (< 35 hours / week; 20%), or full-time (35+ hours / week; 59%). Human capital was represented by highest level of parent education (mother or father, whichever was higher). For this study, highest parent education level ranged from 2 to 17 years, with a mean of 13.3 (*sd* = 3.2).

Results

Percent of Children Doing Homework

Our first set of research questions focused on how many students did any homework. For first through fifth graders, 69% of children did any homework on the random weekday (Monday through Friday) the time diary was completed. For sixth through eighth graders, 66% spent any time doing homework, and for high school (ninth through twelfth grade) students, 59% did any homework. To determine what, if any, investment constructs were related to doing any homework, we next performed a series of logistic regressions, regressing whether or not any homework was completed on controls as well as investment variables. Results are discussed by school category; Table 1 presents a summary of these results. For those in elementary school, school grade and ethnicity were associated with whether or not the child did any homework. Those in higher elementary school grades were more likely to do any homework; Black and Hispanic youth were less likely to do any homework compared to White students. Those who completed the time diary on a Friday were less likely to do any homework compared to those who completed the diary on Monday through Thursday. Only one investment variable was associated with doing any homework: those children who live in families with more children are less likely to do any homework.

For those in junior high school, results were similar. School grade was not associated with doing any homework, but ethnicity and day of week diary completed were associated with doing any homework, with the same results as for elementary school children. As with younger children, only one (different) investment variable was associated with doing any homework; higher family income was associated with a higher likelihood of doing any homework.

For high school youth, controls associated with doing any homework are gender, ethnicity, and day of week diary completed. Girls were more likely to do any homework, while Black and Hispanic youth as well as those who completed the diary on a Friday were less likely

to do any homework. For these adolescents, investment constructs across all three domains—money, time, and human capital—associated with doing any homework. Family income was positively associated with doing any homework. Several time variables were associated with doing any homework, but not in the expected direction: living with two parents was associated with being less likely to do any homework, as was having a mother not working (compared to working part-time or full-time). Finally, higher parent education level was associated positively with doing any homework.

Amount of Time Spent Doing Homework

In our next set of analyses, we examined how much homework students do on weekdays. These results examine only the children and adolescents who did any homework, so “zero” values are not factored in. For those who did any homework on an average weekday (Monday-Friday), children in elementary school spent about 53 minutes ($sd=35$ minutes) doing homework; children in junior high school spent about 75 minutes ($sd=47$ minutes); high school youth spent about 104 minutes ($sd=69$ minutes). As expected, the amount of time spent doing homework increases as children are in more advanced grade levels.

Next, we performed multivariate analyses to examine the control and investment correlates of children’s and adolescents’ homework time. In hierarchical regression analyses, some covariates of homework time emerged. For elementary school children, grade in school and ethnicity were associated with spending more time doing homework. Those in higher elementary school grades spent more time on homework, and those of Black and Hispanic ethnicity spent more time doing homework compared to Whites. One investment model predictor was associated with homework time: having more siblings in the home was associated with spending less time doing homework. For students in junior high school, being Black or of

“other” ethnicity was associated with spending more time doing homework compared to Whites. One investment model variable was associated with homework time: higher parent education level was associated with spending more time doing homework. For high school students, being of other ethnicity and completing the time diary on a Monday through Thursday were both associated with spending more time doing homework (compared to White ethnicity and completing the diary on a Friday respectively). As with junior high school students, the investment model variable of parent education was positively associated with spending more time doing homework. Table 2 details the results of the hierarchical regression analyses for the three subgroups.

Discussion

Contrary to recent media headlines, the story of homework may be a tale of two children, one who does virtually no homework and one who does a great deal. The PSID-CDS time diary data allowed us to examine how much time students in elementary, junior high, and high school spend on homework—and whether they are doing any at all. About one-third of children across school level reported doing no homework on the random weekday the time diary was assigned; for those children who did any homework, however, they spent an hour or two (depending on school grade) during an average weekday working on it. How much homework are children really doing? Elementary school-aged children who do any homework spend about 53 minutes; junior high school students spend about an hour and 15 minutes, while high school students spend an hour and 45 minutes. With all the media reports about the long hours children spend in homework, it is interesting we found that so many children and adolescents spend absolutely no time doing homework.

Some of our findings on correlates of homework time were in line with what others have found when examining children's homework time, but many of our findings were unique. For example, most researchers who have examined gender differences in homework found that girls tend to do more homework. Our findings demonstrate that generally there are few gender differences in homework time—boys and girls tend to spend the same amount of time doing homework; but when we did find a difference (among high school students, girls were more likely to do any homework), it was in line with previous research. Perhaps the difference in most of our findings compared to previous research is due to how homework time was measured; other studies used stylized self-report questions rather than time diaries to determine how much time children spent doing homework. It may be that girls report more homework time when asked in a stylized question, but that in fact in elementary school grade levels, there may be no gender difference in homework time.

Many of our correlates were found to be unrelated to either doing any homework or to how much homework children are doing. The covariates that were significant, however, were generally in line with our expectations. The story of ethnicity is mixed; across the board, we found that Black and Hispanic youth were less likely to do any homework compared to White students. However, for those who did any homework, Black elementary school children were likely to spend longer doing homework, Hispanic elementary and junior high school students spent more time in homework, and those of other ethnicities in junior high and high school spent more time in homework (all compared to White students). Other researchers who have examined the relation of ethnicity to homework have used self-reports of homework time and have found European Americans report doing more homework than other ethnicities (T.Z. Keith et al., 1998). These differences in the findings from the present study compared to previous research

may be due to the design of the study. The PSID-CDS-II time diary is only the second national study to date to estimate the number of minutes children spend doing homework. Why are minority children less likely to do homework, but spending more time on homework when they do any? Home environment may be part of the answer; because ethnicity and poverty can be interrelated, it may be that some children may not have a good environment or adults to monitor them, so may not do homework that was assigned. Or, minority children may attend schools that do not assign as much homework. This study cannot account for homework assigned on the day of the time diary. Minority children may spend more time doing homework because they need more time to complete the same assignments (e.g., immigrants make up some of the minority population, so language barriers can play a role). Children living in minority may have a stronger work ethic, and spend more time doing homework because it is emphasized by family members in the home. More research is necessary to tease apart these connections.

Overall, few investment model characteristics were consistently associated with whether or not students spend any time on homework. For elementary school students, number of children in the household, corresponding to the investment construct of time (if there are more children in the household, parents are able to spend less time with each individual child) was linked with whether or not children spent any time doing homework. For junior high school students, family income, corresponding to the investment construct of money, was linked with spending any time on homework. Nearly every investment construct was associated with homework time for high school students, although not all in the predicted direction. For high school students, investment constructs of money and human capital were associated with homework time in the predicted direction (higher income and higher parental education were associated with a higher likelihood of spending time on homework). The time variables,

however, worked in the opposite direction—those living in a 1-parent household, and those whose mothers worked (either part- or full-time) were more likely to do any homework. One possible explanation for this anomalous finding may be multicollinearity—because all constructs were tested in the same model, the variance associated with these time constructs may be dominated by the money and human capital constructs. Or, it could be that high school students who have a working mother see her as a model for working hard, and choose to emulate her. Again, further research is necessary to examine this issue in more detail.

The investment model was not very useful in predicting amount of time students spent completing homework. One investment model construct was a significant predictor of homework time for each school level. As with whether or not elementary school children did any homework, the only investment predictor was number of children in the household. As parents' time is divided by having other children in the household, they may be less able to monitor children's time in homework. It may be that this variable was only significant for elementary school children because elementary school children are more likely to have siblings who are young, and young children take up more of parents' physical time. For junior high and high school students, parental education was the only investment model predictor of homework time. It may be that as parents' education increases, there is a growing expectation that children should attend college, so they may be preparing as early as junior high school by spending more time on school work.

Time diaries compared to other methodologies. As described earlier, most research on homework time assesses children's homework time through stylized questions. While simple and widely used, this method is biased; it is subject to social desirability bias and it provides no baseline against which to check consistency, validity, or reliability. Times estimates are often

inaccurate (Marini & Shelton, 1993). In fact, Hofferth (1999) established that parents overestimated time spent reading to children when assessed via stylized questions versus time diary reports. A more precise method to assess children's homework time is through direct observation (e.g., Clarke-Stewart, 1978). However, observational methodologies are costly, intrusive, and limited in the amount of a day that can be covered. Another way to collect information is by time sampling, in which respondents write down the activity in which they are engaged whenever a beeper sounds (e.g., Larson & Richards, 1994). This methodology is also costly and intrusive and does not provide an accounting of the entire day. A fourth methodology that leads to more accurate data on children's homework time involves gathering a chronological report by the child and/or the child's primary caretaker about the child's activities over a specified recent 24-hour period, beginning at midnight. The advantage of this time diary methodology is that total time in one day must add to 24 hours, and is very reliable (Juster & Stafford, 1985). Few national time diary studies exist; consequently, few researchers have been able to report accurately on children's homework time.

Our study, because it used the PSID-CDS time diary data, provides an accurate snapshot of U.S. elementary school children's homework time. Although our estimates of homework from time diary data are very accurate within the day they were collected, we may be underestimating the amount of homework done during any give week. Students, especially at the elementary school level, are not always assigned homework each night (Roth, 1999, April).

Quality vs. quantity? From the PSID-CDS time diary data, we can estimate how many elementary school children do homework on a given weekday, and how much they are doing. But how much homework is optimal for children? Because the PSID-CDS data are cross-sectional, we cannot examine the outcomes of completing more or less homework for our

sample. Researchers have compared the homework time and student achievement of children in the US compared to other countries. Chen and Stevenson (1989) examined homework time in China, Japan, and the US. They found that Chinese children were assigned the most homework and American children the least (based on mothers' and teachers' estimates), and there was a positive relation of homework time to achievement between (but not within) cultures. Cross-cultural comparisons have established Chinese and Korean children enjoy doing homework more than American children (Chen & Stevenson, 1989; Hong, Milgram, & Perkins, 1995). It may not be the amount, but the quality of homework that is the key. If children are assigned tasks that are creative and challenging, versus repetitive and dull, they will gain more from doing homework, and it is more likely to have a positive effect on learning.

Homework takes up a significant portion of after school time for some, but by no means the majority of elementary school students. According to a recent report by the Brookings Institute, the small amount of time American children actually spend in homework has been ignored by the media; instead, the experiences of a non-representative few tend to be exaggerated (Loveless, 2003). Homework time may vary each night, and fitting in homework on nights where more is assigned with children's other activities may sometimes be tricky. It is possible that some parents should be concerned that their children are not assigned enough homework, and for those children who are doing homework, parents may want to focus on the content of homework to ensure it is stimulating creativity and fostering learning.

References

- Becker, G. S. (1981). *A treatise on the family*. (2nd ed.). Cambridge, MA: Harvard University Press.
- Becker, G. S., & Thomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4, S1-S139.
- Chen, C., & Stevenson, H. W. (1989). Homework: A cross-cultural examination. *Child Development*, 60, 551-561.
- Clarke-Stewart, K. A. (1978). And Daddy makes three: The father's impact on mother and young child. *Child Development*, 49, 466-478.
- Cool, V. A., & Keith, T. Z. (1991). Testing a model of school learning: Direct and indirect effects on academic achievement. *Contemporary Educational Psychology*, 16, 28-44.
- Cooper, H. (1989). *Homework*. White Plains, NY: Longman.
- Cooper, H. (2001). *The battle over homework: Common ground for administrators, teachers, and parents* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Cooper, H., Lindsay, J. J., Nye, B., & Greathouse, S. (1998). Relationships among attitudes about homework, amount of homework assigned and completed, and student achievement. *Journal of Educational Psychology*, 90, 70-83.
- Cooper, H., Valentine, J. C., Nye, B., & Lindsay, J. J. (1999). Relationships between five after-school activities and academic achievement. *Journal of Educational Psychology*, 91, 369-378.
- Fehrmann, P. G., Keith, T. Z., & Reimers, T. M. (1987). Home influence on school learning: Direct and indirect effects of parental involvement on high school grades. *Journal of Educational Research*, 80, 330-337.

- Gorges, T. C., & Elliott, S. N. (1995). Homework: Parent and student involvement and their effects on academic performance. *Canadian Journal of School Psychology, 11*, 18-31.
- Hagborg, W. J. (1991). A study of homework time of a high school sample. *Perceptual and Motor Skills, 73*, 103-106.
- Haveman, R., & Wolfe, B. (1994). *Succeeding generations: On the effects of investments in children*. New York: Russell Sage Foundation.
- Hofferth, S. L. (1999, May 13). *Family reading to young children: Social desirability and cultural biases in reporting*. Paper presented at the Committee on National Statistics Workshop on Measurement of and Research on Time Use, Washington, D. C.
- Hofferth, S. L., Davis-Kean, P., Davis, J., & Finkelstein, J. (1997). The Child Development Supplement to the Panel Study of Income Dynamics 1997 User Guide.
<http://www.isr.umich.edu/src/child-development/usergd.html>.
- Hofferth, S. L., & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and the Family, 63*, 295-308.
- Hong, E., Milgram, R. M., & Perkins, P. G. (1995). Homework style and homework behavior of Korean and American children. *Journal of Research and Development in Education, 28*, 197-207.
- Juster, F. T., & Stafford, F. P. (Eds.). (1985). *Time, goods, and well-being*. Ann Arbor, MI: Institute for Social Research, University of Michigan.
- Keith, T. Z. (1988). Using path analysis to test the importance of manipulable influences on school learning. *School Psychology Review, 17*, 637-643.

- Keith, T. Z., Reimers, T. M., Fehrmann, P. G., Pottebaum, S. M., & Aubey, L. W. (1986). Parental involvement, homework, and TV time: Direct and indirect effects on high school achievement. *Journal of Educational Psychology, 78*, 373-380.
- Kralovec, E., & Buell, J. (2000). *The end of homework: How homework disrupts families, overburdens children, and limits learning*. Boston: Beacon Press.
- Larson, R., & Richards, M. H. (1994). *Divergent realities: The emotional lives of mothers, fathers, and adolescents*. New York: BasicBooks.
- Leone, C. M., & Richards, M. H. (1989). Classwork and homework in early adolescence: The ecology of achievement. *Journal of Youth and Adolescence, 18*, 531-548.
- Loveless, T. (2003). *The Brown Center report on American education: Do students have too much homework?* Washington, DC: Brookings Institute.
- Marini, M. M., & Shelton, B. A. (1993). Measuring household work: Recent experience in the United States. *Social Science Research, 22*, 361-382.
- Mayer, S. E. (1997). *What money can't buy: Family income and children's life chances*. Cambridge, MA: Harvard University Press.
- McDermott, R. P., Goldman, S. V., & Varenne, H. (1984). When school goes home: Some problems in the organization of homework. *Teachers College Record, 85*, 391-409.
- Paschal, R. A., Weinstein, T., & Walberg, H. J. (1984). The effects of homework on learning: A quantitative synthesis. *Journal of Educational Research, 78*, 97-104.
- Ragland, J. (2002, April 9). Conejo Valley trustees will consider parents' complaints that students are overworked. *The Los Angeles Times*, p. B5.

- Roth, J. L. (1999, April). *What Happens During the School Day: Results From National Teacher Time Diaries*. Paper presented at the Society for Research in Child Development, Albuquerque, NM.
- Seal, K. (2001, September 3). Too much homework, too little play. *New York Times*, p. A15.
- Smith, T. E. (1990). Time and academic achievement. *Journal of Youth and Adolescence*, 19, 539-558.
- Timmer, S. G., Eccles, J., & O'Brien, K. (1985). How children use time. In F. T. Juster & F. Stafford (Eds.), *Time, goods, and well-being* (pp. 353-382). Ann Arbor, MI: Institute for Social Research, University of Michigan.
- Warton, P. M. (1997). Learning about responsibility: Lessons from homework. *British Journal of Educational Psychology*, 67, 213-221.
- Zernike, K. (2000, October 10). As homework load grows, one district says 'Enough'. *New York Times*, p. A1.
- Zick, C. D., & Allen, C. R. (1996). The impact of parents' marital status on the time adolescents spend in productive activities. *Family Relations*, 45, 65-71.

Table 1. Logistic regression predicting any vs. no homework on a weekday, including controls and investment model predictors.

	Elementary (Grades 1-5) (<i>n</i> =906)	Junior High School (Grades 6-8) (<i>n</i> =471)	High School (Grades 9-12) (<i>n</i> =578)
	Beta (SE)		
Controls			
Female ¹	0.13 (0.17)	0.11 (0.21)	1.11** (0.19)
School Grade Level	0.13* (0.59)	-0.15 (0.13)	-0.12 (0.09)
Ethnicity ²			
Black	-1.12** (0.30)	-1.29** (0.34)	-0.82** (0.30)
Hispanic	-1.10** (0.42)	-0.78** (0.44)	-1.16** (0.36)
Other Race	-0.18 (0.30)	-0.52 (0.38)	-0.61 (0.34)
Day of Week (M-Th) ³	2.11** (0.30)	1.58** (0.27)	1.75** (0.25)
Investment—Money			
Family Income	0.03 (0.09)	0.23** (0.11)	0.30** (0.10)
Private School ⁴	0.19 (0.27)	0.06 (0.33)	0.29 (0.37)
Investment—Time			
# Children in HH	-0.22** (0.08)	-0.01 (0.10)	-0.11 (0.10)
1-parent HH ⁵	-0.11 (0.22)	0.22 (0.28)	-0.45* (0.23)
Mother Employment ⁶			
Part-Time	0.26 (0.23)	0.02 (0.29)	0.82** (0.28)
Full-Time	0.08 (0.24)	-0.06 (0.34)	1.14** (0.33)
Investment—Human Capital			
Highest Parental Education	0.03 (0.03)	0.06 (0.05)	0.11** (0.04)
Constant	0.61 (0.75)	1.03 (1.26)	-0.99 (1.31)
Wald χ^2 (<i>df</i>)	154.56** (13)	55.25** (13)	136.75** (13)
% Correct	76.2	71.2	71.8

* $p < .05$; ** $p < .01$

Notes. ¹Male is omitted. ²White ethnicity is omitted. ³Friday is omitted. ⁴Public school is omitted. ⁵2-parent household is omitted. ⁶Mother not employed is omitted.

Table 2. OLS regression predicting homework time for those who did any homework on a weekday, including controls and investment model predictors.

	Elementary (Grades 1-5) (<i>n</i> =593)	Junior High School (Grades 6-8) (<i>n</i> =320)	High School (Grades 9-12) (<i>n</i> =358)
	Standardized Beta		
Controls			
Female ¹	-0.03	-0.01	0.06
School Grade Level	0.23**	0.07	0.06
Ethnicity ²			
Black	0.15**	0.01	-0.04
Hispanic	0.23**	0.23**	0.05
Other Race	0.06	0.26**	0.15**
Day of Week (M-Th) ³	-0.04	-0.08	-0.14**
Investment—Money			
Family Income	-0.04	-0.02	0.01
Private School ⁴	0.01	0.03	-0.07
Investment—Time			
# Children in HH	-0.10*	0.03	0.03
1-parent HH ⁵	0.06	0.02	-0.03
Mother Employment ⁶			
Part-Time	0.03	-0.04	0.07
Full-Time	-0.01	-0.02	0.04
Investment—Human Capital			
Highest Parental Education	0.04	0.18**	0.19**
Constant	**	<i>ns</i>	<i>ns</i>
<i>F</i>	5.5** (13)	2.9** (13)	3.0** (13)
<i>R</i> ²	.11**	.11**	.10**

* $p < .05$; ** $p < .01$

Notes. ¹Male is omitted. ²White ethnicity is omitted. ³Friday is omitted. ⁴Public school is omitted. ⁵2-parent household is omitted. ⁶Mother not employed is omitted.