

Parental Educational Expectations for Adolescents with Disabilities

LINDA L. MASINO

ROBERT M. HODAPP

University of California, Los Angeles

ABSTRACT: *This study used a national sample (from the National Education Longitudinal Study of 1988) of 8th-grade students to examine the effects of child disability on parental educational expectations. Four types of disability conditions were included: visual impairment (n = 97), hearing impairment (n = 126), deafness (n = 38), and orthopedic impairment (n = 61). Controls without disabilities were also included. Although parental expectations were found to be higher for students with disabilities than for those without, student disability status (disabled versus nondisabled) did not contribute significantly to the ability to predict parental expectations. School performance, parent education, and race were found to similarly influence parental educational expectations for students with and without disabilities.*

Despite recent policy changes promoting higher education for individuals with disabilities, these students continue to be underrepresented in U.S. colleges and universities (but not in other postsecondary options, such as vocational training programs). Only 12% of high school graduates with disabilities currently attend college; this rate is markedly below the 54% college participation rate among high school graduates without disabilities (Fairweather & Shaver, 1990). Further, rates of college participation vary widely from one disability group to another. Young people with visual impairments (40.4%) or deafness (33.4%) attend college in relatively high numbers, whereas those with ortho-

pedic disabilities (20.1%), who are hard of hearing (19.3%), or who have other disorders (e.g., those with learning disabilities = 8.6%) attend much more rarely (Fairweather & Shaver, 1990). Although rates across groups may not be strictly comparable, such striking discrepancies nevertheless appear to indicate that young people without disabilities more often attend college than do young people with disabilities, and that people with different disabilities attend college in widely disparate numbers.

These lower rates of college participation undoubtedly result from many factors. One reason relates to academic performance. Compared to their classmates without disabilities, many stu-

dents with disabilities do not perform well in their high school classes. For some groups, such academic disparities are striking. For example, the average adolescent with deafness reads on a 4th- or 5th-grade level (Greenberg & Kusche, 1989), making academic achievement difficult. Yet academic achievement during high school is one of the main predictors of college attendance (Hossler & Stage, 1992).

Several other factors may also play a role in whether students with disabilities attend college. For example, among the general population of high school students, predictors of college attendance include parental expectations and level of education, and students' race and gender.

Large-scale surveys of high school students have shown that parental educational expectations exert a strong influence on college plans (Hossler & Stage, 1992; Sewell & Shah, 1978) and college attendance (Carpenter & Fleishman, 1987; Conklin & Dailey, 1981). Parental expectations are believed to have a reciprocal relationship with a student's performance in school. In other words, high parental expectations are believed to lead to high academic achievement, which, in turn, leads to higher parental expectations (Hossler & Stage, 1992).

Another factor with a strong impact on parental expectations (and college attendance) is parents' level of education. People who have gone to college want their children to go as well. The combination of parents' education and parents' expectations may be the best predictor of students' college plans (Hossler & Stage, 1992).

Race is also predictive of college attendance. White and Asian students are more likely to attend college than are students who are African American, Hispanic, or from other minority groups (Hossler, Braxton, & Coopersmith, 1989; Manski & Wise, 1983; Thomas, Alexander, & Eckland, 1979).

Compared to parental expectations and education or the student's academic performance or race, gender's effects on participation rates seem to have changed in recent times. Historically, greater percentages of males than females have attended college. Recent reports, however, indicate that more females than males are enrolled in college (Vesper, Hossler, & Bouse, 1991). Females also tend to get better grades in high school than

do males; and parents are likely to want their daughters to go to college more so than their sons (Hossler & Stage, 1992; Thomas et al., 1979).

Although much is known about predictors of college attendance for students without disabilities, few studies have looked at predictors for students with disabilities. Research on these predictors would provide valuable information for teachers, counselors, and other professionals working with these students. In addition, public policy initiatives would benefit from insight into predictors of college attendance, as Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112) ensures access to public institutions of higher learning for students with disabilities.

The present study is an important step in addressing these issues. Using a national sample of 8th-grade students, this study examined parental educational expectations for students with disabilities. We compared parents and their eighth graders with one of four types of disability conditions to a control sample of parents and their 8th-grade children without disabilities.

This study tested three hypotheses:

1. Given the lower college attendance by people with disabilities and the connection between college participation and parental expectations, we expected that parental educational expectations would be lower for students with disabilities than for those without.
2. Because college participation rates differ across various disability conditions, we expected that parental expectations would differ across the four groups under investigation.
3. We also expected that predictors of parental expectations might also differ between groups with and without disabilities.

METHOD

Subjects

All subjects were participants in the National Education Longitudinal Study of 1988 (NELS:88). The NELS study, described below, surveyed over 20,000 8th-grade students, ranging in age from 13 to 16 years (Ingels et al., 1990).

For this study, we chose 322 students with one of four disability conditions (and their par-

ents) from among the NELS participants:

- Visual impairment ($n = 97$; 40 males, 57 females).
- Hearing impairment ($n = 126$; 68 males, 58 females).
- Deafness ($n = 38$; 26 males, 12 females).
- Orthopedic impairment ($n = 61$; 25 males, 36 females).

Students with disabilities were compared to 322 students from the NELS sample without disabilities. Each control group student matched a student with a disability on (a) *school performance* (a composite measure of grade point average and math and reading achievement scores), (b) *parent education* (i.e., highest grade completed by either of the student's parents), (c) *race*, and (d) *gender*. These four matching variables have been found to predict college attendance in populations without disabilities (Vesper et al., 1991).

As Table 1 shows, the disability and control groups were closely matched on these four variables. Students with and without disabilities were virtually identical in school performance (even when math, reading, and grade-point average [GPA] are examined separately); the percentages of parents who had received one of three levels of education (*high school or less*, *less than 4 years of college*, and *college graduate or greater*); race (*white and Asian* and *minority*); and gender. Chronological age was the only relevant variable on which these two groups differed; students with disabilities were slightly older than the controls, $t(642) = 2.64, p < .01$.

Table 1 also shows the ways in which students with these four disability conditions differed from the larger sample of eighth graders without disabilities. Compared to the remaining sample of students without disabilities, students with visual impairments, hearing impairments, deafness, and orthopedic impairments performed lower academically. Except for the deaf group, these students had fewer parents who were college educated, and were more likely to be from minority groups. Other familial differences—such as more divorce or separation and lower family income—also characterize the groups with disabilities, especially in families of students with visual impairments (Hodapp & Krasner, 1995).

National Education Longitudinal Study

Students and parents in all groups participated in the base-year (1988) survey of the NELS, sponsored by the U.S. Department of Education. NELS employed random-selection procedures to obtain participation of 24,599 students and their parents from 1,052 schools across the United States. Excluded from the NELS sample were students attending special schools for students with disabilities and students whose impairments made it unduly difficult for them to participate (Ingels et al., 1990). McGrew, Thurlow, and Spiegel (1993) also noted the exclusion of large numbers of students with disabilities from NELS and other large data sets. Most likely to be in the excluded sample were students with more severe disabilities and students with mental retardation, learning disabilities, and severe emotional disabilities.

Although the NELS project involved questionnaires for students, parents, teachers, and school administrators, this study focused on the student and parent questionnaires. Each covered a wide range of topics, including family background, student activities in school and at home, and characteristics of the child's educational supports within the home. Students also took a battery of tests devoted to four areas: reading, mathematics, science, and history/government.

Procedures

After being contacted through their local schools, students and parents filled out their respective questionnaires. The following questions are of interest for this study.

Student Disability. The parent questionnaire included the questions: "In your opinion, does your eighth grader have any of the following problems?" and "Has your eighth grader ever received special services for any or all of the following?" For each of these questions, response choices were as follows:

- (a) Visual handicap (not correctable by glasses);
- (b) Hearing problem; (c) Deafness; (d) Speech problem; (e) Orthopedic problem (for example, club foot, absence of arm or leg, cerebral palsy, amputation, polio); (f) Other physical disability;
- (g) Specific learning problem (for example, dyslexia, or other reading, spelling, writing, or math disability); (h) Emotional problem; (i)

TABLE 1
Demographics and School Performance

Characteristic	Disability Status				Disability Group	Control Group	Total Sample of 8th Graders
	Visual	Hearing	Deafness	Orthopedic %			
Gender							
Male	41.2	60.0	68.4	41.0	49.4	49.4	48.3
Female	58.8	40.0	31.6	59.0	50.6	50.6	51.7
Race							
White/Asian	48.5	75.5	81.6	65.6	66.2	66.2	72.8
Minority	51.5	24.5	18.4	34.4	33.8	33.8	27.2
Parent education							
High school	39.2	29.4	23.7	19.7	29.8	29.8	27.5
Some college	39.2	43.7	39.5	54.1	43.8	43.8	40.8
College graduate or greater	21.6	26.9	36.8	26.2	26.4	26.4	31.7
	<i>Mean (SD)</i>						
Age ^a	14.4 (0.7)	14.5 (0.6)	14.9 (0.7)	14.5 (0.7)	14.5 (0.7)	14.4 (0.6)	14.3 (0.6)
School performance ^b	48.1 (7.0)	49.3 (7.5)	46.1 (7.4)	50.6 (7.9)	48.8 (7.5)	48.8 (7.5)	51.5 (8.3)

^a Age values refer to mean chronological age, in years. ^b School performance is a composite of standardized tests in math and reading and grade point average, scaled to a mean of 50 and standard deviation of 10.

Mental retardation; and (j) Other health problem."

A third question asked: "Is your eighth grader currently enrolled in any of the following special programs/services?" Response choices included: "Special services for orthopedically handicapped students" and "Special education services for students with learning disabilities."

Subjects were included if their parents reported they had one of the four disabilities and had ever received or were currently receiving special services for that or related problems. The *visually impaired* and *orthopedic problem* groups included students identified as having and receiving services for only the single disability condition (either visual impairment or orthopedic problem). The *hearing problem* and *deaf* groups included

students identified as also having a speech problem. The *deaf* group included students also identified as having a hearing problem. Such decisions were made because of the frequent co-occurrence of speech and hearing problems, and because deafness presupposes hearing problems.

We selected the four groups in this study because, compared to most other NELS disability categories, they are more well defined, and there are fewer controversies about appropriate definitions. In addition, the connections are well documented between these disabilities and problems in school learning.

School Performance. For each student, a school performance score was derived. This score was computed by first taking the GPA from the student's self-reported grades in English, math, science, and social studies from 6th grade for-

ward. These grades were next converted to a standardized score. School performance then became the average of (a) *standardized GPA*, (b) *standardized reading test score*, and (c) *standardized math test score*. High correlations among these three components allayed initial concerns about self-report grade bias, as well as concerns about alternative grading practices or invalid test scores for students with disabilities.

Parent Education. This variable represents the highest grade completed by either of the student's parents. The parent questionnaire included these questions: "What is the highest level of education you have completed?" and "What is the highest level of education your spouse/partner has completed?" Response choices, ranging from "8th grade or less" to "Ph.D., M.D., or other advanced degree," were collapsed into categories consistent with prior research (Fairweather & Shaver, 1990): *high school or less*, *less than 4 years of college*, and *college graduate or greater*.

Race. The race category consisted of two levels: *white and Asian* and *minority*. Small sample sizes among individual minority groups necessitated combining different racial groups for statistical analyses. White and Asian students were grouped together because of similar rates of college attendance. Minorities were Hispanics, African Americans, and Native Americans.

Parental Expectations. Parental expectations were obtained from the question: "How far in school do you expect your eighth grader to go?" Twelve response choices were available: 1—less than high school diploma; 2—GED; 3—high school graduation; 4—less than 1 year vocational, trade, or business school; 5—1 to 2 years vocational, trade, or business school; 6—2 years or more of vocational, trade, or business school; 7—less than 2 years of college; 8—2 or more years of college; 9—finish a 2-year program; 10—finish a 4- or 5-year program; 11—Master's degree or equivalent; 12—Ph.D., M.D., or other advanced degree. These categories were treated as a continuous variable.

RESULTS

In order of the study's hypotheses, we first compared parental expectations to those of the control

group—for the group with disabilities as a whole and for each specific disability. Next, we used regression analyses to examine whether predictors of parental expectations differed between groups with and without disabilities.

Comparisons of Parental Expectations

We first examined parental educational expectations in comparisons of groups with and without disabilities. Parental expectations were found to be similar for students with ($M = 8.71$, $SD = 2.68$) and without ($M = 8.41$, $SD = 2.85$) disabilities, $t(642) = 1.40$, ns. When student's age was covaried, parental expectations were significantly higher for students with disabilities, $F(1, 635) = 4.44$, $p < .05$. In contrast, then, to expectations based on college participation rates, parental educational expectations are equal or higher for students with disabilities.

But parents in each disability group did not show equivalent educational expectations compared to matched control parents. As Table 2 shows, the greatest discrepancy in parental expectations was found between the group with visual impairments and respective controls, $M = 9.05$, $SD = 2.43$, versus $M = 8.08$, $SD = 3.02$, $t(192) = 2.46$, $p < .05$.

Predictors of Parental Expectations for Students with and Without Disabilities

Predictors of parental expectations were examined in three stepwise regression analyses, one combining all groups, one each for the group with disabilities and controls. As Table 3 shows, 22% of the variance in parental expectations (all groups combined) was accounted for by the linear composite of *school performance*, *parent's level of education*, *race*, and *age*, $R^2 = .22$, $F(4, 639) = 45.21$, $p < .0001$. School performance and parent education each had positive effects on parental expectations; student's age had a negative effect. With respect to race, expectations were higher for whites and Asians than for minorities. *Disability status* (students with disabilities vs. those without disabilities), *type of disability*, and *gender* did not contribute to the equation.

The variables found to be predictive of parental expectations were examined in separate stepwise regression analyses for disability and control groups. As Table 3 shows, findings were simi-

TABLE 2
Parental Educational Expectations

<i>Disability Group Versus Control Group</i>	<i>Mean (SD)</i>	<i>n</i>
Visual impairment	9.05 (2.43)	97
Control group	8.08 (3.02)	97
Hearing impairment	8.44 (2.76)	126
Control group	8.47 (2.72)	126
Deafness	8.34 (2.80)	38
Control group	8.34 (3.14)	38
Orthopedic impairment	8.98 (2.76)	61
Control group	8.85 (2.65)	61
Combined disabled	8.71 (2.68)	322
Control group	8.41 (2.85)	322

lar for each group. *Student's age* was the only variable on which groups differed. There was a negative effect of student's age on parental expectations in the group with disabilities, whereas there was no relationship between these two variables in the group without disabilities. School performance, parental education, and race significantly predicted parental expectations in each group to similar degrees.

DISCUSSION

As one of the few large-scale examinations of parental educational expectations, this study helps explain why some students with disabilities go on to higher education, and some do not. The study compared parental expectations for students with versus without disabilities, determined whether expectations differ in different disability groups, and specified which factors affect parental expectations. As such, the study provides information important from theoretical, intervention, and policy perspectives.

Our first issue concerned parental expectations for students with and without disabilities. As Table 1 shows, the findings of this study did not support the hypothesis of higher parental ex-

pectation for students without than for students with disabilities. To the contrary, despite lower college participation rates among students with disabilities, parental expectations were found to be slightly higher for these students.

A second issue concerned the student's type of disability. Earlier research showed that students with different disabilities attend college in differing rates. For example, whereas 33.4% of students with deafness attend college, only 8.6% of students with learning disabilities attend (Fairweather & Shaver, 1990). In this regard, the group with visual impairments showed the greatest discrepancy in parental expectations versus controls. This finding is consistent with relatively high college participation rates among students who are visually impaired (40.4%), compared to students with other disability conditions.

The third issue concerned predictors of parental expectations. We found that predictors of parental expectations are generally alike for students with and without disabilities. For both groups, school performance and parent education were the strongest predictors and race the weakest predictor of parental expectations. Parents were more likely to expect their students to attend college if the students were doing well academically

TABLE 3
Predictors of Parental Expectations

<i>Predictor</i>	<i>R²</i>	<i>Change in R²</i>	<i>F</i>	<i>p</i>
<i>Disability and Control Groups (N = 644)</i>				
School performance	.15	—	113.02	<.0001
Parent education	.20	.05	79.91	<.0001
Race	.21	.01	57.37	<.0001
Age	.22	.01	45.21	<.0001
<i>Disability Group (N = 322)</i>				
School performance	.14	—	52.72	<.0001
Parent education	.19	.05	36.88	<.0001
Age	.21	.02	27.25	<.0001
Race	.22	.01	27.10	<.0001
<i>Control Group (N = 322)</i>				
School performance	.16	—	60.45	<.0001
Parent education	.21	.05	43.05	<.0001
Race	.22	.01	30.56	<.0001

and if they themselves had attended college. Expectations were higher for whites and Asians than for African Americans, Hispanics, and Native Americans. Indeed, among the variables investigated, the student's age was the only other variable found to be predictive of parental expectations, but only for the group with disabilities. Expectations were lower for students with disabilities who were older than their classmates.

In sum, parents of children with and without disabilities have similar expectations for their children's educational attainment. When the student's age was covaried (students with disabilities were slightly older than those without), parental expectations were found to be slightly higher for the group with disabilities; they were highest for the group (visually impaired) most likely to attend college. Variables affecting parental expectations were also similar in groups with and without disabilities, and the academic performance of students with disabilities was also generally compara-

ble to the sample as a whole (see Table 1).

Given these similarities in parental expectations and in student academic performance, why is there such a disparity in college attendance rates between students with and without disabilities? Compared to a college participation rate of 54% among high school graduates without disabilities, rates are only 40.4%, 19.3%, 33.4%, and 20.1% for students with visual impairments, hearing impairments, deafness, and orthopedic impairments, respectively (Fairweather & Shaver, 1990).

Undoubtedly, many factors contribute to the relatively low rates of college attendance among students with disabilities. One factor may relate to curriculum: Many times students with mild disabilities do not participate in accelerated academic courses typically afforded to students perceived to be college bound. Other factors may be related to developmental issues associated with adolescence. Adolescence, characterized by a search for a personal identity and autonomy,

might be a particularly difficult time for people with disabilities. As a result, these students may be more likely than students without disabilities to experience a lowering of their self-confidence and self-esteem; low self-esteem may lead to lower educational aspirations.

We should also note the study's limitations. Due to a partial ceiling effect on the scale of parental educational aspirations, we have been limited in our ability to identify between-group differences. An additional issue concerns sampling. The NELS sample excluded students with severe disabilities; and our study excluded students with nonsensory and nonphysical conditions (e.g., mental retardation, learning disabilities, or severe emotional disabilities).

Yet these exclusions do not diminish the significance of this study. Despite the fact that students with mild disabilities outnumber students with severe disabilities by a ratio of 10 to 1 (Neubert, Tilson, & Ianacone, 1989), the population of students with mild disabilities has received little research attention. As one of few studies to use a national sample and matched controls to examine parents and their children with mild disabilities, this study helps us to understand a variety of educational issues in the four groups examined. When available for analysis, NELS follow-up data regarding what these students did after leaving high school will further our understanding of these issues.

IMPLICATIONS FOR PRACTICE

Teachers, counselors, and other interested professionals can help eliminate barriers to college attendance met by students with disabilities by taking steps to ensure that these students are not placed into nonacademic tracks unnecessarily, and by working to improve transitional support services. Such services might also capitalize on the high parental educational aspirations found in this study. Before students with disabilities enter high school, their parents should be involved in discussions of desired educational attainment and needed services to reach these goals. Early parental involvement is considered a necessary element of a quality transitional program (Bates, 1990).

Despite the disparity in rates of college participation, parents of students with and without disabilities share similar educational aspirations for their children. In light of the many public policy changes that have taken place over the past 20 years, we need more insight into the issues concerning education for students with disabilities. Educators and other professionals would benefit from a greater understanding of predictors and barriers associated with college participation among students with disabilities. Such knowledge would assist them in ensuring that students with disabilities, like all students, can realistically choose to attend and succeed in college.

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ABOUT THE AUTHORS

LINDA L. MASINO, Post-Doctoral Fellow, UCLA Graduate School of Education and Information Studies; **ROBERT M. HODAPP** (CEC #29), Associate Professor, UCLA Graduate School of Education and Information Studies, University of California-Los Angeles.

Address correspondence and reprint requests to Robert M. Hodapp, UCLA Graduate School of Education, 405 Hilgard Avenue, Los Angeles, CA 90095-1521 (e-mail: hodapp@gse.ucla.edu).

This study was performed in partial satisfaction of the first author's Ph.D. requirements at UCLA's Graduate School of Education. We thank Bruce Baker, Connie Kasari, and Rodney Skager for their helpful comments, and Jeffery Owings and Diane Krasner for their assistance in accessing the data used in this study.

Manuscript received October 1994; revision accepted June 1995.

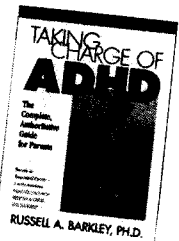
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