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## ABSTRACT

This report summarizes findings of the National Longitudinal Transition Study of Special Education Students (NLTS) in four areas: (1) the multiple dimensions of diversity and the characteristics of young people with disabilities; (2) secondary school programs, performance, and completion; (3) postschool outcomes; and (4) life profiles which provide a construct of independence. An overview of the NLTS notes the wide range of characteristics, experiences, and outcomes considered in the study which is based on parent/student telephone interviews, analysis of secondary school records, and a student school program survey. Under each of these areas, major findings are first highlighted, then each finding is explained in a one-page brief, and, finally, supporting graphs and tables provide detailed documentation. Sample findings from each of the four areas include: the majority of secondary school students with disabilities had cognitive learning problems; academic coursework dominated students' programs; there were strong gains in employment over time, so that 57 percent were competitively employed 3 to 5 years out of school; and gains in independence over time were not equally distributed across disability categories. (DB)

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## A Summary of Findings from the National Longitudinal Transition Study of Special Education Students

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December 1993

Prepared for:

The Office of Special Education Programs  
U.S. Department of Education

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SRI International under Contract 300-87-0054 with the Office of Special Education Programs,  
U.S. Department of Education.



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December 1993

Prepared for:

The Office of Special Education Programs  
U.S. Department of Education

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## THE TRANSITION EXPERIENCES OF YOUTH WITH DISABILITIES: A SUMMARY OF FINDINGS FROM THE NATIONAL LONGITUDINAL STUDY OF SPECIAL EDUCATION STUDENTS

The National Longitudinal Transition Study of Special Education Students (NLTS) began in 1987, after 2 years of design activity. The NLTS staff have produced myriad reports, papers, "statistical almanacs," and data tapes (see accompanying list). This document summarizes key findings from this extensive program of research on the experiences and outcomes of young people with disabilities nationally while they were in secondary school and in the early postschool years.

Findings are summarized as they pertain to four topics:

- The multiple dimensions of diversity: characteristics of young people with disabilities.
- Secondary school programs, performance, and completion
- Postschool outcomes
- Life profiles: a construct of independence

Recognizing that readers have different levels of interest in particular topics, summary findings for each topic have been prepared at three levels of detail:

- *A quick scan.* Materials for each of the topics are in separate sections. At the beginning of each section is a page entitled **The Facts**, a single page of the handful of "bullets" that highlight key NLTS findings about the topic.
- *Greater depth.* For more detailed study, a one-page brief has been included for each of The Facts in a section entitled **The Background**.
- *"The whole truth."* For those with the interest and time to delve into a particular area, **The Figures** present graphs and tables that describe the experiences and outcomes of youth who differ in disability, ethnic background, grade level, or other pertinent distinguishing characteristics.

## OVERVIEW OF THE NATIONAL LONGITUDINAL TRANSITION STUDY OF SPECIAL EDUCATION STUDENTS

As part of the 1983 amendments to the Education of All Handicapped Children Act (EHA), the Congress requested that the U.S. Department of Education conduct a national longitudinal study of the transition of secondary special education students to determine how they fare in terms of education, employment, and independent living. A 5-year study was mandated, which was to include youth from ages 13 to 21 who were in special education at the time they were selected and who represented all 11 federal disability categories in use at the time.

In 1984, the Office of Special Education Programs (OSEP) of the U.S. Department of Education contracted with SRI International to determine a design, develop and field test data collection instruments, and select a study sample. In April 1987, under a separate contract, SRI began the National Longitudinal Transition Study of Special Education Students (NLTS).

In the field of research on youth with disabilities, the NLTS is unique in several respects. For many years, the research base on youth with disabilities consisted largely of studies of relatively few youth who were in particular disability categories, in a few school districts or a single state, or in a specific educational placement or treatment program. It was very difficult to paint a broad picture of students' experiences from this fragmented research base. With the NLTS, findings are based on a sample that is large and nationally representative. The data presented here were collected in 1987 and 1990 for a sample of more than 8,000 youth who represent the national population of secondary special education students who were ages 13 to 21 in the 1985-86 school year. The sample permits us to estimate with fairly high precision many of the characteristics of youth with disabilities and their experiences in adolescence and early adulthood. Further, the sample is nationally representative of 1985-86 secondary special education students both as a whole and for those in each of the 11 federal disability categories separately. Therefore, for the first time we know what the transition experiences were for youth with mental retardation, for example, and how they differed from those of youth with orthopedic impairments or multiple handicaps.

The NLTS is also unusual in its longitudinal design. The students for whom data were gathered in 1987 were retained in the study so that follow-up data could be collected about them in 1990. These follow-up data enable the estimation of trends in experiences as youth age. For example, we now can describe the movement in and out of jobs and in and out of school that often characterizes youth in their early adult years.

Finally, the NLTS is extremely broad in scope. It has gathered information on a wide range of characteristics, experiences, and outcomes of youth with disabilities, including the following:

- **Individual and family characteristics** (e.g., demographics, disability-related characteristics).
- **Independent functioning** (e.g., residential independence, financial independence, functional abilities).
- **Social experiences** (e.g., belonging to school or community groups, socializing with friends).

- **School programs** (e.g., courses taken, support services provided, educational placements).
- **School characteristics and policies** (e.g., type of school attended, policies related to mainstreaming, programs available for special education students).
- **School achievement and completion** (e.g., grades received, absenteeism, dropout/graduation behaviors).
- **Employment characteristics** (e.g., rates of employment, job types and duration, wages).
- **Postsecondary education participation** in vocational schools and 2-year and 4-year colleges.
- **Services provided by the school and other sources** (e.g., job training, physical therapy, counseling).
- **Parental expectations** for youth in the areas of education, employment, and independence.

This breadth of scope provides the most comprehensive picture yet available of youth with disabilities during adolescence and early adulthood.

### Study Components

- **Parent/student telephone interviews.** In 1987, parents and, in 1990, parents and students (if they were able to respond for themselves) were administered a structured interview by telephone to obtain information on services received by the students and outcomes in the areas of employment, education, and independence.
- **Secondary school records.** As part of the 1987 data collection, local school staff abstracted school record information for students' most recent school year (either the 1986-87 or 1985-86 school year). In 1990, high school transcripts were sought for all sample students who attended secondary school after the 1986-87 school year. For some students, both school record abstracts for a single year and transcripts for more years were available. For other students, data from only the single year recorded on the school record abstract are available. For students whose school programs were not recorded on transcripts, school program content forms were completed by teachers who were familiar with students' programs. These were sought in 1990 for the most recent school year for all students who had been in secondary school at all since the 1986-87 school year.
- **Student school program survey.** For all students still in school in the 1990-91 school year and for those students leaving school in the 1988-89 and 1989-90 school years who were classified as learning disabled, speech impaired, seriously emotionally disturbed, or mildly/moderately mentally retarded, teachers were surveyed regarding their performance expectations for students and more detailed aspects of those students' school programs. School background information also was sought with a brief mailed questionnaire administered to principals in 1987 and 1990.

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**Reports and Papers  
Based on the NLTS**

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**Papers available:**

- "What Makes a Difference? Influences on Postschool Outcomes of Youth with Disabilities: The Third Comprehensive Report from the National Longitudinal Transition Study of Special Education Students." M. Wagner, J. Blackorby, R. Cameto, and L. Newman, 1993. \$30.00. [Order No. 178]
- "Beyond the Report Card: The Multiple Dimensions of Secondary School Performance of Students with Disabilities." M. Wagner, J. Blackorby, and K. Hebbeler, 1993. \$25.00. [Order No. 176]
- "The Secondary School Programs of Students with Disabilities." Edited by M. Wagner, 1993. \$30.00. [Order No. 175]
- "Services for Youth with Disabilities After Secondary School: A Special Topic Report from the National Longitudinal Transition Study of Special Education Students." C. Marder, M. Wechsler, and K. Valdés, 1993. \$15.00. [Order No. 177]
- "The National Longitudinal Transition Study of Special Education Students: Report on Sample Design, Wave 2 (1990)." H. Javitz and M. Wagner, 1993. \$15.00. [Order No. 179]
- "What Happens Next? Trends in Postschool Outcomes of Youth with Disabilities: The Second Comprehensive Report from the National Longitudinal Transition Study of Special Education Students." M. Wagner, R. D'Amico, C. Marder, L. Newman, and J. Blackorby, 1992. 328 pp. \$32.00. [Order No. 166]
- "Youth Classified as Seriously Emotionally Disturbed: How Well Are They Being Served?" C. Marder, 1992. 25 pp. \$10.00. [Order No. 158]
- "Hispanic Secondary School Students with Disabilities: How Are They Doing?" L. Newman, 1992. 35 pp. \$10.00. [Order No. 157]
- "Being Female—A Secondary Disability? Gender Differences in the Transition Experiences of Young People with Disabilities." M. Wagner, 1992. 50 pp. \$10.00. [Order No. 156]
- "The Early Work Experiences of Youth with Disabilities: Trends in Employment Rates and Job Characteristics." R. D'Amico and C. Marder, 1991. 56 pp. \$15.00. [Order No. 147]
- "Dropouts with Disabilities: What Do We Know? What Can We Do?" M. Wagner, 1991. 80 pp. \$15.00. [Order No. 146]
- "How Well Are Youth with Disabilities Really Doing? A Comparison of Youth with Disabilities and Youth in General." C. Marder, March 1992. 92 pp. \$15.00. [Order No. 144]
- "Youth with Disabilities: How Are They Doing? The First Comprehensive Report from the National Longitudinal Transition Study of Special Education Students." M. Wagner et al. 1991. 600 pp. \$40.00. [Order No. 135]
- "Parents' Reports of Students' Involvement with Vocational Rehabilitation Agencies in the First Years After Secondary School." M. Wagner and R. Cox, 1991. 50 pp. \$12.00. [Order No. 134]
- "The Relationship Between Social Activities and School Performance for Secondary Students with Learning Disabilities." L. Newman, 1991. 52 pp. \$10.00. [Order No. 133]

- "The Benefits Associated with Secondary Vocational Education for Young People with Disabilities." M. Wagner, 1991. 66 pp. \$10.00. [Order No. 132]
- "The National Longitudinal Transition Study of Special Education Students: Report on Sample Design and Limitations, Wave 1 (1987)." H. Javitz and M. Wagner, 1990. 71 pp. \$18.00. [Order No. 131]
- "The National Longitudinal Transition Study of Special Education Students: Report on Procedures for the First Wave of Data Collection (1987)." M. Wagner, L. Newman, and D. Shaver, 1989 (includes data collection instruments). 280 pp. \$25.00. [Order No. 126]
- "The National Longitudinal Transition Study of Special Education Students: Report on Procedures for the Second Wave of Data Collection (1990)." C. Marder, K. Habina, and N. Prince, 1992 (includes data collection instruments). 220 pp. \$20.00. [Order No. 165]
- "The School Programs and School Performance of Secondary Students Classified as Learning Disabled: Findings from the National Longitudinal Transition Study of Special Education Students." M. Wagner, 1990. 27 pp. \$10.00 [Order No. 125]

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**The Multiple Dimensions of Diversity:  
Characteristics of Young People with  
Disabilities**

## The Facts

- *The majority of secondary school students with disabilities had cognitive learning problems. More than half were classified as learning disabled, and almost one-fourth were classified as having mental retardation. One in 10 students had serious emotional disturbances. Physical and sensory impairments were low-incidence disabilities.*
- *Youth with disabilities differed from their peers in the general population in ways other than having a disability, ways that had implications for the outcomes they achieved. They were more likely than typical students to be male, poor, African American, and from single-parent households that did not reside in suburban areas. Except for gender, these differences describe youth in each disability category.*
- *Negative outcomes were associated with demographic factors that were disproportionate among youth with disabilities, both in school and in the early postschool years.*
- *Disability and aspects of economic disadvantage combined to create significant functional deficits for secondary school students in special education. The average tested IQ of youth with disabilities was 79. There was substantial variation in ability level among youth who shared the same disability classification. With the exception of youth with mental retardation, youth in every category spanned the ability range from low to high IQ. NLTS measures of self-care abilities, functional mental skills, and community living skills showed a sizable minority of youth whose parents reported that they had some difficulty with these kinds of tasks.*

## The Background

***The majority of secondary school students with disabilities had cognitive learning problems.***

More than 55% of secondary school students in special education were classified as *learning disabled*. About three-fourths of these students were reported by parents as having experienced difficulties with their disabilities in elementary school; 11% were reported to have a secondary disability, half of which were speech impairments.

An additional 24% of students were classified as having *mental retardation*, one-third of them identified as such at birth. More than one-fourth (28%) were reported to have a secondary disability, most often a speech impairment (19%).

One in 10 secondary school students in special education were classified as *seriously emotionally disturbed*, students whose emotional disabilities interfered significantly with their ability to benefit from education. The age at onset of this disability was later than any other--16% did not begin having trouble with their disability until adolescence. One-fourth of these students also had secondary disabilities: 8% were reported to have mental retardation, 3% had speech impairments, and the remainder were largely reported to have learning disabilities.

Being classified as *speech impaired* for special education purposes was fairly uncommon at the secondary school level (3% of students in special education were so classified), unlike in elementary school, where speech impaired is the largest single disability category (41%). Six in 10 secondary school students classified as speech impaired began having trouble with that disability in elementary school; 14% had secondary disabilities, often learning disabilities.

*Hearing impairments* characterized fewer than 2% of secondary school students with disabilities--about half classified as deaf and half as hard of hearing. About one-third also were reported to have secondary speech impairments stemming from their hearing loss. About 9% also had cognitive difficulties resulting from accompanying mental retardation. The majority of these students had experienced hearing loss since before entering school.

Students classified as *visually impaired* were fewer than 1% of secondary school students in special education. Two-thirds of them had been visually impaired from birth; 28% had secondary disabilities, including 12% who also had mental retardation.

*Orthopedic and other health impairments* each characterized about 1.5% of secondary school students in special education. More than half of youth with orthopedic impairments had had them since birth, whereas almost half of other health impaired youth began having their health difficulties in elementary school. About one-third of these students had secondary disabilities; 16% of those with orthopedic impairments and 9% of those with other health impairments also had mental retardation.

The category of *multiple handicaps* included almost 2% of secondary school students in special education. *Deaf/blind* students were fewer than one-tenth of 1%. Mental retardation was a common component of students' multiple disabilities, reported for about half of students in these categories. Most had experienced their disabilities from birth.

***Youth with disabilities differed from their peers in the general population in ways other than having a disability.***

Secondary school students with disabilities, compared with the general population of students of similar ages, were disproportionately:

- *Male.* Whereas genders are about equally represented in the general student population, among secondary school students in special education, males outnumbered females by about 2 to 1. Males were about three-fourths of students classified as learning disabled or seriously emotionally disturbed, but they were about 55% or fewer of students with sensory, orthopedic, or health impairments.
- *Poor.* In 1986, about 4 in 10 students in the general population came from households with annual incomes of less than \$25,000, compared with 68% of secondary school students with disabilities. More than one-third of typical students came from households making more than \$50,000 per year; only 15% of students with disabilities did so. Poverty was about equally represented among all disability groups. Low educational levels among heads of households may explain part of this difference in income. About 22% of typical students had heads of households that were not high school graduates, compared with 41% of secondary school students with disabilities.
- *African American.* In the general population of students, 12% were African American. Almost twice as many secondary school students with disabilities were African American. This pattern occurred about equally in all disability categories.
- *From single-parent households.* At the time they were secondary school students, one-fourth of youth in the general population were living in single-parent households; 37% of youth with disabilities had a single parent.
- *Not living in suburban areas.* In contrast to both rural and urban areas, suburban communities often benefit from greater public resources, lower residential mobility, and less poverty. In the general population, 48% of students lived in suburban areas, whereas only 34% of secondary school students with disabilities did so.

***Negative influences on outcomes were associated with demographic factors.***

During secondary school, poorer school performance was noted for students with disabilities that were male, African American, or from low-income or single-parent households.

For example, controlling for other differences between them, male students with disabilities were significantly more likely than females to receive failing grades in school and to drop out. Similarly, African American students were significantly more likely than their white peers to be absent from school and to receive failing grades. Significantly higher absenteeism also was noted for students from low-income and from single-parent households, independent of other differences between students.

The effects of these factors separately understate their actual influence because these demographic factors often clustered together. For example, 62% of students with disabilities who were poor also came from single parent households, making them subject to the detrimental effects on school performance of both factors.

Influences of demographic factors on postschool outcomes also were apparent. Controlling for other differences, African American youth with disabilities were significantly less likely than white youth to find competitive jobs. When they did work, they earned significantly less than white workers. They also were significantly less likely to be living independently and to be fully participating in the community (i.e., being productively engaged outside the home, residentially independent, and socially involved).

Similarly, students from low-income households were significantly less likely to have enrolled in either colleges or postsecondary vocational programs after high school. Although they found jobs at about the same rate as wealthier peers, their jobs paid significantly less. Because poor youth with disabilities were not upgrading their skills through postsecondary education and were not well paid for the jobs they found, economic disadvantage is likely to continue for these young people.

Full community participation also was less common for poor youth than for those from wealthier households.

***Disability and aspects of economic disadvantage combined to create significant functional deficits for secondary school students in special education.***

The average tested IQ of secondary school students with disabilities was 79. About one-fifth had IQs around the mean (91 to 110), while 4% had IQs above average (above 110). In contrast, more than one-third had IQs below 75. Average IQs ranged from 50 for students with multiple impairments, to 60 for those with mental retardation, to the mid 70s for those with orthopedic or other health impairments, to the mid 80s for youth with learning, emotional, or visual impairments, to 93 for youth who were deaf. At least 1 in 8 students in each disability category had tested IQs below 75. Among youth with speech, orthopedic, or other health impairments, about one-third of students had IQs in this range.

The NLTS asked parents to report how well their children with disabilities could perform three basic self-care tasks on their own, without help: dressing themselves, feeding themselves, and getting around outside the house, like to a nearby park. Overall, 14% of youth had some trouble with at least one of these tasks. Even among categories of disability not generally associated with deficits in such basic skills, some youth had at least some problem, including 4% of youth with learning disabilities, 6% of those with serious emotional disturbances, and 8% of those who had speech impairments or who were hard of hearing. Almost half of youth with visual impairments had difficulty with these tasks, as did 58% of those with orthopedic impairments, 65% of those with multiple impairments, and almost 8 of 10 of those who were deaf/blind.

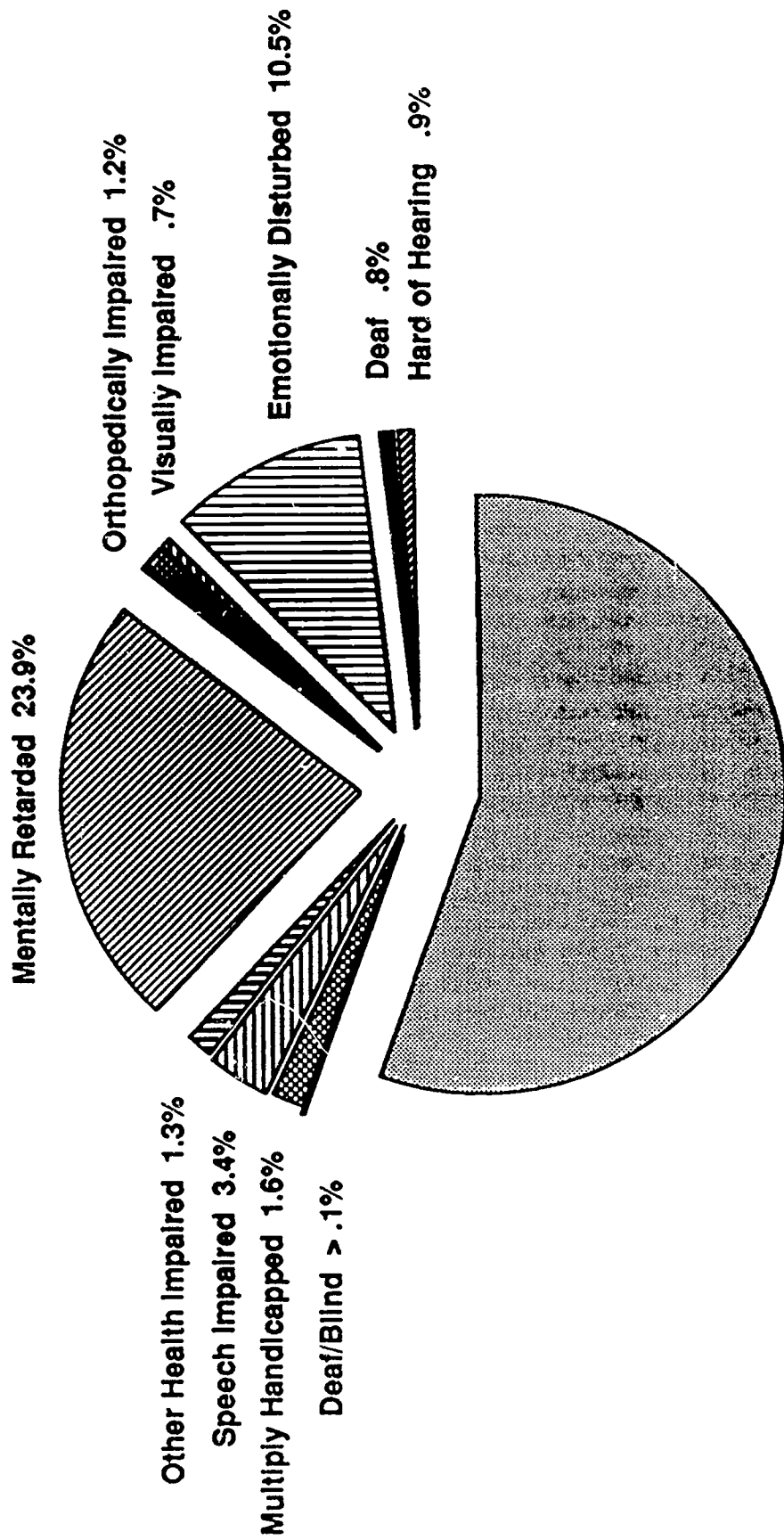
The NLTS also asked parents to report how well their children with disabilities could perform four applications of basic mental functions to daily life tasks: reading common signs, counting change, telling time on an analog clock, and looking up telephone numbers and using the phone. These were much more difficult tasks for youth; 45% had some difficulty with at least one of them, ranging from 31% of youth with speech impairments and 34% of those with learning disabilities to half of those with orthopedic impairments, two-thirds of those with mental retardation, and about 90% of those with multiple handicaps.

Parents also reported how well youth could perform four tasks involving functioning in the community: using community resources such as a swimming pool or library, buying their own clothes in a store, arranging a plane or train trip out of town, and using public transportation. Again, about 4 of 10 youth had some difficulty with at least one of these tasks. Most youth with learning, speech, or emotional disturbances could do these things (between one-fourth and one-third had at least some trouble), but about 60% of youth with sensory or other health impairments had some difficulty, as did about two-thirds of those with orthopedic impairments and the large majority of those with multiple disabilities.

These findings demonstrate that these aspects of functioning vary widely within disability categories--some youth in each category did well and some did poorly on each of these functional measures.

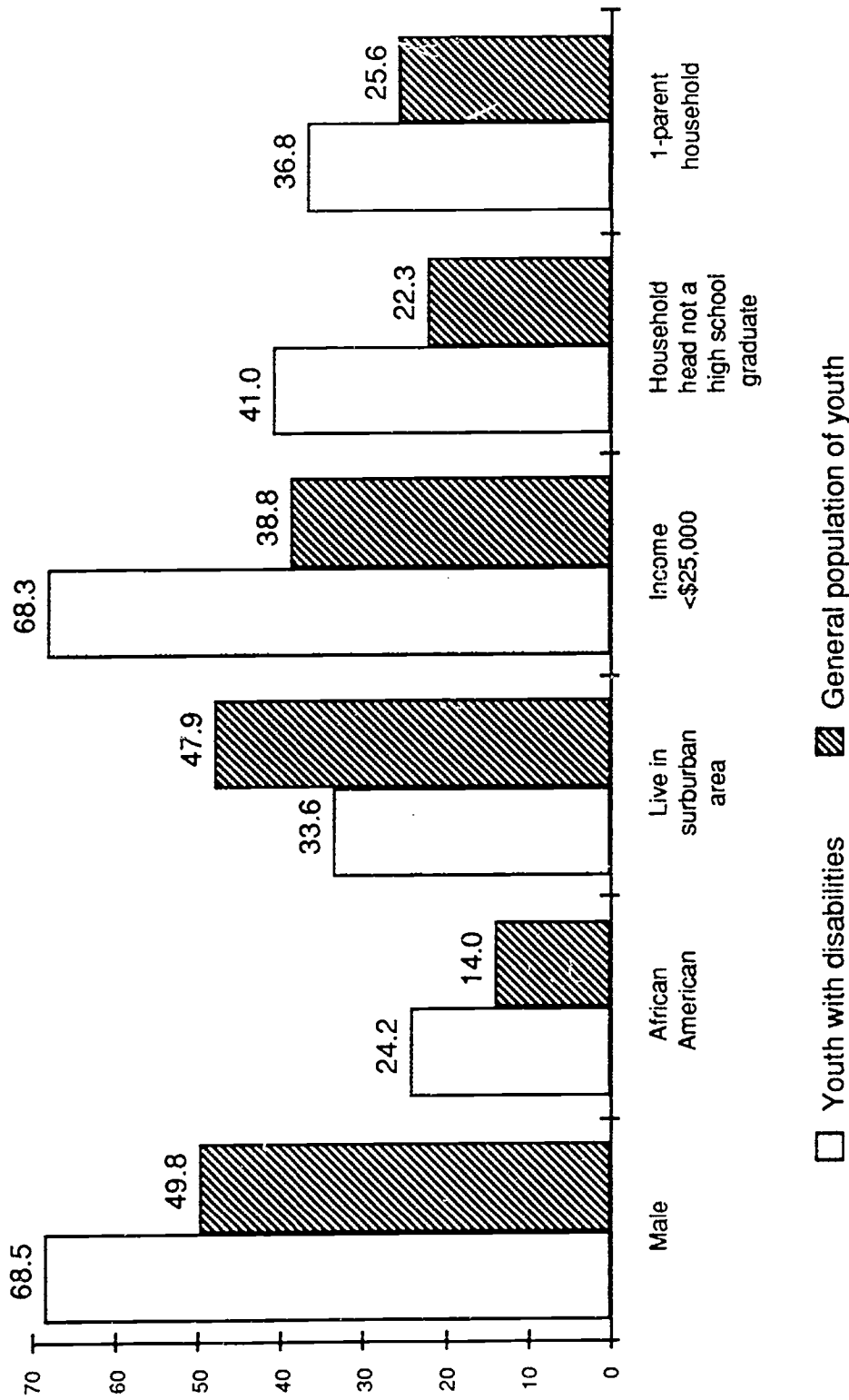
## **The Figures**

# PRIMARY DISABILITY CATEGORY OF SECONDARY SPECIAL EDUCATION STUDENTS REPORTED BY THE NLTS



Learning Disabled 55.7%





## DEMOGRAPHIC DIFFERENCES BETWEEN YOUTH WITH DISABILITIES AND THE GENERAL POPULATION OF YOUTH

# DEMOGRAPHIC CHARACTERISTICS OF YOUTH WITH DISABILITIES

Percentage of Youth with Disabilities Who Are/Have:

Disability Category	Male	Minority	Family Income	
			Less Than \$25,000	Family Head Not High School Graduate
All conditions	68.5	35.0	68.3	41.0
Learning disabled	73.4	32.8	65.4	37.8
Emotionally disturbed	76.4	32.9	70.3	43.7
Mentally retarded	58.0	39.0	74.6	49.4
Speech impaired	59.5	45.7	70.7	46.1
Visually impaired	55.6	36.4	66.4	36.6
Deaf	54.5	37.3	66.1	33.6
Hard of hearing	52.0	36.6	64.6	36.1
Orthopedically impaired	54.2	36.9	67.2	32.5
Other health impaired	56.0	45.8	69.1	35.6
Multiply handicapped	65.4	34.4	72.7	32.4
Deaf/blind	49.5	33.0	66.2	38.5

## THE INFLUENCE OF DEMOGRAPHIC CHARACTERISTICS ON OUTCOMES<sup>1</sup> OF YOUTH WITH DISABILITIES

Outcomes	Being Male	Being African American	Low Household Income	Single-Parent Household
<b>In School</b>				
Average days absent <sup>2</sup>		+‡	+**	+*
Failed courses <sup>2</sup>	+*	+**		
Dropped out	+**		+*	
<b>Postschool</b>				
Attended college			-***	+*
Attended vocational program			-‡	
Competitively employed		-**		
Total compensation	+***	-‡	-*	
Residential independence	-*	-‡		
Full community participation		-*	-*	

‡ p<.10

\* p<.05

\*\* p<.01

\*\*\* p<.001

Note: Plus denotes positive relationship; minus denotes negative relationship.

<sup>1</sup> Relationships statistically control for differences in disability, school programs, and other youth experiences and behaviors.

<sup>2</sup> Related to outcome at any grade level, 9 through 12.

# IQ LEVELS OF YOUTH WITH DISABILITIES

Disability Category	IQ Level				Mean IQ	Sample Size
	< 75	75-90	91-110	>110		
All disabled youth	33.9	41.0	21.4	3.7	79.3	4,383
Learning disabled	13.1	52.8	29.1	5.0	87.1	748
Emotionally disturbed	16.6	45.4	33.4	4.6	86.4	427
Mentally retarded	80.4	18.5	1.0	0.0	60.2	803
Speech impaired	30.3	45.8	19.4	4.4	80.8	212
Visually impaired	19.7	30.2	27.9	22.1	86.8	465
Deaf	14.1	27.6	41.9	16.3	93.0	468
Hard of hearing	15.1	39.1	37.1	8.7	89.1	338
Orthopedically impaired	34.3	43.5	18.8	3.4	77.2	355
Other health impaired	35.5	32.2	26.0	6.3	77.9	143
Multiply handicapped	73.8	19.4	4.5	2.3	49.8	396
Deaf/blind	52.7	34.0	8.9	4.4	63.7	28

Source: Students' school records

# FUNCTIONAL ABILITIES, BY DISABILITY CATEGORY

Percentage of Youth with Parents Reporting:

Disability Category	Percentage of Youth with Parents Reporting:		
	High* Self-Care Skills	High† Functional Mental Skills	High‡ Community Living Skills
<b>All conditions</b>	<b>86.4</b>	<b>56.9</b>	<b>61.4</b>
<b>Learning disabled</b>	<b>95.5</b>	<b>66.0</b>	<b>74.2</b>
<b>Emotionally disturbed</b>	<b>94.1</b>	<b>65.3</b>	<b>66.9</b>
<b>Speech impaired</b>	<b>91.8</b>	<b>68.9</b>	<b>67.3</b>
<b>Mentally retarded</b>	<b>67.4</b>	<b>32.8</b>	<b>29.4</b>
<b>Visually impaired</b>	<b>51.6</b>	<b>31.8</b>	<b>41.2</b>
<b>Deaf</b>	<b>83.4</b>	<b>44.3</b>	<b>43.4</b>
<b>Hard of hearing</b>	<b>92.3</b>	<b>60.7</b>	<b>45.8</b>
<b>Orthopedically impaired</b>	<b>42.3</b>	<b>50.5</b>	<b>32.5</b>
<b>Other health impaired</b>	<b>65.3</b>	<b>57.3</b>	<b>41.2</b>
<b>Multiply handicapped</b>	<b>34.5</b>	<b>12.8</b>	<b>21.3</b>
<b>Deaf/blind</b>	<b>21.0</b>	<b>6.8</b>	<b>13.2</b>

\* Skills include dressing oneself, feeding oneself, and getting around outside the home. Scale ranges from 3 to 12. High is 12.

† Skills include counting change, reading common signs, telling time on an analog clock, and looking up telephone numbers and using the phone. Scale ranges from 4 to 16. High is 15 or 16.

‡ Skills include using public transportation, buying clothes, arranging a trip out of town, and using community resources, such as a swimming pool and/or library. Scale ranges from 4 to 16. High is 15 or 16.

## **Secondary School Programs, Performance, and Completion**

## The Facts

- *More than 90% of students with disabilities attended regular secondary schools.* Special school attendance was more common for students with sensory or multiple impairments.

**Note:** the following facts refer to the experiences of students with disabilities in regular secondary schools.

- *Academic coursework dominated students' programs, particularly in 9th and 10th grades.* Overall, students with disabilities earned an average of 12 academic credits over 4 grade levels, or 55% of their total of 22 credits.
- *Most students with disabilities took some vocational education in high school, although only about one-third took a concentration of vocational classes (four or more courses in a single skill area), and almost 1 in 4 students participated in work experience programs.*
- *Secondary school students with disabilities spent the majority of their time in regular education classrooms.* As a group, students with disabilities averaged 70% of their classes in regular education settings. This ranged from 87% of time class for visually impaired students to 32% of class time for multiply handicapped students.
- *The majority of students with disabilities received some type of support service(s) from or through their secondary schools.* However, only a minority of students were provided any particular service. Even among students with disabilities for whom a particular service would be most relevant (e.g., speech therapy for those with speech impairments), only a minority received that service from or through their schools.
- *Transition planning was done for a large majority of students, although not all plans were written.* School personnel generally were included in planning, but service providers were not. Transition goals emphasized employment, with postsecondary education being a goal for a minority of students, except for those with sensory impairments.
- *A sizable minority of students had markedly poor school performance.* Although students missed an average of 13 days of school per year and their grade point average was 2.3, 19% were absent 20 or more days per year, and two-thirds failed a course at some point in their 4 years of school. These were disproportionately students classified as seriously emotionally disturbed or learning disabled.
- *A disproportionate share of students with disabilities dropped out of school.* Overall, about 38% of students with disabilities who left school did so by dropping out (8% in middle school, 30% in high school), a higher rate than for students in the general population. Dropout rates were especially high for youth with serious emotional disturbances, learning disabilities, mental retardation, and other health impairments.
- *Significant influences on course failure* included reading below grade level, missing school, experiencing school failure previously, and performing poorly on school-related tasks. Students who attended large schools, had parents who were less involved in supporting them educationally, did not belong to school or community groups, and saw friends often outside of school also were significantly more likely to receive failing grades. The likelihood of failure also was higher among students who spent more time in regular education academic classes and who had not participated in work experience programs. Vocational education and work experience programs both were related to lower probabilities of dropping out.

## **The Background**

***The vast majority of students with disabilities attended regular secondary schools.***

An important distinguishing feature of a student's educational program is the type of school he or she attends. NLTS data indicate that the vast majority of secondary students with disabilities attended regular schools. Within these regular schools, students in special education constituted between 8% and 10% of the student population.

Eight percent of secondary school students with disabilities attended special schools that served only students with disabilities. For youth in most disability categories, fewer than 1 in 5 students attended a special school, and the rate was less than 2% for students with learning disabilities. However for youth with hearing, visual, or multiple impairments, enrollment in special schools was considerably more common. More than one-third of youth who had visual impairments (35%) or multiple handicaps (41%) attended special schools. Among students who were classified as deaf, 63% were enrolled in special schools. Virtually all students who were deaf/blind (94%) also were special school students.

Most special school students (more than 8 in 10) attended day schools and lived at home with parents. Among special school students who were deaf, 15% attended residential schools, as did 11% of special school students with visual impairments and 8% of those with multiple handicaps.

Special school students differed from regular school students in the same disability categories in that special school students were older on average, more likely to be from low-income families, less likely to be assigned to a specific grade level, and generally scored lower on measures of self-care skills and functional mental skills. Among those with visual impairments, special school students also were more likely to be completely blind, rather than partially sighted. There were no significant differences based on students' ethnicity.

Most special school students attended schools that served all grades or were ungraded, and that were smaller than regular secondary schools.

Special school students were more likely than regular school students to have participated in vocational courses and less likely to have taken academic courses.

Perhaps reflecting their generally more severe disabilities, special school students were more likely than regular school students with similar kinds of disabilities to have received personal counseling or therapy, occupational therapy or life skills training, or physical therapy/mobility training from or through their schools. Students in special schools averaged a greater number of such services per student than did regular school students.



## ***Academic coursework dominated students' programs in regular secondary schools.***

Virtually all students with disabilities took at least one academic course during each of their 4 years in regular high schools. Academic courses accounted for more than half of the credits earned each year in high school. Requirements for high school graduation vary by state, but generally states require students to have a total of 11 or 12 credits in academic subjects, a requirement met by students with disabilities as a group. Students with disabilities who had been in high school for 4 grades had accumulated 12 credits in academic subjects, fewer academic credits than their nondisabled peers, who accumulated 15 academic credits.

Students with disabilities earned fewer academic credits each successive year in high school. This was true for students in all disability categories and with different demographic characteristics. Their experience with vocational courses was the opposite; students earned more vocational credits in 12th grade than in 9th grade.

Students with visual impairments earned the most academic credits cumulatively, followed by those with hearing, speech, or orthopedic impairments, the disability categories that also had significantly higher rates of students continuing on to postsecondary education. Youth with mental retardation, multiple handicaps, or serious emotional disabilities earned the fewest academic credits.

Especially during the early grades, students' core group of courses included English, mathematics, social studies, and science. Very few students enrolled in courses often described as "college prep," such as foreign language and advanced math. Independent of other differences between them, students who took foreign language or advanced math classes were significantly more likely to continue on to postsecondary school than students who did not.

High school students with disabilities received most of their academic instruction in regular education classes. Students with visual impairments earned the most regular academic credits and the fewest special education academic credits. Students classified as mentally retarded or multiply handicapped earned significantly more special education academic credits than regular academic credits. Controlling for other differences between them, students who spent more of their time in regular education academic classes were significantly more likely to receive failing grades than students who spent less time there.

Unlike students assigned to grade levels, students not assigned to grade levels spent most of their days in special education settings. Students not at grade level who were classified as multiply handicapped or mentally retarded were the least likely to be receiving academic instruction.

### ***Most students with disabilities took vocational education in high school.***

Virtually all students with disabilities were exposed to vocational instruction at some point during their high school careers. For many students with disabilities, their experience with vocational education began in their freshman year: two-thirds of students with disabilities took at least one vocational course in 9th grade. This number increased with each successive year of secondary school. By 12th grade, 89% of students were taking a vocational education class.

Vocational education can be either occupational, with course content that involves specific job-related skills, or prevocational, with course content that focuses on more general job-readiness skills and career awareness. Many more students participated in occupational vocational education than prevocational education. Cumulatively over 4 years, 53% of youth with disabilities took prevocational classes, whereas 98% took occupationally specific vocational education classes. Students with disabilities earned 6 times as many credits in occupational vocational education (4.5) as they did in prevocational education (.7). The most common areas of study were trade and industry, technical education, and office occupations.

Students with learning disabilities took courses in greater numbers and earned more credits than peers in other disability categories in occupational vocational education in general and in trade and industry classes in particular. Students with mental retardation were among the most likely to take prevocational education, agriculture, health occupations, and home economics, but were among the least likely to take courses in office occupations and technical education. On the other hand, students with visual impairments, hard of hearing students, deaf students, and students with orthopedic or other health impairments were most likely to enroll in business and office occupations and technical education.

Some contend that students with a coherent set of job-related skills gained from taking a series of related classes have an advantage in the postschool labor market. NLTS data suggest that, cumulatively, 35% of students with disabilities took a concentration of vocational training during their high school careers--i.e., four or more classes in a particular skill area. This ranged from 40% for students with learning disabilities to 16% for students with multiple handicaps.

Although young women with disabilities were as likely as young men to take vocational education in general, they were significantly less likely to take occupational training in the early grades and to take a concentration of courses in a particular skill area. Similarly, African American students were less likely to take occupational vocational education early in their high school careers and to take a concentration of courses than were white students.

More than one-third of students with disabilities participated in work experience programs during high school. Students with mental retardation or multiple handicaps were more likely than peers with speech or visual impairments, those with emotional disturbances, or those who were hard of hearing to receive this kind of training.

***Overall, students with disabilities spent the majority of their time in secondary school in regular education classrooms.***

In regular secondary schools in the late 1980s, inclusion in regular education was a reality for the majority of students with disabilities. Only 3% of students with disabilities spent all of their time in special education classes; 21% were fully included in regular education classes for all of their coursework. As a group, students with disabilities spent 70% of their time in secondary school in regular education classes.

Students with visual or speech impairments spent the most time in regular education (87% and 86%, respectively). Students with multiple impairments spent the least time in regular education classes (an average of 32% of their time).

Substantial differences in the amount of time in regular education were found even for students with the same disability classification. For example, 20% of students with learning disabilities spent all of their class time in regular education courses; nearly the same percentage spent less than half their time there.

Half of the students with visual impairments and two-thirds of those with speech impairments who had been in special education in middle school were never enrolled in a special education class throughout high school. Conversely, sizable percentages of students with some disabilities spent very little time in regular education classrooms. Most notably, 55% of students with multiple impairments spent one-quarter or less of their time in regular education classes.

Both African American and Hispanic students spent less time in regular education classes than their white peers. Students from higher-income families spent substantially more time in regular education courses.

Throughout the 4 years of high school, youth with disabilities were consistently more likely to receive their core academic instruction in a regular education setting than in special education classes. Over their secondary school careers, 88% of students with disabilities spent some time in regular education classes for academic subjects; about 70% did so at any given grade level. By the end of high school, youth with disabilities had accumulated 7 regular education academic credits, compared with 5 special education academic credits.

Vocational education classes were even more likely to occur in regular education settings. Over the 4 years of high school, 93% of students received vocational instruction in a regular education setting; only 28% received vocational instruction in a special education setting.

***The majority of students with disabilities received some type of support service(s) from or through their regular secondary schools.***

The majority of students with disabilities in regular secondary schools received some type of support service(s) during secondary school. Overall, students with hearing impairments and multiple handicaps received the most services and students with milder disabilities received the fewest support services.

Increasing numbers of students received services as they progressed through the grades (67% to 81% from 9th through 12th grade). This was especially true for students with the majority of their classes in regular education (63% to 94% from 9th through 12th grade).

Life skills training (which included home economics courses) was the service most likely to be provided to students with disabilities. An increase from 25% to 43% was seen for students from 9th through 12th grade. Students with multiple handicaps and mental retardation were more likely than students with other disabilities to receive life skills training.

Tutoring increased dramatically, doubling between 11th and 12th grade for most disability categories. This service was more likely to be provided to students with more regular education classes.

Physical therapy, personal counseling, speech therapy, and reader and interpreter services were provided to fewer than 20% of students with disabilities, overall. The support services that addressed the needs of particular disability groups were provided more often to those categories of students. For example, over the four grade levels of high school, physical therapy was provided to between 31% and 42% of students with physical disabilities, and personal counseling was provided to between 34% and 39% of students with emotional disturbances.

Students not assigned to grade levels were more likely to receive support services than students assigned to grades. The support services most likely to be provided to these students were life skills training (61%), speech therapy (53%), personal counseling (29%), and physical therapy (16%).

Females were more likely than males to receive support services by a 16 to 25 percentage point difference in grades 9 to 12. This was particularly true for life skills training, speech and language therapy, and personal counseling in 12th grade.

***Transition planning was done for a large majority of students in regular secondary schools.***

Information on transition planning is from 1990, before the enactment of legislation mandating transition services (IDEA, P.L. 101-476). Thus, transition services received by students in the study should not be viewed as the response of schools to that mandate.

In 1990, transition planning was a fairly informal process. Virtually all regular secondary schools attended by students with disabilities set goals for those students for outcomes beyond graduation. However, fewer students actually had transition plans (78% of 12th-graders and 87% of students not assigned to grades), and fewer still had written plans (44% of 12th-graders and 67% of students not assigned to grades).

Students with emotional disturbances were the least likely students with disabilities to have transition planning done for them by their schools. This is the same group that had high arrest rates, low postsecondary school attendance rates, and a pattern of job instability as young adults.

Competitive employment was the most typical postschool goal for students assigned to grade levels (56%). Students with learning disabilities, emotional disturbances, and mental retardation were more likely than students with other disabilities to have a goal of competitive employment. Males were more likely than females to have a goal of competitive employment (61% vs. 46%), because of the overrepresentation of males in these disability categories.

For students not assigned to grade levels, supported employment was the most typical postschool goal (52%). One-third of these students had a goal of sheltered employment.

College was the goal for 23% of students assigned to grade levels, and postsecondary vocational training was the goal for 28% of these students. Students with hearing impairments were the most likely to have these goals (43% and 37%, respectively).

The transition planning process for students with disabilities involved primarily school personnel, with special education teachers being included most frequently. Adult service providers were not often involved. Vocational Rehabilitation (VR) counselors were involved with 26% of students assigned to grade levels and 37% of those not assigned to grades, the most frequently involved adult service agency.

VR counselors were the most likely organization to be contacted by the schools on behalf of students (64%), particularly those with mental retardation or sensory or physical impairments. Colleges and postsecondary vocational training programs each were contacted for about one-third of 12th-graders with disabilities. Additional service needs were less likely to be addressed. For example, mental health agencies were contacted for only 7% of youth with disabilities; none of those with serious emotional disturbances had contacts made with mental health agencies on their behalf by their schools.

***A sizable minority of students had markedly poor school performance.***

Students with disabilities in regular schools missed about 3 weeks of school each year. Although absenteeism was relatively constant across the 4 years of secondary school, nearly one-quarter of students with disabilities were absent 4 or more weeks during a given school year, a higher rate than for students in the general population.

Students with serious emotional disturbances or orthopedic or other health impairments missed more school than their peers in most other disability categories. On the other hand, students with sensory or speech impairments typically missed less school than students in other categories.

Almost 7% of students with disabilities in regular secondary schools and 55% of those in special schools did not receive course grades in a given year; students with more severe disabilities and lower functional skills were more likely not to receive grades.

Students with disabilities in regular schools who earned grades had a GPA of 2.3 over the 4 years of secondary school, marginally below the 2.6 GPA for the general population. GPAs for students with disabilities increased marginally over the course of secondary school. Almost two-thirds of students with disabilities who stayed in school for 4 years failed at least one course in their high school careers. Course failure tended to occur early in secondary school, with the number of students who failed a class decreasing from 43% during 9th grade to 23% during 12th grade. Performance improvements over the grade levels were in part due to the dropping out of less successful students, leaving a more successful cohort of students in each succeeding year. Also, students took fewer academic classes and more vocational classes in the later grades; grades tended to be higher for vocational classes.

Students had better grades in special education than in regular education classes (GPA of 2.5 vs. 2.3). More than half of students with disabilities (58%) who took regular education classes failed one or more of them over four grade levels compared with a 15% failure rate for students who took special education classes.

Students classified as deaf or orthopedically impaired consistently earned the highest GPAs and had among the lowest course failure rates, whereas students with learning disabilities or emotional disturbances tended to earn lower GPAs and failed courses more often.

Controlling for other factors, several school-related experiences were associated with absenteeism and school failure. Absenteeism or failure in a previous grade level were among the strongest predictors of current absenteeism or failure. Students who had reading abilities below grade level and performed poorly on school related tasks also were more likely to fail courses. Having parents who were less involved in school, not belonging to school or community groups, and seeing friends often outside of school also were related to poorer school performance. Further, students who attended larger schools, who spent more time in regular education academic classes, and who had not participated in a work experience program did significantly less well in school.



### ***A disproportionate share of students with disabilities dropped out of school.***

NLTS data suggest that 38% of students with disabilities who left school did so by dropping out. Almost two-thirds of school leavers graduated, and 3% left school because they exceeded the maximum age limit for attendance. About 8% of leavers dropped out before reaching high school; 30% dropped out in grades 9 through 12.

Among dropouts who had ever attended high school, fewer than one-fourth left before age 17, one-third left at age 18, and the remainder were 19 years of age or older when they dropped out. Clearly, many dropouts persevered in school until their age peers graduated. However, dropouts had accumulated only 10 credits, on average, when they dropped out, despite their several years in high school. Part of this low accumulation of credits resulted from the high course failure rate among dropouts.

Dropout rates were particularly high for youth with emotional disturbances. Almost half of these students who had ever attended high school left school by dropping out. Dropout rates were 27% to 29% for students with learning disabilities, mental retardation, or other health impairments, and 23% for those with speech impairments. Dropout rates were below 15% for all other categories of students. Dropout rates were lower for white students than minorities and for wealthier students compared with those in poverty.

Measures of previous school performance were the strongest predictors of dropping out throughout high school. Furthermore, the power of these relationships increased over time. In 9th grade, students who were older than their grade peers, a proxy for previous grade retention, were more likely to drop out (8 percentage points) than students at the typical age for their grade level. Previous absenteeism and failure were very powerful predictors of school dropout at each grade level, but were most powerful later in high school. For example, in 12th grade, students who missed an average of 18 days of school annually were 7 percentage points more likely to drop out than peers who averaged 8 days. Similarly, youth who had failed courses at some point during high school were 15 percentage points more likely to drop out in 12th grade than peers who had not.

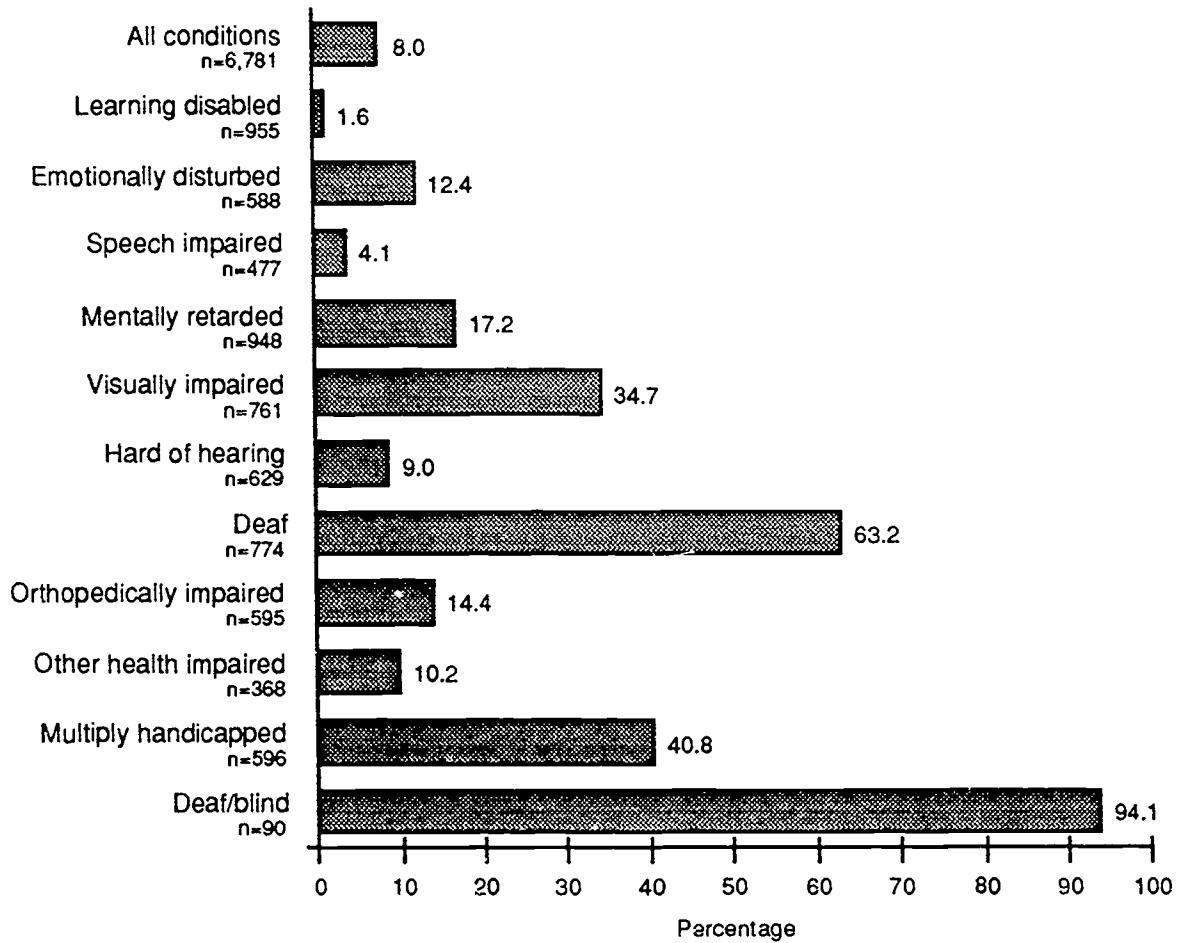
Vocational education had holding power to keep youth with disabilities in school. A concentration of four or more related classes in vocational education, as well as taking fewer and/or unrelated vocational classes, was associated with dramatically lower probabilities for dropping out in both 11th and 12th grades (from 6 to 19 percentage points). This holding power may have been due to the fact that youth not only experienced a different curriculum but also met with greater success there. Teacher ratings of students' in-class behavior was higher in vocational settings than academic classes for students most at risk of dropping out--those with serious emotional disturbances or learning disabilities and those who were African American.

In both 11th and 12th grades, youth in work experience programs were estimated to have a lower probability of dropping out of school (7 percentage points in 12th grade).

## **The Figures**



## Attending Special Schools



Source: Survey of Secondary Education Programs and/or students' school records from their most recent school year.

## YOUTH WITH DISABILITIES WHO ATTENDED SPECIAL SCHOOLS

**COURSES TAKEN IN THEIR MOST RECENT SCHOOL YEAR BY STUDENTS IN SELECTED  
DISABILITY CATEGORIES WHO ATTENDED REGULAR AND SPECIAL SCHOOLS**

Program Characteristics	Disability Category and School Enrollment:					
	Deaf		Visually Impaired		Multiply Handicapped	
	Regular School	Special School	Regular School	Special School	Regular School	Special School
Percentage of students who took in their most recent school year:						
Academic courses <sup>†</sup>	98.3	87.2	94.5	87.3	62.4	46.8
Vocational education courses <sup>§</sup>	69.2	80.9	47.4	69.4	40.3	48.2
Occupationally oriented vocational education courses <sup>#</sup>	59.4	74.3	41.7	54.9	23.3	31.2
Other nonacademic courses <sup>‡</sup>	89.9	73.0	89.8	96.2	82.8	92.5
n	237	455	307	258	191	321

† Academic courses include English/language arts, mathematics, science, social science, and foreign language.

§ Vocational courses include home economics, courses in prevocational skills, and occupationally specific courses.

# Occupationally oriented courses are vocational courses providing training in a specific labor market area (e.g., auto repair, food service); prevocational skills training and home economics courses are not included as occupationally specific.

‡ Nonacademics include physical education, music, art, drivers' education, etc.

Source: Parent interviews and students' school records from their most recent year in secondary school.

**SERVICES RECEIVED FROM THE SCHOOL BY STUDENTS IN SELECTED DISABILITY  
CATEGORIES WHO ATTENDED REGULAR AND SPECIAL SCHOOLS**

Program Characteristics	Disability Category and School Enrollment:					
	Deaf		Visually Impaired		Multiply Handicapped	
	Regular School	Special School	Regular School	Special School	Regular School	Special School
Percentage of students in school in 1986-87 who were reported to have received from their school in that year:						
Help from a tutor/reader/interpreter	55.6	41.7	25.4	23.8	11.2	13.7
Speech/communication therapy	59.7	58.6	6.2	22.1	63.4	55.9
Personal counseling/therapy	18.1	34.5	8.7	33.3	20.4	31.9
Occupational therapy/life skills training	29.3	47.5	23.7	55.4	52.1	64.8
Physical therapy/mobility training	1.9	13.3	8.4	40.8	30.0	41.0
n	290	511	429	346	248	390
Average number of these services received from/through school in 1986-87 school year	2.0	2.4	.8	2.0	2.0	2.4
n	239	419	382	300	219	335

Source: Parent interviews and students' school records from their most recent school year.

## CHARACTERISTICS OF STUDENTS IN REGULAR AND SPECIAL SCHOOLS IN SELECTED DISABILITY CATEGORIES

Student Characteristics	Disability Category and School Enrollment:					
	Deaf		Visually Impaired		Multiply Handicapped	
	Regular School	Special School	Regular School	Special School	Regular School	Special School
<b>Demographics</b>						
Average age of students in their most recent year in secondary school	17.9	18.4	17.2	18.2	17.8	18.4
n	292	519	435	357	250	395
Percentage of youth at least 1 year older than typical age for grade	73.1	85.7	69.4	83.4	81.8	78.0
n	233	397	324	235	130	88
Percentage of youth from household with head not a high school graduate	24.8	37.9	34.5	38.4	35.5	24.1
n	250	423	368	286	193	283
Percentage of youth from household with annual income less than \$25,000	49.5	73.8	60.1	73.3	76.0	62.2
n	237	391	327	256	186	272
<b>School status</b>						
Percentage of students not assigned to a specific grade level	6.2	16.7	4.5	31.8	47.4	77.2
n	245	459	339	306	209	341
<b>Disability-related characteristics</b>						
Percentage of youth with high:						
Self-care abilities <sup>†</sup>	95.0	87.6	76.1	51.8	46.6	30.9
Functional mental skills <sup>§</sup>	54.1	40.0	35.6	21.4	16.8	9.8
n	249	410	357	272	198	298
Percentage with IQ below 75	14.1	16.4	19.8	35.4	73.8	90.0
n	162	306	200	284	162	265
Percentage who were completely blind	NA	NA	23.1	52.5	NA	NA
n			373	263		

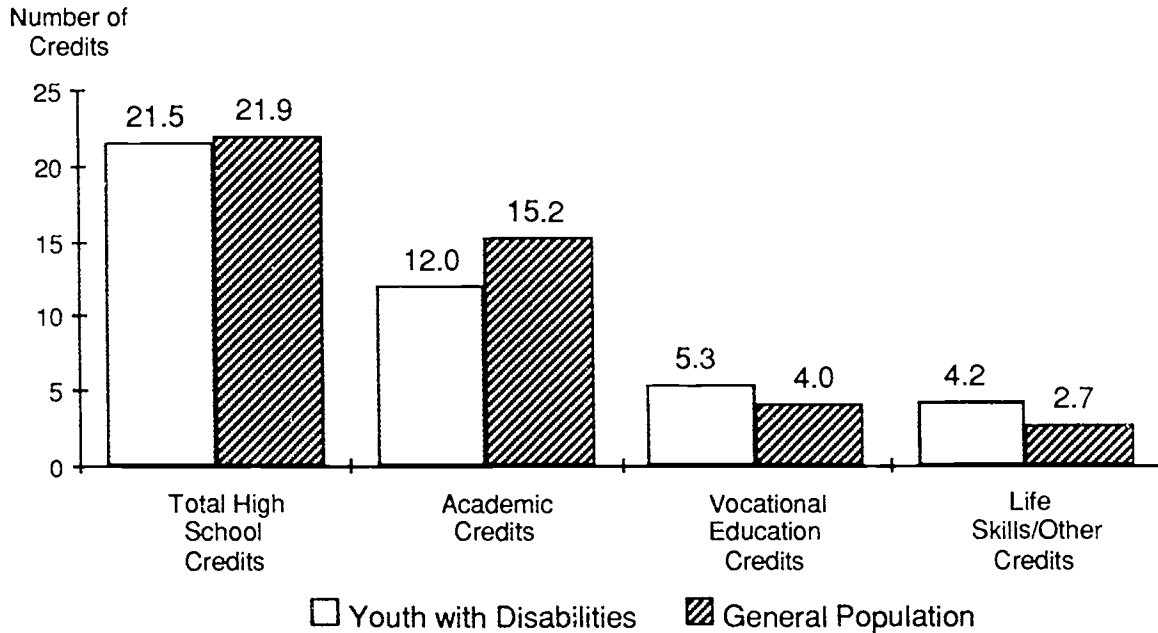
Note: Standard errors are in parentheses.

<sup>†</sup> Parents rated on a 4-point scale youths' abilities to dress themselves, feed themselves, and get around outside the home. Ratings were summed to create a scale ranging from 3 to 12. High ability is defined as a scale value of 11 or 12.

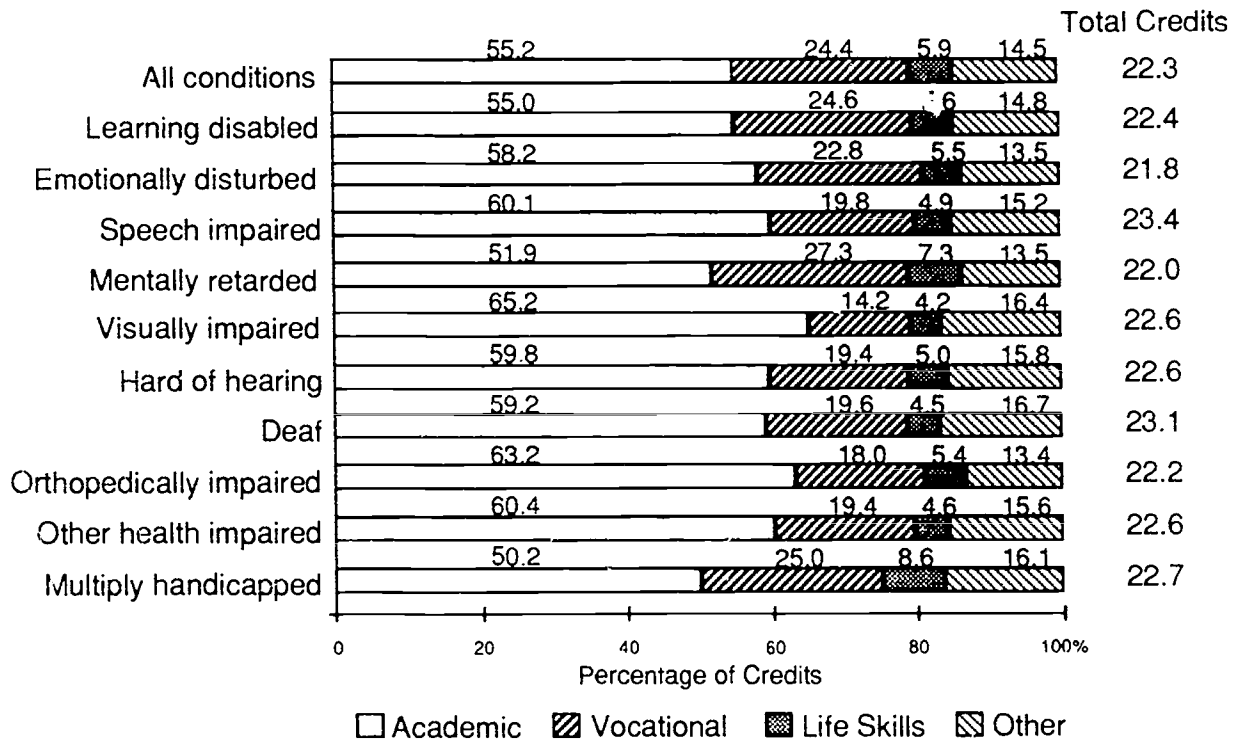
<sup>§</sup> Parents rated on a 4-point scale youths' abilities to tell time on a clock with hands, look up telephone numbers and use the phone, count change, and read common signs. Ratings were summed to create a scale ranging from 4 to 16. High ability is defined as a scale value of 15 or 16.

Source: Parent interviews and students' school records from their most recent school year.

## Academic Course-Taking

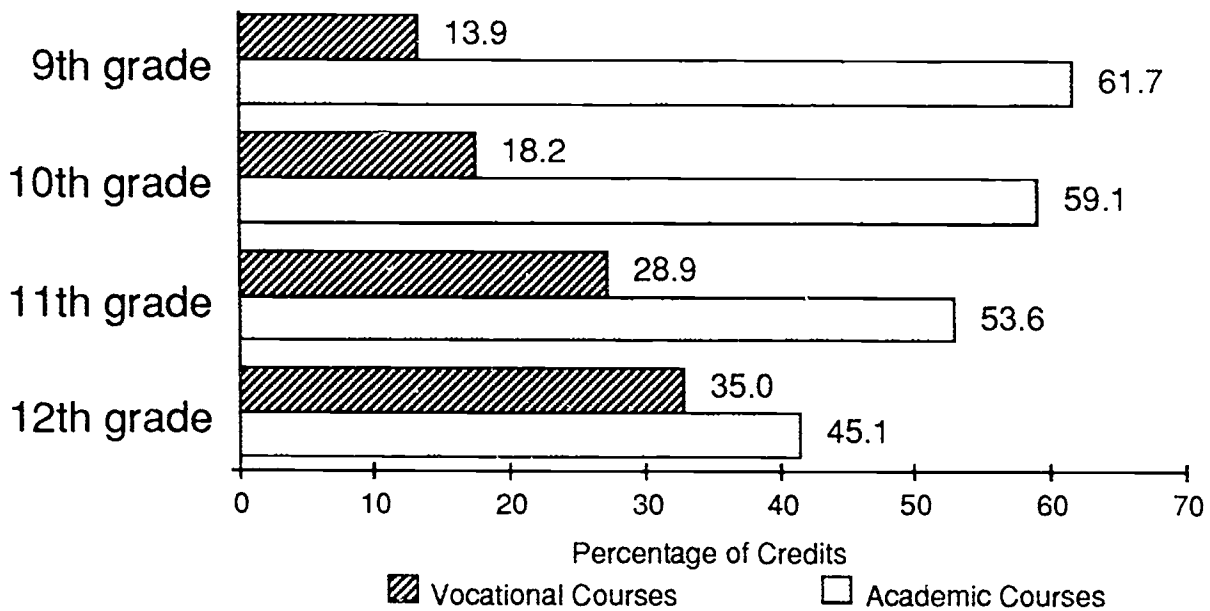


### COURSE-TAKING OF HIGH SCHOOL STUDENTS WITH DISABILITIES AND STUDENTS IN THE GENERAL POPULATION



Base: Graduates with complete transcripts N for all conditions = 2,108

### TYPES OF CREDITS EARNED BY GRADUATES WITH DISABILITIES



Base: Graduates with complete transcripts, N = 2,091.

**PERCENT OF CREDITS EARNED BY GRADUATES  
AT EACH GRADE LEVEL**

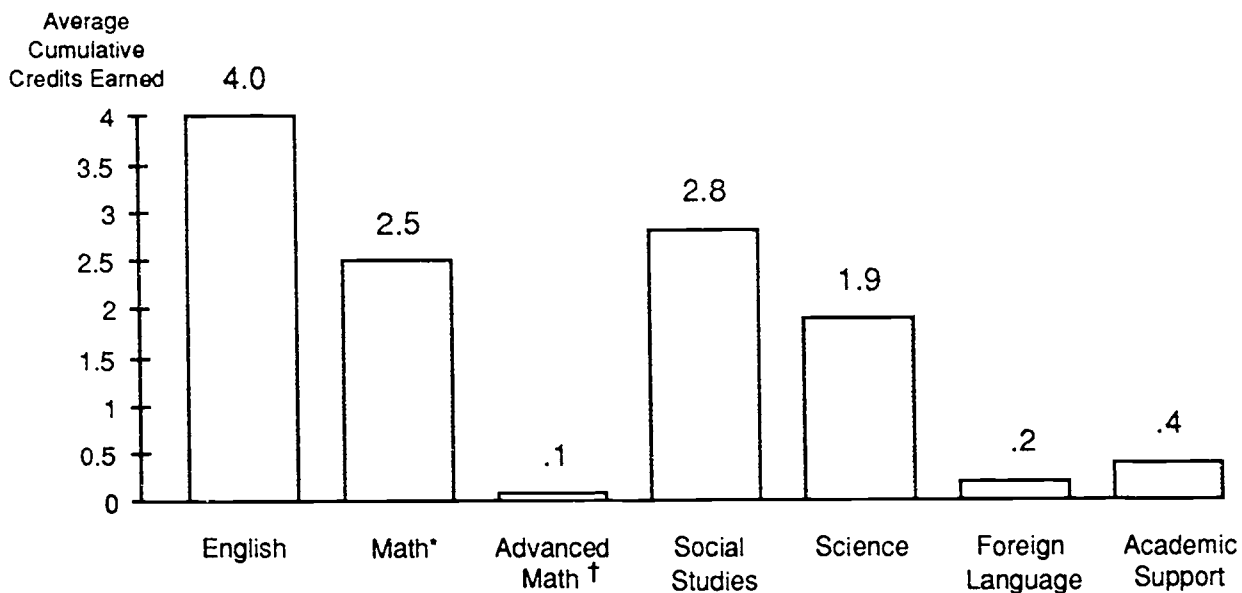


**AVERAGE ACADEMIC CREDITS EARNED,  
BY DISABILITY CATEGORY**

Grade Level*	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handi-capped
9th grade	3.2	3.0	3.5	2.9	3.8	3.6	3.8	3.7	3.2	3.1
n	548	299	282	418	265	387	180	306	200	90
10th grade	3.1	2.7	3.5	2.7	3.6	3.5	3.6	3.5	3.1	2.8
n	520	286	261	399	265	377	174	292	189	91
11th grade	2.6	2.7	3.3	2.4	3.8	3.3	3.2	3.4	3.1	2.4
n	532	235	258	375	250	371	180	293	185	87
12th grade	2.2	2.1	2.6	2.1	2.9	2.5	2.6	2.6	2.4	2.0
n	652	278	311	451	294	430	223	344	194	90
Cumulative for 4 grades	11.9	11.8	13.5	11.2	14.7	13.5	13.5	13.9	12.8	11.3
n	399	167	215	263	215	322	159	240	137	70

**AVERAGE ACADEMIC CREDITS EARNED,  
BY DEMOGRAPHIC CHARACTERISTICS**

Youth Characteristics	Gender		Ethnic Background			Household Income		
	Male	Female	White	African American	Hispanic	<\$12,000	\$12,000 - \$25,000	>\$25,000
9th grade	3.1	3.3	3.3	3.1	2.7	2.9	3.1	3.4
n	1,821	1,155	1,686	520	305	563	654	1,105
10th grade	3.0	3.1	3.2	2.8	3.0	2.8	3.0	3.3
n	1,756	1,101	1,625	501	291	531	629	1,077
11th grade	2.6	2.8	2.7	2.5	3.0	2.5	2.6	2.8
n	1,686	1,081	1,631	448	276	512	618	1,083
12th grade	2.2	2.2	2.2	2.2	2.4	2.1	2.1	2.3
n	1,977	1,292	1,960	514	290	568	702	1,314
Cumulative for 4 grades	11.8	12.2	12.0	11.6	12.7	11.4	11.4	12.4
n	1,319	872	1,337	347	215	390	487	903



\* Math includes all math classes, including advanced math.

† Advanced math includes geometry, trigonometry, and calculus.

n = 2,191

### AVERAGE CUMULATIVE CREDITS EARNED IN ACADEMIC CONTENT COURSES

### ENROLLMENT OF STUDENTS WITH DISABILITIES IN ACADEMIC CONTENT AREA COURSES, BY GRADE LEVEL

Academic Content Area	Grade Level:					Cumulative for 4 Grades	Extended 12th Grade
	9th Grade	10th Grade	11th Grade	12th Grade			
Percentage of students enrolled in courses in:							
English	97.1	96.9	95.5	89.7	99.7	70.5	
Mathematics*	95.5	90.4	67.4	45.3	99.5	63.2	
Advanced mathematics†	0.5	3.6	4.9	2.9	11.8	--	
Social studies	75.1	67.6	86.5	76.2	97.7	31.9	
Science	78.8	75.9	42.9	28.1	96.5	9.5	
Foreign language	5.5	5.9	8.1	4.6	17.6	.2	
Academic support	13.7	15.6	13.8	10.7	30.5	19.5	
n	2,979	2,859	2,771	3,273	2,191	84	

\* Math includes all math classes, including advanced math.

† Advanced math includes geometry, trigonometry, and calculus

**ENROLLMENT IN ACADEMIC CONTENT COURSES,  
BY DISABILITY CATEGORY**

Youth Characteristics	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handi-capped
Percentage taking:										
English	100.0	100.0	99.0	98.6	99.7	99.5	100.0	100.0	96.9	98.2
Mathematics*	100.0	100.0	99.5	97.5	99.7	99.7	100.0	99.7	96.9	96.0
Advanced math†	10.8	17.4	35.8	.5	50.9	33.3	21.9	33.6	28.8	3.2
Social studies	99.0	99.5	99.5	91.3	99.7	99.2	99.5	99.4	95.1	87.2
Science	98.2	99.0	98.0	88.9	99.0	99.5	97.6	99.3	91.4	85.2
Foreign language	17.2	20.5	43.6	4.7	61.8	28.8	11.6	40.2	47.7	8.1
Academic support	33.7	27.1	14.7	25.3	31.7	29.5	34.4	25.4	26.3	17.2
n	399	167	215	263	215	322	159	240	137	70

\* Mathematics includes all math classes, including advanced math.

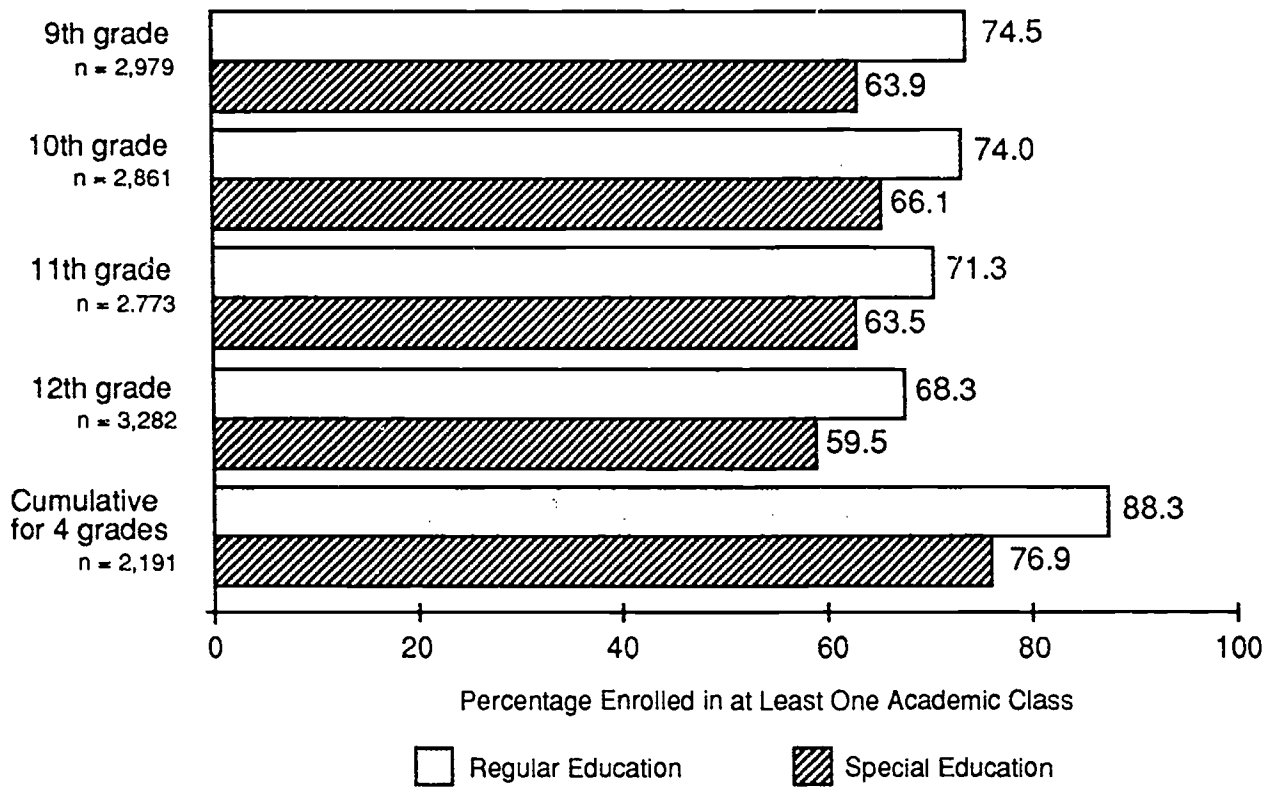
† Advanced math includes geometry, trigonometry, and calculus.

**ENROLLMENT IN ACADEMIC CONTENT COURSES,  
BY DEMOGRAPHIC CHARACTERISTICS**

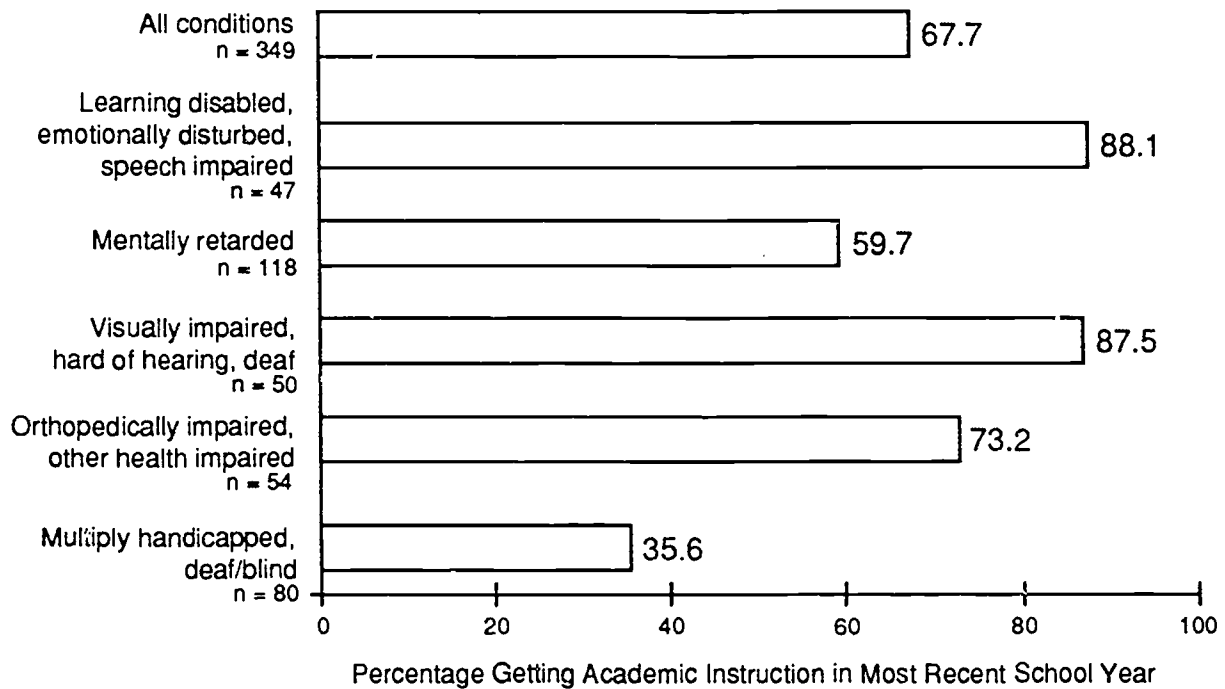
Content Area	Gender		Ethnic Background			Household Income		
	Male	Female	White	African American	Hispanic	<\$12,000	\$12,000 - \$25,000	>\$25,000
Percentage taking:								
English	99.7	99.6	99.6	99.9	99.4	98.9	99.7	99.8
Math*	99.5	99.3	99.4	99.9	99.1	99.1	99.5	99.6
Advanced math†	11.9	11.6	13.1	8.4	11.9	6.7	6.6	17.0
Social studies	97.7	97.7	97.1	99.3	96.8	98.3	97.4	97.1
Science	96.5	96.6	95.9	98.7	96.8	96.2	96.7	96.1
Foreign language	15.1	22.9	15.0	18.5	42.4	19.4	18.0	16.5
Academic support	29.8	32.0	32.6	29.8	21.2	27.2	33.0	31.9
n	1,319	872	1337	347	215	390	487	903

\* Math includes all math classes, including advanced math.

† Advanced math includes geometry, trigonometry, and calculus.



### PLACEMENT OF ACADEMIC COURSES

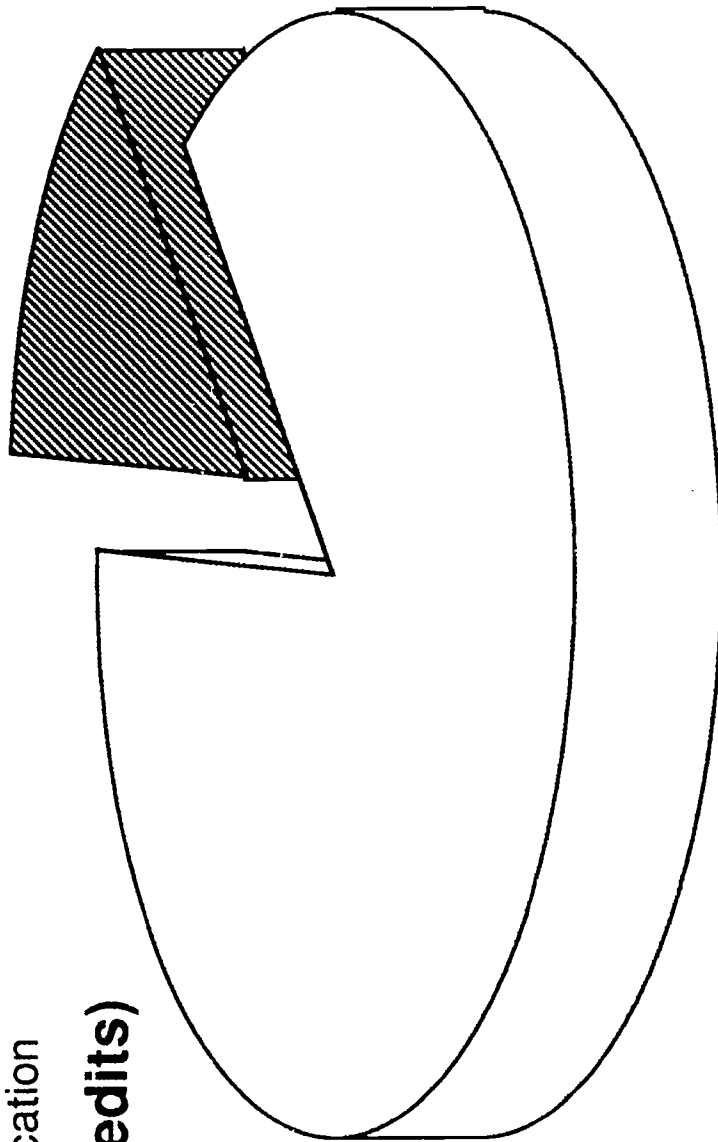


### ACADEMIC INSTRUCTION OF STUDENTS NOT ASSIGNED TO A GRADE LEVEL

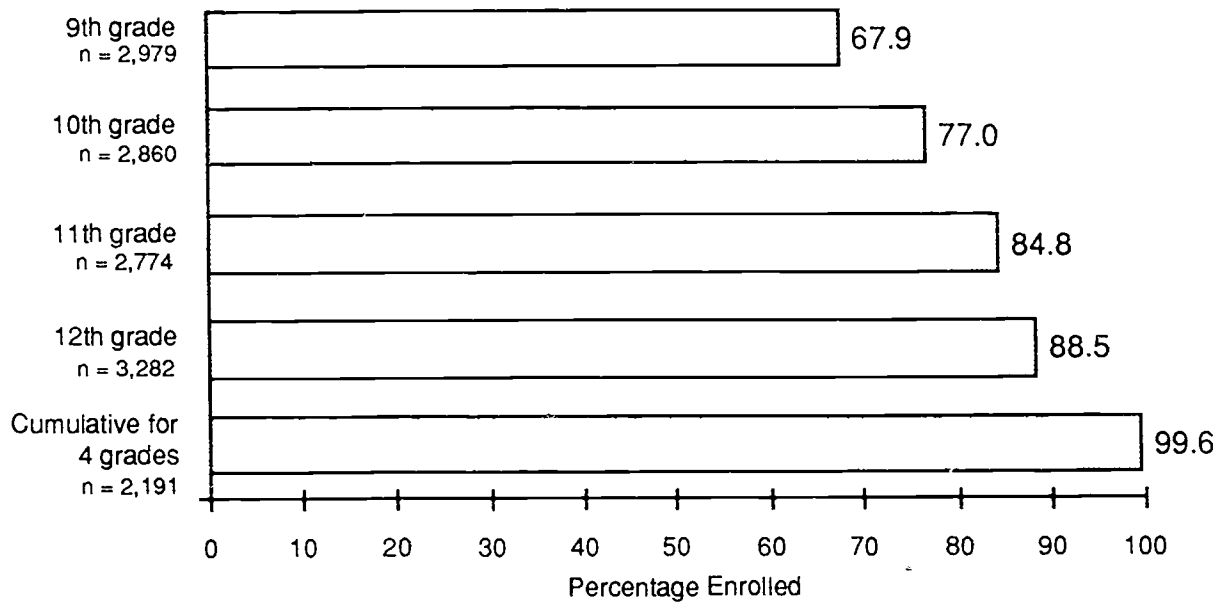
## Vocational Education

Prevocational Education  
**13% (.7 credits)**

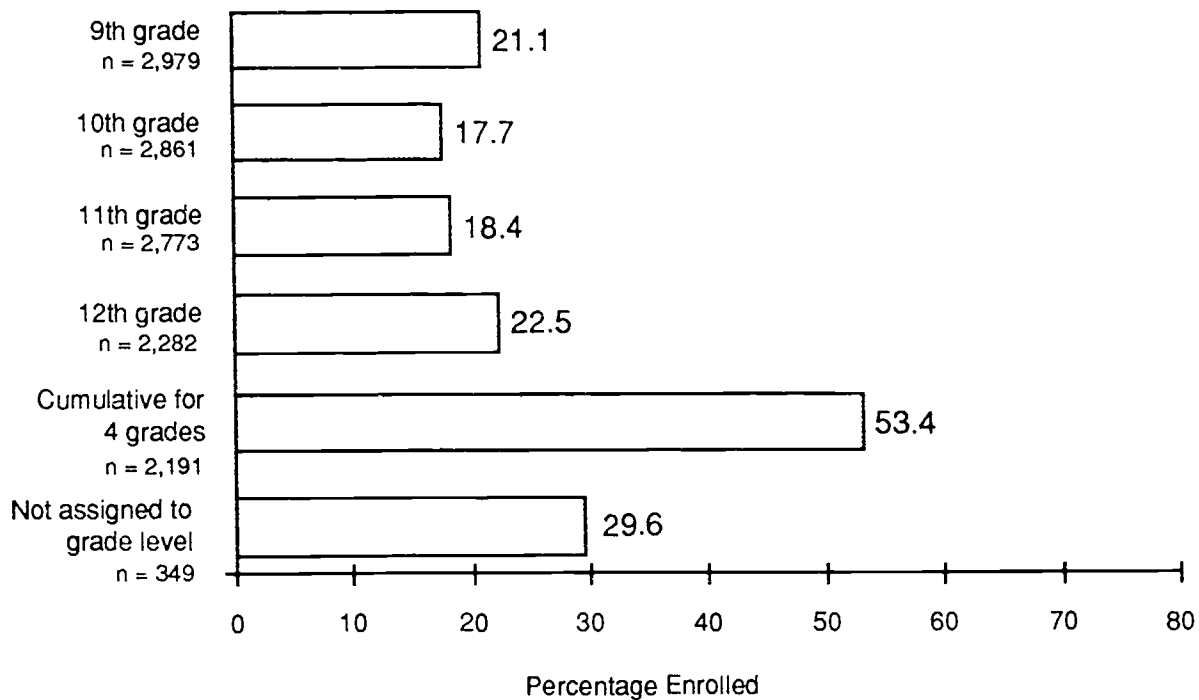
Occupationally-Oriented  
Vocational Education  
**87% (4.5 credits)**



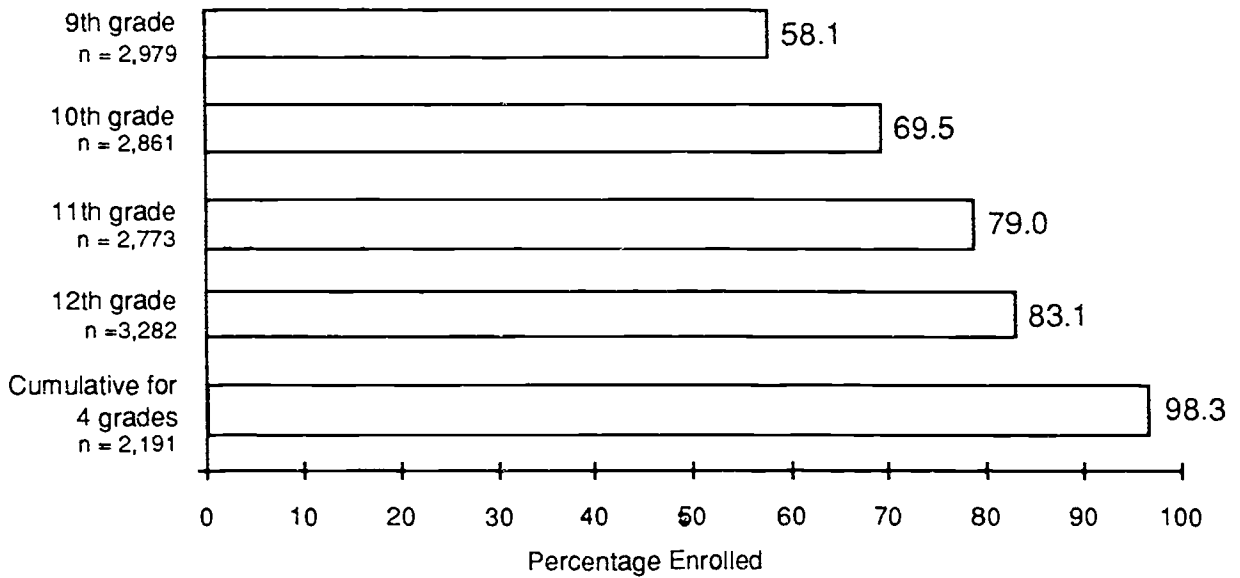
## PERCENTAGE OF STUDENTS WITH DISABILITIES IN OCCUPATIONAL AND PREVOCATIONAL EDUCATION



### VOCATIONAL COURSE-TAKING BY GRADE LEVEL



### PREVOCATIONAL EDUCATION COURSE-TAKING, BY GRADE LEVEL



### OCCUPATIONAL VOCATIONAL EDUCATION COURSE-TAKING, BY GRADE LEVEL

### PREVOCATIONAL AND OCCUPATIONAL COURSE-TAKING, BY DISABILITY CATEGORY

Grade Level	Students Classified as:									
	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handi-capped
Cumulative prevocational for 4 grades*	50.4	48.1	46.8	65.8	45.0	50.5	68.9	60.2	64.7	75.0
n	399	167	215	263	215	322	159	240	137	70
Cumulative occupational for 4 grades*	98.7	97.8	96.6	96.8	92.0	96.7	99.2	96.2	95.7	96.5
n	399	167	215	263	215	322	159	240	137	70



## OCCUPATIONAL VOCATIONAL EDUCATION COURSE-TAKING, BY DEMOGRAPHIC CHARACTERISTICS

Grade Level	Gender		Ethnic Background			Household Income		
	Male	Female	White	African American	Hispanic	<\$12,000	\$12,000-\$25,000	>\$25,000
Percentage enrolled in occupational vocational education in:								
9th grade	62.9	47.8	63.3	45.6	57.7	52.1	57.6	61.6
n	1,821	1,155	1,686	520	305	563	654	1,105
10th grade	73.6	60.7	72.5	60.9	66.6	66.6	74.0	68.5
n	1,758	1,101	1,627	501	291	531	630	1,078
11th grade	81.1	74.3	79.1	78.0	83.5	81.2	80.3	77.7
n	1,687	1,082	1,634	448	276	514	618	1,084
12th grade	82.9	83.7	83.8	79.3	80.3	82.9	83.9	82.9
n	1,980	1,298	1,963	516	292	571	703	1,316
Cumulative for 4 grades*	98.3	97.6	98.2	96.6	98.2	98.7	97.6	98.0
n	1,319	872	1,337	347	215	390	487	903

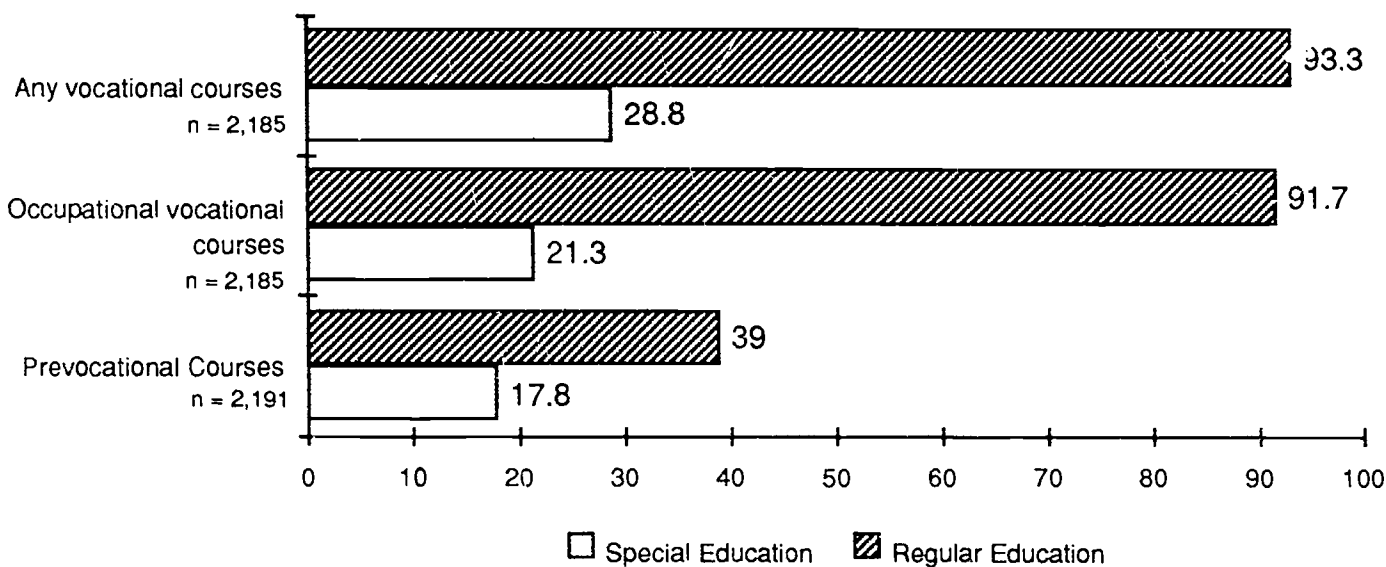
\* There are too few students not assigned to a grade level to disaggregate.

## ENROLLMENT AND CREDITS EARNED BY STUDENTS WITH DISABILITIES IN VOCATIONAL EDUCATION CONTENT AREAS

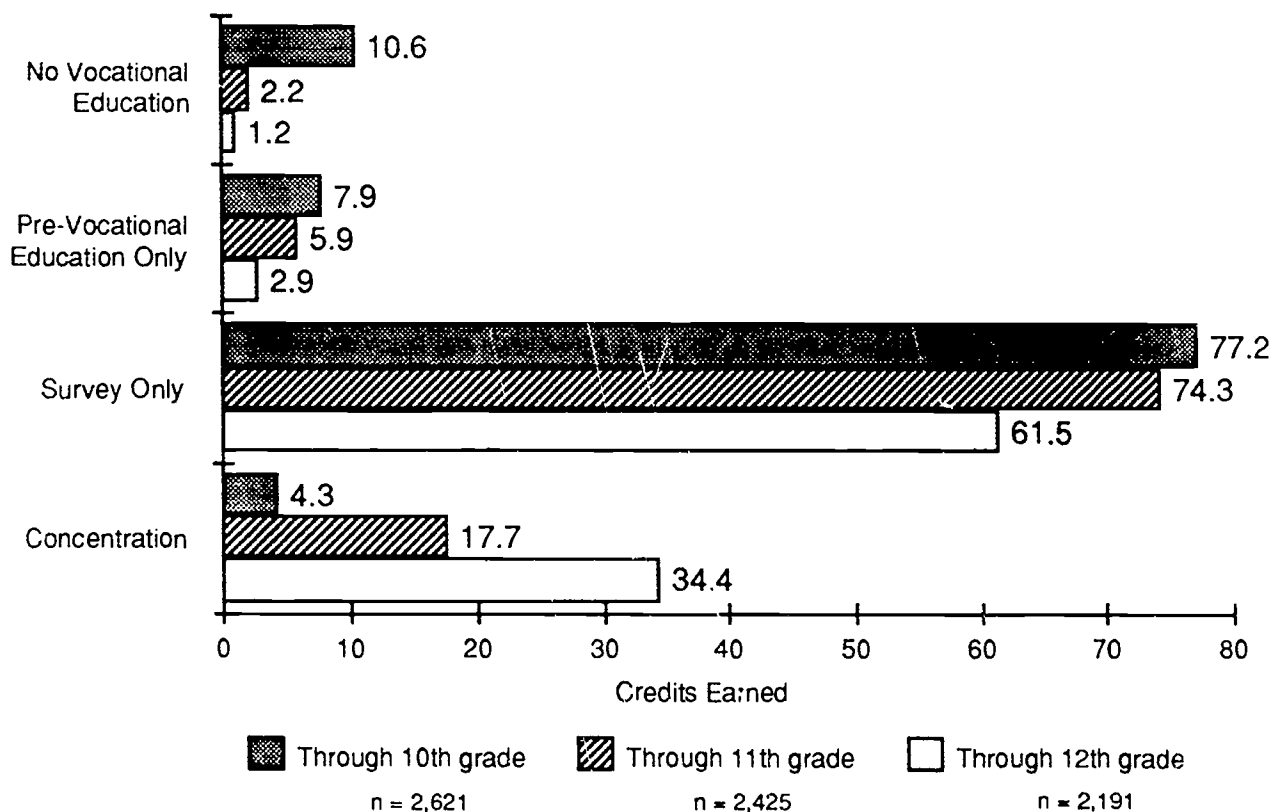
Percentage of students taking.	Grade Level				Cumulative	Extended 12th grade
	9th grade	10th grade	11th grade	12th grade		
Agriculture	7.8	9.3	9.0	9.5	17.9	.8
Marketing	.7	2.2	4.3	7.7	10.2	2.9
Health occupations	.4	.5	1.5	1.4	2.4	.0
Home economics	4.0	8.6	11.9	15.7	28.3	18.1
Office occupations	19.3	23.4	22.5	26.2	57.9	30.0
Technical education	22.8	26.9	28.5	29.1	63.2	30.3
Trade and industry	31.5	36.4	36.3	35.8	59.4	23.5

**CUMULATIVE ENROLLMENT AND CREDITS EARNED IN VOCATIONAL  
CONTENT AREAS, BY DISABILITY CATEGORY**

	Students Classified As.									
	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped- ically Impaired	Health Impaired	Multiply Handi- capped
<b>Percentage of students taking:</b>										
Agriculture	18.2	14.3	13.2	22.6	5.3	9.9	6.0	8.9	10.5	8.9
Marketing	11.5	10.7	10.0	6.6	5.0	6.0	3.1	9.0	6.6	4.7
Health occupations	1.4	1.8	5.2	5.2	4.4	2.9	4.3	4.5	5.6	2.9
Home economics	26.2	26.4	24.9	39.2	25.3	24.9	22.2	27.9	24.4	17.3
Office occupations	61.5	60.0	64.3	39.3	71.1	69.4	69.9	58.9	70.4	41.2
Technical education	66.7	65.5	71.6	43.9	80.3	75.3	77.0	71.5	72.3	50.8
Trade and industry	63.1	61.4	54.0	52.2	32.8	49.8	58.2	28.1	42.0	36.0
<b>Average credits earned in:</b>										
Agriculture	.5	.3	.2	.5	.1	.2	.1	.1	.2	.5
Marketing	.2	.3	.2	.1	.1	.1	.1	.2	.2	.2
Health occupations	.0	.1	.1	.1	.1	.0	.1	.1	.1	.0
Home economics	.4	.3	.3	.9	.3	.4	.3	.4	.2	.3
Office occupations	.9	.7	1.0	.5	1.1	1.2	1.0	.9	1.0	.5
Technical education	1.1	1.0	1.2	.6	1.3	1.2	1.0	1.3	1.2	.6
Trade and industry	2.2	1.7	1.4	1.5	.6	1.3	1.1	.6	.8	.5



### PLACEMENT FOR VOCATIONAL EDUCATION COURSES



### CONCENTRATION IN VOCATIONAL EDUCATION, BY GRADE LEVEL

## CONCENTRATION IN VOCATIONAL EDUCATION COURSETAKING, BY DISABILITY CATEGORY

Enrollment and Grade Level	Students Classified As:									
	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handi-capped
Percentage of students taking no vocational education through:										
10th grade	9.4	16.4	11.6	10.3	21.2	16.4	14.2	22.0	8.6	11.7
11th gade	1.2	4.7	5.0	2.5	10.8	7.4	2.5	8.7	3.6	3.0
12th grade	.8	.6	1.7	2.3	4.2	2.5	2.2	2.9	4.2	7.9
Percentage of students taking prevocational courses only through:										
10th grade	5.2	9.0	8.1	15.1	10.3	9.4	5.2	11.8	10.5	31.5
11th grade	4.6	4.2	4.5	10.1	6.8	3.9	4.3	8.7	9.9	27.2
12th grade	1.9	1.9	3.9	5.8	4.7	2.9	.7	5.6	5.5	15.8
Percentage of students taking survey courses (no centration) through:										
10th grade	79.8	71.5	76.2	73.2	65.9	71.6	78.2	64.3	78.3	56.8
11th grade	72.2	78.9	77.3	78.3	72.9	77.5	86.6	74.0	76.9	63.1
12th grade	57.0	71.2	64.6	71.0	72.0	68.2	73.9	70.8	66.5	59.8
Percentage of students taking concentration through:										
10th grade	5.5	3.0	4.0	1.3	2.6	2.6	2.4	1.9	2.6	.0
11th grade	22.0	12.1	13.3	9.1	9.5	11.1	6.6	8.6	9.6	6.6
12th grade	40.3	26.4	29.8	20.9	19.1	26.5	23.2	20.7	23.9	16.5
10th-grade n	479	237	247	347	246	355	172	277	176	81
11h grade n	443	198	231	316	228	342	169	258	160	76
12th-grade n	399	167	215	263	215	322	159	240	137	70

## CONCENTRATION IN VOCATIONAL EDUCATION, BY DEMOGRAPHIC CHARACTERISTICS

Enrollment and Grade Level	Gender		Ethnic Background			Household Income		
	Male	Female	White	African American	Hispanic	<\$12,000	\$12,000- \$25,000	>\$25,000
Percentage of students taking no vocational education through:								
10th grade	8.5	15.2	9.3	16.4	10.1	10.7	8.7	11.6
11th grade	1.1	4.3	1.8	3.1	1.9	3.4	1.0	2.1
12th grade	.6	2.5	1.3	.2	2.3	1.4	.5	1.9
Percentage of students taking prevocational courses only through:								
10th grade	5.2	7.4	4.5	7.2	10.6	4.5	5.6	5.8
11th grade	7.3	9.2	5.4	12.5	14.2	8.3	7.7	7.2
12th grade	2.8	2.9	1.9	4.4	6.7	1.5	4.0	2.0
Percentage of students taking survey courses (no concentration) through:								
10th grade	78.9	73.4	79.9	69.9	65.4	77.9	79.9	75.8
11th grade	71.9	79.4	71.6	84.6	70.3	77.8	77.9	73.3
12th grade	56.8	71.4	59.2	79.0	51.4	66.7	58.7	62.2
Percentage of students taking concentration through:								
10th grade	5.3	2.2	5.4	1.3	10.3	3.1	3.6	5.4
11th grade	21.8	8.9	22.1	5.0	17.1	14.4	15.4	18.7
12th grade	39.7	23.2	37.6	16.5	39.6	30.4	36.8	34.0
10th-grade n	1,598	1,022	1,537	437	269	482	574	1,029
11th grade n	1,473	951	1,448	393	244	443	535	980
12th-grade n	1,319	872	1,337	347	215	390	487	903

## ENROLLMENT IN WORK EXPERIENCE PROGRAMS

	Work Experience Program Participation		
	Percentage	Standard Error	n
<b>Disability Categories</b>			
All conditions*	38.8	1.5	4,320
Learning disabled	38.7	2.2	819
Emotionally disturbed	29.7	2.9	420
Speech impaired	32.4	3.1	381
Mentally retarded	44.9	2.5	660
Visually impaired	26.9	3.1	357
Hard of hearing	33.5	2.7	528
Deaf	39.7	4.1	247
Orthopedically impaired	40.4	3.1	435
Other health impaired	38.0	3.8	279
Multiply handicapped	49.6	4.9	186
<b>Demographic Characteristics</b>			
<b>Gender</b>			
Male	38.0	1.8	2,647
Female	40.9	2.6	1,668
<b>Ethnic background</b>			
White	42.7	1.9	2,616
African American	34.7	3.3	805
Hispanic	33.7	5.9	419
<b>Household income</b>			
<\$12,000	38.9	3.2	881
\$12,000 - \$25,000	41.0	3.0	1,032
>\$25,000	43.8	2.5	1,685

\* "All conditions" includes youths in each of the 11 federally defined disability categories. Percentages are reported separately only for categories with at least 25 students.

## Regular Education Placements

## TIME IN REGULAR EDUCATION COURSES DURING HIGH SCHOOL

Disability Category	Average Percent of Time	Percentage of Students Whose Proportion of Time in Regular Education Was:				n
		0%	1-25%	76-99%	100%	
All conditions*	69.6	3.4	6.8	31.0	21.3	2,191
Learning disabled	74.6	2.0	3.3	39.0	20.2	399
Emotionally disturbed	74.3	4.2	5.0	28.1	32.0	167
Speech impaired	85.9	.5	3.5	15.3	63.2	215
Mentally retarded	44.4	8.2	19.6	7.7	6.1	263
Visually impaired	86.8	1.9	1.7	31.0	50.9	215
Hard of hearing	75.3	3.1	6.6	28.6	34.5	322
Deaf	57.4	6.8	14.2	24.6	10.1	159
Orthopedically impaired	68.8	3.8	14.7	30.8	26.4	240
Other health impaired	75.4	2.5	12.3	27.5	37.7	137
Multiply handicapped	31.7	24.3	30.3	6.5	6.4	70

\* "All conditons" includes youths in each of the 11 federal special education disability categories. Percentages are reported separately only for categories with at least 25 students.

Note: Based on all students with complete transcript data.



**PERCENTAGE OF INSTRUCTIONAL TIME IN REGULAR EDUCATION CLASSES,  
BY STUDENTS' FUNCTIONAL ABILITIES**

Disability-Related Characteristics	Instructional Time Spent in Regular Education Classes	
	%	N
Self-care ability scale score: <sup>#</sup>		
High (11 or 12)	58.0	2,746
Medium (7 to 10)	27.5	371
Low (3 to 6)	17.2	104
Functional ability scale score: <sup>§</sup>		
High (15 or 16)	64.8	1,732
Medium (9 to 14)	47.7	1,223
Low (4 to 8)	16.8	212
IQ Score		
> 110	84.2	183
91 to 110	74.6	684
75 to 90	58.8	1,095
53 to 74	37.6	796
≤ 52	14.6	274

<sup>#</sup> Parents rated on a 4-point scale youths' abilities to dress themselves, feed themselves, and get around outside the home. Ratings were summed to create a scale ranging from 3 to 12.

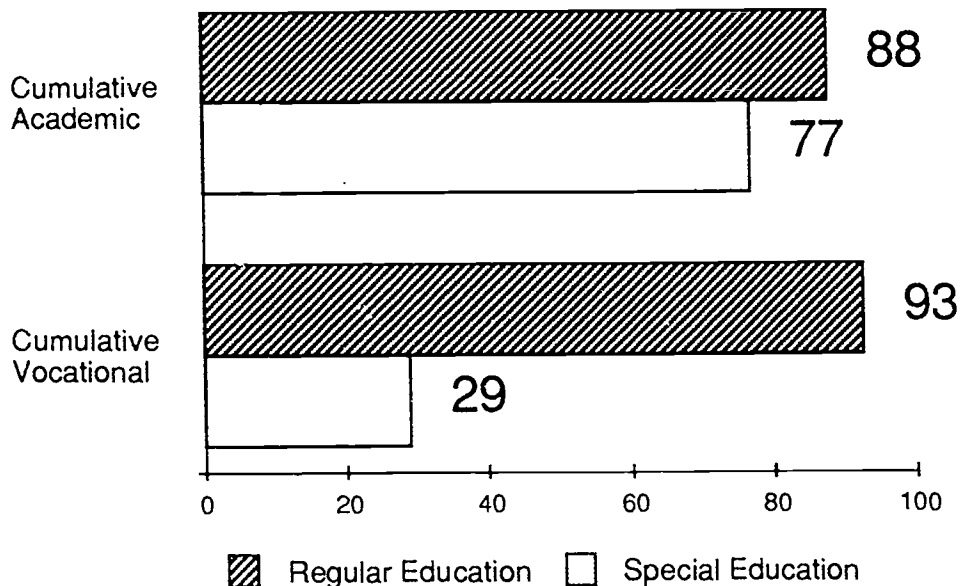
<sup>§</sup> Parents rated on a 4-point scale youths' abilities to tell time on a clock with hands, look up telephone numbers and use the phone, count change, and read common signs. Ratings were summed to create a scale ranging from 4 to 16.

Source: IQ scores and placement data are based on students' school records. Other data are from parent interviews.

**PERCENTAGE OF INSTRUCTIONAL TIME IN REGULAR EDUCATION CLASSES,  
BY STUDENTS' SOCIOECONOMIC CHARACTERISTICS**

Socioeconomic Characteristics	Instructional Time Spent in Regular Education Classes	
	%	N
Ethnic background		
White	60.4	2,263
Black	48.3	686
Hispanic	43.4	336
Other	48.9	111
Household income		
≤ \$25,000	50.6	1,613
> \$25,000	67.3	1,384
Household had:		
Two parents	59.6	2,194
One parent	48.9	1,019
School was in:		
Urban area	46.3	1,466
Suburban area	60.2	1,503
Rural area	60.1	1,024

Source: Parent interviews and Quality Education Data on region and urbanicity



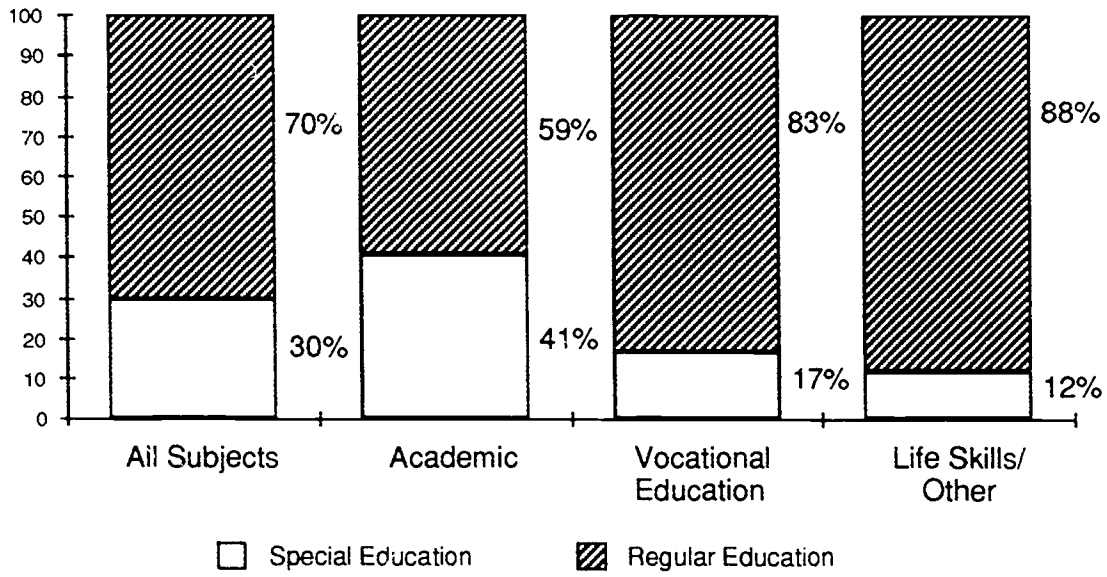
**PERCENT ENROLLED IN AT LEAST ONE ACADEMIC AND ONE VOCATIONAL CLASS, BY PLACEMENT**

**STUDENTS WITH DISABILITIES IN REGULAR EDUCATION SETTINGS FOR ACADEMIC AND VOCATIONAL COURSES**

Disability Category	Of Students Who Took a Type of Course, Those Who Took At Least One of Them In Regular Education Classes	
	Academic Courses <sup>#</sup>	Vocational Courses <sup>§</sup>
All conditions	88	93
Learning disabled	95	95
Emotionally disturbed	94	93
Speech impaired	92	96
Mentally retarded	62	83
Visually impaired	96	90
Hard of hearing	92	93
Deaf	82	89
Orthopedically impaired	87	88
Other health impaired	90	91
Multiply handicapped	45	58

<sup>#</sup> Academic courses include English/language arts, mathematics, science, social science, and foreign language.

<sup>§</sup> Vocational courses include home economics, courses in prevocational skills, and occupationally specific courses.



**REGULAR AND SPECIAL EDUCATION ENROLLMENT IN ACADEMIC, VOCATIONAL AND LIFE SKILLS/OTHER SUBJECTS**

(As a Percentage of all Credits Taken Within Area Over Four Grades)

# STUDENTS WITH DISABILITIES IN REGULAR EDUCATION SETTINGS OR CUMULATIVE ACADEMIC AND VOCATIONAL COURSES

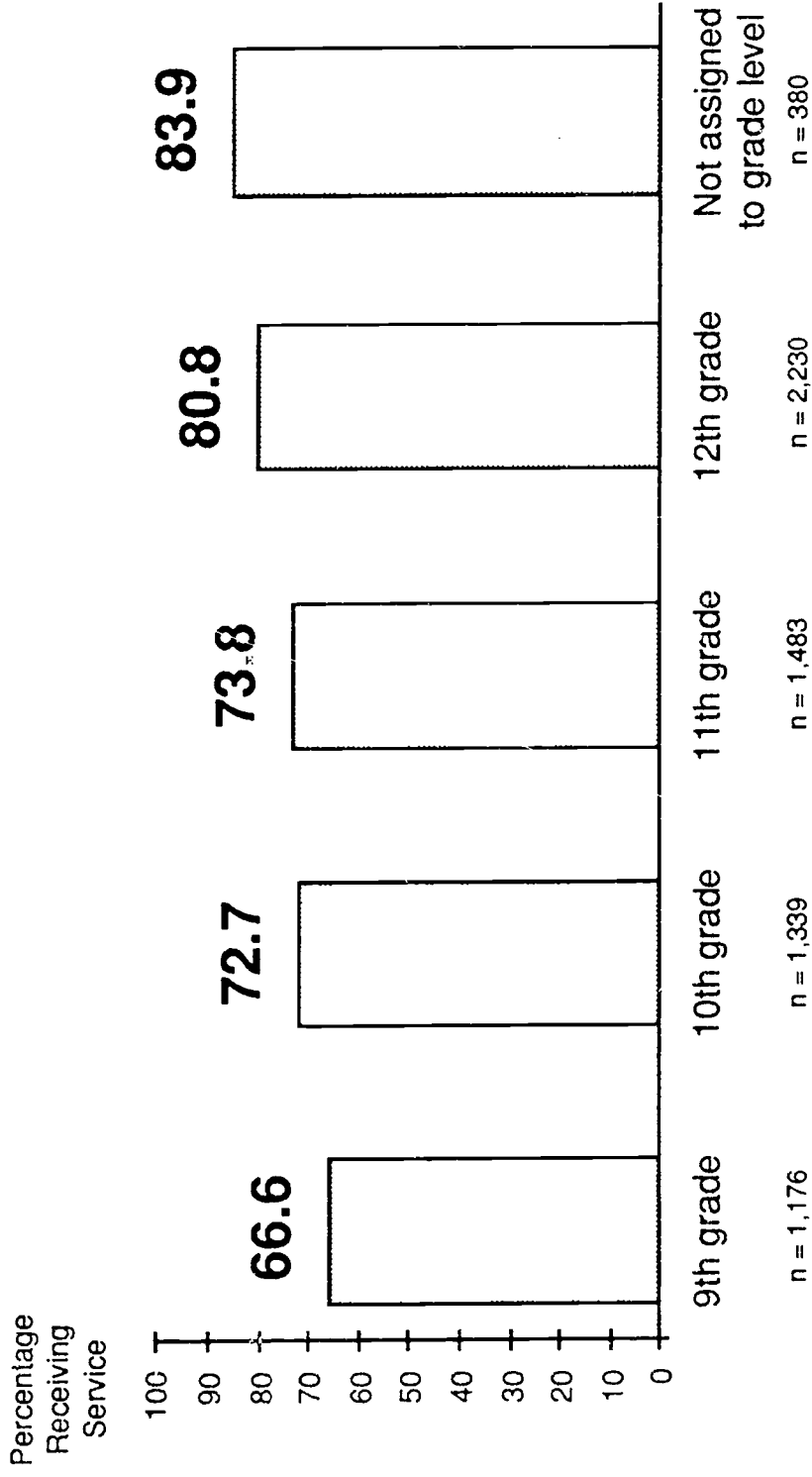
Of Students Who Took a Type of Course, Those Who  
Took At Least One of Them In Regular Education Classes

Disability Category	Academic Courses <sup>†</sup>	Vocational Courses <sup>§</sup>
All conditions	88	93
Learning disabled	95	95
Emotionally disturbed	94	93
Speech impaired	92	96
Mentally retarded	62	83
Visually impaired	96	90
Hard of hearing	92	93
Deaf	82	89
Orthopedically impaired	87	88
Other health impaired	90	91
Multiply handicapped	45	58

<sup>†</sup> Academic courses include English/language arts, mathematics, science, social science, and foreign language.

<sup>§</sup> Vocational courses include home economics, courses in prevocational skills, and occupationally specific courses.

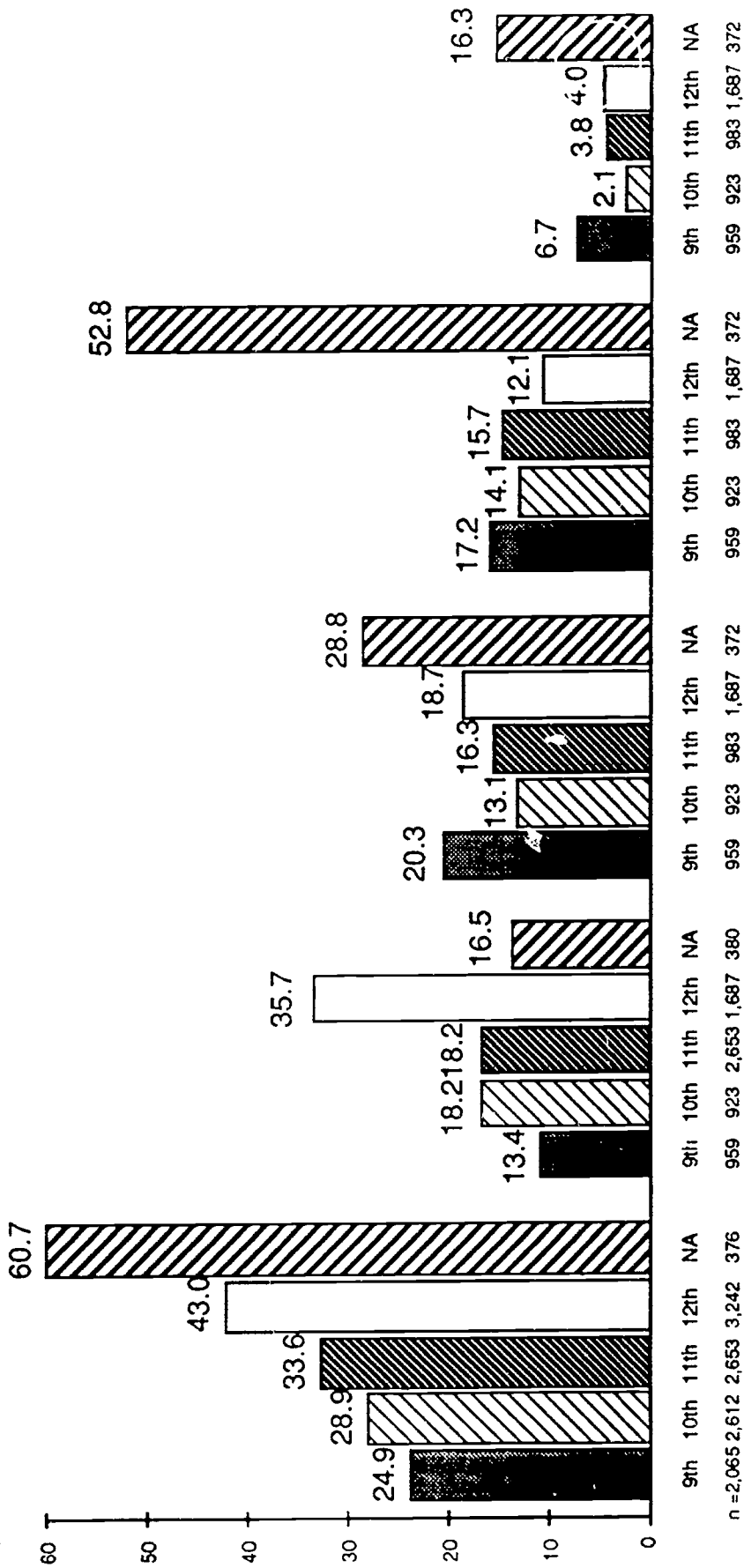
## Support Services Received from Schools



## STUDENTS WHO RECEIVED SUPPORT SERVICES \* FROM THEIR SCHOOLS, BY GRADE LEVEL

\* Services included life skills training, vocational assistance, speech therapy, physical therapy/mobility training or personal counseling/therapy.

Percentage  
Receiving  
Service



NA indicates not assigned to grade level.

## STUDENTS WHO RECEIVED EACH SUPPORT SERVICE, BY GRADE LEVEL

## STUDENTS WHO RECEIVED PERSONAL COUNSELING FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handi-capped
Percentage receiving services in:										
9th grade	20.9	33.8	3.0	13.7	11.5	9.8	19.8	19.4	18.8	---
n	180	128	106	121	77	101	48	104	70	
10th grade	7.8	37.0	8.7	15.7	10.0	11.6	18.2	19.8	17.5	---
n	164	100	79	155	93	117	45	86	61	
11th grade	14.0	34.9	13.1	17.5	15.3	17.8	18.9	12.1	12.9	22.4
n	217	86	77	144	74	117	56	101	69	42
12th grade	15.8	39.2	9.4	20.1	17.2	26.0	31.2	24.1	28.7	29.1
n	388	166	139	295	116	198	106	146	86	47

Percentages are reported separately only for categories with at least 25 students.

## STUDENTS WHO RECEIVED SPEECH/LANGUAGE THERAPY FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handicapped
Percentage receiving service in:										
9th grade	15.0	4.3	47.9	23.0	3.7	49.2	69.2	19.1	14.8	---
n	180	128	106	121	77	101	48	104	70	
10th grade	8.1	2.8	46.5	24.9	2.6	57.4	78.8	18.3	11.7	---
n	164	100	79	155	93	117	45	86	61	
11th grade	11.1	8.4	52.3	24.8	4.0	51.4	78.4	26.3	10.7	48.7
n	217	86	77	144	74	117	56	101	69	42
12th grade	7.0	6.8	51.6	19.8	4.6	61.2	81.2	20.7	33.3	40.0
n	388	166	139	295	116	198	106	146	86	47

Standard errors are in parentheses

Percentages are reported separately only for categories with at least 25 students



## STUDENTS WHO RECEIVED LIFE SKILLS TRAINING FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handicapped
Percentage receiving services in:										
9th grade	23.2	22.2	19.9	31.4	17.2	21.5	24.8	35.6	31.3	44.5
n	371	218	204	294	189	259	116	218	145	51
10th grade	25.5	21.5	21.7	44.9	24.0	23.4	28.0	33.2	23.4	43.8
n	476	262	241	366	241	342	155	266	182	81
11th grade	31.2	26.3	34.1	44.8	26.8	29.1	33.8	35.0	28.6	54.0
n	509	227	247	366	239	355	166	277	181	85
12th grade	41.3	39.3	36.8	51.7	36.3	41.8	40.5	47.3	38.4	59.2
n	645	274	304	454	288	431	215	333	198	100

Students in extended 12th grade and those not assigned to grade levels are not included here because the samples were too small to disaggregate.

## STUDENTS WHO RECEIVED HELP FROM TUTORS, READERS, OR INTERPRETERS FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped-ically Impaired	Other Health Impaired	Multiply Handicapped
Percentage receiving services in:										
9th grade	15.0	8.8	6.2	9.5	26.6	38.7	67.6	14.5	20.7	---
n	180	128	106	121	77	101	48	104	70	
10th grade	19.7	9.0	6.1	17.5	26.6	42.0	67.0	23.0	23.6	---
n	164	100	79	155	93	117	45	86	61	
11th grade	18.7	15.5	9.9	15.8	36.4	45.8	75.5	21.8	19.3	22.2
n	212	86	77	144	74	117	56	101	69	42
12th grade	35.6	33.5	23.3	35.5	50.7	68.6	77.9	33.2	51.9	31.0
n	388	166	139	295	116	198	106	146	86	47

Students in extended 12th grade and those not assigned to grade levels are not included here because the samples were too small to disaggregate.

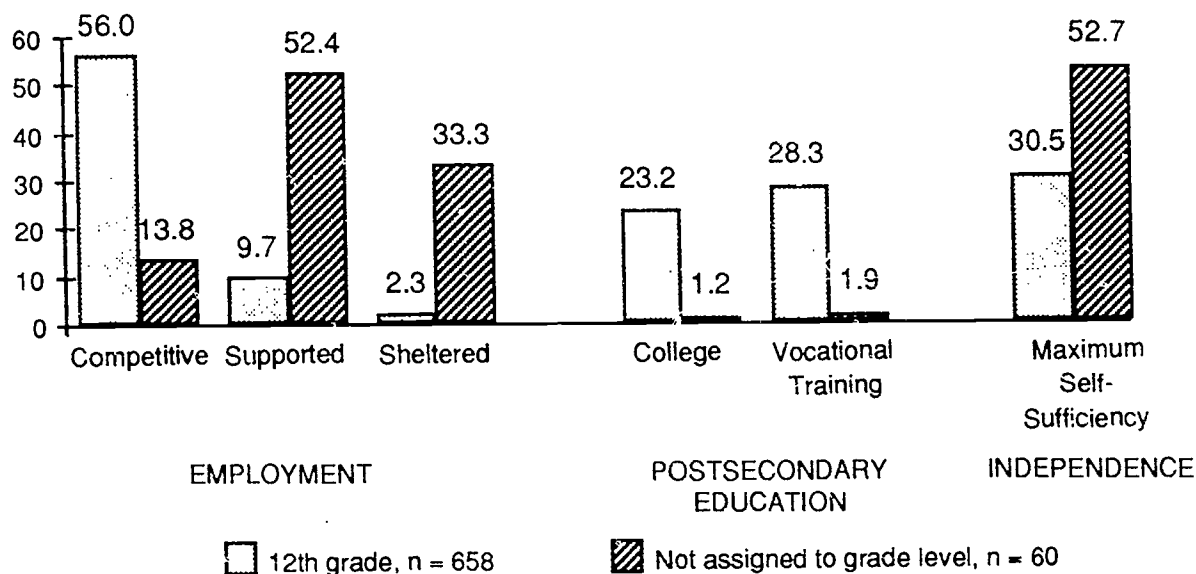
## STUDENTS WHO RECEIVED PHYSICAL THERAPY FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped- ically Impaired	Other Health Impaired	Multiply Handi- capped
Percentage receiving services in:										
9th grade	6.7	2.8	.0	8.2	11.5	4.8	1.8	40.8	8.3	---
n	180	128	106	121	77	101	48	104	70	
10th grade	.0	1.0	1.4	4.8	10.9	4.0	1.3	30.8	8.5	---
n	164	100	79	155	93	117	45	86	61	
11th grade	2.4	.9	4.9	6.4	19.3	1.4	5.6	41.9	8.7	17.6
n	217	86	77	144	74	117	56	101	69	42
12th grade	1.5	3.4	.0	9.2	21.0	.4	4.5	42.2	10.8	26.3
n	388	166	139	295	116	198	106	146	86	47

Percentages are reported separately only for categories with at least 25 students.

## Transition Planning

Percentage with Goal



**PRIMARY TRANSITION GOAL OF STUDENTS WITH DISABILITIES IN 12TH GRADE AND NOT ASSIGNED TO GRADE LEVEL**

**PRIMARY GOAL OF STUDENTS' TRANSITION PLANNING IN 12TH GRADE, BY SELECTED DISABILITY CATEGORIES**

Percentage of students with goal to:	Learning Disabled	Emotionally Disturbed	Speech Impaired	Mentally Retarded	Hard of Hearing	Other
Become competitively employed	58.6	64.1	38.9	53.1	35.1	30.1
Attend sheltered workshop	.0	2.2	.0	8.9	.0	14.7
Be in supported employment	3.5	5.1	6.5	30.9	9.3	20.0
Attend college	27.8	20.2	35.4	4.0	43.4	31.9
Attend vocational training program	32.4	16.8	27.7	20.1	36.8	21.7
n	177	76	103	125	73	104

Percentages are reported separately only for categories with at least 25 students. Multiple responses possible.

## PARTICIPANTS IN TRANSITION PLANNING FOR 12TH GRADE STUDENTS, BY DISABILITY CATEGORY

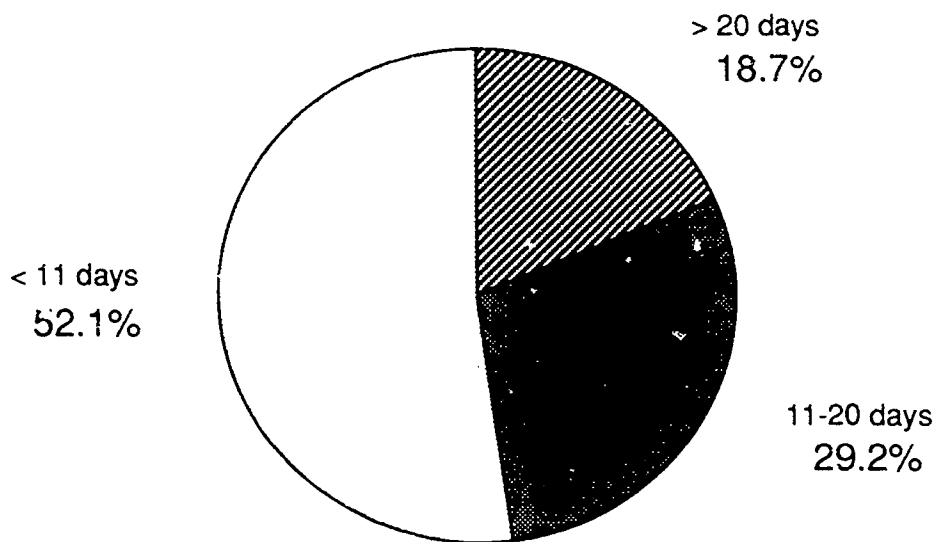
Percentage of students whose transition planning involved:	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Hearing Impaired	Other
Regular education academic teacher	21.3	18.3	20.6	9.4	16.8	16.7
Regular education vocational teacher	28.8	35.4	22.9	28.8	27.1	23.3
Special education teacher	81.5	78.9	54.6	98.6	83.5	91.5
School administrator	13.8	22.5	7.5	20.0	17.2	36.2
School counselor	71.5	76.0	74.1	55.0	53.6	62.9
Parent/guardian	57.4	51.1	50.0	78.7	58.9	63.6
Student	76.0	79.2	63.2	79.6	79.7	86.5
Vocational rehabilitation counselor	22.0	9.0	16.1	36.5	49.8	56.8
Other agency staff	.3	0	0	8.1	6.8	22.4
n	136	50	68	104	63	86

Percentages are reported separately only for categories with at least 25 students.

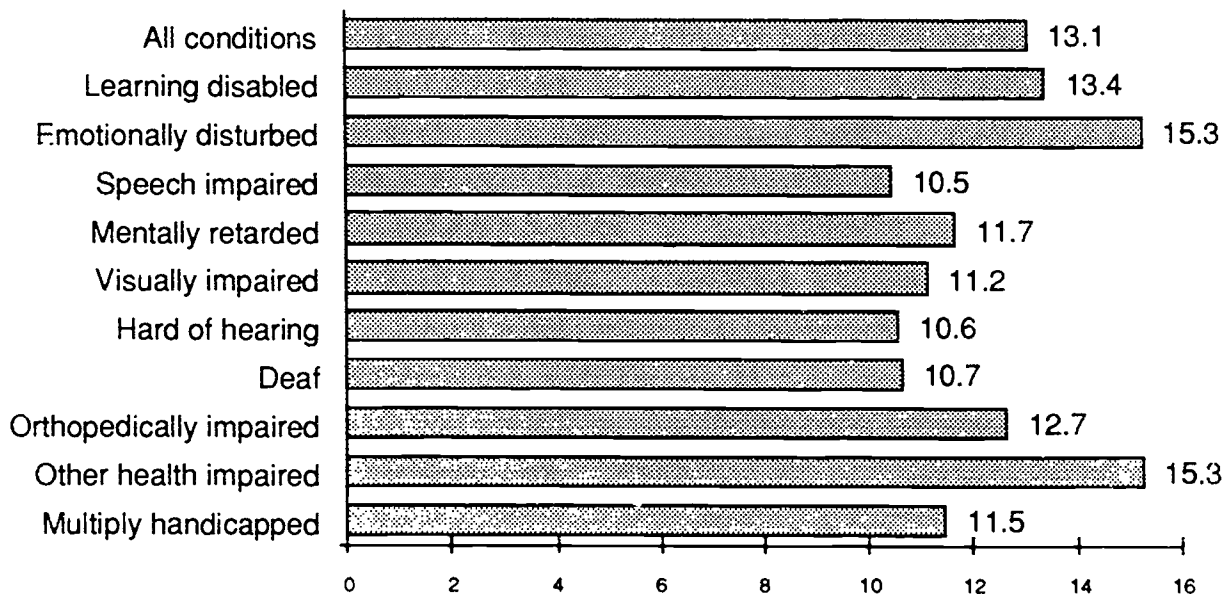
## CONTACTS MADE BY SCHOOL AS PART OF TRANSITION PLANNING FOR 12TH GRADE STUDENTS, BY SELECTED DISABILITY CATEGORIES

Percentage of students for whom transition planning involved contacts by the schools:	Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Hard of Hearing	Other
State vocational rehabilitation agency	57.2	38.8	73.3	82.7	79.2	76.4
Job placement programs	38.1	30.3	36.2	37.2	23.6	28.3
Employers	23.0	56.8	30.7	46.0	26.1	30.6
Post-secondary vocational training program	33.7	27.1	47.7	24.2	44.9	23.3
Other vocational training programs	15.2	18.0	36.1	37.1	24.6	15.9
Supported employment program	10.6	18.4	15.6	35.6	10.3	31.7
Sheltered workshops	2.3	6.0	10.2	19.4	0	20.4
Colleges	35.4	31.6	36.5	11.0	44.5	39.5
Military	19.0	27.2	12.4	3.0	7.2	3.1
Mental health agencies	2.4	0	8.5	17.6	0	10.6
Social service agencies	9.3	10.3	22.0	30.1	19.9	26.6
Group homes	1.7	5.9	0	10.8	0	8.7
n	64-108	29-44	35-47	36-94	36-68	62-81

## School Performance



**STUDENT ABSENTEEISM**



**AVERAGE DAYS ABSENT FROM SCHOOL,  
BY DISABILITY CATEGORY**

## GRADE PERFORMANCE, BY DISABILITY CATEGORY

Grade Level	Primary Disability Category:										
	All* Conditions	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped- ically Impaired	Other Health Impaired	Multiply Handicapped
<b>GPA for students in:</b>											
9th grade	2.0	1.9	1.7	2.1	2.0	2.4	2.3	2.6	2.5	2.1	2.1
10th grade	2.0	1.9	1.7	2.2	2.1	2.3	2.3	2.5	2.4	2.0	2.2
11th grade	2.1	2.0	1.9	2.2	2.2	2.4	2.4	2.6	2.4	2.2	2.3
12th grade	2.3	2.3	2.1	2.6	2.4	2.6	2.6	2.7	2.6	2.5	2.6
Cumulative	2.3	2.3	2.2	2.6	2.4	2.6	2.6	2.7	2.6	2.5	2.7
<b>Percentage failing a course in:</b>											
9th grade	42.7	44.6	56.5	39.7	33.5	29.6	31.1	21.8	27.0	40.9	30.3
10th grade	43.9	44.8	56.7	38.2	37.3	30.9	34.9	27.0	32.8	55.9	34.8
11th grade	37.5	38.7	54.1	34.3	28.5	30.6	30.4	22.9	29.4	43.3	16.7
12th grade	23.1	24.1	30.4	19.0	18.3	24.6	16.9	14.7	15.3	28.8	14.9
Cumulative	62.2	65.1	77.4	56.4	48.5	53.5	54.2	44.1	50.7	65.7	50.0
<b>Ns for:</b>											
9th grade	2,979	548	299	282	418	265	387	180	306	200	90
10th grade	2,859	520	286	261	399	265	377	174	292	189	91
11th grade	2,771	532	235	258	375	250	371	180	293	185	87
12th grade	3,273	652	278	311	451	294	430	223	344	194	90
Cumulative	2,191	399	167	215	263	215	322	159	240	137	70

\* All conditions includes youth in 11 federal special education disability categories. Percentages are reported separately only for categories with at least 15 students.

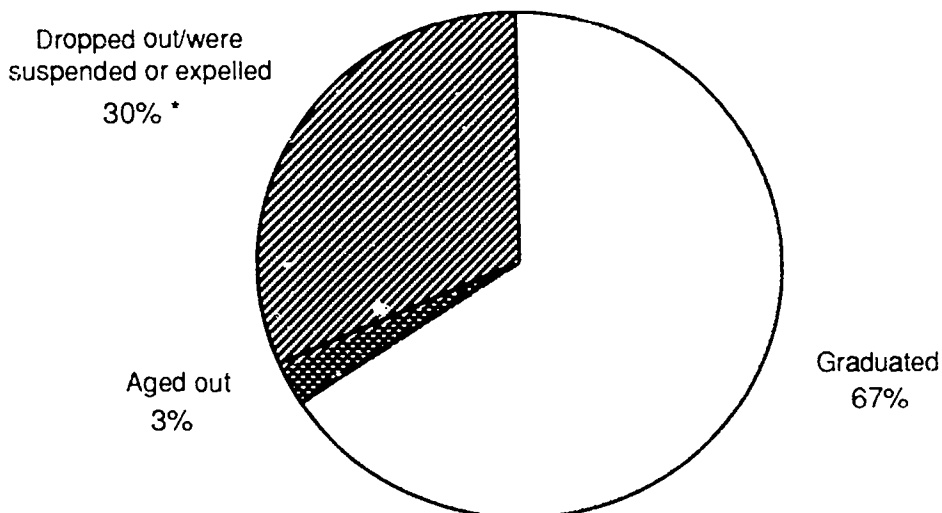
## GRADE PERFORMANCE IN REGULAR AND SPECIAL EDUCATION CLASSES, BY DISABILITY CATEGORY

Placement	Primary Disability Category:										
	All* Conditions	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthoped- ically Impaired	Other Health Impaired	Multiply Handicapped
<b>Cumulative GPA for students in:</b>											
Regular education	2.3	2.2	2.1	2.6	2.3	2.6	2.5	2.6	2.5	2.4	2.6
Special education	2.5	2.5	2.2	2.6	2.6	3.0	2.9	2.9	2.9	2.7	2.7
<b>Cumulative percentage failing a course:</b>											
Regular education	58.1	61.1	74.0	55.0	43.0	49.9	50.8	36.6	45.3	65.0	32.0
Special education	15.3	14.2	22.7	8.5	19.0	8.6	9.4	19.7	9.7	10.0	34.2

categories with at least 25 students

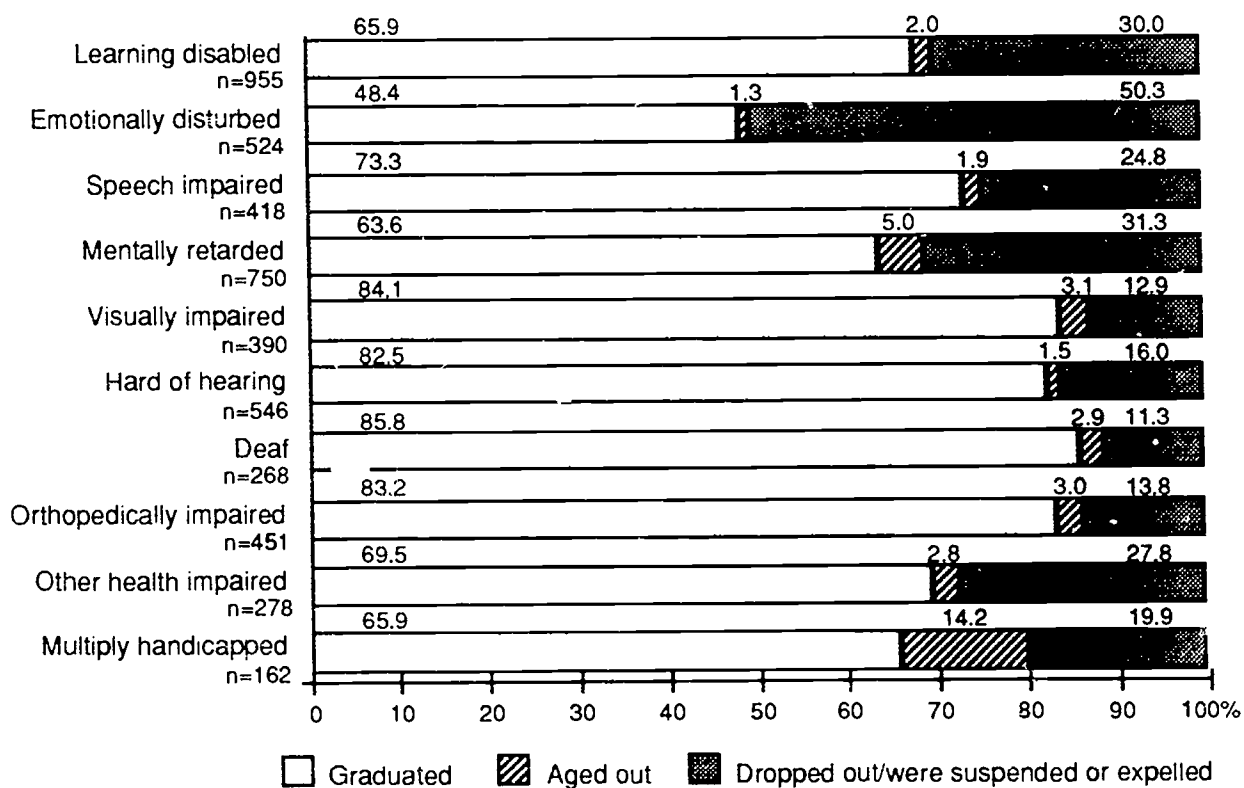


## School Completion

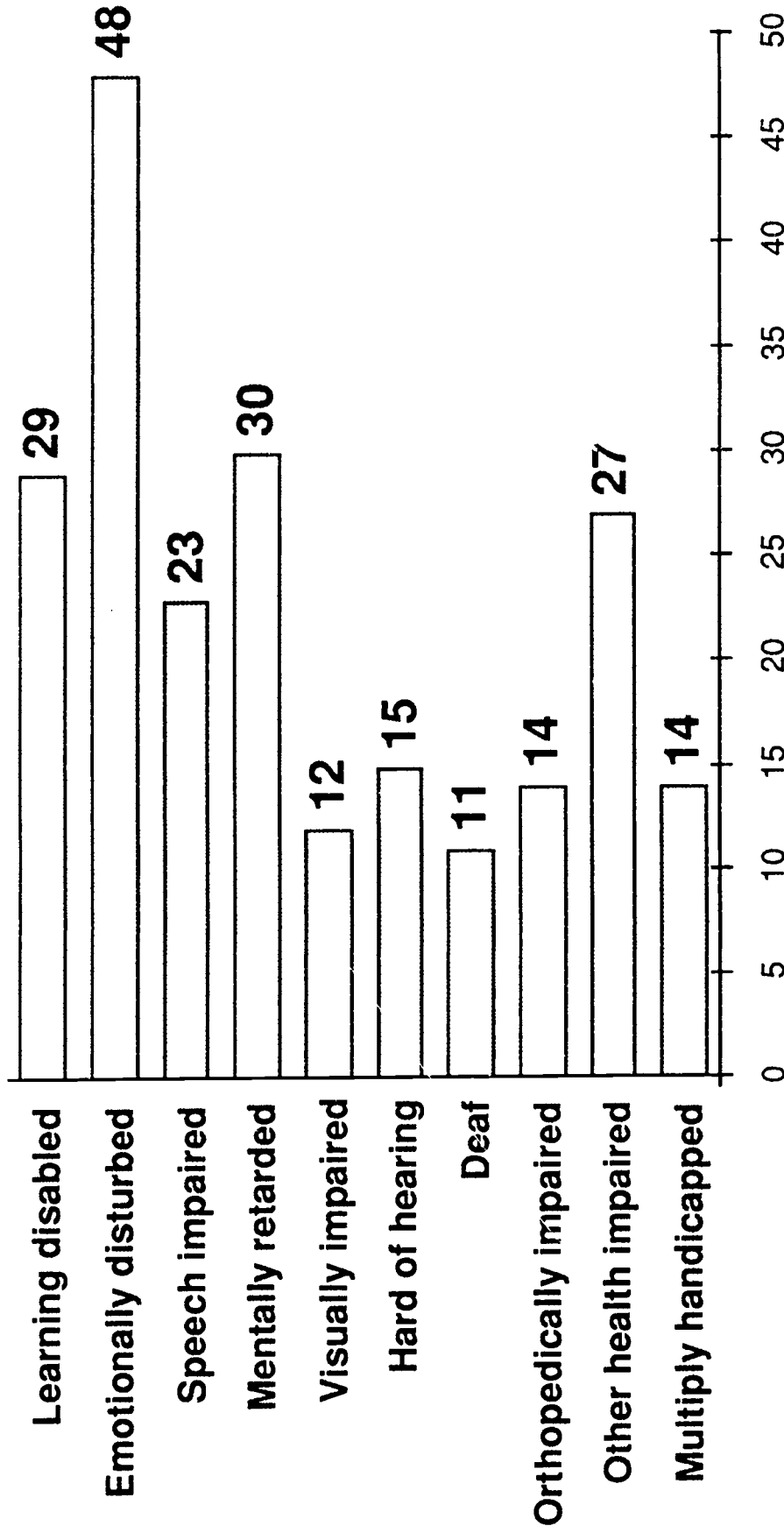


**SCHOOL COMPLETION STATUS OF YOUTH WITH DISABILITIES WHO ATTENDED REGULAR HIGH SCHOOLS (n = 4,751)**

\* Does not include 8% of youth who dropped out before 9th grade.

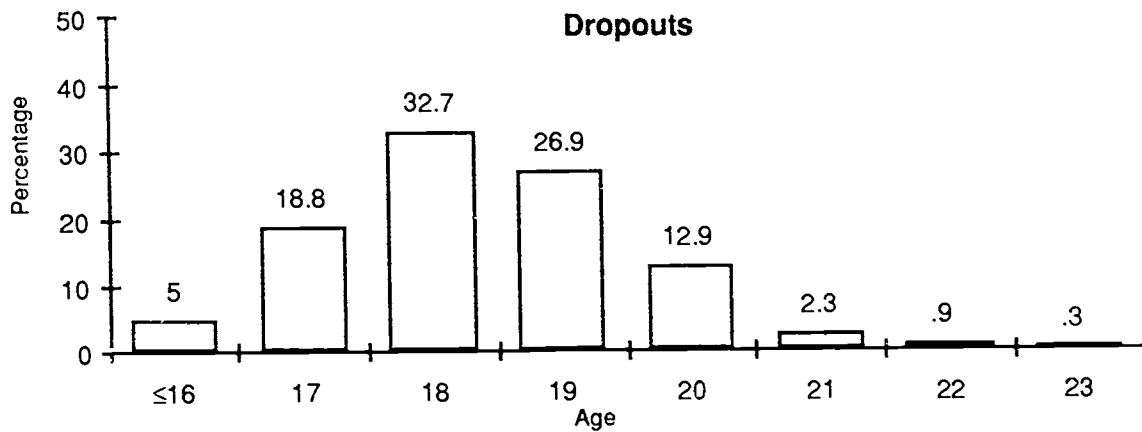
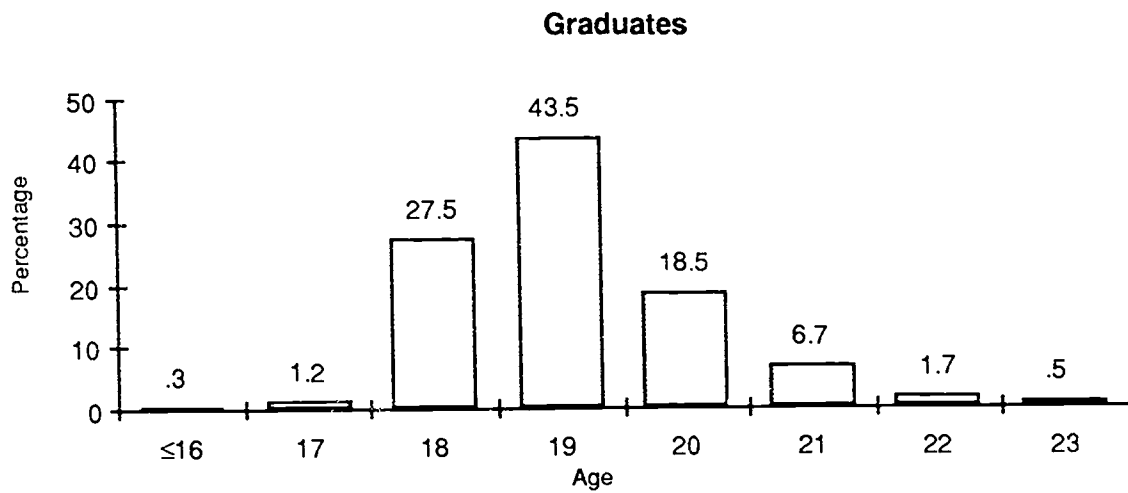


**SCHOOL COMPLETION STATUS OF YOUTH WITH DISABILITIES WHO ATTENDED REGULAR HIGH SCHOOLS, BY DISABILITY CATEGORY**



## DROPOUT RATES\* FROM 9TH THROUGH 12TH GRADES, BY DISABILITY

\* Does not include 8% of youth who dropped out before 9th grade.



**PERCENTAGE OF GRADUATES AND DROPOUTS  
LEAVING SCHOOL AT EACH AGE LEVEL**

## CREDITS EARNED BY STUDENTS WHO DROPPED OUT

Disability Category	Average Credits	n
All conditions*	9.5	505
Learning disabled	10.1	117
Emotionally disturbed	8.5	104
Speech impaired	8.4	44
Mentally retarded	8.0	80
Visually impaired	9.4	28
Hard of hearing	9.8	38
Deaf	12.9	22
Orthopedically impaired	11.5	26
Other health impaired	9.5	40

\* "All conditions" includes youths in each of the 11 federal special education disability categories. Percentages are reported separately only for categories with at least 25 dropouts.

Note: Based on all dropouts with complete transcript data for time in school.

## **Influences on School Performance and Completion**

## CHANGE IN SCHOOL PERFORMANCE ASSOCIATED WITH SCHOOL-RELATED EXPERIENCES

	<u>Absenteeism</u>	<u>Course Failure</u>	<u>Dropout</u>
School characteristics			
Larger student enrollment	+*	+***	
Low-income student body	+***	+*	
Student prior school performance			
Below grade-level reading ability		+*	NA
Older for grade	+*	+**	+***
Student and parent behaviors			
More on task in-class behaviors	-**	-***	NA
Parent very involved in child's education	-*	-***	NA
Belong to a school or community group	-***	-***	-***
See friends frequently outside school	+**	+**	+*
School program			
Spend more time in academic classes in regular education setting	+**	+***	
Take an occupational vocational survey class			-***
Concentrate in an occupational vocational content area			-***
Participate in a work experience program	-*	-**	-**

- ‡ p<.10  
 \* p<.05  
 \*\* p<.01  
 \*\*\* p<.001

Note. Plus denotes factor increases outcomes; minus denotes factor decreases outcome.

<sup>1</sup> Relationships statistically control for differences in disability, school programs, and other youth experiences and behaviors.

<sup>2</sup> Related to outcome at any grade level, 9 through 12.

**RELATIONSHIP AMONG MEASURES OF SCHOOL PERFORMANCE  
OVER 4 YEARS OF HIGH SCHOOL BY GRADE LEVEL**

	Absence			Failure			Dropout			
	9	10	11	9	10	11	9	10	11	12
Prior school performance										
Higher absenteeism	NA	+	+	+	+	+	+	+	+	+
Failed a class	NA		+	+	+	+	+	+	+	+

**+** denotes more likely to be absent, fail a class, or drop out

• p < 05

•• p < 01

••• p < 001



## **Postschool Outcomes**

## The Facts

- *Postsecondary education.* Few students with disabilities went on to postsecondary education. When they had been out of high school 3 to 5 years, fewer than one-third had done so, less than half the rate of youth in general. College attendance was particularly low. Enrollment rates were lowest for youth with learning disabilities and mental retardation; youth with sensory impairments enrolled at rates similar to typical youth.
- *Employment.* There were strong gains in employment over time, so that 57% of youth with disabilities were competitively employed when they had been out of school 3 to 5 years. This rate was still lower than that for the general population of youth. Significant increases for youth with disabilities were noted in the proportion of youth working full time and in those earning more than \$6 per hour. Gains were experienced largely by youth with learning, speech, or emotional disabilities; employment trends for most other disability categories were flat.
- *Residential independence.* Youth with disabilities showed a significant increase in independent living after high school; 37% lived independently 3 to 5 years after leaving school. However, this rate was substantially below the rate of youth as a whole. Independent living was more common among employed youth and those earning higher wages, as well as among females, because women were more likely to be married.
- *The social domain.* The rate at which youth belonged to groups and saw friends declined over time, although social isolation was rare; only 5% of youth saw friends less than weekly, did not belong to any community groups, and were not married or engaged. This rate was 25% for youth with multiple impairments. Overall, youth with disabilities were married or living with someone of the opposite sex when they had been out of high school 3 to 5 years at about the same rate as typical youth. However, young women with disabilities were significantly more likely than their nondisabled peers to be mothers (41%), particularly single mothers (20%).
- *Citizenship.* Half of youth with disabilities were registered to vote when they had been out of school 3 to 5 years, compared with two-thirds of youth in the general population. Registration rates were higher among high school graduates than among dropouts. Arrest rates rose sharply. Overall, 19% of youth with disabilities out of high school up to 2 years had been arrested at some time; 3 years later the rate was 30%. Arrests occurred primarily to youth with serious emotional disturbances, among whom 58% had been arrested.
- *Influences on postschool outcomes.* Controlling statistically for other differences between youth, postschool outcomes in some domains were better for youth who completed secondary school and for those who, while they were in school, had taken vocational education, spent more time in regular education classes, and belonged to school or community groups. Particular outcomes also were better for youth who had a transition plan in high school that specified that outcome as a goal (e.g., employment) and for youth whose parents expected them to succeed and who were involved in their schooling.
- *Adult services.* Parents reported that 30% of out-of-school youth with disabilities did not need adult services. Among those reported to need a service, about one-third were getting vocational assistance or physical therapy, and one-fourth were receiving life skills training, help from a tutor, reader, or interpreter, or personal counseling.

# **The Background**

## ***Postsecondary Education***

Dropouts with disabilities rarely completed secondary school, either by returning to high school or by earning a GED. Three to 5 years after dropping out, 27% of dropouts with disabilities had enrolled in a program to earn a high school diploma; 11% actually had earned a diploma, and 5% were still enrolled. Even if all those still enrolled completed the program, more than 30% of youth with disabilities out of school 3 to 5 years still would be without a high school diploma, almost twice the rate of youth in the general population.

Although there were increases over time in the rates at which youth with disabilities had enrolled in some kind of postsecondary school since leaving high school, enrollment rates still lagged substantially behind those of youth in the general population. Among youth who had been out of high school up to 2 years, 14% had enrolled in postsecondary school; 27% had done so 3 years later. Comparable rates for the general population of youth were 53% and 68%.

Enrollment rates were particularly low for youth with learning disabilities (30%), mental retardation, and multiple impairments (9%). Youth with sensory impairments enrolled in postsecondary schools at about the same rate as youth in general (58% to 60%).

The higher dropout rate of youth with disabilities than youth in the general population does not explain their lower rate of postsecondary school enrollment. Even among graduates, enrollment rates were significantly lower (37%).

Virtually all of the difference in postsecondary enrollment between youth with disabilities and those in the general population involved college attendance. Youth with disabilities were about as likely as others to enroll in postsecondary vocational schools, but they were only about one-third as likely to enroll in 2-year or 4-year colleges.

Overall, 12% of youth with disabilities out of school 3 to 5 years had completed a postsecondary degree, generally from a vocational program. This constituted 45% of those who had ever enrolled in a postsecondary program. Fewer than one-fourth of those who had ever enrolled were still attending a postsecondary school.

Controlling for other differences between them, young people with disabilities were significantly more likely to enroll in a postsecondary academic program at a 2-year or 4-year college if they had parents who were involved in their education in high school and who expected them to go on to further education after high school. Spending more time in high school in regular education classes, taking college preparatory courses (e.g., advanced math or foreign language), and having a transition plan with a goal of postsecondary education also were significantly related to higher postsecondary academic enrollment, independent of other differences between youth.

## **Employment**

The rate of competitive employment for youth with disabilities increased from 46% for youth out of school up to 2 years to 57% 3 years later. Nonetheless, the rate is lower than for youth in the general population (69%).

Almost three-fourths of those with learning disabilities were competitively employed (up 12 percentage points over time), as were two-thirds of those with speech impairments (up 15 percentage points). The employment picture for those with the lowest employment rates in the early years after high school remained poor. Three to 5 years after secondary school, only 17% of youth with multiple handicaps were competitively employed, as were 22% and 29% of their peers with orthopedic or visual impairments.

The improvement in employment was fueled by an 18-point increase in the percentage of youth with disabilities who were working full-time. Whereas about 25% of employed youth were working full-time when out of school less than 2 years, 3 years later the percentage had increased to 43%. The trend was decisively toward full-time employment for youth in all categories, significantly so in the case of youth with learning disabilities, emotional disturbances, speech impairments, or mental retardation.

Wage advancement was pronounced for working youth in all disability categories. Overall, there was a 31 percentage point increase in the number of working youth earning more than \$6.00 per hour; 40% of competitively employed youth earned these higher wages 3 to 5 years after high school. Gains were particularly strong for youth with learning disabilities, serious emotional disturbances, speech impairments, or sensory impairments.

Although wage advances were made, the median hourly wage still was just \$5.72, which equated to an annual income of less than \$12,000 for youth who were employed full-time and year around. Further, the initial disparity in wages between the disability categories that was apparent in the early years after secondary school persisted.

About 60% of employed youth received medical insurance or paid vacation, which was highly related to the types of jobs held. More than two-thirds of full-time workers with disabilities received these benefits, compared with just over one-third of part-time workers. Similarly, those earning more than \$6.00 per hour were almost twice as likely as those earning \$4.30 or less per hour to receive paid vacation and medical insurance.

High school completion was associated with more positive employment outcomes. Graduates from secondary school bested their peers who dropped out or aged out in the number employed, growth in employment, number working full-time, growth in wages, and those earning more than \$6.00 per hour. Controlling for other differences between youth, those who spent more time in regular education and those who took vocational education in secondary school were significantly more likely to be competitively employed and to earn higher wages.

Fewer than half of nonworking youth with disabilities were looking for work. Young women were significantly less likely than men to be looking for work outside the home, often because of parenting responsibilities.

## ***Residential Independence***

In their first 2 years out of high school, a large majority (83%) of youth with disabilities lived at home with their parents; 3 years later, 55% did so. There was an accompanying significant increase in the residential independence of youth (defined as living alone, with a spouse or roommate, in a college dormitory, or in military housing not as a dependent). The rate of residential independence increased from 11% of youth out of school up to 2 years to 37% of youth out of school 3 to 5 years. The rate of independent living still lagged substantially behind rates for youth in the general population, among whom 60% were living independently 3 to 5 years after high school.

Although there were significant gains in residential independence for youth in virtually all disability categories, independent living was most common among youth with learning disabilities, emotional disturbances, or sensory impairments (40% or more lived independently). One-fourth or fewer youth with mental retardation, health impairments, or multiple disabilities lived independently.

Controlling for other differences among them, residential independence was significantly more common among females than males, because of their higher marriage rates. White youth also were significantly more likely to be living independently than minorities. Youth were more likely to be living independently after high school if parents had expected them to be. Residential independence also was facilitated by having a job, earning higher wages, or attending college (thereby often living in a college dormitory).

The rate of youth living in supervised settings (including group homes, institutions for those with disabilities, and residential schools that were not colleges) was stable over time, about 4% of youth with disabilities. Rates were highest for youth with multiple impairments, including those who were deaf/blind; about one-third lived in supervised settings.

The rate at which youth resided in correctional facilities increased from fewer than 1% of youth out of school up to 2 years to almost 3% 3 years later. Rates were highest for youth with serious emotional disturbances; 10% were incarcerated or lived in drug treatment centers, shelters for the homeless, or similar settings.

## ***The Social Domain***

*Seeing friends.* As youth were out of school longer, their frequency of seeing friends declined. However, more than one-third still reported seeing friends (other than those they may have been living with) 4 or more days per week. This frequency of seeing friends was significantly higher for males than for females with disabilities.

*Belonging to groups.* Group membership also declined somewhat in the postschool years, so that 3 to 5 years after leaving high school, about 1 in 5 youth belonged to social or community groups. There were few significant differences in group membership between disability groups, except for higher membership rates for youth who were deaf or visually impaired, groups most likely still to be students in postsecondary schools.

*Marriage and family formation.* By the time they had been out of school 3 to 5 years, 15% of young men and 30% of young women with disabilities were married or living with someone of the opposite sex. These rates were not significantly different from those for youth in the general population. Among youth with disabilities, 16% of males were reported to be fathers and 41% of females were reported to be mothers. For males, this parenting rate was not different from that in the general population. However, the parenting rate for young women with disabilities was significantly higher than the rate for young women in the general population who had been out of school a similar length of time. One in 5 young single women with disabilities were mothers, also a significantly higher rate than in the general population. Female dropouts were particularly likely to be mothers (54%). About one-third of single mothers with disabilities lived alone with their children.

*Social isolation.* The NLTS identified youth as socially isolated if they saw friends less often than weekly, did not belong to a school or community group, and were not married, engaged, or living with someone of the opposite sex. Overall, social isolation was experienced by 6% of youth with disabilities who had been out of school 3 to 5 years. However, one-fourth of those with multiple impairments and 1 in 6 of those with other health impairments were socially isolated, by the NLTS definition. Social isolation does not imply a lack of contact with people outside the family, however. One-third of those who were socially isolated worked competitively, 10% were in sheltered or supported jobs that would bring them into contact with others, and 5% were postsecondary students.



## **Citizenship**

Exercising one's right to vote is an important aspect of American citizenship. Although the NLTS did not collect information on the voting behavior of youth with disabilities, information is available on whether youth were registered to vote. Overall, about half of youth who had been out of secondary school 3 to 5 years were registered to vote. This rate was somewhat lower than the corresponding figure for the general population of youth, 66%.

Voter registration was most common for youth with speech impairments (62%). Youth with learning, visual, orthopedic, or other health impairments had registration rates between 55% and 60%. No youth with multiple impairments were reported to be registered to vote.

Young men with disabilities were significantly more likely than women to be registered to vote (55% vs. 42%). African American youth had higher registration rates than white youth with disabilities (64% vs. 48%), in contrast to the ethnic differences in the general population. High school graduates were significantly more likely to be registered to vote than dropouts or those who aged out (58% vs. 42% and 32%).

Being arrested is in some ways the inverse of good citizenship. Arrest rates increased over time among youth with disabilities. When they had been out of secondary school up to 2 years, 19% had been arrested at some time in the past. Three years later, 30% had been arrested.

Arrest rates were highest and increased most dramatically for youth with serious emotional disturbances. Two years out of high school, 37% had been arrested. Another 21% were arrested for the first time in the subsequent 3 years, so that by the time youth had been out of school 3 to 5 years, 58% had been arrested at some time. Arrest rates also were relatively high for youth with learning disabilities. In the first 2 years out of high school, 20% had been arrested, a rate that increased to 31% 3 years later. Arrest rates 3 to 5 years after high school were below 20% for all other disability categories except speech impaired (23%), and below 10% for youth with orthopedic and other health impairments and youth who were deaf/blind.

Males were significantly more likely than females to be arrested (38% vs. 11% 3 to 5 years after high school), as were African American youth compared with their white and Hispanic counterparts (40% vs. 27% and 22%).

The largest difference, however, was between high school dropouts and those who left high school by graduating or aging out. The arrest rate was 56% among high school dropouts, compared with 16% among graduates and 10% among those who aged out of school. Among dropouts with serious emotional disturbances, the arrest rate was 73% 3 to 5 years after secondary school.

Among those who had been out of school 3 to 5 years and who had been arrested at some time in the past, 11% were incarcerated at the time of the NLTS interview.

## **Adult Services**

The NLTS asked parents to report whether youth with disabilities who had been out of secondary school up to 5 years needed vocational assistance; life skills training; help from a tutor, reader or interpreter; personal counseling; or physical therapy. They also reported whether services had been received since leaving high school. If not received, questions were asked about whether those services were being sought.

Parents reported that 30% of out-of-school youth with disabilities did not need adult services. About one-third of youth with learning disabilities or speech impairments were reported not to need adult services when they had been out of school up to 5 years. Fewer than 10% of youth with sensory, physical, or multiple disabilities were reported not to need services.

Six of 10 youth with disabilities out of school up to 5 years were reported by parents to need vocational assistance (e.g., job skills training, help in finding a job). Need was most common among youth with emotional or orthopedic impairments and those who were hard of hearing. African American students, dropouts, and youth who were not employed also had higher rates of need for vocational assistance. Overall, more than one-third of youth reported to need vocational help were receiving it. Categories of youth with the highest reported need often were the least likely to be receiving services. For example, of the 70% of youth with emotional disabilities who were reported to need vocational help, only 28% were receiving it. In contrast, of the 56% of youth with speech impairments who were reported to need vocational assistance, 39% were receiving it. African American youth and dropouts in need of help were less likely to receive it than others. This pattern of high need being met by low receipt was fairly common across the kinds of services investigated.

Life skills training was reported as a need for 43% of youth, with higher rates reported, again, for youth with emotional, orthopedic, or hearing impairments, minority youth, and dropouts. Among those reported to need life skills training, 30% were receiving it, with higher rates of receipt among youth with mental retardation and health, visual, or multiple impairments.

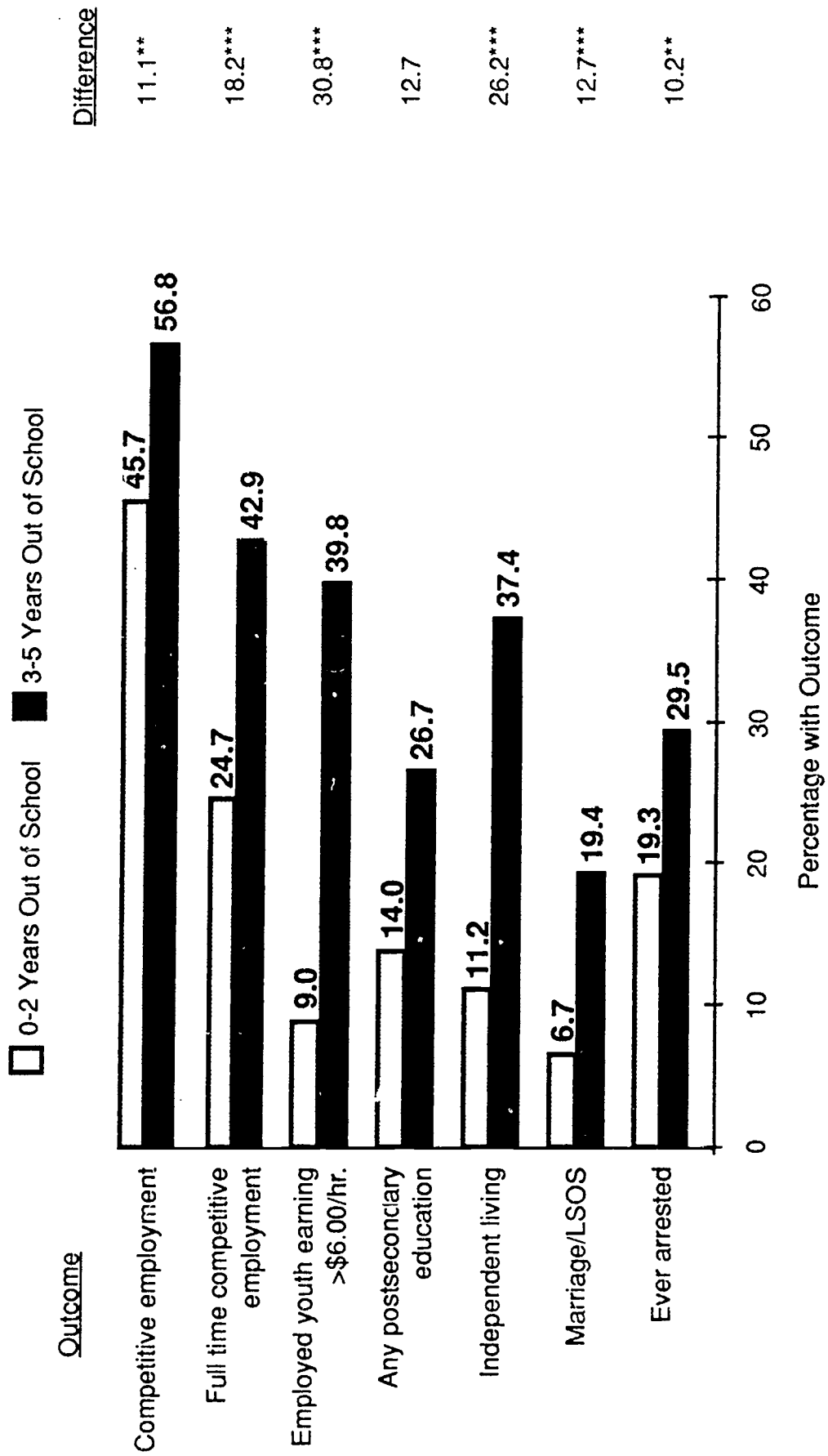
Help from a tutor, reader, or interpreter and personal counseling each were reported as a need for about one-third of youth. Human aides were needed most by youth with hearing impairments, and personal counseling was needed most by those with emotional disabilities and multiple impairments. Fewer than one-fourth of those who needed either kind of help were receiving it.

Physical therapy or mobility training was a need reported for about one-fourth of youth, the rate being highest, logically, for those with orthopedic or multiple impairments. Almost one-third of those needing it were reported to be receiving this kind of therapy.

Few parents reported that services were being sought for youth who needed them but were not receiving them. For most services, fewer than 15% of those with unmet needs were seeking services to meet those needs. Youth with more severe disabilities were more likely to have someone seeking services for them, as were youth with better-educated heads of households.



## **The Figures**



# TRENDS OVER TIME IN POSTSCHOOL OUTCOMES OF YOUTH WITH DISABILITIES

Source: Wagner et al. (1992). *What Happens Next? Trends in Postschool Outcomes of Youth with Disabilities*. Menlo Park, CA: SRI International.  
 \*\* p < .01; \*\*\* p < .001

## THE INFLUENCE OF SCHOOL FACTORS ON OUTCOMES<sup>1</sup> OF YOUTH WITH DISABILITIES

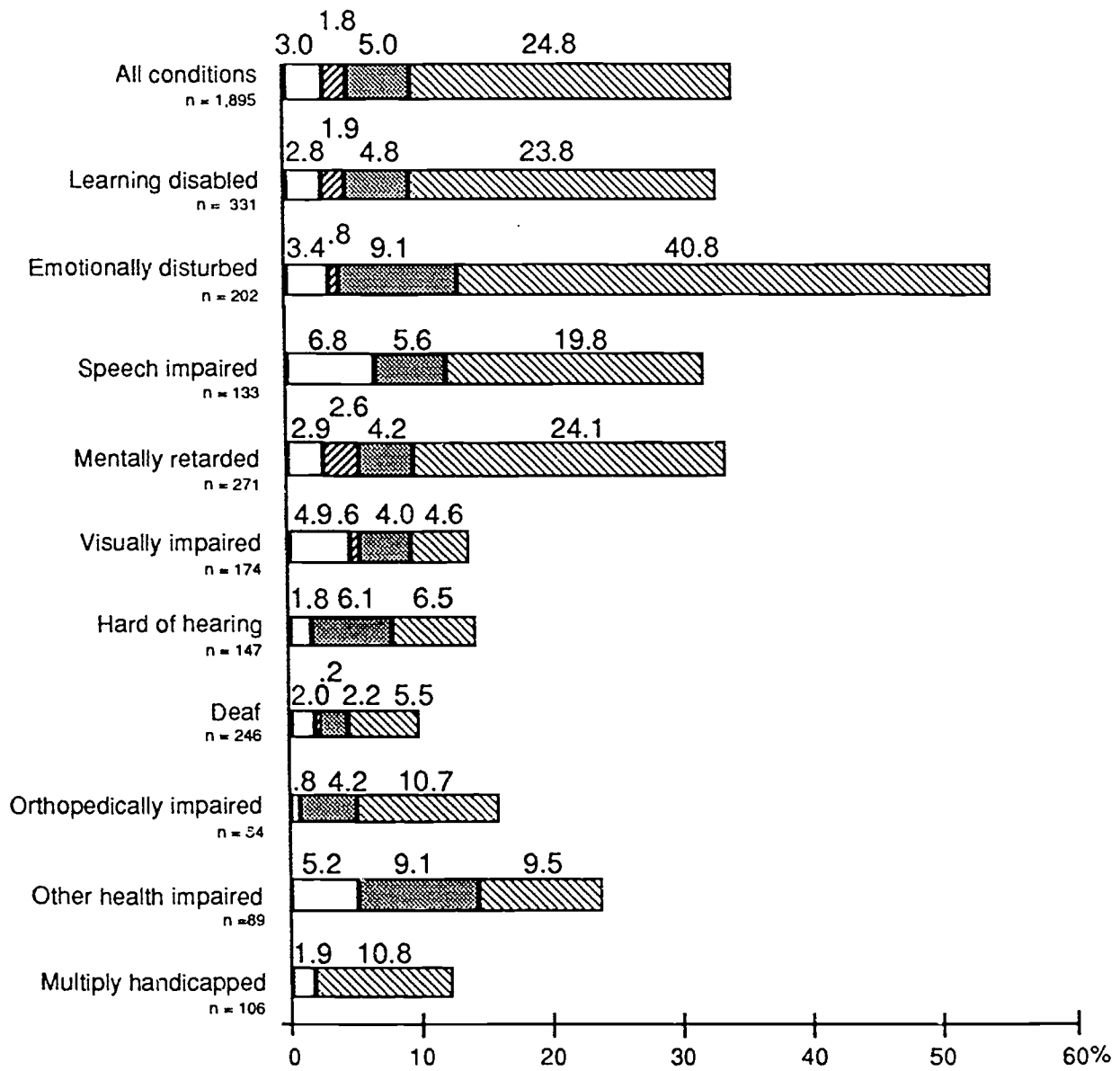
Postschool Outcomes	Time Spent in Regular Education Classes		Took College Prep Classes <sup>2</sup>		Took Vocational Education <sup>3</sup>		Had Transition Plan with Relevant Goal		Dropped Out		Belonged to School/Community Group		High Parent Expectations While in High School		High Parent Involvement While in High School	
Attended college			†***				†*					†*				
Attended vocational program			‡				†*					‡				†*
Competitively employed		†**			†*											
Total compensation		†***			†*											-
Residential independence		-														†*
Full community participation			†***		‡											†***

† p < .10  
 \* p < .05  
 \*\* p < .01  
 \*\*\* p < .001

Note: Plus denotes factor increases outcome; minus denotes factor decreases outcome.

<sup>1</sup> Relationships statistically control for differences in disability, school programs, and other youth experiences and behaviors.  
<sup>2</sup> Related to outcome at any grade level, 9 through 12

## Postsecondary Education



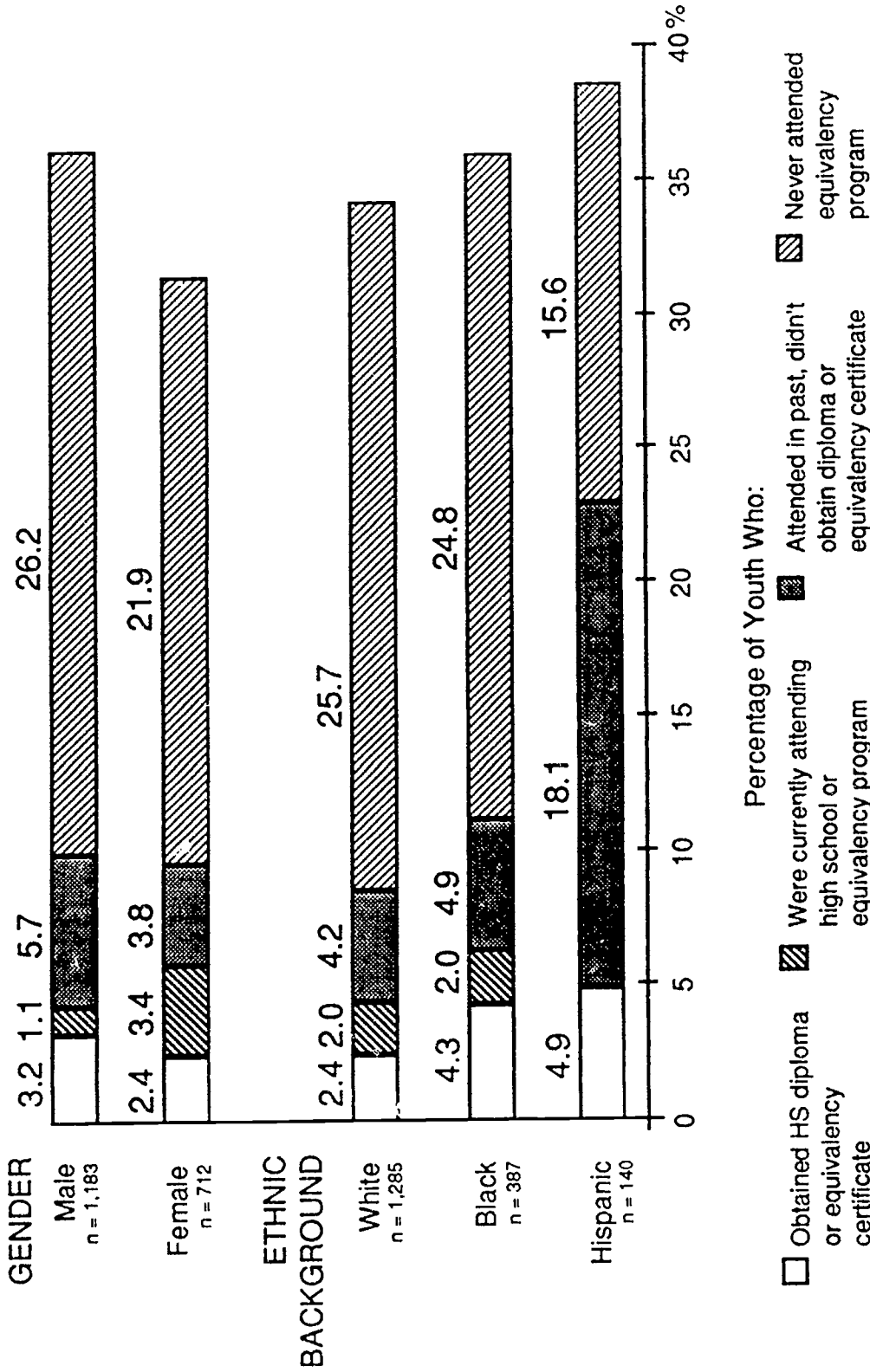
Percent of Youth Who:

- Obtained HS diploma or equivalency certificate
- ▨ Were currently attending high school or equivalency program
- ▩ Attended in past, didn't obtain diploma or equivalency certificate
- ▧ Never attended equivalency program

Note: Bars represent youth who dropped out of secondary school.

Youth classified as deaf/blind are not included because of small sample size.

## SECONDARY SCHOOL COMPLETION STATUS OF YOUTH 3 TO 5 YEARS AFTER DROPPING OUT OF SECONDARY SCHOOL, BY DISABILITY CATEGORY

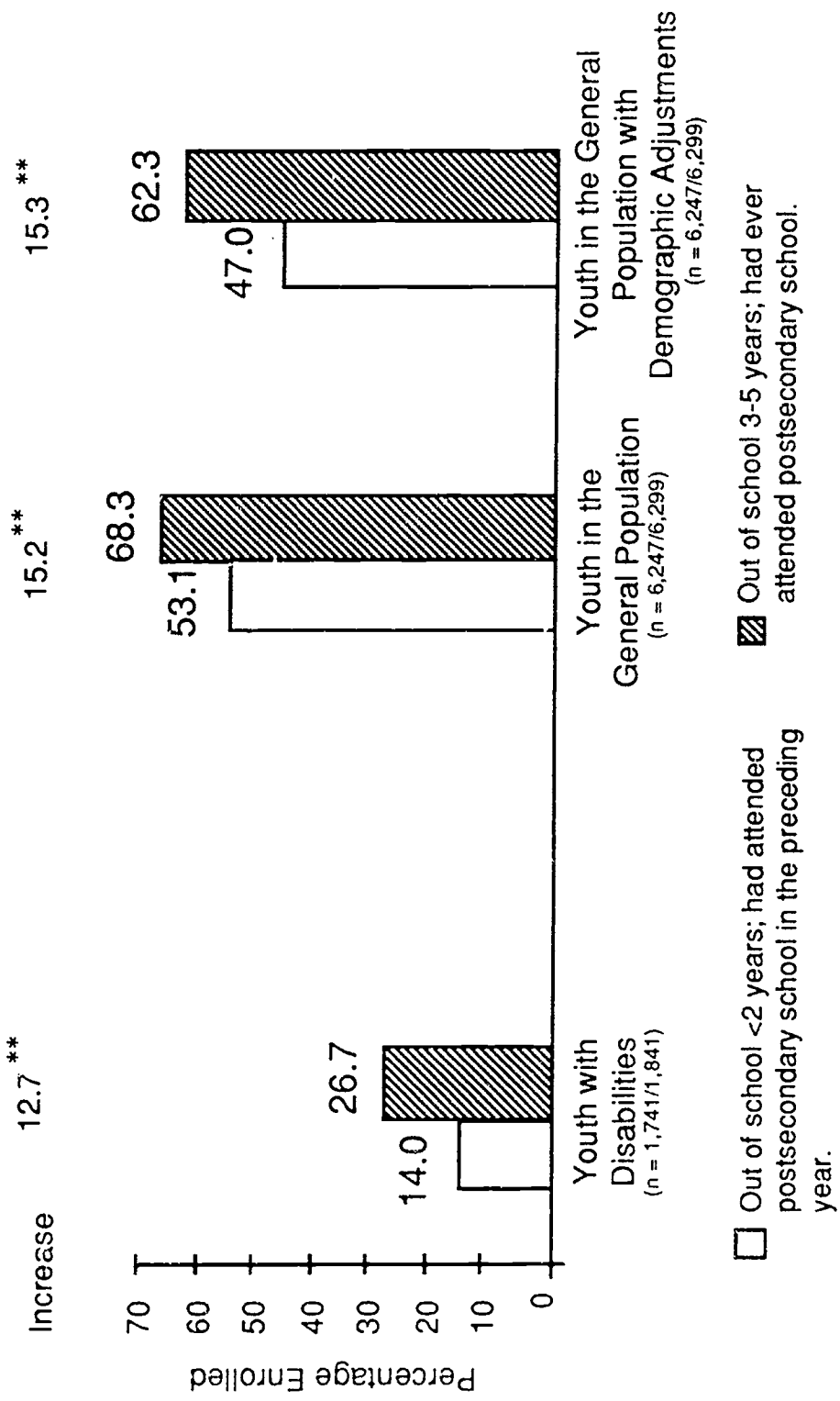


Note: Bars represent youth who dropped out of secondary school.

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**SECONDARY SCHOOL COMPLETION STATUS OF YOUTH WITH DISABILITIES 3 TO 5 YEARS AFTER DROPPING OUT OF SECONDARY SCHOOL, BY GENDER AND ETHNIC BACKGROUND**

**108**



Note: Data for the general population come from the 1979-1986 National Longitudinal Survey of Youth. General population is adjusted to match youth with disabilities for gender, ethnic background, and head of household's educational level.

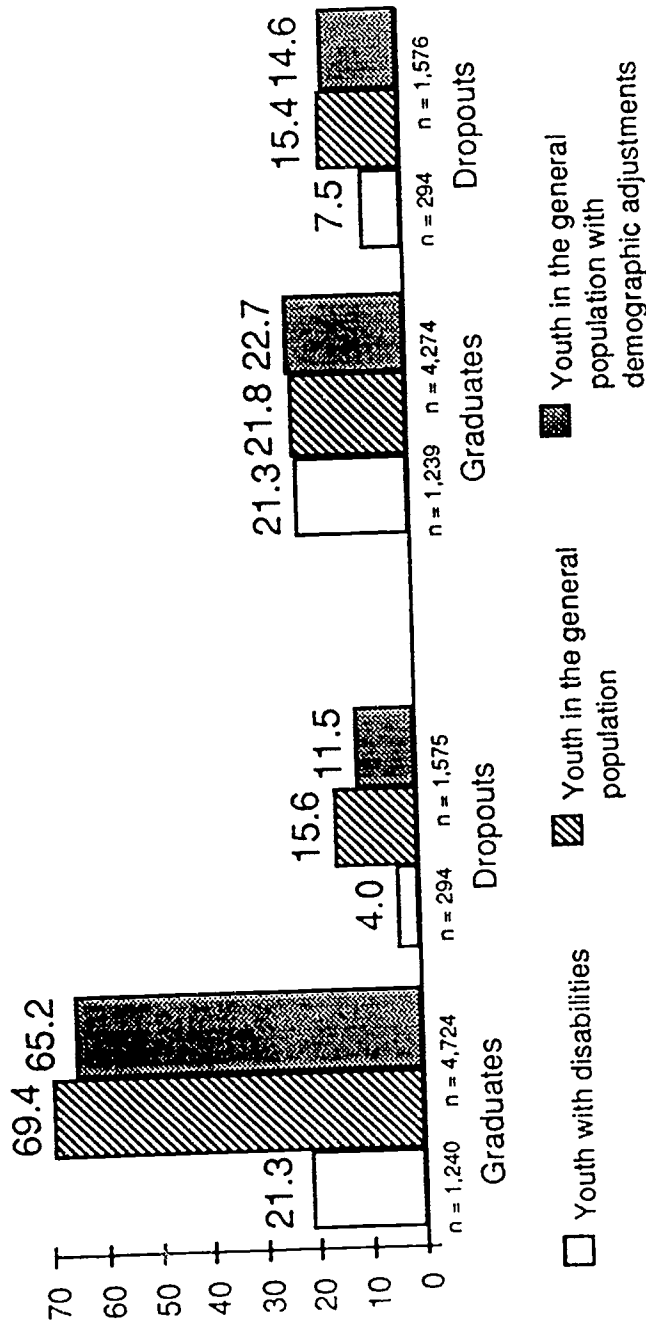
\*\* p < .01

## TRENDS IN POSTSECONDARY SCHOOL ENROLLMENT OF YOUTH WITH DISABILITIES AND YOUTH IN GENERAL

Percentage of youth 3 to 5 years out of secondary school who had attended:

**Postsecondary Vocational Schools**

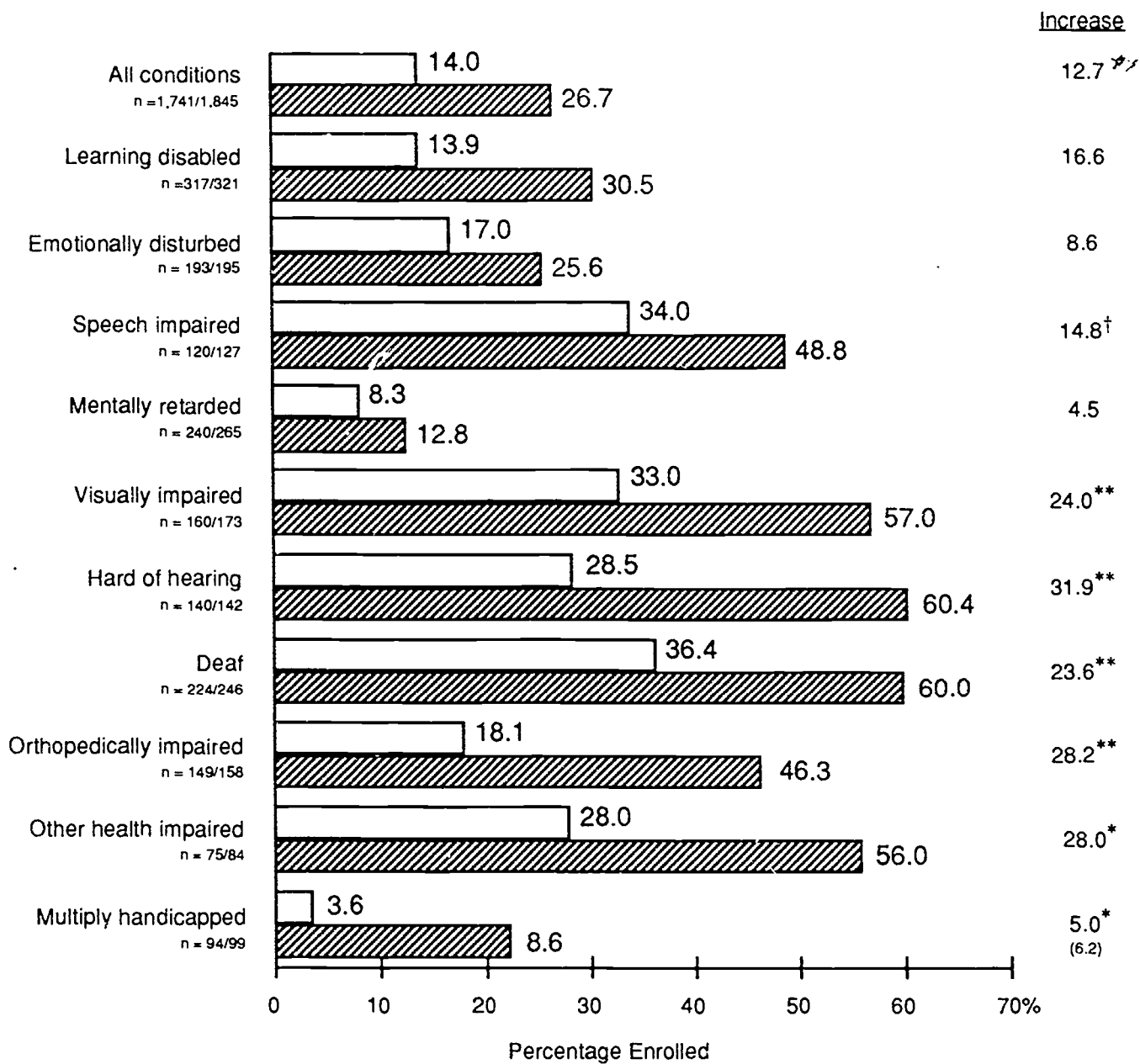
**Colleges**



Note: Data for the general population come from the 1979-1986 National Longitudinal Survey of Youth. General population is adjusted to match youth with disabilities for gender, ethnic background, and head of household's educational level.

**ENROLLMENT IN COLLEGES AND POSTSECONDARY VOCATIONAL SCHOOLS BY GRADUATES AND DROPOUTS WITH DISABILITIES AND THOSE IN THE GENERAL POPULATION**



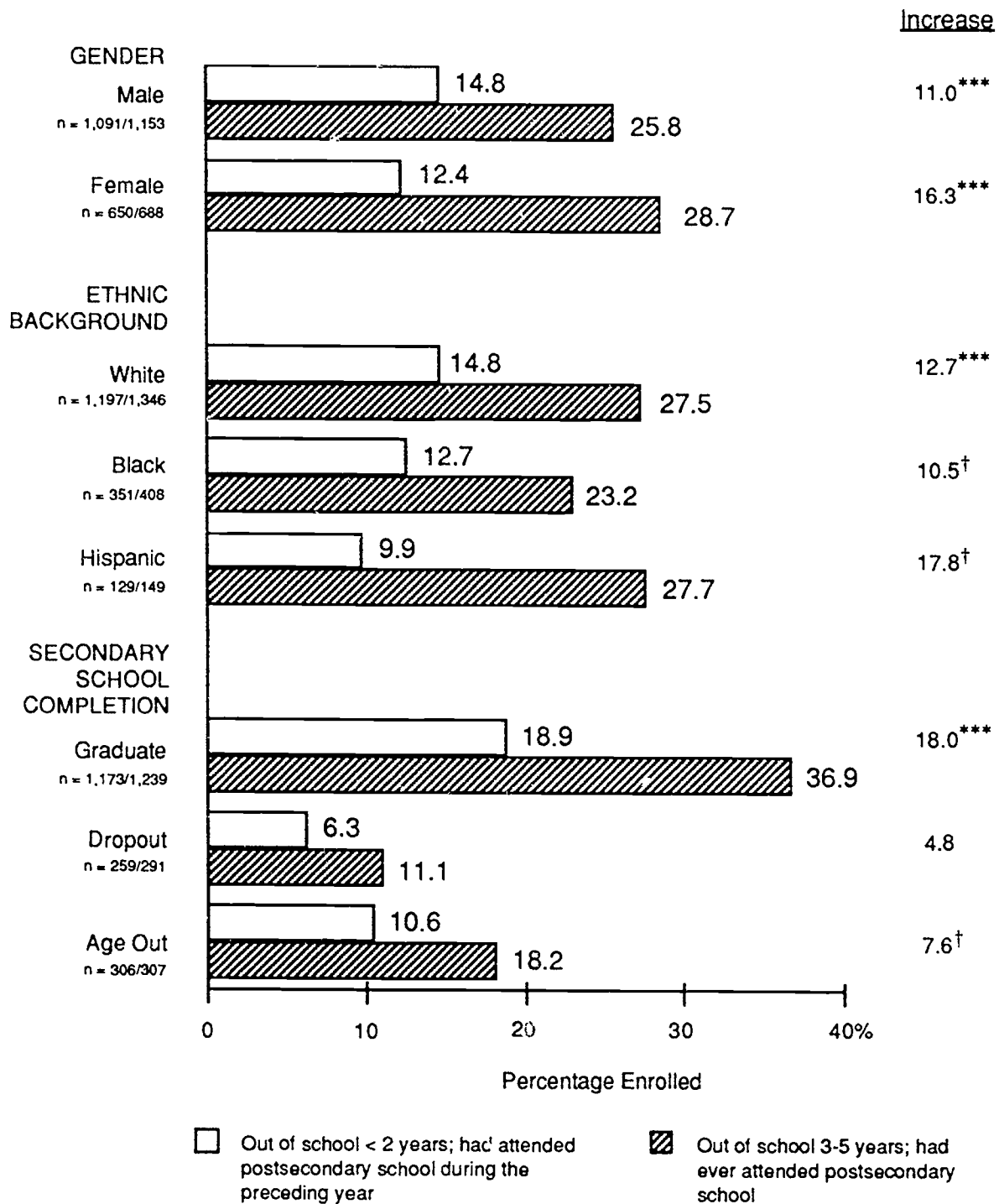


□ Out of school < 2 years; had attended postsecondary school during the preceding year.

▨ Out of school 3-5 years; had ever attended postsecondary school.

<sup>†</sup>p<.10, \* p<.05, \*\* p<.01

### TRENDS IN POSTSECONDARY SCHOOL ENROLLMENT OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY



† p < .10, \*\*\* p < .001

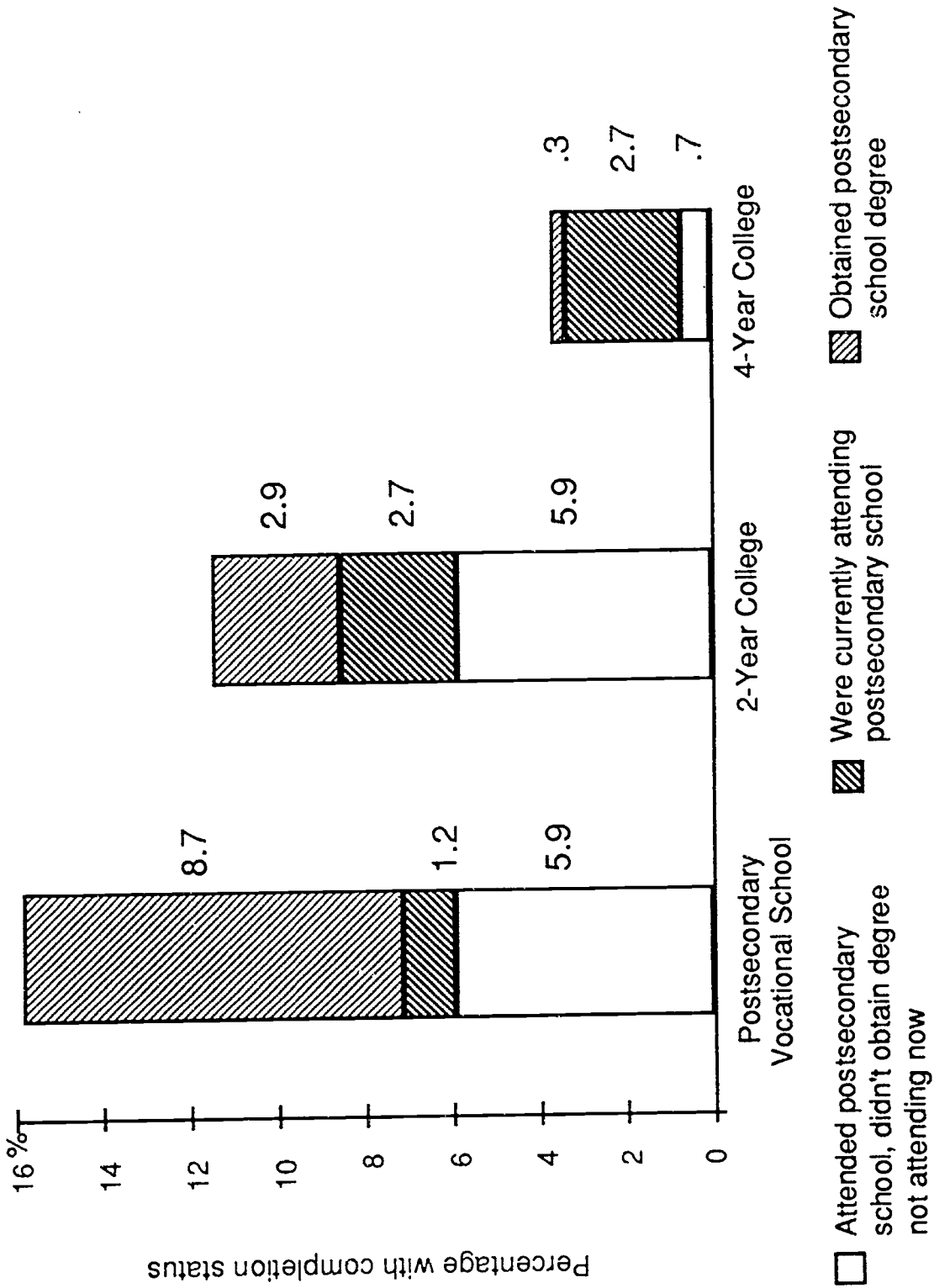
### TRENDS IN POSTSECONDARY SCHOOL ENROLLMENT OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY SELECTED CHARACTERISTICS

**PERCENTAGE OF YOUTH WITH DISABILITIES WHO WERE  
OUT OF SCHOOL 3 TO 5 YEARS THAT HAD  
EVER ATTENDED POSTSECONDARY SCHOOL,  
BY TYPE OF SCHOOL AND DISABILITY CATEGORY**

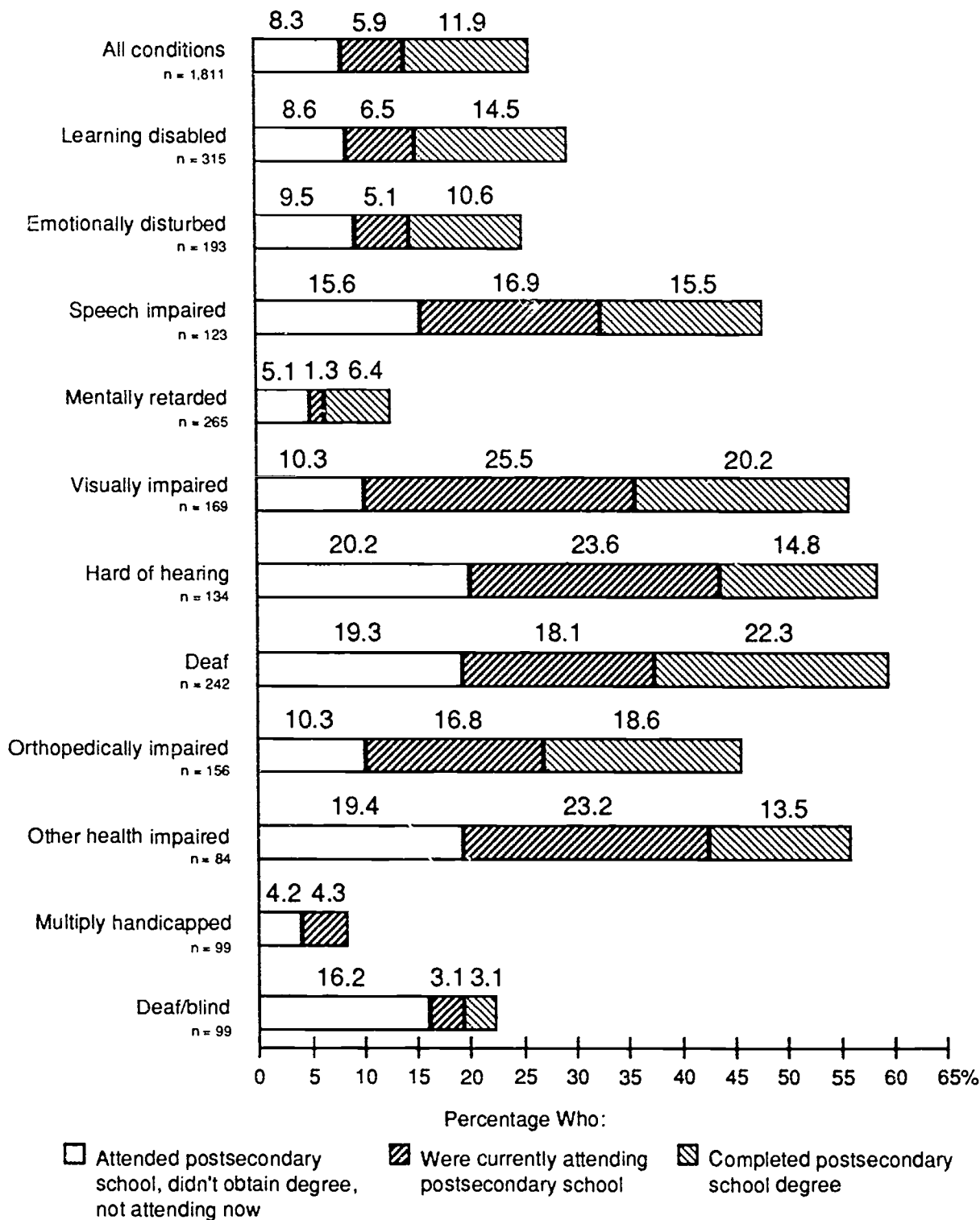
	<u>Percentage of Youth That Attended:</u>			<u>n</u>
	<u>Postsecondary Vocational School</u>	<u>2-year College</u>	<u>4-year College</u>	
All youth	15.9	11.8	4.2	1,841
Disability category				
Learning disabled	19.0	13.7	4.4	321
Emotionally disturbed	15.4	10.1	4.2	321
Speech impaired	16.4	25.4	13.3	127
Mentally retarded	9.6	3.6	0	265
Visually impaired	15.6	27.5	33.4	173
Hard of hearing	16.0	40.4	15.7	142
Deaf	22.5	33.2	22.1	246
Orthopedically impaired	12.6	32.3	12.9	158
Other health impaired	33.9	28.4	21.9	84
Multiply handicapped	0.7	7.9	2.2	99
Deaf/blind	13.4	8.9	8.9	31

## TYPES OF POSTSECONDARY SCHOOLS ATTENDED BY YOUTH WITH DISABILITIES BY SELECTED CHARACTERISTICS

	<u>Percentage of Youth That Attended:</u>			<u>n</u>
	<u>Postsecondary Vocational School</u>	<u>2-year College</u>	<u>4-year College</u>	
<b>Gender</b>				
Males	16.5	10.7	4.0	1,153
Females	14.4	14.2	4.5	658
<b>Ethnic Background</b>				
White	16.1	13.5	4.8	1,253
Black	15.6	7.7	3.4	378
Hispanic	20.0	11.8	1.8	134
<b>Secondary School Leaving Status</b>				
Graduate	21.3	16.8	7.0	1,239
Dropout	7.5	4.0	.0	291
Age out	11.4	8.0	1.2	307

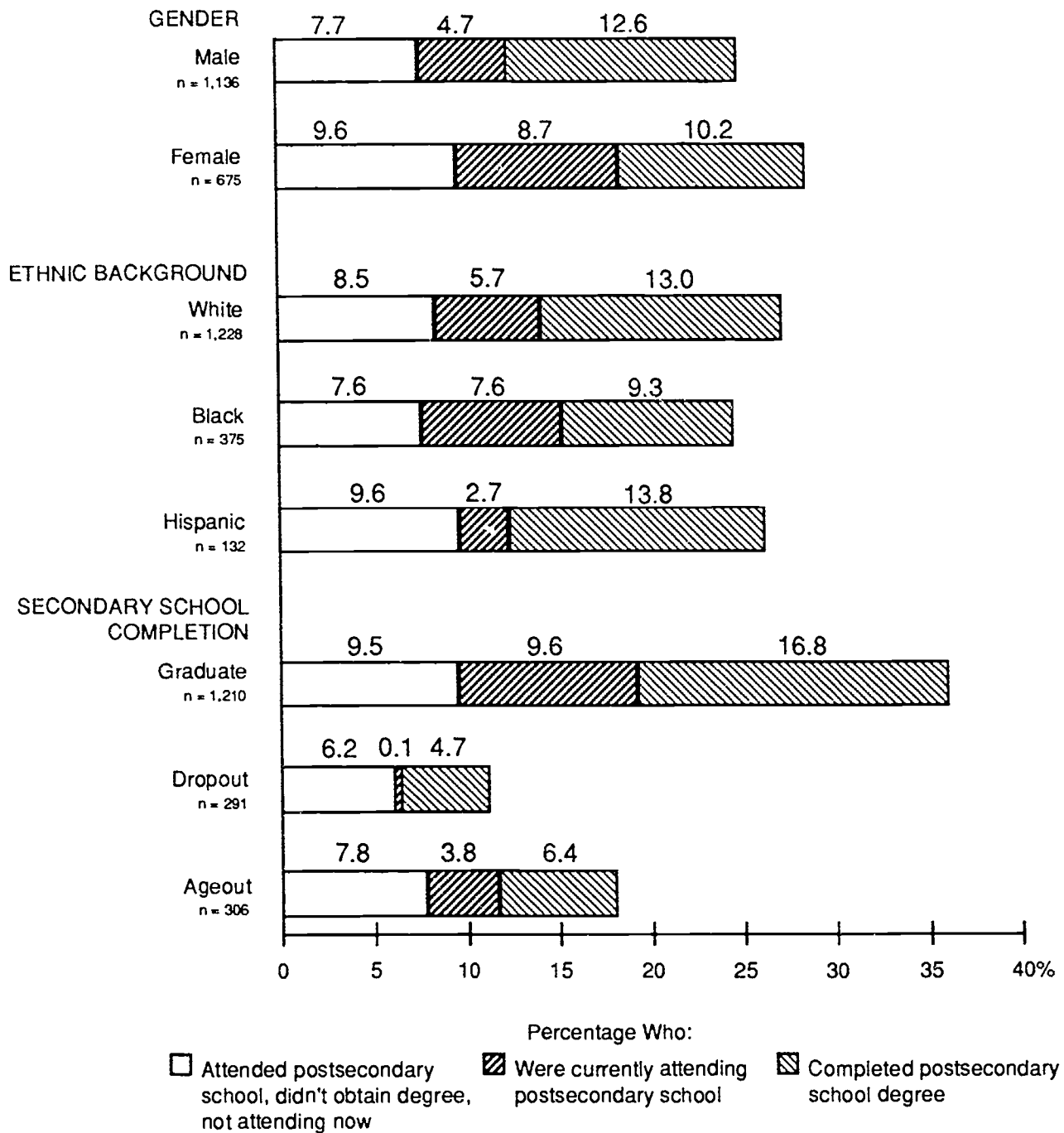


**POSTSECONDARY DEGREE COMPLETION OF YOUTH WITH DISABILITIES, BY TYPE OF POSTSECONDARY SCHOOL**



Note: Bars represent postsecondary school students.

### POSTSECONDARY DEGREE COMPLETION OF YOUTH WITH DISABILITIES, BY DISABILITY CATEGORY

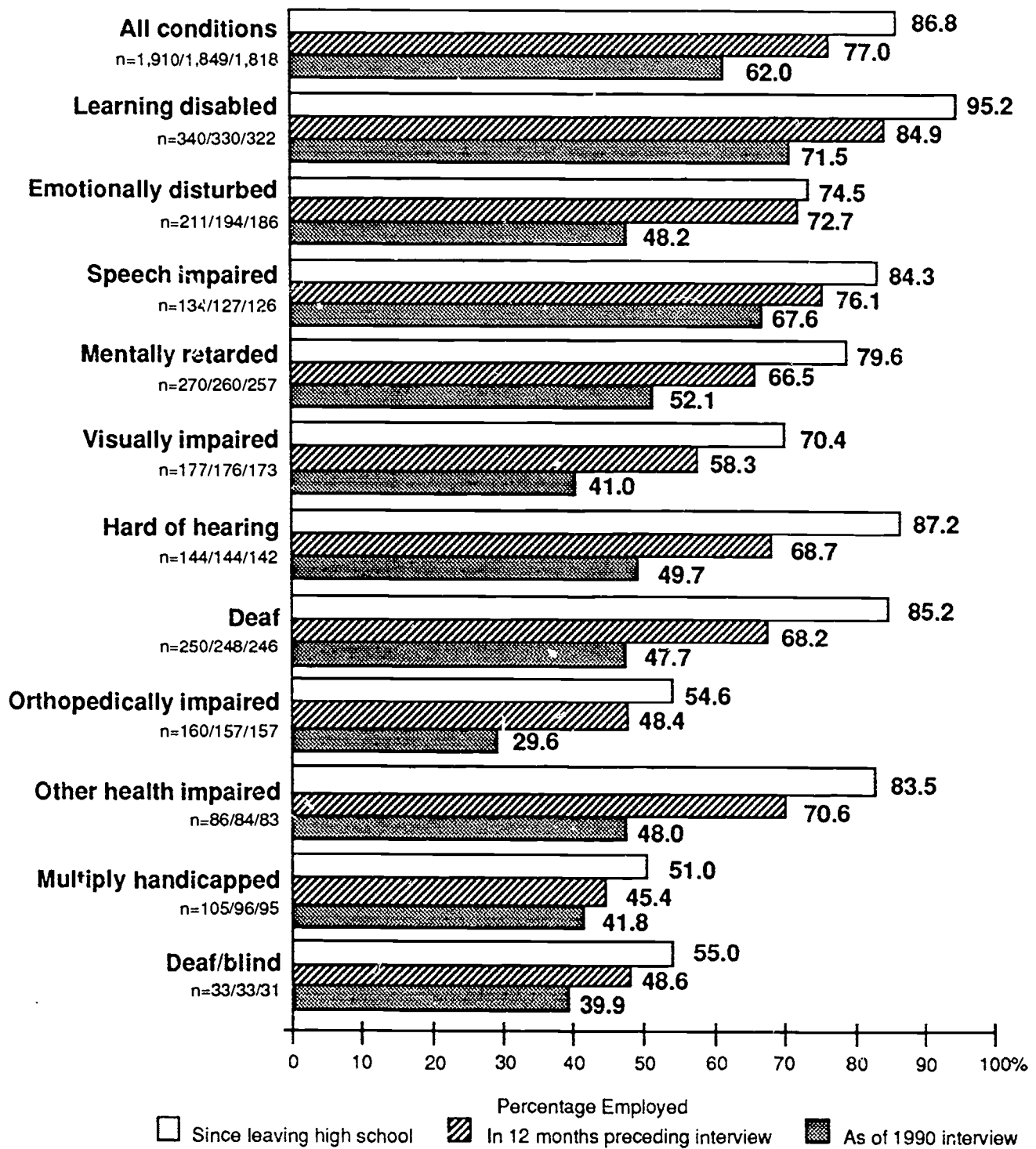


Note: Bars represent postsecondary school students.

## POSTSECONDARY DEGREE COMPLETION OF YOUTH WITH DISABILITIES, BY SELECTED YOUTH CHARACTERISTICS

# Employment

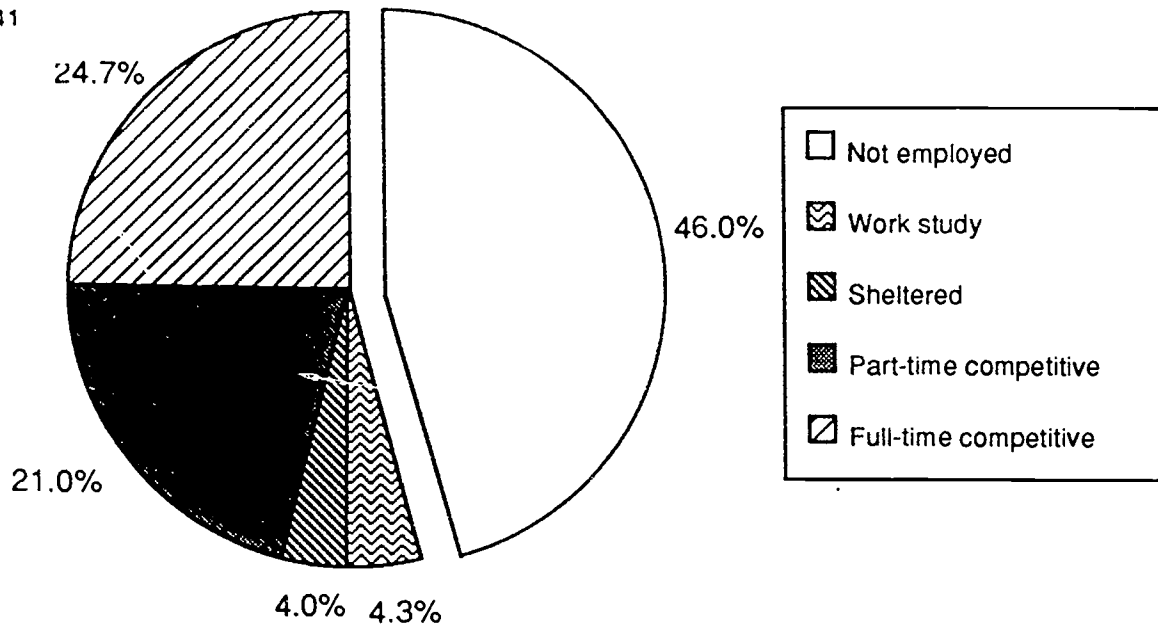




**YOUTH EVER EMPLOYED SINCE HIGH SCHOOL,  
 EMPLOYED AS OF THE 1990 INTERVIEW, AND  
 EMPLOYED IN THE YEAR PRECEDING THE INTERVIEW**

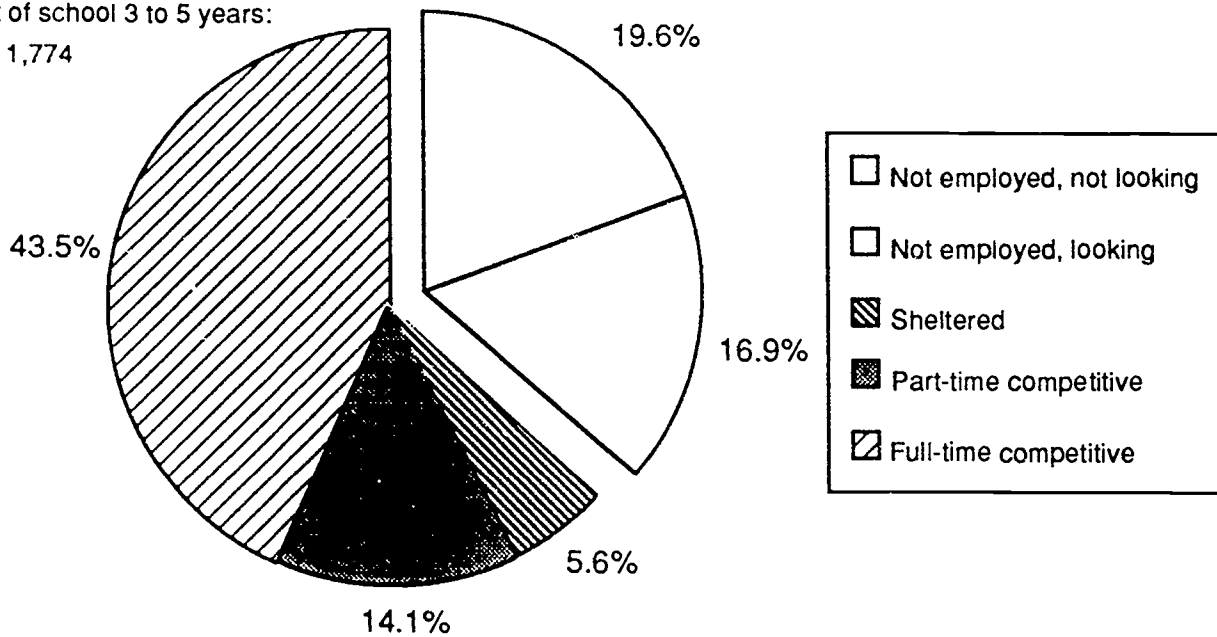
Out of school < 2 years:

n = 1,941



Out of school 3 to 5 years:

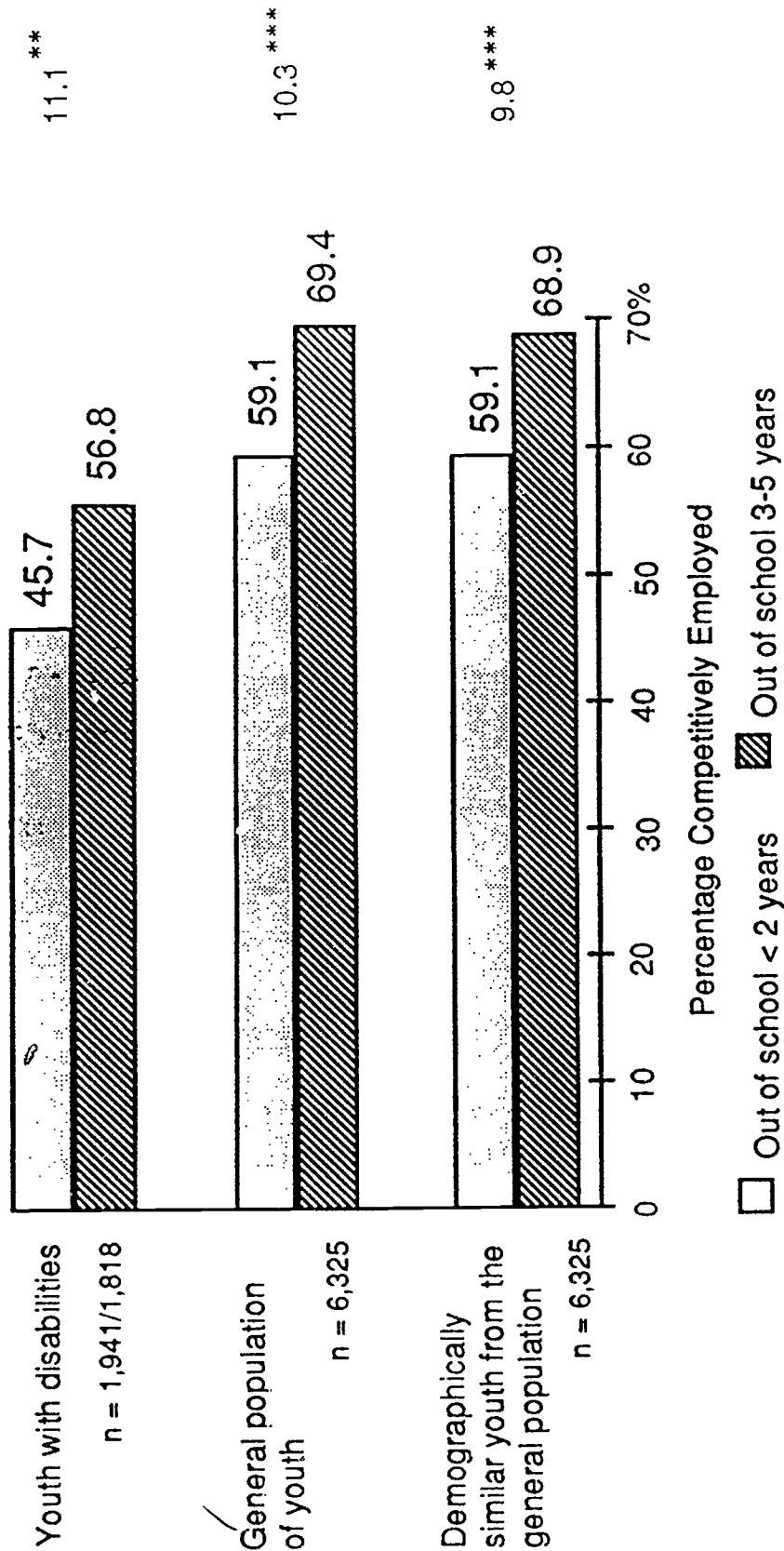
n = 1,774



Notes: The surveys in 1987 and 1990 asked somewhat different questions, and therefore produced data that are not congruous with one another (e.g., not employed and not looking in 1990). Note the categories "sheltered" and "work study" include youth who were involved in those activities part-time or full-time. These data are disaggregated in later sections.

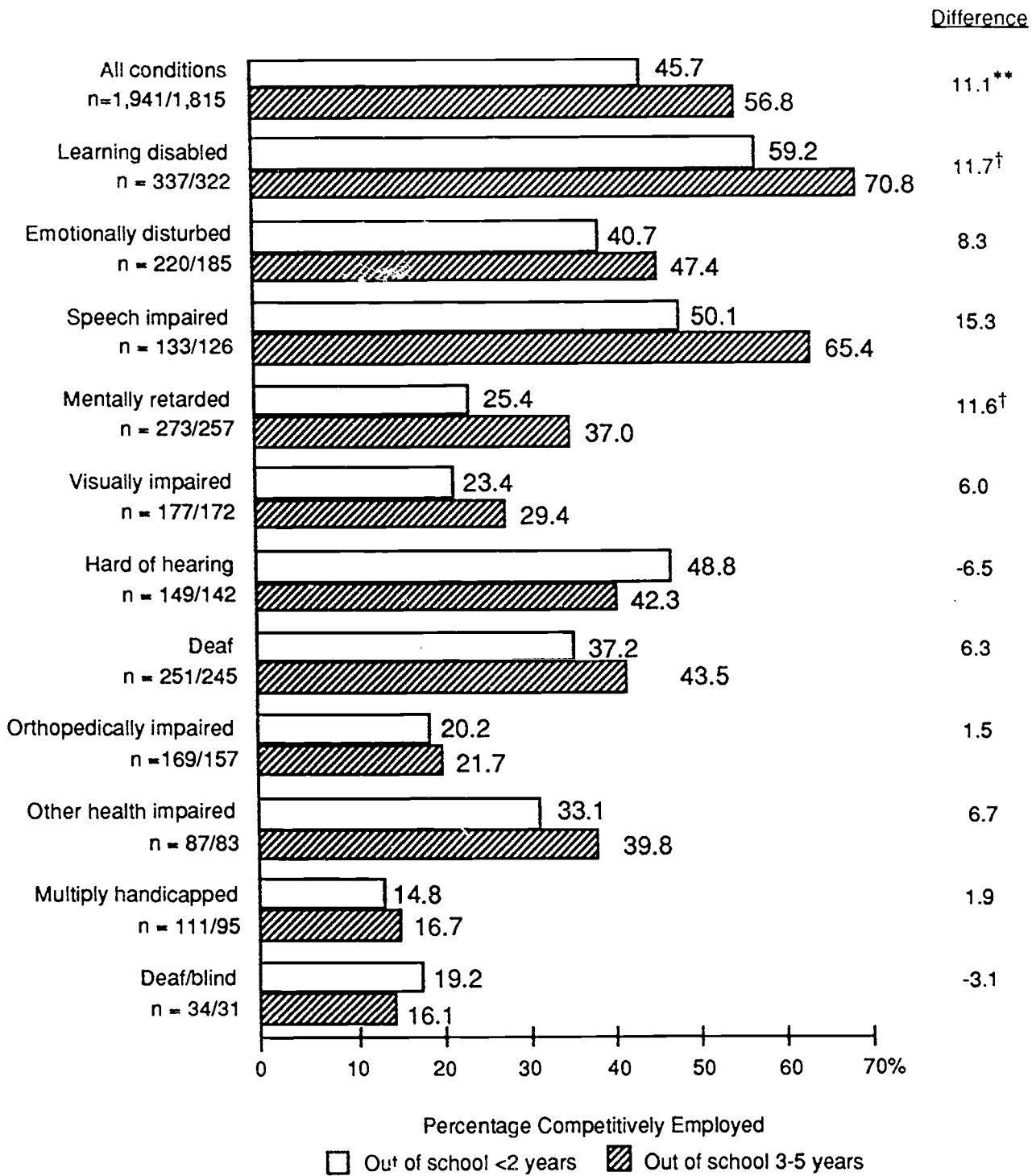
## OVERALL EMPLOYMENT PICTURE FOR YOUTH WITH DISABILITIES OUT OF SCHOOL LESS THAN 2 YEARS AND 3 YEARS LATER

Difference



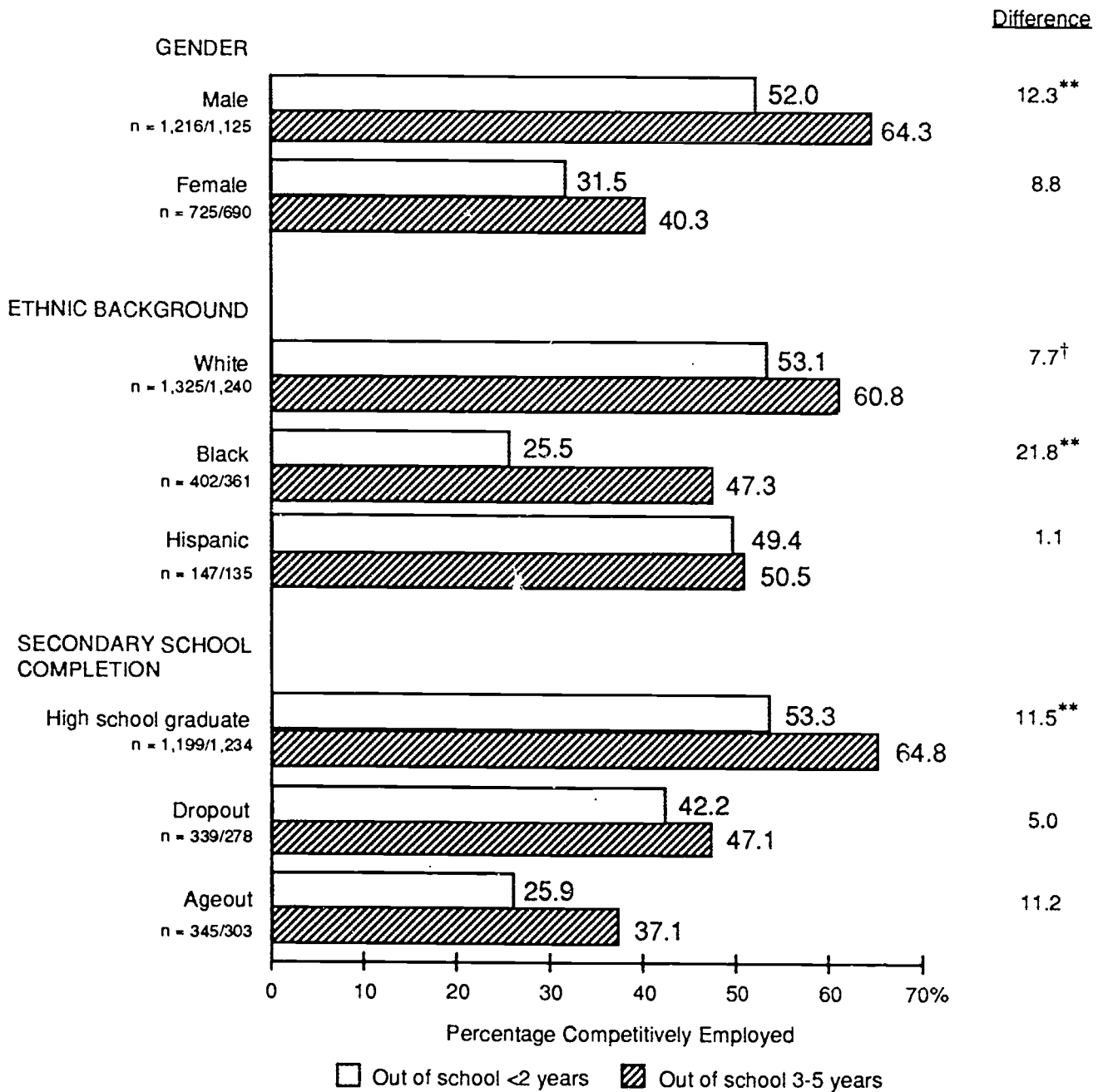
\*\* p<.01; \*\*\*p<.001

**TRENDS IN RATES OF COMPETITIVE EMPLOYMENT FOR YOUTH WITH DISABILITIES AND THE GENERAL POPULATION OF YOUTH**



† p<.10, \*\* p<.01

### TRENDS IN COMPETITIVE EMPLOYMENT, BY DISABILITY CATEGORY



† p<.10, \*\* p<.01

### TRENDS IN COMPETITIVE PAID EMPLOYMENT, BY YOUTH CHARACTERISTICS

# PART-TIME AND FULL-TIME COMPETITIVE PAID EMPLOYMENT OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

Primary Disability Category	Percentage of Youth, by Competitive Employment Status						Difference in Employment Rates Between <2 and 3-5 Years after High School			n at 2 Time Points
	Out of School < 2 Years:			Out of School 3-5 Years			Not Employed	Part- Time	Full- Time	
	Not Employed	Part- Time	Full- Time	Not Employed	Part- Time	Full- Time				
All conditions	54.3	21.0	24.7	43.2	13.9	42.9	-11.1**	-7.1*	18.2***	1,941/1,815
Learning disabled	40.8	23.5	35.7	29.2	14.1	56.7	-11.6†	-9.4†	21.0***	337/322
Emotionally disturbed	59.3	26.2	14.5	52.6	12.4	35.0	-6.7	-13.8*	20.5**	220/185
Speech impaired	49.9	35.9	14.2	34.6	27.9	37.5	-15.3	14.8*	25.2**	133/126
Mentally retarded	74.6	13.1	12.3	63.0	13.6	23.4	-11.6†	.5	11.1*	273/257
Visually impaired	76.6	12.9	10.4	70.6	12.4	17.0	-6.0	-5	6.6	177/172
Hard of hearing	51.2	26.1	22.7	57.7	8.3	34.0	6.5	-17.8*	11.3	149/142
Deaf	62.8	16.5	20.8	56.5	13.6	29.9	-6.3	-2.9	9.1	251/245
Orthopedically impaired	79.8	15.2	5.0	78.3	10.8	10.9	-1.5	-4.4	5.9	169/157
Other health impaired	66.9	18.3	14.8	60.2	13.3	26.5	-6.7	-5.0	11.7	87/83
Multiply handicapped	85.2	10.3	4.5	83.3	2.9	13.8	-1.9	-7.4	9.3	111/95
Deaf/blind	80.8	19.2	.0	83.9	9.9	6.1	3.1	-9.3	6.1	34/31

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

## TRENDS IN COMPETITIVE EMPLOYMENT OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY YOUTH CHARACTERISTICS

Youth Characteristic	Percentage of Youth, by Competitive Employment Status						Difference in Employment Rates Between < 2 and 3-5 Years after High School				n at 2 Time Points
	Out of School < 2 Years			Out of School 3-5 Years			Not Employed	Part- Time	Full- Time	n	
	Not Employed	Part- Time	Full- Time	Not Employed	Part- Time	Full- Time					
<b>Gender</b>											
Male	48.0	23.7	28.3	35.7	11.9	52.4	-12.3**	-11.8***	24.1***		1,216/1,125
Female	68.5	14.9	16.6	60.0	18.4	21.6	-8.5	3.5	5.0		725/690
<b>Ethnic background</b>											
White	46.9	23.8	29.3	39.2	13.4	47.4	-7.7†	-10.4**	18.1***		1,325/1,240
Black	74.6	13.6	11.8	52.7	17.6	29.6	-21.9*	4.0	17.8*		402/361
Hispanic	50.6	24.7	24.7	49.5	11.7	38.8	-1.1	-13.0	14.1		147/135
<b>Secondary school completion</b>											
Graduate	46.7	23.7	29.6	35.3	16.4	48.3	-11.4*	-7.3†	18.7***		1199/1231
Dropout	57.8	18.9	23.3	52.2	9.2	38.6	-5.6	-9.7†	15.3*		316/268
Ageout	74.1	11.0	14.9	62.9	15.9	21.1	-11.2	4.9	6.2		345/303

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

## PATTERNS OF EMPLOYMENT OVER TIME OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

Disability Category	Percentage of Youth:				n
	Not Employed at Either Time	Lost Employment	Became Employed	Employed at Both Times	
All conditions	30.4	13.3	22.9	33.4	1,781
Learning disabled	17.5	12.4	22.9	47.2	312
Emotionally disturbed	32.5	19.0	24.9	23.7	185
Speech impaired	21.2	15.2	27.4	36.2	123
Mentally retarded	50.3	12.9	23.9	12.9	251
Visually impaired	61.5	8.8	15.3	14.4	169
Hard of hearing	39.8	18.5	10.6	31.1	140
Deaf	41.4	14.2	21.6	22.8	243
Orthopedically impaired	73.3	5.6	7.4	13.6	153
Other health impaired	47.2	13.9	19.7	19.3	80
Multiplly handicapped	73.0	10.2	8.3	8.5	94
Deaf/blind	72.7	11.2	5.5	10.5	31

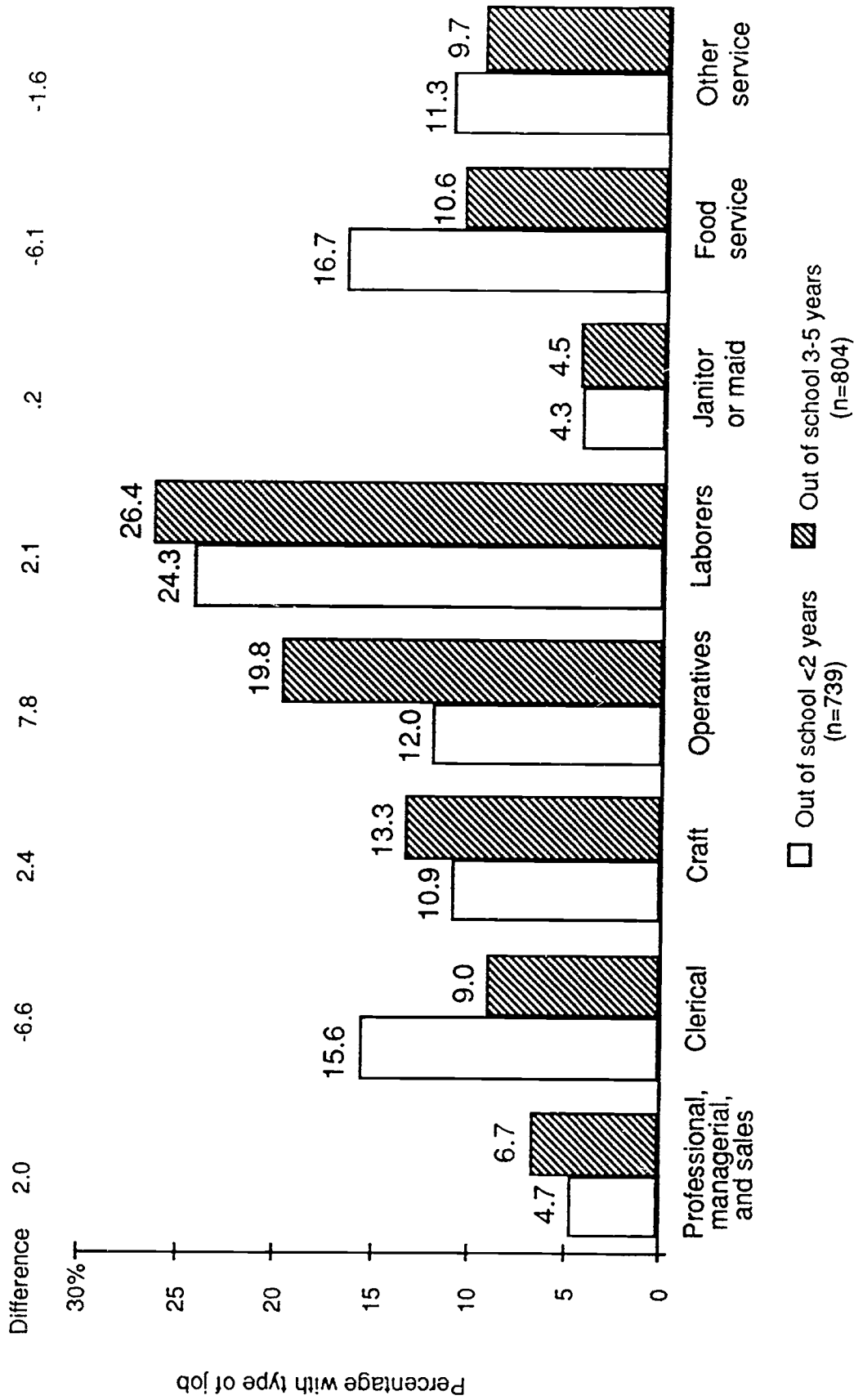
Not employed at either time = not employed at interview point in 1987 or 1990.

Lost employment = employed at interview point in 1987 but not in 1990.

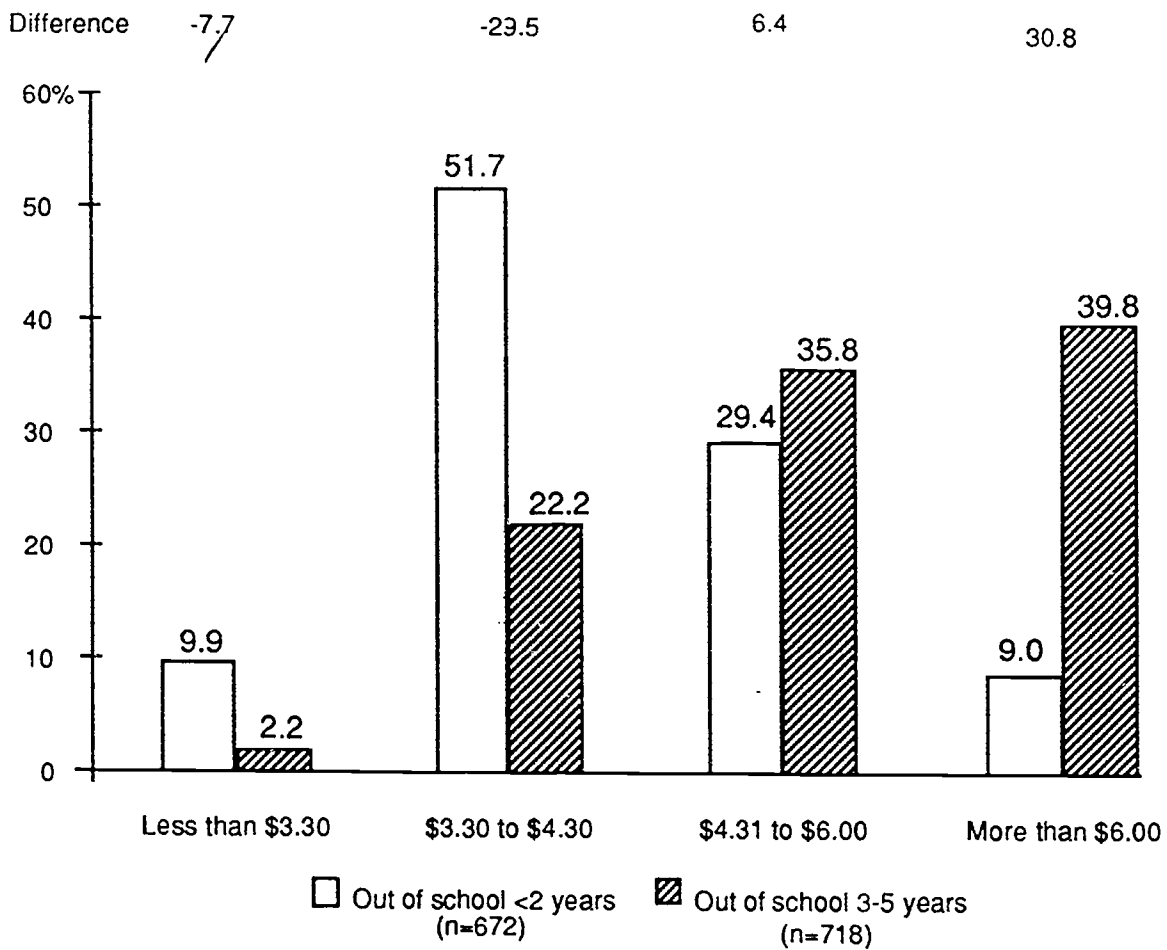
Became employed = not employed at interview point in 1987 but employed in 1990.

Employed at both times = employed at interview points in 1987 and 1990.





**OCCUPATIONS OF COMPETITIVELY EMPLOYED  
OUT-OF-SCHOOL YOUTH WITH DISABILITIES**



Numbers indicate percentage of employed youth earning the indicated hourly wage.

### TRENDS IN HOURLY WAGES OF YOUTH WITH DISABILITIES COMPETITIVELY EMPLOYED

## TRENDS IN WAGE EARNING FOR OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

Youth were out of secondary school	All Conditions	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Ortho- pedically Impaired
<b>&lt;2 years and earned per hour:</b>									
< \$3.30	9.9	7.9	15.0	4.4	17.0	10.3	6.3	11.7	17.1
\$3.30 - \$4.30	51.7	49.3	56.4	58.3	56.4	69.6	55.2	62.3	66.6
\$4.31 - \$6.00	29.4	33.8	19.5	29.4	16.3	14.5	29.9	22.2	9.1
> \$6.00	9.0	9.0	9.1	7.9	10.3	5.5	8.5	3.7	7.1
n	672	195	87	66	65	42	67	80	33
Median hourly wage	4.00	4.05	3.35	4.00	3.50	3.50	3.95	3.65	3.35
<b>3-5 years and earned per hour:</b>									
< \$3.30	2.2	2.0	2.6	2.2	2.7	2.7	.0	1.7	3.7
\$3.30 - \$4.30	22.2	18.4	21.3	20.5	39.8	13.2	20.1	22.5	19.6
\$4.31 - \$6.00	35.8	34.5	27.4	44.7	44.2	43.3	45.2	30.6	62.9
> \$6.00	39.8	45.2	48.7	32.7	13.2	40.8	34.7	45.1	13.9
n	718	208	93	73	76	47	60	86	34
Median hourly wage	5.72	6.00	6.00	5.25	5.00	5.14	5.65	6.00	6.00
Difference in wages between 0-2 and 3-5 years after secondary school:									
< \$3.30	-7.7**	-5.9†	-12.4†	-2.2	-14.3†	-7.6	-6.3	-10.0	-13.4
\$3.30 - \$4.30	-29.5***	30.9***	-35.1***	-37.8**	-16.6	-56.4***	-35.1*	9.8***	-47.0†
\$4.31 - \$6.00	6.4	.7	7.9	15.3	27.9*	28.8*	15.3	8.4	53.8*
> \$6.00	30.8***	36.2***	39.6***	24.8*	2.9	35.3**	26.2*	41.4***	6.8

† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001

**TRENDS IN COMPETITIVELY EMPLOYED YOUTHS'  
EARNING WAGES ABOVE \$6.00 PER HOUR,  
BY YOUTH CHARACTERISTICS**

Youth Characteristic	Percentage of Employed Youth Earning >\$6.00 Per Hour		Difference Between <2 and 3-5 Years	n
	Out of School <2 Years	Out of School 3-5 Years		
<b>Gender</b>				
Male	10.6	44.3	33.7***	518
Female	0.8	23.0	22.2**	200
<b>Ethnic Background</b>				
White	8.7	46.3	37.6***	539
Black	14.2	13.7	-0.5	104
Hispanic	0.1	25.0	24.9	52
<b>Secondary School Completion</b>				
Graduate	6.8	41.7	34.9***	529
Dropout	11.2	37.9	26.7*	105
Ageout	13.2	26.3	13.1	81

\* p<.05, \*\* p<.01, \*\*\* p<.001

## FRINGE BENEFITS RECEIVED BY COMPETITIVELY EMPLOYED OUT-OF-SCHOOL WORKERS WITH DISABILITIES, BY CHARACTERISTICS OF THEIR JOBS

Job Characteristics	Percentage of Employed Youth with:		n
	Vacation or Sick Leave	Medical Insurance	
All competitively employed youth	59.9	60.9	773
Youth worked for pay:			
Part-time	37.4	35.7	244
Full-time	67.4	69.2	530
Youth worked as:			
Professional, management, sales workers	75.0	62.5	76
Clerical workers (e.g., secretaries)	74.8	61.9	130
Craft workers (e.g., mechanics, apprentices)	67.4	71.4	100
Operatives (e.g., service station attendants)	77.4	78.0	118
Laborers (e.g., grounds keepers)	43.8	62.6	136
Service workers (e.g., food service, janitors)	49.5	39.2	200
Youth earned:			
\$3.30 - \$4.30 per hour	30.1	40.7	140
\$4.31 - \$6.00 per hour	64.9	62.1	244
> \$6.00 per hour	71.3	74.5	276

## EXTENT OF SHELTERED EMPLOYMENT OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

<u>Primary Disability Category</u>	<u>Percentage of Youth with Paid Sheltered Work</u>		<u>n</u>
	<u>Out of School &lt; 2 Years</u>	<u>Out of School 3-5 Years</u>	
All conditions	4.0	5.2	1,941/1,796
Learning disabled	2.3	.7	337/320
Emotionally disturbed	0.6	.8	220/178
Speech impaired	2.5	2.2	133/125
Mentally retarded	8.8	15.1	273/257
Visually impaired	4.5	11.6	177/171
Hard of hearing	5.4	7.4	149/140
Deaf	1.2	4.2	251/242
Orthopedically impaired	3.9	7.9	169/156
Other health impaired	7.1	8.2	87/83
Multiply handicapped	12.9	25.1	111/93
Deaf/blind	13.4	23.9	34/31

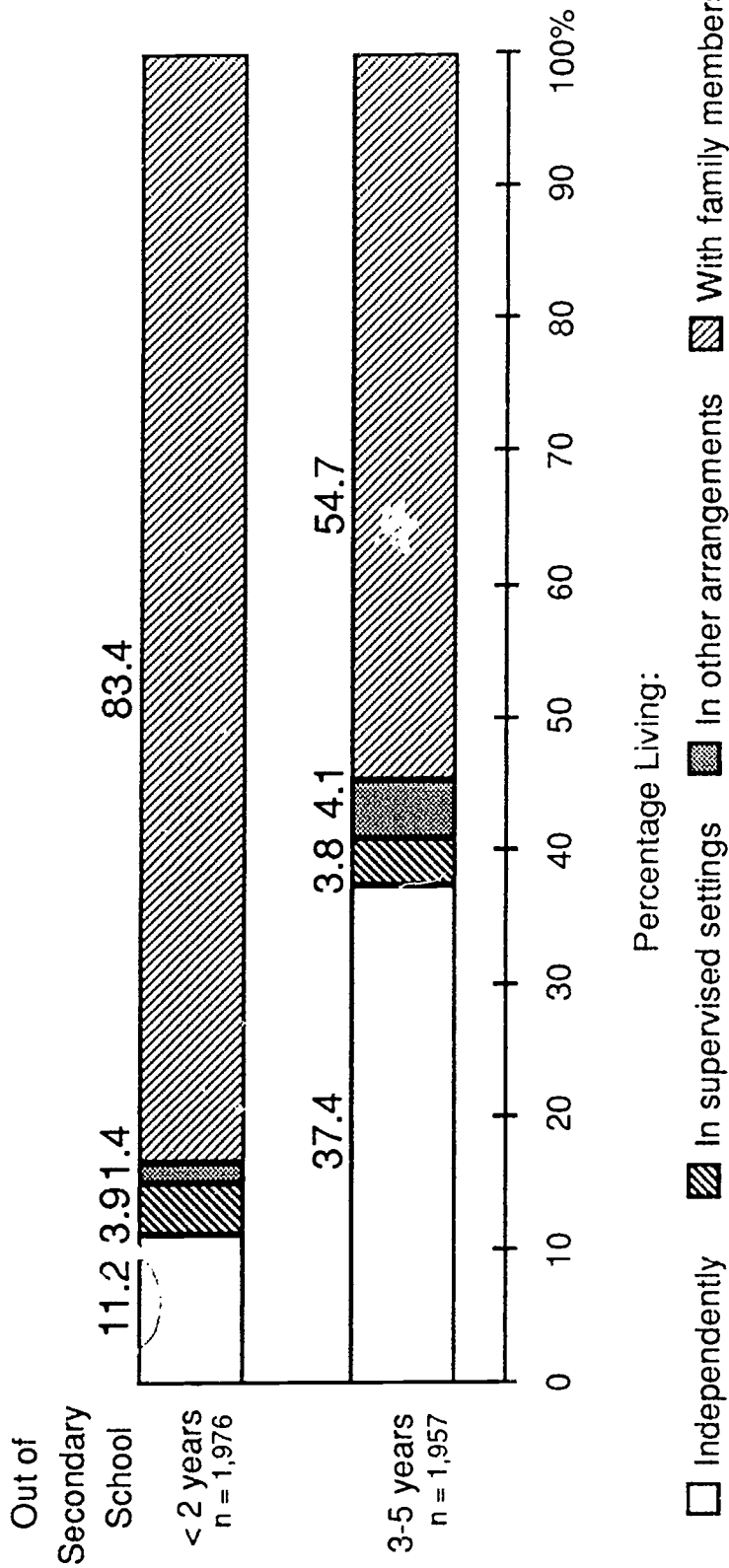
## PERCENTAGE OF NONWORKING OUT-OF-SCHOOL YOUTH WITH DISABILITIES WHO WERE LOOKING FOR WORK

Disability Category	Percentage	n
All conditions <sup>a</sup>	42.6	799
Learning disabled	50.3	76
Emotionally disturbed	43.7	72
Speech impaired	33.2	39
Mentally retarded	37.8	115
Visually impaired	19.7	95
Hard of hearing	39.0	67
Deaf	36.4	120
Orthopedically impaired	24.2	105
Other health impaired	29.4	43
Multiply handicapped	12.9	48
Gender		
Male	56.3	413
Female	25.8	386
Ethnic background		
White	41.9	495
Black	50.1	191
Hispanic	23.5	71
Secondary school completion		
Graduate	43.6	515
Dropout	59.5	138
Ageout	21.1	140

<sup>a</sup> "All conditions" includes youth in all 11 federal special education disability categories; data are reported separately only for categories with at least 30 cases.

# Residential Arrangement





Difference in rates between 0-2 and 3-5 years after secondary school in living:

Independently 26.2\*\*\* In a supervised setting -.1 Other arrangement 2.7 With family member -28.7\*\*\*

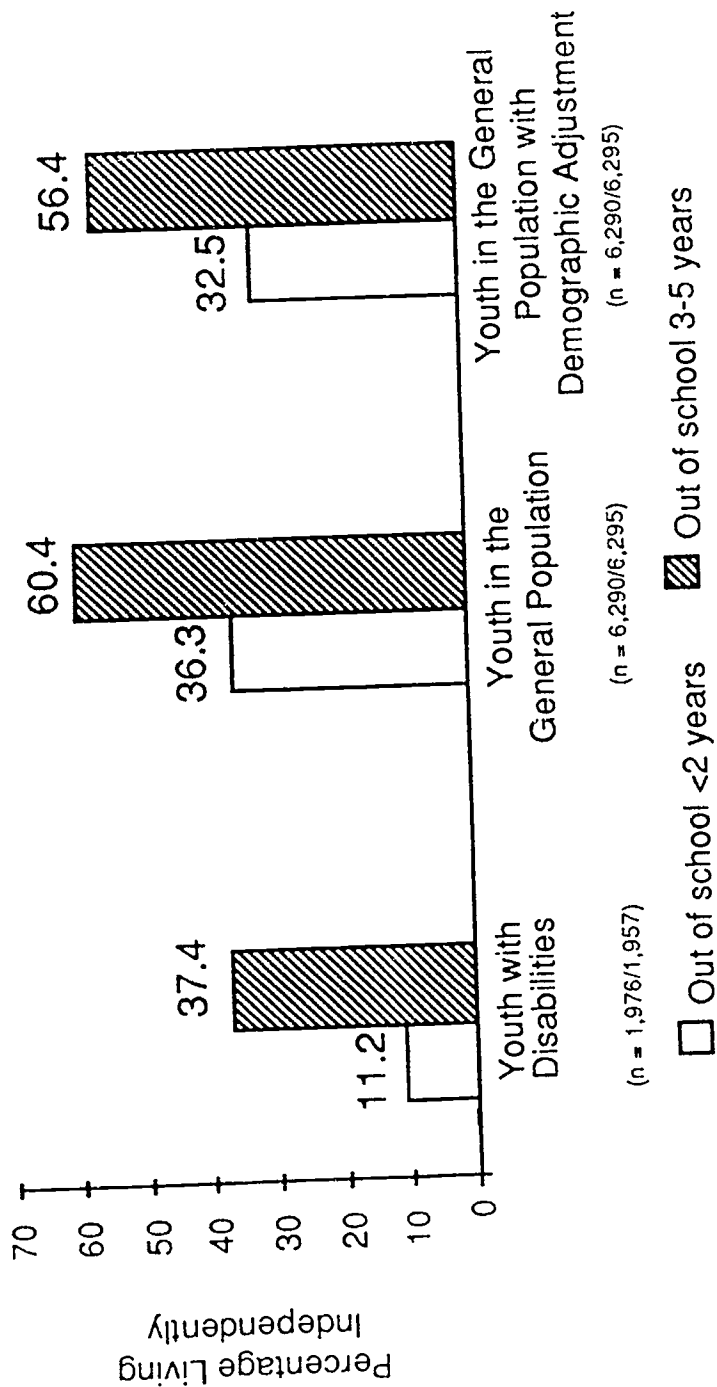
\*\*\* p < .001

## RESIDENTIAL ARRANGEMENTS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES

23.9 \*\*\*

24.1 \*\*\*

Difference 26.2 \*\*\*

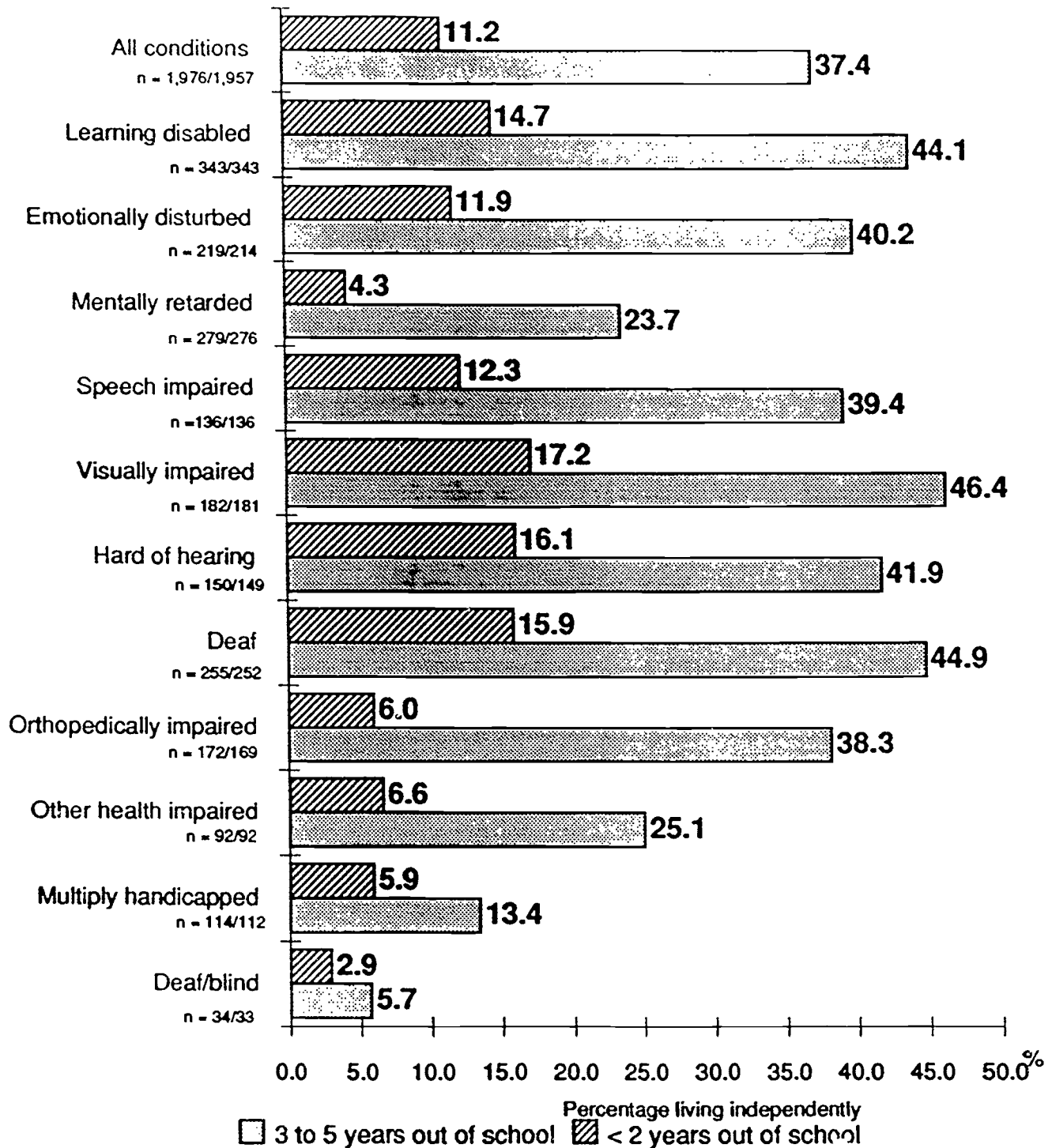


Note: Data for the general population come from the 1979-1986 National Longitudinal Survey of Youth. General population is adjusted to match youth with disabilities for gender, ethnic background, and head of household's educational level.

\*\*\* p < .001

## RESIDENTIAL INDEPENDENCE OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES AND YOUTH IN THE GENERAL POPULATION

# INDEPENDENT LIVING ARRANGEMENTS OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY



Source: Parent interviews and school record abstracts

## TRENDS IN INDEPENDENT LIVING OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY YOUTH CHARACTERISTICS

Youth Characteristics	Percentage Living Independently When Youth Were Out of Secondary School		Difference Between <2 and 3-5 Years	n
	<2 Years	3-5 Years		
<b>Gender</b>				
Male	10.4	34.2	23.8***	1,242/1,226
Female	13.1	44.8	31.7***	734/731
<b>Ethnic background</b>				
White	13.4	42.3	28.9***	1,342/1,326
Black	5.1	25.5	20.4***	406/403
Hispanic	15.2	31.1	15.9*	148/146
<b>Secondary school completion status</b>				
Graduate	9.9	40.8	30.9***	1,225/1,302
Dropout	15.2	35.0	19.8**	341/313
Age out	6.7	21.9	15.2**	352/333

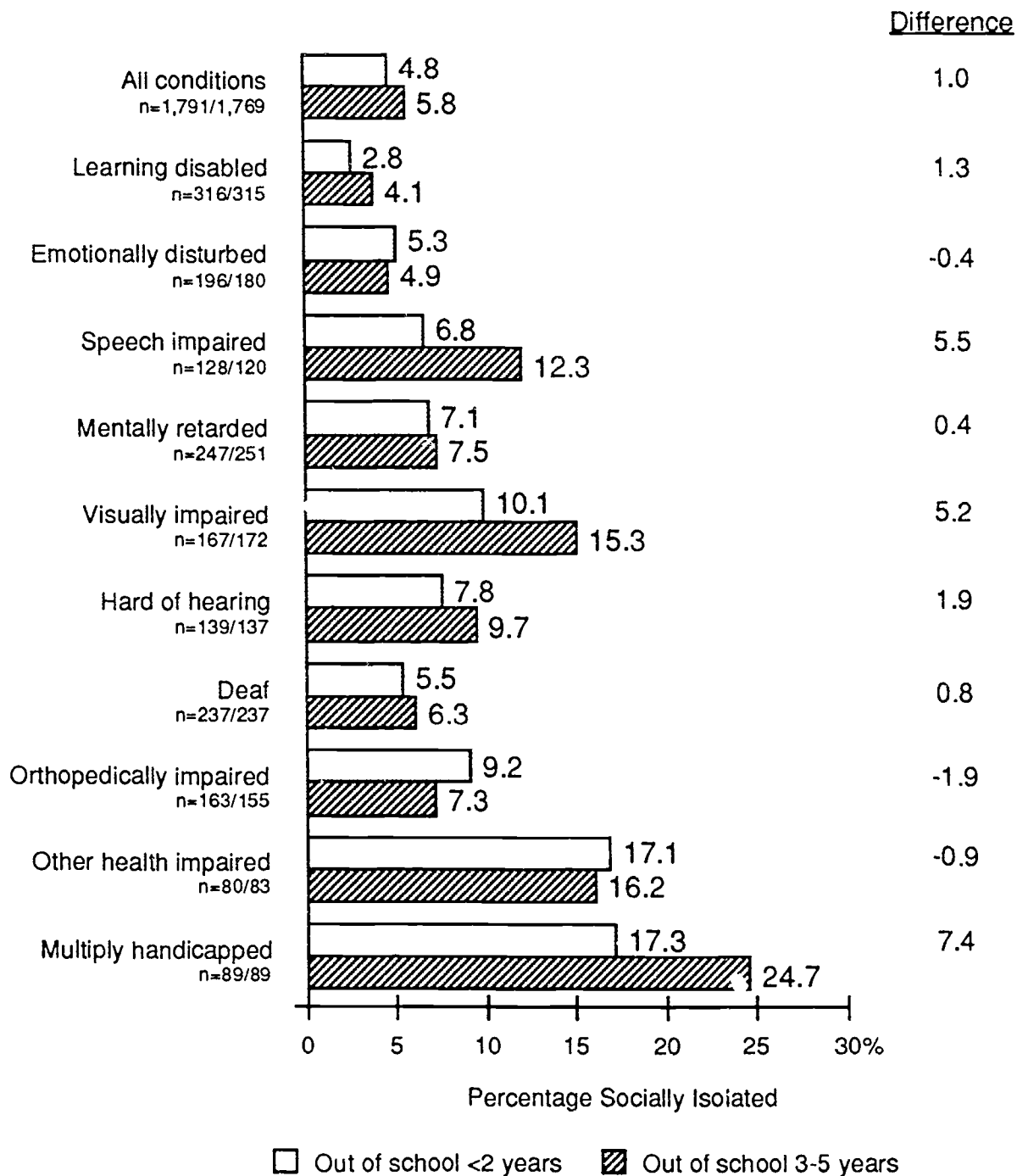
\* p<.05, \*\* p<.01, \*\*\* p<.001

**PATTERNS OF RESIDENTIAL INDEPENDENCE OVER TIME OF  
OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY**  
(Percent)

Disability Category	Residential Independence Pattern <sup>a</sup>				n
	Independent at NEITHER Point	Lost Independence	Became Independent	Independent at BOTH Points	
All conditions	60.7	2.4	28.3	8.6	1,938
Learning disabled	54.3	2.1	31.2	12.5	336
Emotionally disturbed	56.8	4.1	31.5	7.6	211
Speech impaired	54.7	4.8	34.0	6.5	134
Mentally retarded	74.6	1.9	21.0	2.4	275
Visually impaired	59.3	3.7	33.3	13.7	180
Hard of hearing	51.6	6.4	31.8	10.3	148
Deaf	48.9	6.4	34.8	9.9	251
Orthopedically impaired	59.6	2.5	35.5	2.5	168
Other health impaired	74.9	0	18.5	6.6	92
Multiply handicapped	82.8	3.5	10.8	2.8	110
Deaf/blind	91.3	3.1	5.7	0	33

- <sup>a</sup> Independent at neither point = not living independently at either 0-2 years or 3-5 years after secondary school.  
 Lost independence = living independently at 0-2 years but not 3-5 years after secondary school.  
 Became independent = not living independently at 0-2 years, but was at 3-5 years after secondary school.  
 Independent at both points = living independently at 0-2 years and 3-5 years after secondary school.

## The Social Domain



"All conditions" includes youth in all 11 federal disability categories; data are reported separately only for categories with at least 30 cases.

## SOCIAL ISOLATION OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

# FREQUENCY OF SOCIAL INTERACTIONS<sup>a</sup> OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY (Percent)

## Primary Disability Category

Frequency of Interactions	All Conditions	Primary Disability Category																		
		Learning Disabled	Emotionally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthopedically Impaired	Other Health Impaired	Multiply Handicapped	Deaf/Blind								
Youth were out of high school less than 2 years and had social interactions:																				
Less often than weekly	9.0	5.0	9.6	12.7	14.3	14.1	12.0	10.1	20.4	23.4	29.1	44.7								
1-3 days a week	39.1	39.1	32.7	35.9	41.5	44.7	38.0	42.4	51.4	31.3	46.4	44.9								
4 or more days a week	51.9	55.9	57.7	51.4	44.2	41.2	50.0	47.5	28.2	45.3	24.5	10.4								
n	1,807	313	197	128	253	166	139	235	163	84	97	32								
Youth were out of high school 3 to 5 years and had social interactions:																				
Less often than weekly	10.0	8.7	9.0	14.1	11.2	24.3	15.0	8.2	11.5	20.0	27.3	28.7								
1-3 days a week	51.8	50.3	47.3	54.6	57.2	45.6	47.6	53.3	45.6	47.5	45.3	57.6								
4 or more days a week	38.2	41.0	43.7	31.3	31.6	30.1	37.4	38.5	42.9	32.6	27.4	13.7								
n	1,728	305	172	119	246	166	136	227	154	82	89	30								
Difference between <2 and 3-5 years after high school in rate of social interactions:																				
Less often than weekly	1.0	3.7	-0.6	1.4	-3.1	10.2	3.0	-1.9	-8.9	-3.4	-1.8	-16.0								
1-3 days a week	12.7**	11.2†	14.6†	18.7†	15.7*	0.9	9.6	10.9	-5.8	16.2	-1.1	12.7								
4 or more days a week	-13.7***	-14.9	-14.0***	-20.1**	-12.6†	-11.1	-12.6	-9.0	14.7	-12.7	2.9	3.3								

<sup>a</sup> Social interactions included "seeing friends or family members socially, other than those (the youth) lives with."  
† p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001



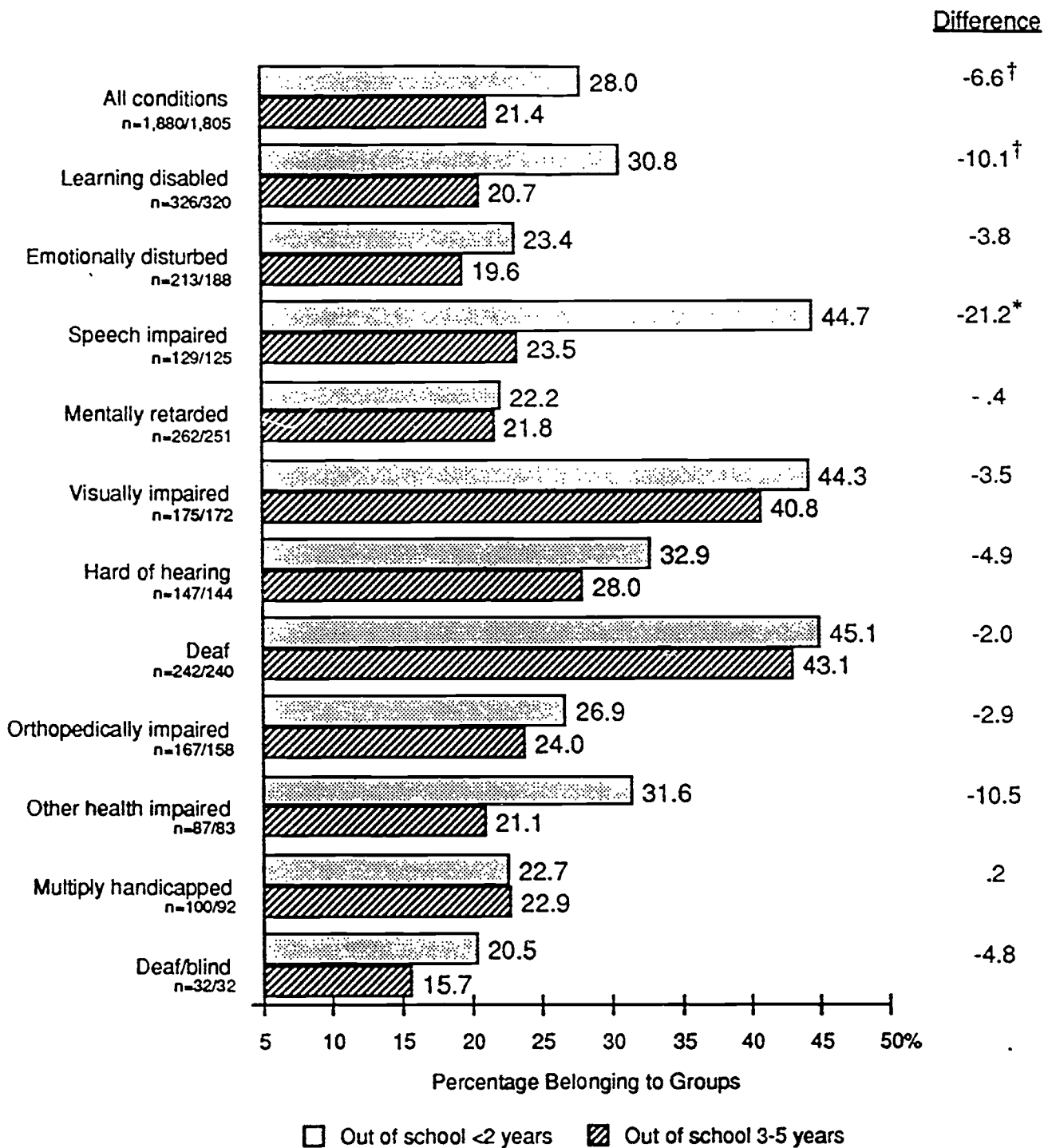
# FREQUENCY OF SOCIAL INTERACTIONS<sup>a</sup> OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY YOUTH CHARACTERISTICS

(Percent)

Frequency of Interactions	Youth Characteristics							
	Gender		Ethnicity			Secondary School Completion Status		
	Male	Female	White	Black	Hispanic	Graduate	Dropout	Ageout
Youth were out of high school less than 2 years and had social interaction								
Less often than weekly	8.0	11.1	8.8	8.1	15.9	8.1	7.8	18.9
1-3 days a week	35.0	48.4	39.1	36.6	42.1	41.0	36.5	47.4
4 or more days a week	57.0	40.5	52.1	55.3	42.0	50.9	55.7	33.7
n	1,131	676	1,243	363	138	1,143	304	313
Youth were out of high school 3-5 years and had social interactions:								
Less often than weekly	9.3	11.8	9.9	9.9	13.4	9.8	9.1	16.7
1-3 days a week	47.8	60.7	49.9	54.0	73.8	50.2	52.7	60.9
4 or more days a week	42.9	27.4	40.1	36.1	12.9	40.0	38.3	22.4
n	1,072	656	1,184	335	132	1,176	265	284
Difference between <2 and 3-5 years after high school in rate of social interaction								
Less often than weekly	1.3	0.7	1.1	1.8	-2.5	1.7	1.3	-2.2
1-3 days a week	12.8*	12.3	10.8*	17.4†	31.7†	9.2†	16.2	13.5
4 or more days a week	14.1*	-13.1†	-12.0*	-19.2*	-29.1*	-10.9*	-17.4*	-11.3

<sup>a</sup> Social interactions included "seeing friends or family members socially, other than those (the youth) lives with."

†p<.10, \*p<.05, \*\*p<.01



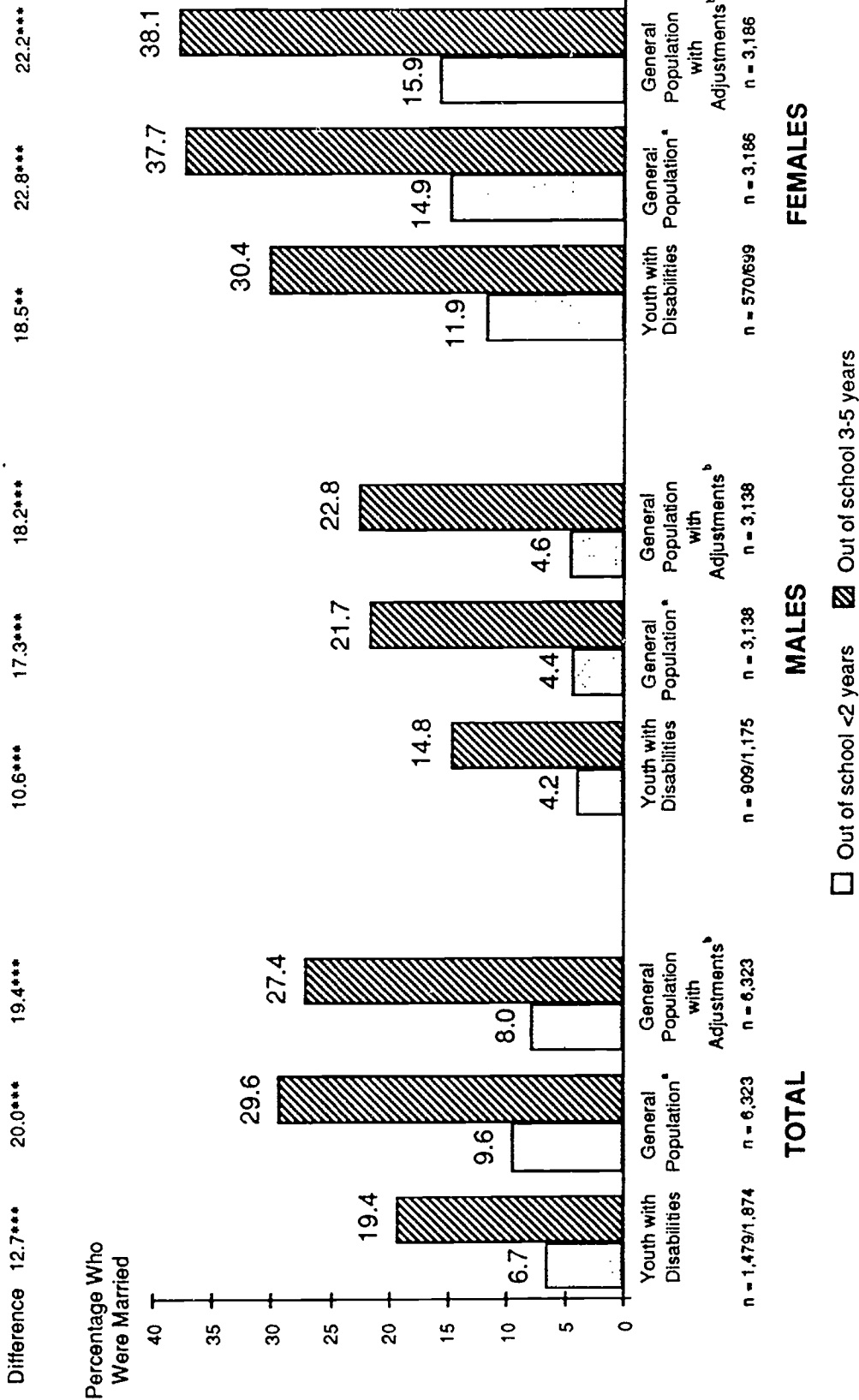
<sup>†</sup> p < .10, \* p < .05

### GROUP MEMBERSHIP OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

## GROUP MEMBERSHIP OF OUT-OF SCHOOL YOUTH WITH DISABILITIES, BY YOUTH CHARACTERISTICS

Youth Characteristics	Percentage of Youth Belonging to School/Community Group(s) When They Were Out of Secondary School:		Difference Between <2 and 3-5 Years	n
	<2 Years	3-5 Years		
<b>Gender</b>				
Male	27.5	23.5	-4.0	1,176/1,123
Female	29.2	16.8	-12.4*	704/704
<b>Ethnic background</b>				
White	29.7	21.3	-8.4*	1,286/1,231
Black	28.4	22.5	-5.9	385/361
Hispanic	13.7	15.4	1.7	143/135
<b>Secondary school completion</b>				
Graduate	35.3	25.3	-10.0*	1,184/1,214
Dropout	14.1	13.5	-0.6	321/286
Ageout	30.3	27.4	-2.9	323/302

\*p <.05



a Data for the general population come from the 1979-1986 National Longitudinal Survey of Youth.  
 b This group matches youth with disabilities with regard to gender, ethnicity, and head of household's education.

\*\* p < .01, \*\*\* p < .001

**MARRIAGE OR LIVING WITH PERSONS OF THE OPPOSITE SEX AMONG OUT-OF-SCHOOL YOUTH WITH DISABILITIES AND YOUTH IN THE GENERAL POPULATION**

# MARRIAGE RATES OF OUT-OF-SCHOOL MALES AND FEMALES, BY DISABILITY CATEGORY

Percentage Who Were Married/Living with Someone of the Opposite Sex

Primary Disability Category	All Youth						Males			Females		
	<2 Years After School		3-5 Years After School		Difference Between <2 and 3-5		<2 Years After School		3-5 Years After School		Difference Between <2 and 3-5	
	n	%	n	%	n	%	n	%	n	%	n	%
Learning disabled	9.1	23.5	14.4**	17.8	12.3†	19.7	41.4	21.7	261	328	205	66
Emotionally disturbed	3.8	17.2	13.4**	14.1	13.7**	11.5	26.8	15.3	145	197	107	44
Speech impaired	6.5	18.0	11.5†	16.4	15.4*	14.4	20.7	6.3	96	130	56	50
Mentally retarded	3.6	13.5	9.9*	8.5	4.7	3.3	21.2	17.9*	203	267	114	112
Visually impaired	4.8	12.7	7.9	9.5	9.5*	10.4	16.5	6.1	147	175	87	74
Hard of hearing	4.6	24.6	20.0**	10.9	10.1	8.2	36.2	28.0*	126	143	69	67
Deaf	4.9	17.2	12.3**	11.4	9.2	8.7	24.8	16.1*	212	249	117	113
Orthopedically impaired	3.0	16.6	13.6*	15.5	15.5*	5.7	17.7	12.0	134	161	69	77
Other health impaired	5.6	16.0	10.4	2.9	--	11.6	30.0	18.4	60	85	29	40
Multiply handicapped	.0	3.4	3.4	5.2	5.2	--	.0	--	70	107	46	41

†p<.10, \*p<.05, \*\*p<.01

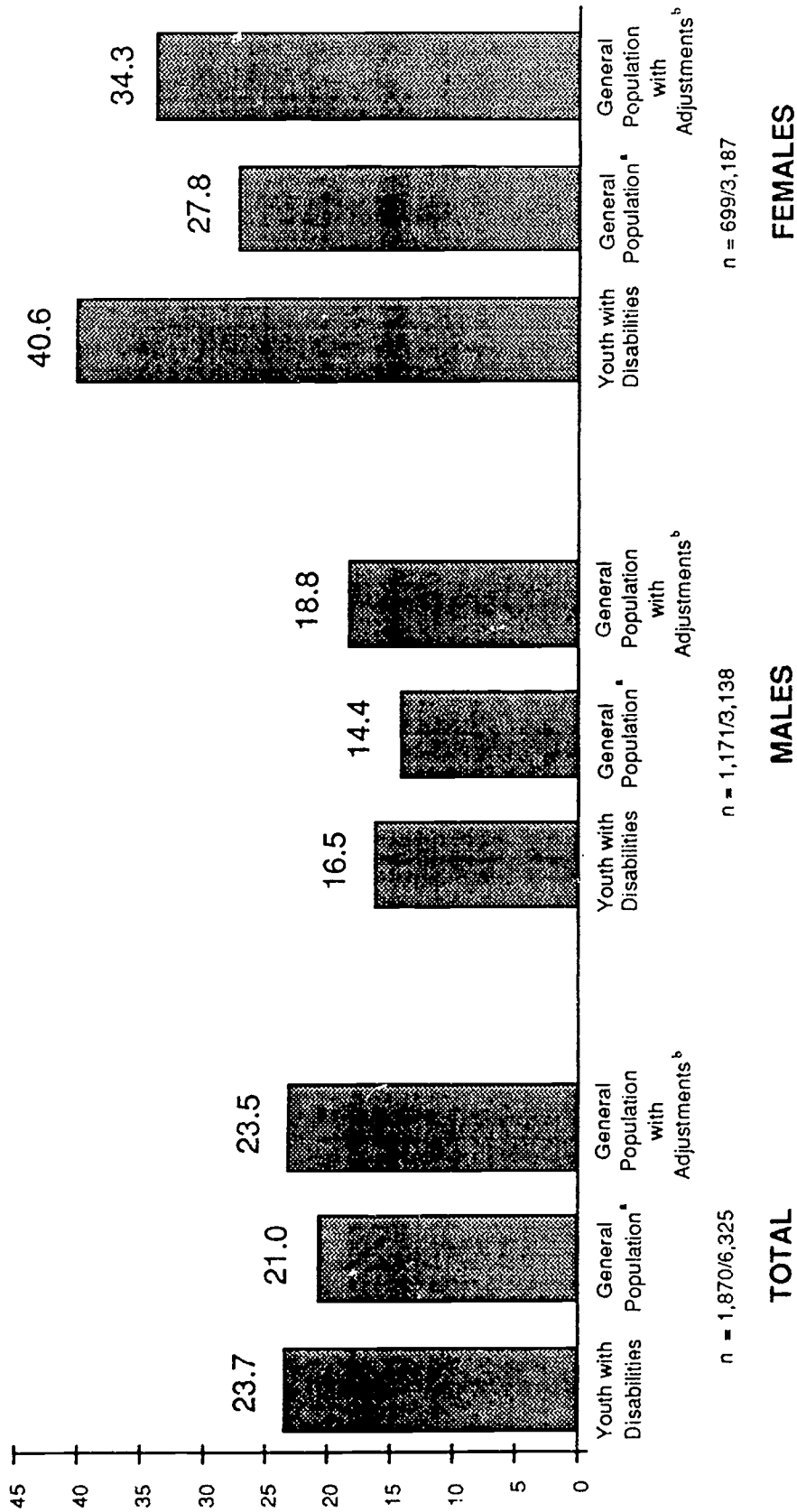
# MARRIAGE RATES OF OUT-OF-SCHOOL MALES AND FEMALES WITH DISABILITIES, BY YOUTH CHARACTERISTICS

Percentage Who Were Married/Living with Someone of the Opposite Sex

Youth Characteristics	All Youth				Males				Females			
	<2 Years After School	3-5 Years After School	Difference Between <2 and 3-5	p	<2 Years After School	3-5 Years After School	Difference Between <2 and 3-5	p	<2 Years After School	3-5 Years After School	Difference Between <2 and 3-5	p
	n	n			n	n			n	n		
<b>Ethnic background</b>												
White	7.8	22.8	15.0***		5.2	15.6	10.4**		13.5	39.4	25.9**	
n	1,032	1,272	634		802	398	470					
Black	.7	10.1	9.4*		.5	11.3	10.8*		1.2	7.3	6.1	
n	291	384	186		247	105	137					
Hispanic	18.5	25.0	6.5		7.6	22.2	14.6		40.8	31.0	-9.8	
n	102	139	55		75	47	64					
<b>Secondary school completion status</b>												
Graduate	4.3	20.0	15.7***		2.8	17.1	14.3***		7.6	26.9	19.3**	
n	1,093	1,247	659		758	434	489					
Dropout	18.0	21.1	3.1		9.9	12.1	2.2		38.0	45.5	7.5	
n	116	299	85		217	31	82					
Ageout	2.7	8.3	5.6		3.4	8.8	5.4		1.8	7.6	5.8	
n	270	320	165		197	105	123					

\*p<.05. \*\*p<.01

Percentage Who  
Were Parents



<sup>a</sup> Data for the general population come from the 1979-1986 National Longitudinal Survey of Youth.  
<sup>b</sup> This group matches youth with disabilities with regard to gender, ethnicity, and head of household's education.

**PARENTING RATES OF YOUTH WITH DISABILITIES AND YOUTH IN THE  
GENERAL POPULATION 3 TO 5 YEARS AFTER SECONDARY SCHOOL**

**PARENTING RATES OF MALES AND FEMALES WITH  
DISABILITIES 3 TO 5 YEARS AFTER SECONDARY  
SCHOOL, BY YOUTH CHARACTERISTICS**

Youth Characteristics	Percentage Who Were Parents Among:		
	All Youth	Males	Females
<b>Ethnic background</b>			
White	22.7	13.3	44.4
n	1,272	802	470
Black	25.7	24.1	29.7
n	380	243	137
Hispanic	29.3	24.6	38.7
n	138	74	64
<b>Secondary school completion</b>			
Graduate	20.5	13.2	37.7
n	1,246	757	489
Dropout	31.0	22.4	54.1
n	298	216	82
Ageout	14.3	14.2	14.5
n	318	195	123
<b>Marital status</b>			
Married/living with some- one of the opposite sex	66.3	57.4	76.4
n	270	129	141
Single/never married	10.0	6.4	20.4
n	1,457	952	505
Engaged	36.8	32.5	50.7
n	100	68	32
Divorced/widowed	59.9	--	--
n	41	20	21

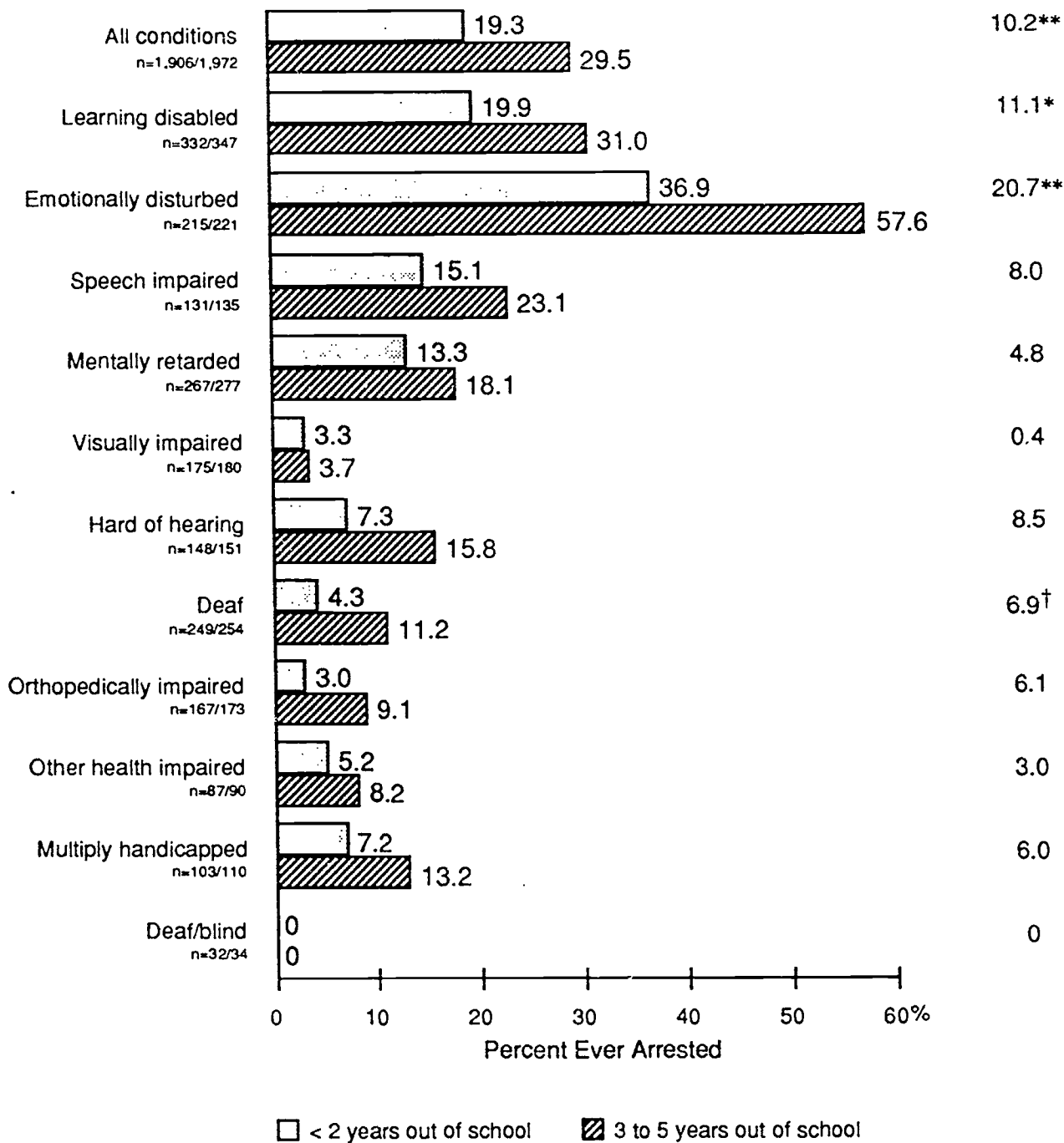


# Citizenship

**VOTER REGISTRATION RATE OF YOUTH WITH DISABILITIES OUT OF SECONDARY SCHOOL 3 TO 5 YEARS, BY YOUTH CHARACTERISTICS**

<u>Youth Characteristics</u>	<u>Youth Were Registered to Vote</u>		
	<u>Percentage</u>	<u>Standard Error</u>	<u>n</u>
All youth	50.8	2.9	1,781
Primary disability category			
Learning disabled	57.9	4.6	309
Emotionally disturbed	42.3	5.8	188
Speech impaired	62.4	7.1	124
Mentally retarded	41.2	5.2	255
Visually impaired	56.2	6.2	170
Hard of hearing	48.0	7.8	135
Deaf	50.8	5.4	215
Orthopedically impaired	55.2	7.5	153
Other health impaired	57.9	9.4	83
Multiply handicapped	0.0	.0	115
Deaf/blind	0.0	0	34
Gender			
Male	54.9	3.4	1,112
Female	41.6	5.5	669
Ethnic background			
White	47.8	3.4	1,222
Black	64.1	6.4	352
Hispanic	41.0	12.2	130
Secondary school completion			
Graduate	58.4	3.5	1,188
Dropout	42.1	5.9	283
Ageout	32.0	5.6	302
Youth belonged to school or community group			
Yes	61.3	6.0	479
No	48.3	3.4	1,240

Increase



† p < .10   \* p < .05   \*\* p < .01

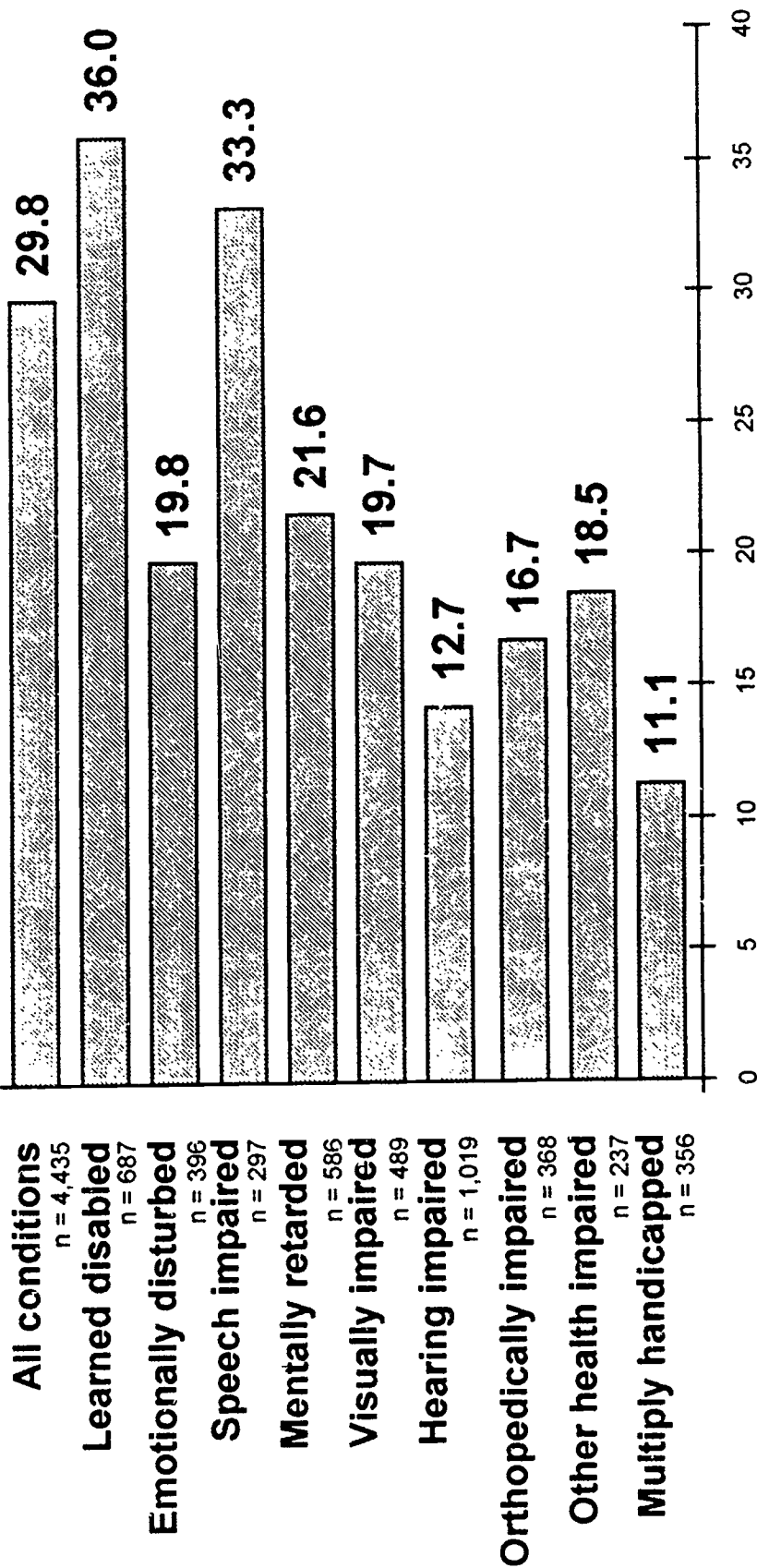
### ARREST RATES OF OUT-OF-SCHOOL YOUTH, BY DISABILITY CATEGORY

## ARREST RATES OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY YOUTH CHARACTERISTICS

Youth Characteristics	Percentage of Youth Arrested:		Difference Between <2 and 3-5 Years	n
	By 2 Years After High School	By 3-5 Years After High School		
<b>Gender</b>				
Male	24.7	37.6	12.9**	1,192/1,238
Female	7.3	10.7	3.4	714/734
<b>Ethnic background</b>				
White	16.5	27.1	10.6**	1,302/1,333
Black	28.4	39.8	11.4	393/408
Hispanic	13.6	22.1	8.5	146/148
<b>Secondary school completion status</b>				
Graduate	7.1	15.8	8.7	1,191/1,308
Dropout	37.1	56.4	19.3	307/320
Ageout	7.4	9.5	2.1	332/336

\*\*p < .01

## Adult Services



**PERCENTAGE OF OUT-OF-SCHOOL YOUTH REPORTED  
BY PARENTS NOT TO NEED ANY SERVICES,  
BY PRIMARY DISABILITY CLASSIFICATION**

**CURRENT NEED FOR SERVICES,  
BY PRIMARY DISABILITY CATEGORY**

Type of Service Needed	All Conditions	Primary Disability Category								
		Learning Disabled	Emotion-ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hearing Impaired	Orthope-dically Impaired	Other Health Impaired	Multiply Handicapped
Vocational assistance	60.0	56.6	70.5	56.4	61.9	64.2	72.9	70.5	66.3	68.2
Life Skills training	42.7	33.7	52.3	35.9	59.7	53.6	50.5	54.4	47.3	68.8
Tutoring, reading, interpreting	32.5	27.2	31.7	26.7	44.8	39.4	65.9	27.7	31.5	52.1
Personal counseling	30.4	26.2	43.9	24.6	33.8	27.5	40.9	34.8	34.7	44.2
Physical therapy/ mobility training*	23.6	--	--	--	21.5	32.5	14.5	43.1	23.6	47.7
n	4,646	716	419	306	619	510	1,070	387	245	371
*n	2,747				624	512	603	389	247	372

**CURRENT NEED FOR SERVICES,  
BY BACKGROUND CHARACTERISTICS**

Type of Service Needed	Youth's Ethnic Background			Secondary School Leaving Status		
	White	African American	Hispanic	Graduated	Aged Out	Dropped Out
Vocational assistance	57.4	69.8	64.2	56.2	58.4	70.8
Life skills training	38.3	51.9	60.4	37.5	58.7	51.5
Tutoring, reading, interpreting	26.4	48.6	47.4	27.7	44.3	41.9
Personal counseling	25.6	37.2	55.3	24.6	44.3	41.3
Physical therapy*	18.0	31.0	37.8	20.7	33.0	26.3
n	2,975	868	340	3,397	452	787
*n	1,711	544	223	2,051	365	330

## CURRENT RECEIPT OF SERVICES, BY PRIMARY DISABILITY CATEGORY

Percentage receiving service among youth reported to need:	Primary Disability Category									
	All Conditions	Learning Disabled	Emotionally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hearing Impaired	Orthopedically Impaired	Other Health Impaired	Multiply Handicapped
Vocational assistance	36.5	33.6	28.4	39.0	43.3	46.7	50.5	42.6	52.5	58.4
n	3,048	409	293	165	391	321	794	266	160	249
Life Skills training	.26	.17	.22	.28	.39	.35	19.4	.23	.38	.54
n	2,206	230	208	99	363	252	290	197	113	252
Tutoring, reading, interpreting	23.4	19.1	18.3	24.1	27.5	45.2	48.4	33.6	18.7	43.8
n	1,833	186	120	78	273	198	401	104	76	188
Personal counseling	23.7	17.6	27.1	19.5	34.3	29.1	17.8	25.0	21.9	40.0
n	1,565	183	181	73	204	134	417	132	85	156
Physical therapy	31.0	--	--	--	30.2	35.4	9.4	26.2	34.7	44.4
n	854				127	156	73	163	54	179

## RECEIPT OF SERVICES, BY SELECTED YOUTH CHARACTERISTICS

Percentage receiving services among youth reported to need:	Youth's Ethnic Background			Secondary School Leaving Status		
	White	African American	Hispanic	Graduated	Aged Out	Dropped Out
Vocational assistance	40.6	27.2	24.1	44.7	47.9	16.0
n	1,850	640	247	2,185	283	579
Life skills training	29.5	21.2	12.1	29.6	39.2	13.4
n	1,322	481	190	1,479	296	431
Tutoring, reading, interpreting	25.8	23.7	10.1	28.5	29.8	11.7
n	1,027	457	154	1,286	232	315
Personal counseling	28.5	15.6	17.7	27.6	28.4	16.1
n	904	347	155	1,013	202	350
Physical therapy/mobility training	46.1	10.9	31.0	33.6	44.9	18.7
n	427	179	70	503	156	92



**PERCENTAGE OF YOUTH WITH UNMET NEEDS WHOSE PARENTS  
REPORTED THAT SERVICES WERE BEING SOUGHT FOR THEM,  
BY PRIMARY DISABILITY CATEGORY**

**Primary Disability Category**

Service Sought	All Conditions	Learning Disabled	Emotion- ally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hearing Impaired	Orthope- dically Impaired	Other Health Impaired	Multiply Handicapped
<b>Vocational assistance</b>	<b>24.0</b>	<b>21.9</b>	<b>28.3</b>	<b>17.5</b>	<b>25.5</b>	<b>27.7</b>	<b>31.0</b>	<b>37.8</b>	<b>26.7</b>	<b>48.4</b>
n	1,725	273	209	105	210	171	418	157	83	99
<b>Life Skills training</b>	<b>12.6</b>	<b>8.8</b>	<b>15.2</b>	<b>12.7</b>	<b>17.5</b>	<b>13.3</b>	<b>15.6</b>	<b>18.5</b>	<b>13.8</b>	<b>28.7</b>
n	1,590	197	163	76	232	175	398	157	74	118
<b>Tutoring, reading, interpreting</b>	<b>10.0</b>	<b>11.3</b>	<b>3.8</b>	<b>10.1</b>	<b>9.5</b>	<b>11.5</b>	<b>13.2</b>	<b>9.2</b>	<b>7.2</b>	<b>17.1</b>
n	1,109	146	94	54	195	99	297	63	57	104
<b>Personal counseling</b>	<b>14.4</b>	<b>12.6</b>	<b>17.7</b>	<b>19.5</b>	<b>14.3</b>	<b>9.8</b>	<b>16.7</b>	<b>22.8</b>	<b>19.1</b>	<b>24.9</b>
n	1,119	148	128	58	125	89	328	94	62	87
<b>Physical therapy</b>	<b>11.9</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>11.1</b>	<b>17.7</b>	<b>11.9</b>	<b>19.3</b>	<b>17.1</b>	<b>21.5</b>
n	563	20	18	16	83	96	65	112	35	92

**PERCENTAGE OF YOUTH WITH UNMET NEEDS WHOSE PARENTS REPORTED THAT SERVICES WERE BEING SOUGHT FOR THEM, BY ETHNIC BACKGROUND AND HOUSEHOLD HEAD'S EDUCATION**

Service Sought	Youth's Ethnic Background			Head of Household's Education		
	White	African American	Hispanic	Less than high school	High school graduate	Beyond high school
<b>Vocational assistance</b> n	<b>27.0</b> 1,000	<b>22.1</b> 414	<b>9.3</b> 153	<b>20.5</b> 569	<b>24.0</b> 592	<b>29.5</b> 484
<b>Life skills training</b> n	<b>17.1</b> 917	<b>5.3</b> 366	<b>6.5</b> 157	<b>8.8</b> 496	<b>11.6</b> 536	<b>19.5</b> 486
<b>Tutoring, reading, interpreting</b> n	<b>12.3</b> 570	<b>6.4</b> 304	<b>3.1</b> 121	<b>6.0</b> 403	<b>12.5</b> 355	<b>12.3</b> 300
<b>Personal counseling</b> n	<b>19.6</b> 596	<b>8.5</b> 280	<b>4.5</b> 124	<b>6.6</b> 369	<b>15</b> 356	<b>25.3</b> 345
<b>Physical therapy</b> n	<b>18.4</b> 286	<b>10.2</b> 162	<b>2.4</b> 60	<b>7.7</b> 211	<b>15.2</b> 175	<b>18.9</b> 145

# **Life Profiles: A Construct of Independence**

## The Facts

Much research on postschool outcomes examines specific dimensions of the experiences of youth. Yet, an integrated picture of the whole of the experience of youth with disabilities cannot be drawn by concentrating only on its parts. The NLTS has developed an outcome measure that goes beyond individual activities to examine the blending of experiences with independence on three important dimensions: engagement in work- or education-related activities outside the home, residential arrangements, and social activities. The NLTS measure of youths' general independence--referred to as life profiles--captures the extent to which youth were independent across these dimensions (e.g., independent in the engagement and residential domains vs. the engagement domain alone) and indicates how independently youth were functioning in a particular domain (e.g., whether youth were working for pay or doing volunteer work). Six profiles range from full independence in all three domains to institutionalization.

- *Gains in independence were achieved by youth with disabilities over time.* The rate at which youth were fully independent in all three domains (Profile 1) increased from 6% of youth in the first 2 years after high school to 20% of youth 3 years later. There was a corresponding decrease in the number of youth who were active, but not independent (Profile 4) from 22% to 9%, and in the number who were not active (Profile 5), from 24% to 17%.
- *Although youth in all disability categories experienced gains in independence, the gains were not equally distributed.* The highest rates of and gains in independence were experienced by youth with learning, speech, or sensory impairments. For example, the rate of full independence (Profile 1) increased by 23 percentage points over time for youth with speech impairments, so that 3 to 5 years after high school, 28% were fully independent in three domains. In contrast, the percentage of youth characterized by Profile 1 among those with mental retardation increased only 6 percentage points, from 1% to 7%. Youth with mental retardation or orthopedic or multiple impairments were primarily active but not independent or inactive (Profiles 4 or 5). For example, 49% of youth with mental retardation had these profiles 3 to 5 years after secondary school. More youth with serious emotional disturbances or multiple handicaps were institutionalized than youth in other categories. However, youth with emotional disturbances were more likely to be incarcerated, whereas those with multiple impairments resided in facilities for persons with disabilities.
- *Greater gains in independence were experienced by males, white youth, and high school graduates than by females, minority youth, or those who dropped out or aged out of school.* For example, the proportion of males with Profile 1 increased 16 percentage points over time, twice the increase for females. Similarly white youth increased the proportion with Profile 1 by 16 percentage points and graduates did so by 20 percentage points, compared with 8 percentage points for minority youth and 3 and 4 percentage points for those who dropped out and aged out, respectively.
- *Few youth who were not fully independent were receiving services that would help them become so.* For example, only 4% of youth who were inactive in their communities (Profile 5) were receiving life skills training or occupational therapy according to parents, and only 8% were receiving vocational assistance. The latter service was the most frequently cited need by parents for their young adult children with disabilities.

## The Background

### *Gains in independence were achieved by youth with disabilities over time.*

Youth with disabilities demonstrated sizable gains in the most independent profiles:

- *Profile 1.* This profile describes youth who were productively engaged full time outside the home, were living independently, and were socially active. On the engagement dimension, the vast majority of youth who fit Profile 1 were employed in competitive, full-time jobs, with a small number working competitively part time, in combination with either job training or postsecondary education. The majority of youth lived with a spouse or roommate, consistent with the high rate of marriage or living with persons of the opposite sex among youth who fit this profile. Overall, 20% of youth with disabilities who had been out of secondary school 3 to 5 years fit this profile, a significant increase over the rate of 6% 3 years earlier. Although Profile 1 implies the greatest independence captured by the profile construct, we are reminded that the full-time productive engagement outside the home that was common for the most independent youth with disabilities still frequently meant employment at relatively low-skill and low-paying jobs that would ensure poverty for a young family if they relied on that job alone for support.
- *Profile 2.* Youth were fully independent on two dimensions. For example, youth were working competitively full time or were full-time students and were involved socially, but lived at home with parents (and thus were not independent in the residential domain). Alternatively, youth were married (socially independent) and lived with their spouses (residentially independent), but were not working or worked less than full time. Almost half of youth (48%) fit this profile when they had been out of secondary school 3 to 5 years, making it the most common cluster of youth experiences. The rate increased significantly over the 31% of youth with this profile up to 2 years after high school.

These gains in independence were accompanied by decreases in the less independent domains, such as:

- *Profile 4.* These youth were active in either the engagement or residential dimensions, but were not independent in either of them. This includes youth who had volunteer, work-study, sheltered, or supported jobs and who did not live independent. Also included are youth who lived in supervised group homes who did not work competitively. This profile represented 22% of youth with disabilities in the first 2 years after high school, a rate that declined to 9% 3 years later.
- *Profile 5.* Youth were not participating on either the engagement or residential dimensions, but were not living in institutions. These youth were not involved in any work- or education-related activities outside the home and generally lived with parents or other adult family members. Despite their lack of involvement in work or school or in living situations outside their immediate families, few were socially isolated. This profile characterized 17% of youth who had been out of secondary school 3 to 5 years, a decline from 24% 3 years earlier.

***Although youth in all disability categories experienced gains in independence over time, the gains were not equally distributed.***

Youth with speech, visual, or learning disabilities experienced the greatest gains in full independence (Profile 1) over time, ranging from 16 to 23 percentage points. Yet only among youth with visual or speech impairments or learning disabilities did at least 25% of youth reach this highest level of independence 3 to 5 years after high school! Only 5% of youth with multiple impairments and 8% of youth with mental retardation were fully independent on all three dimensions.

Profile 2 characterized more than half of youth with speech or other health impairments or learning disabilities, but only 23% of youth with multiple impairments and about one-third of youth with mental retardation. Gains in Profile 2 were greatest for youth with orthopedic impairments (25 percentage points) or serious emotional disturbances (15 percentage points).

All youth experienced decreases in Profiles 4 and 5, which represent youth who were active but not independent or who were inactive. However, the smallest declines were among youth who were hard of hearing, other health impaired, or multiply handicapped. The least independent profiles characterized almost half or more of youth with mental retardation, multiple impairments, or youth who were deaf/blind.

Profile 6, youth who were in institutions, represented only 2% of youth in the first 2 years after high school and 3% of youth 3 years later. However, it included 10% of youth with and 11% of those with multiple impairments. Youth with serious emotional disturbances were more likely to be incarcerated, whereas those with multiple impairments more commonly resided in facilities for persons with disabilities.

***Greater gains in independence were experienced by males, white youth, and high school graduates than by females, minority youth, or those who dropped out or aged out of school.***

Males and females both experienced significant increases in the most independent profile, but the 16 percentage point gain for young men with disabilities was twice the increase for young women. However, women experienced stronger gains in Profile 2 than men (22 vs. 7 percentage points). Profile 2 was most common for females with disabilities 3 to 5 years after high school (47%), usually involving living independently and being socially involved but being unemployed or working part-time, often due to childcare responsibilities. Young men with disabilities were more likely than women to have Profile 6 in the later years after high school (4% vs. <1%) due to their higher rate of incarceration.

White youth showed stronger increases in Profile 1 than minorities (16 percentage points vs. 8), giving them a higher proportion with that profile 3 to 5 years after high school (25% vs. 8% of African American and 13% of Hispanic youth with disabilities). Minority youth were more likely to show their increases in independence in Profile 2 (20 percentage points for African American youth and 14 points for Hispanic youth compared with 9 points for white youth). African American youth had the highest rate of membership in Profile 6, those in institutions, due to their higher rate of incarceration (9% vs. 2% 3 to 5 years after high school).

High school graduates experienced large and significant gains in the most independent profiles, with an increase of 20 percentage points in Profile 1 (from 5% to 25%) and 10 percentage points in Profile 2 (from 36% to 46%). Less independent profiles, 3 through 5, had corresponding significant declines. Although dropouts had patterns of decline in the less independent profiles that were similar to graduates, most of their corresponding increase in independence was in Profile 2, rather than Profile 1 (18 percentage points for Profile 2 and 3 percentage points for Profile 1). The distribution of profiles was virtually unchanged over time among youth who had aged out of secondary school. No significant gains in more independent profiles or declines in less independent profiles were observed for these youth. Thus, as time passed, youth who aged out were left farther behind their peers who graduated or dropped out (e.g., 8% with Profile 1 compared with 14% for dropouts and 25% for graduates 3 to 5 years after high school).

***Few youth who were not fully independent were receiving services that would help them become so.***

Only small minorities of youth who fit any of the profiles were receiving the services investigated by the NLTS. For example, no more than 6% of youth whose experiences corresponded to any of the profiles were receiving speech or language therapy; no more than 15% were receiving help from a tutor, reader, or interpreter, and no more than about one-third were reported to be receiving personal counseling or therapy 3 to 5 years after high school.

Further, there seems to be little relationship between the levels of independence captured by the profiles and the extent to which youth were receiving services. For example, inactive youth who fit Profile 5 were no more likely than the most independent youth with Profile 1 to be receiving services that might support increased independence. The exception to this pattern is that services in general were somewhat more common among youth who fit Profiles 4 (active, but not independent) and 6 (institutionalized). The institutions, agencies, or programs with which these youth were connected (e.g., group homes or supported employment programs in the case of Profile 4) may have provided them with these kinds of services.

Parents of youth with disabilities who were not receiving services 3 to 5 years after high school were asked if they believed youth needed various services. NLTS data suggest there are unmet needs for support services even among youth who, by the life profiles we have developed, have achieved the fullest degree of independence. For example, among the most independent youth with Profile 1, one-fourth of unserved youth were perceived by parents to need vocational assistance in the form of further training, job counseling, or job placement assistance. One in 5 unserved youth with Profile 1 were reported to need occupational therapy or life skills training for their future development.

Levels of unmet need generally were higher for youth with less independent profiles. For example, reported levels of need were lowest in all cases for youth with Profile 1 and were highest for all of the services for youth with Profiles 5 or 6.

These findings suggest that parents believed their children had the potential for greater independence than they had thus far achieved and that support services were needed to translate that potential into accomplishment. This appeared to be most true for youth who had achieved the least independence thus far. Without intervention by the service system, prospects for increased independence for these youth appear dim.



## **The Figures**

## LIFE PROFILES

PROFILE	
1	Fully independent, 3 domains
2	Fully independent, 2 domains
3	Independent, 1 domain
4	Active, not independent
5	Not active
6	Institutionalized

# **DOMAINS OF INDEPENDENCE**

## **Engagement**

**Employment**

**Job Training**

**Postsecondary education**

**Volunteer work**

## **Social**

**Marriage**

**Sees friends at least weekly**

**Belongs to a group**

## **Residential**

**Lives independently**

**Lives in supported setting**

**Lives in institution**

# ACTIVITIES OF YOUTH WITH DISABILITIES OUT OF SECONDARY SCHOOL 3 TO 5 YEARS

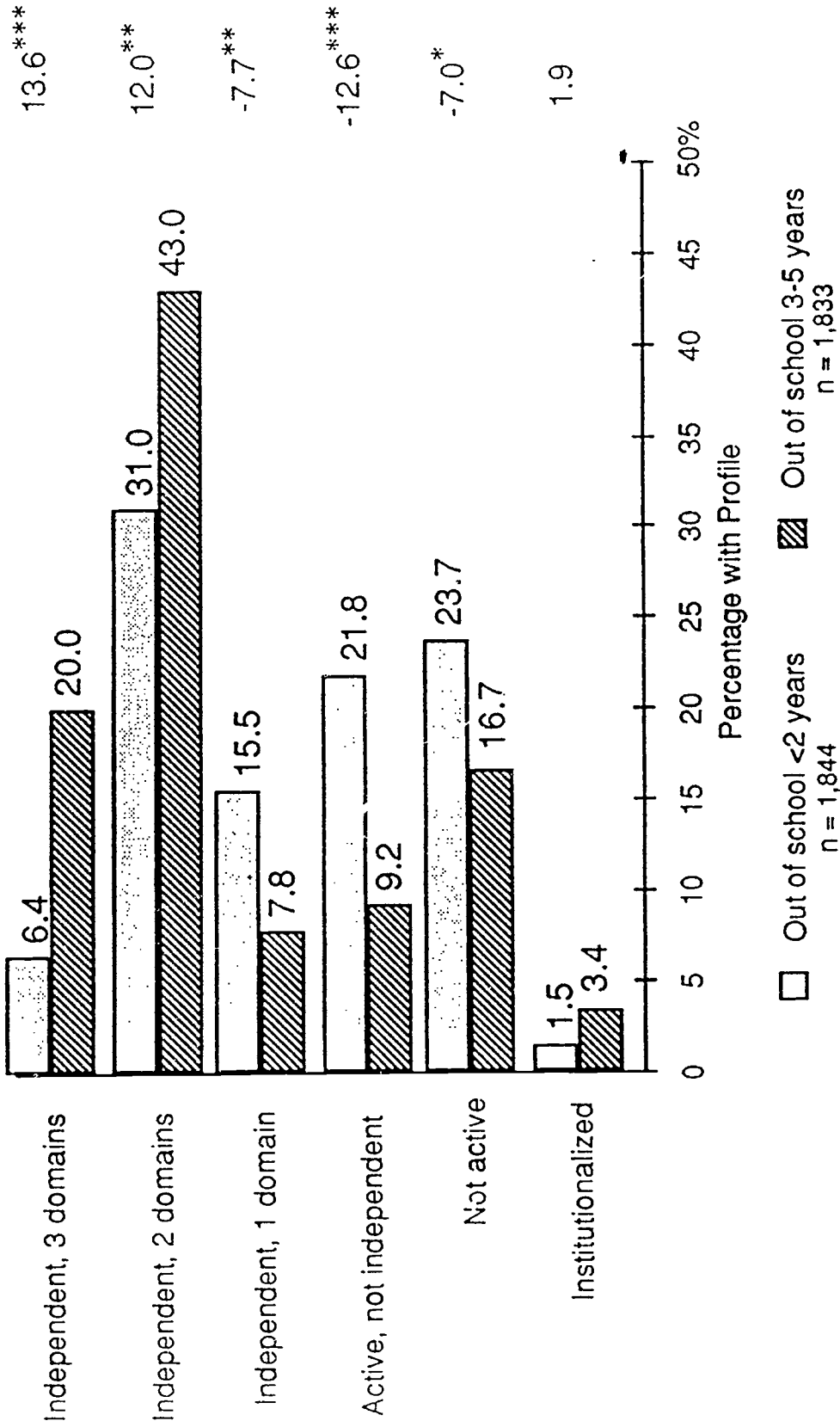
Youth Activities	Profile 1: Independent, 3 Domains	Profile 2: Independent, 2 Domains	Profile 3: Independent, 1 Domain	Profile 4: Active, Not Independent	Profile 5: Not Active	Profile 6: Institution- alized
<b>Engagement Domain</b>						
Percentage of youth employed:						
Not at all	6.9	26.6	11.3	28.0	100.0	100.0
As volunteer only	1.4	2.1	1.0	10.9	.0	.0
In sheltered or supported work	.1	2.0	.4	55.8	.0	.0
In part-time competitive work	6.1	14.2	72.6	5.3	.0	.0
In full-time competitive work	85.5	55.1	14.7	.0	.0	.0
Percentage of youth who were:						
Enrolled in a post-secondary school	12.4	7.9	1.3	1.6	.0	.0
Involved in job skills training	7.8	12.0	7.7	32.7	.0	.0
n	349	657	139	239	285	37

# ACTIVITIES OF YOUTH WITH DISABILITIES OUT OF SECONDARY SCHOOL 3 TO 5 YEARS

Youth Activities	Profile 1: Independent, 3 Domains	Profile 2: Independent, 2 Domains	Profile 3: Independent, 1 Domain	Profile 4: Active, Not Independent	Profile 5: Not Active	Profile 6: Institution- alized
<b>Residential Domain</b>						
Percentage of youth living:						
Independently	100.0	38.1	12.6	.0	.0	.0
With parent(s)/other family members	.0	59.0	85.5	80.4	97.4	.0
In a supervised group home	.0	1.3	1.8	18.5	.0	.0
In a hospital/facility for those with disabilities/correctional facility	.0	.0	.1	.0	.0	99.3
In another setting	.0	1.8	.1	1.1	2.6	.0
<b>Social Domain</b>						
Percentage of youth who were:						
Socially isolated <sup>a</sup>	.0	1.3	22.7	21.1	8.9	--
Married/living with someone of the opposite sex	44.0	19.5	1.5	2.2	11.1	.0
Parents	39.2	24.6	13.2	1.9	18.8	11.8
n	349	657	139	239	285	37

<sup>a</sup> Saw friends less often than weekly, did not belong to social/community groups, and was not married or engaged.

Difference



\* p < .05, \*\* p < .01, \*\*\* p < .001

## LIFE PROFILES OF YOUTH WITH DISABILITIES

# LIFE PROFILES OF YOUTH WITH DISABILITIES BY DISABILITY CATEGORY (Percent)

Life Profiles	Primary Disability Category											
	All Conditions	Learning Disabled	Emotionally Disturbed	Speech Impaired	Mentally Retarded	Visually Impaired	Hard of Hearing	Deaf	Orthopedically Impaired	Other Health Impaired	Multiply Handicapped	Deaf/Blind
<b>Less than 2 years after secondary school, youth were:</b>												
Independent, 3 domains	6.4	10.2	2.9	4.8	1.2	7.5	7.7	8.1	3.3	.0	.0	3.0
Independent, 2 domains	31.0	37.7	31.0	33.5	18.2	30.5	40.4	36.1	12.1	39.3	14.2	12.2
Independent, 1 domain	15.5	15.8	21.5	18.0	13.1	8.0	13.5	10.3	12.4	11.8	3.9	9.6
Active, not independent	21.8	16.7	15.2	20.4	34.5	30.9	21.8	22.2	26.5	22.4	35.2	39.1
Not active	23.7	19.6	24.7	21.8	30.5	22.5	16.2	22.7	43.8	26.5	30.3	27.5
Institutionalized	1.5	.0	4.8	1.4	2.5	.6	.4	.7	1.9	.0	16.4	8.6
n	1,844	327	207	127	258	166	143	243	15	79	104	33
<b>3 to 5 years after secondary school, youth were:</b>												
Independent, 3 domains	20.0	26.8	16.2	27.6	7.7	28.5	20.1	22.8	14.7	16.5	5.1	5.8
Independent, 2 domains	43.0	49.9	45.7	35.2	30.1	35.5	48.9	42.5	37.1	43.8	18.9	13.2
Independent, 1 domain	7.8	7.2	6.7	15.8	9.0	5.8	6.3	10.3	3.1	8.1	2.1	8.7
Active, not independent	9.2	2.8	7.2	4.2	22.0	11.6	7.7	5.2	15.8	14.5	33.1	33.2
Not active	16.7	11.6	14.0	14.0	27.3	18.0	17.0	16.3	28.3	17.0	29.5	31.8
Institutionalized	3.4	1.7	10.3	3.1	3.9	.6	.0	2.7	1.1	.1	11.3	7.3
n	1,833	325	190	127	263	172	140	244	156	84	100	32
<b>Difference between &lt;2 and 3-5 years after high school</b>												
Independent, 3 domains	13.6***	16.6***	13.3**	22.8**	6.5*	21.0**	12.4†	14.7**	11.4*	16.5*	5.1	2.8
Independent, 2 domains	12.0**	12.2*	14.7†	1.7	11.9*	5.0	8.5	6.4	25.0**	4.5	4.7	1.0
Independent, 1 domain	-7.7	-8.6*	-14.8**	-2.2	-4.1	-2.2	-7.2	.0	-9.3†	-3.7	-1.8	-.9
Active, not independent	-12.6***	-13.9***	-8.0	-16.2*	-12.5*	-19.3**	-14.1*	-17.0***	-10.7	-7.9	-2.1	-5.9
Not active	-7.0*	-8.0†	-10.7†	-7.8	-3.2	-4.5	0.8	-6.4	-15.5	-9.5	-.8	4.3
Institutionalized	1.9	1.7	5.5	1.7	1.4	.0	-.4	2.0	-.8	.1	-5.1	-1.3

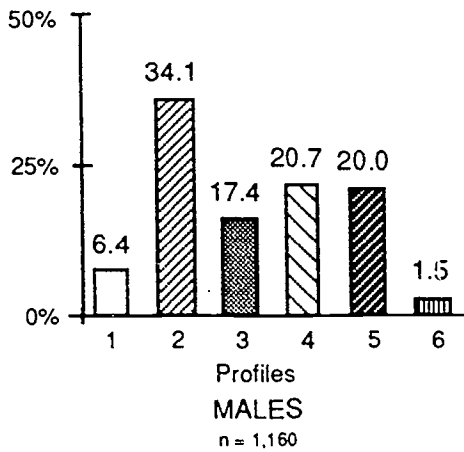
† p<.10, \* p<.05, \*\* p<.01, \*\*\* p<.001.

Youth Out of School Up to 2 Years

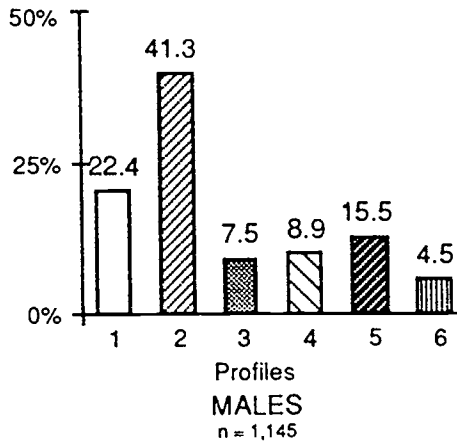
Youth Out of School 3 to 5 Years

Difference

Percentage with Profile



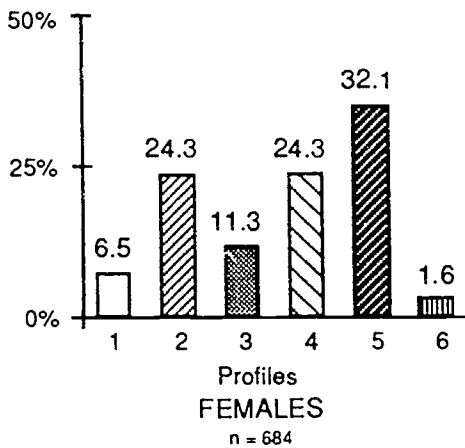
Percentage with Profile



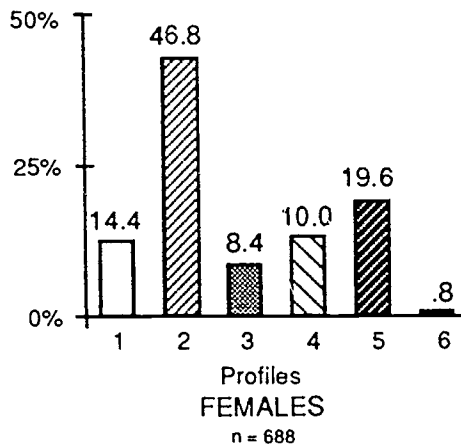
Profile

1	16.0 <sup>***</sup>
2	7.2 <sup>*</sup>
3	-9.9 <sup>**</sup>
4	-11.8 <sup>***</sup>
5	-4.5
6	3.0

Percentage with Profile



Percentage with Profile



1	7.9 <sup>†</sup>
2	22.5 <sup>***</sup>
3	-2.9
4	-14.3 <sup>*</sup>
5	-12.5 <sup>†</sup>
6	-.8

† p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

**GENDER DIFFERENCES IN LIFE PROFILE  
CHANGES OF YOUTH WITH DISABILITIES**

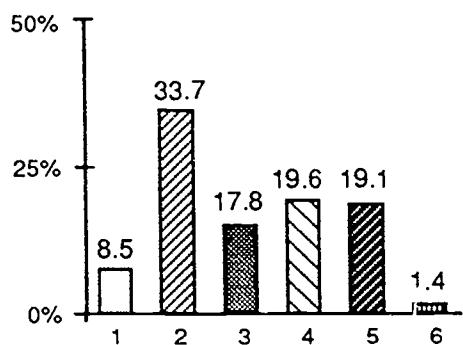


### Youth Out of School Up to 2 Years

### Youth Out of School 3 to 5 Years

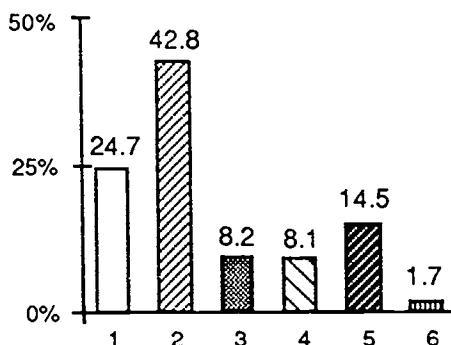
### Difference

Percentage with Profile



WHITE  
n = 1,268

Percentage with Profile

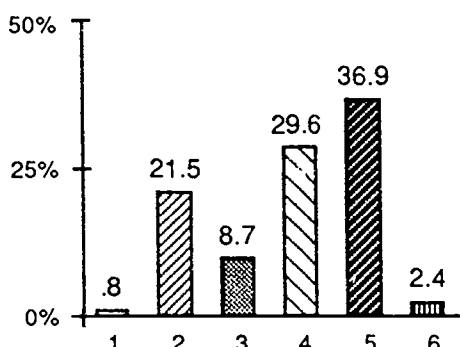


WHITE  
n = 1,251

Profile

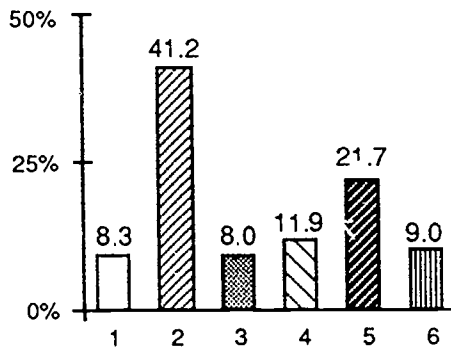
1	16.2***
2	9.1*
3	-9.6**
4	-11.5***
5	-4.6
6	3.0

Percentage with Profile



BLACK  
n = 374

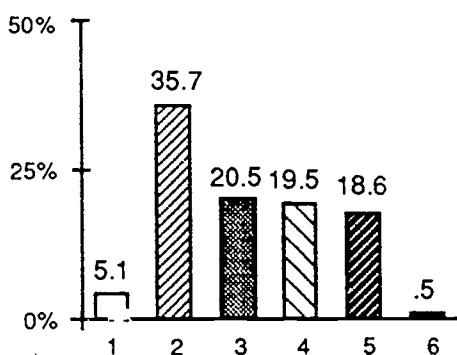
Percentage with Profile



BLACK  
n = 372

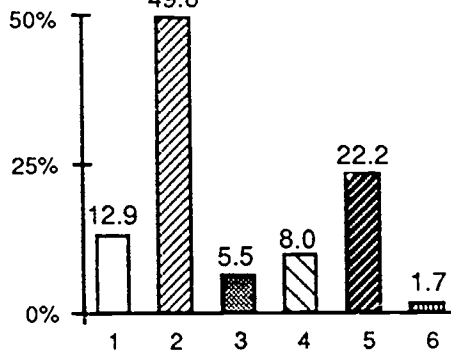
1	7.5†
2	19.7*
3	-.7
4	-17.7*
5	-15.2†
6	6.6

Percentage with Profile



HISPANIC  
n = 138

Percentage with Profile



HISPANIC  
n = 132

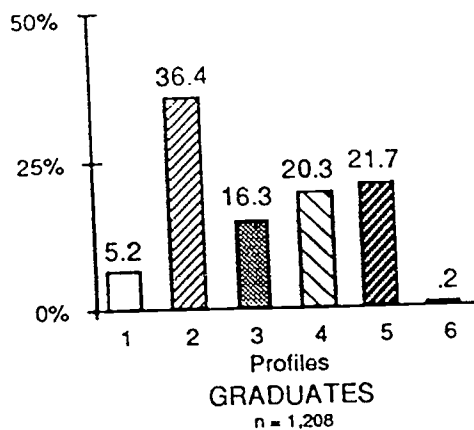
1	7.8
2	13.9
3	-15.0
4	-11.5
5	3.6
6	1.2

† p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

## LIFE PROFILES OF YOUTH WITH DISABILITIES, BY ETHNIC BACKGROUND

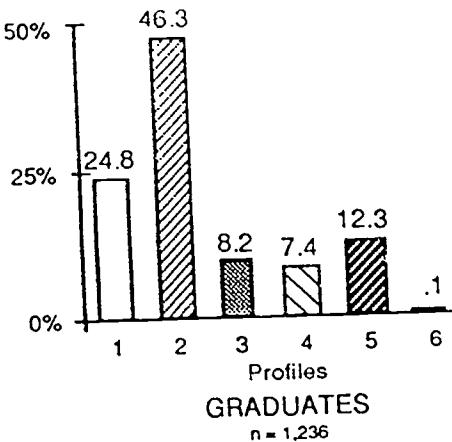
### Youth Out of School Up to 2 Years

Percentage with Profile



### Youth Out of School 3 to 5 Years

Percentage with Profile

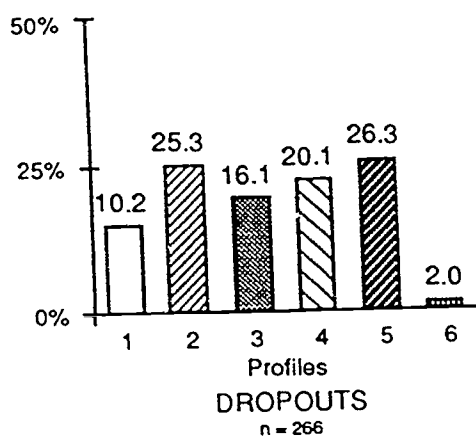


### Difference

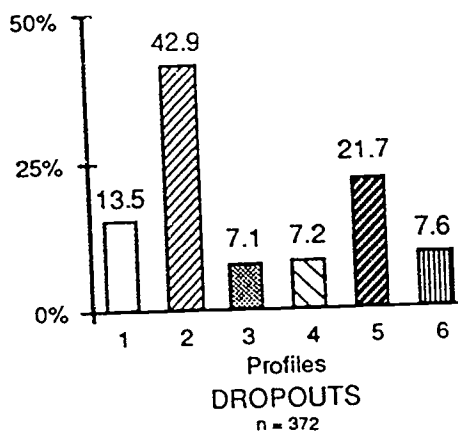
Profile

1	19.6***
2	9.9*
3	-8.1**
4	-12.9***
5	-9.4
6	-.1

Percentage with Profile

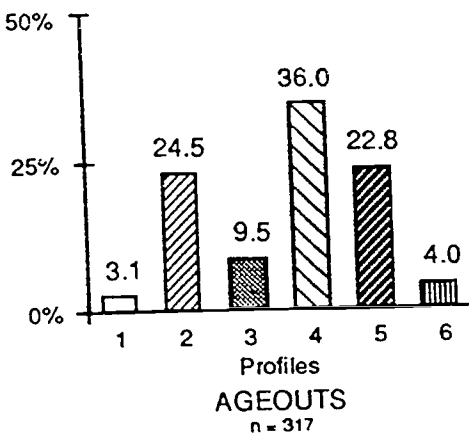


Percentage with Profile

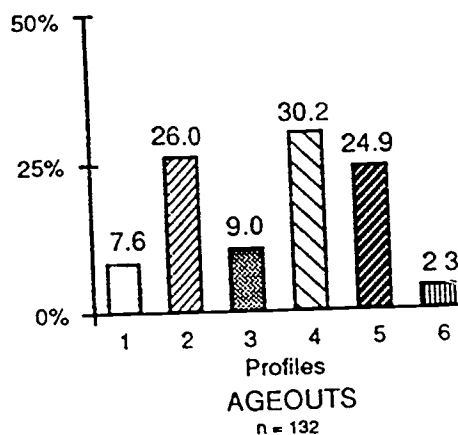


1	3.3
2	17.6*
3	-9.0†
4	-12.9*
5	-4.6
6	5.6

Percentage with Profile



Percentage with Profile



1	4.5
2	1.5
3	-.5
4	-5.8
5	2.1
6	-1.7

† p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

## LIFE PROFILES OF YOUTH WITH DISABILITIES, BY SECONDARY SCHOOL COMPLETION

## CHANGE IN LIFE PROFILES OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES

Life Profiles Less Than 2 Years After Secondary School:

	1 Independent, 3 Domains	2 Independent, 2 Domains	3 Independent, 1 Domain	4 Active, Not Independent	5 Not Active	6 Institution- alized
Percentage of youth 3 to 5 years after secondary school who were:						
1 Independent, 3 domains	63.4	26.8	25.1	9.9	9.6	.0
2 Independent, 2 domains	31.1	50.4	41.8	43.7	40.4	1.0
3 Independent, 1 domain	2.4	8.2	5.3	11.1	7.9	1.8
4 Active, not independent	.9	3.7	10.6	16.1	9.5	35.5
5 Not active	2.1	9.1	14.7	14.7	30.8	10.3
6 Institutionalized	.0	1.8	2.5	4.6	1.7	51.4
n	91	551	235	417	387	25

# FLUCTUATION IN LIFE PROFILES OF YOUTH WITH DISABILITIES, BY DISABILITY CATEGORY

Percentage of Youth Who:

Youth Characteristics	Percentage of Youth Who:					n
	Were Fully Independent (Profile 1) at Both Times	Moved Toward Greater Independence	Were Stable, Moderate Independence (Profiles 2-3)	Moved Toward Less Independence	Were Stable, Low Independence (Profiles 4-6)	
All youth	4.0	50.0	16.0	18.3	11.6	1,706
Primary disability category						
Learning disabled	6.6	51.7	19.9	14.5	7.3	305
Emotionally disturbed	1.2	52.3	15.7	24.3	6.5	178
Speech impaired	2.8	53.4	17.4	19.4	7.0	118
Mentally retarded	.6	46.1	8.2	23.8	21.4	242
Visually impaired	5.3	52.6	13.0	19.3	9.8	159
Hard of hearing	1.6	43.9	27.6	20.7	6.2	132
Deaf	3.6	49.0	18.2	25.7	3.4	233
Orthopedically impaired	.7	51.3	6.2	9.9	31.8	143
Other health impaired	.0	45.9	26.6	9.6	17.9	73
Multiply handicapped	.0	30.6	2.3	25.2	41.9	92
Deaf/blind	.0	25.2	11.6	18.6	44.6	31

# FLUCTUATION IN LIFE PROFILES OF YOUTH WITH DISABILITIES, BY DEMOGRAPHIC CHARACTERISTICS

Percentage of Youth Who:

Youth Characteristics	Percentage of Youth Who:				n
	Were Fully Independent (Profile 1) at Both Times	Moved Toward Greater Independence	Were Stable, Moderate Independence (Profiles 2-3)	Moved Toward Less Independence	
<b>Gender</b>					
Male	4.7	49.6	16.6	19.5	1,066
Female	2.7	50.8	14.8	15.8	640
<b>Ethnic background</b>					
White	5.0	51.4	17.2	16.2	1,184
Nonwhite	1.8	47.0	13.4	23.2	518
<b>Secondary school completion</b>					
Graduate	3.4	53.8	18.5	15.3	1,169
Dropout	5.8	44.8	12.1	23.3	246
Ageout	1.5	39.5	13.2	22.2	287
<b>Household income</b>					
Less than \$25,000 per year	5.2	47.9	13.7	18.8	805
\$25,000 per year or more	2.9	53.7	18.6	17.5	757

## SERVICES REPORTED RECEIVED BY YOUTH WITH DISABILITIES OUT OF SECONDARY SCHOOL 3 TO 5 YEARS

Services Reported Received by Youth	Profile 1:	Profile 2:	Profile 3:	Profile 4:	Profile 5:	Profile 6:
	Independent, 3 Domains	Independent, 2 Domains	Independent, 1 Domain	Active, Not Independent	Not Active	Institution- alized
Percentage of youth whose parents reported they were receiving:						
Vocational assistance (e.g., job counseling, placement)	9.9	13.4	9.3	52.1	7.8	9.8
Occupational therapy/life skills training	.9	6.8	5.2	39.6	3.7	22.2
Tutor/reader/interpreter	4.5	7.4	5.5	14.4	8.9	11.5
Speech/language therapy	.9	1.7	1.0	5.3	.9	6.4
Personal counseling/therapy	2.3	7.4	8.3	20.9	2.9	32.3
Physical therapy/mobility training <sup>a</sup>	1.5	6.3	4.2	8.4	10.4	--
n	346	655	141	248	301	33

<sup>a</sup> The items related to physical therapy were not asked of parents/youth if youth had only learning disabilities, speech impairments, or emotional disturbances; n=181, 415, 99, 226, 244, 26 for the six profiles.

## SERVICES REPORTED NEEDED BY YOUTH WITH DISABILITIES OUT OF SECONDARY SCHOOL 3 TO 5 YEARS

3 to 5 Years After Secondary School, Youth Had Profile:

Services Reported Needed by Youth	Profile 1:	Profile 2:	Profile 3:	Profile 4:	Profile 5:	Profile 6:
	Independent, 3 Domains	Independent, 2 Domains	Independent, 1 Domain	Active, Not Independent	Not Active	Institution- alized
Percentage of youth not receiving the services whose parents reported that the youth needed them:						
Vocational assistance n	25.5 271	43.3 519	56.1 110	43.0 129	61.2 274	79.5 35
Occupational therapy/life skills training n	19.9 328	28.3 584	38.4 118	42.1 151	51.9 280	-- 24
Tutor/reader/interpreter n	10.8 277	24.8 562	24.9 123	33.3 201	35.8 273	45.0 31
Speech/language therapy n	5.4 331	12.4 625	11.4 129	27.5 211	18.3 285	34.0 31
Personal counseling/therapy n	15.6 317	21.4 592	20.5 123	28.3 190	40.4 276	-- 27
Physical therapy/mobility training <sup>a</sup> n	4.2 69	17.7 381	8.3 90	16.4 187	27.6 212	-- 16

<sup>a</sup> Questions regarding physical therapy/mobility training were not asked of respondents regarding youth whose only known disabilities were learning, emotional, hearing, or speech impairments. Hence, the sample sizes for this question are smaller than for other services.

Note: Percentages are provided only for groups of at least 30 youth.

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