

# FACTS

from **OSEP's National Longitudinal Studies**

June 2005

## **The Self-Determination of Youth with Disabilities**

Societal treatment of persons with disabilities has evolved through many stages, most recently from a model of institutional care and sheltering to one of community participation and full citizenship. Part of this evolution continues with a focus away from decision-making by caretakers toward that of choice-making by the individuals with disabilities. However, the environment in which one lives has an impact on day-to-day choice-making—the more structured the environment, the fewer the opportunities for choice that an individual experiences. The degree to which persons perceive themselves to have control in their lives is associated with more positive outcomes (Wehmeyer, 2000).

The term “self-determination” has emerged in special education to describe a combination of skills, knowledge, and beliefs—including an understanding of one’s own strengths and limitations and belief in oneself as capable and effective—that enables individuals to engage in goal-directed, self-regulated, autonomous behavior (Field et al., 1998). Developing self-determination skills as youth with disabilities mature and transition to adulthood is an important element of their emerging independence.

To support the development of such skills, beginning in 1990, the U.S. Department of Education funded demonstration projects to develop and evaluate curricula, assessments, materials, and strategies to support self-determination for youth with disabilities (Ward & Kohler, 1996; Wehmeyer et al., 2004). Interventions, including published curricula and person-centered planning strategies to increase students’ involvement in the IEP process, have been developed and evaluated (Mason, Field, & Sawilowsky, 2004; Test et al., 2004). To what extent do youth with disabilities exhibit the skills and beliefs that are central to the self-determination these interventions are designed to promote?

To address this question, the National Longitudinal Transition Study-2 (NLTS2) has investigated four key domains of youth’s self-determination by asking youth to judge and report the extent to which their behavior reflects autonomy, self-regulation, self-realization, and psychological empowerment (Wehmeyer, 1997). NLTS2 selected items from The Arc’s Self-Determination Scale (Wehmeyer, 2000) that address these topics and included them as part of an in-person interview with youth. Items were selected

from among those in the original instrument with the highest factor loading and face validity to reflect the four conceptual domains noted above. This interview followed a direct assessment of the youth’s academic achievement, which together took approximately 1 hour to complete. Responses to all items are self-reports by youth.

NLTS2 youth who were at least 16 years old participated in the student assessment and in-person interview in spring/summer of either 2002 or 2004, when they met the age

eligibility requirements. The vast majority of the youth interviewed were age 16 (31%) or 17 (49%), with only 20% being 18 or older. Almost all of those interviewed (96%) were still in school; 31% of students were in 10th grade or below, 46% were in 11th grade, 23% were in 12th grade, and fewer than 1% were in ungraded programs. Thus, the results represent the behaviors and perceptions of 16- to 18-year-old students with disabilities as they prepared for their transition to adult life.

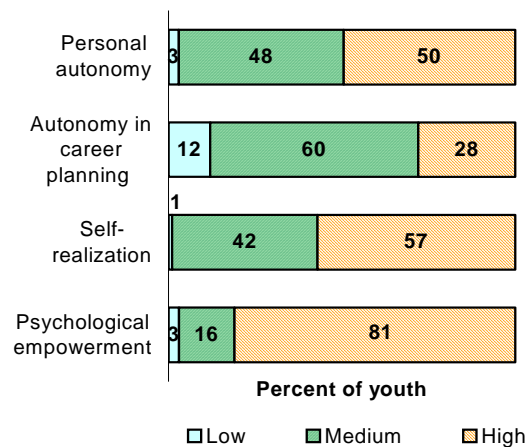
Behavior is autonomous if a person acts independently according to his or her own preferences, interests, and abilities without undue external influence or interference (Wehmeyer, 2000). NLTS2 examined autonomous behavior in general and as it relates specifically to career planning. Items in the personal autonomy subscale include those assessing independence in personal care, interacting with the environment, interests and abilities in the community, and personal expression.<sup>1</sup> Items in the autonomy in career planning subscale include in-school and out-of-school interests and activities related to youth’s future careers.<sup>2</sup>

<sup>1</sup> Personal autonomy items:  
 I keep my own personal items together.  
 I keep good personal care and grooming.  
 I make friends with other kids my age.  
 I keep my appointments and meetings.  
 I plan weekend activities that I like to do.  
 I am involved in school-related activities.  
 I volunteer for things that I am interested in.  
 I go to restaurants that I like.  
 I choose gifts to give to family and friends.  
 I choose how to spend my personal money.

<sup>2</sup> Autonomy in career planning items:  
 I work on schoolwork that will improve my career chances.  
 I do school and free time activities based on my career interests.  
 I make long-range career plans.  
 I work or have worked to earn money.  
 I am in or have been in career or job classes or training.

Responses were reported on a 4-point scale ranging from “not even when I have the chance” to “every time I have the chance.” A summative scale of personal autonomy ranges from 10 (all responses “not even when I have the chance”) to 40 (all responses “every time I have the chance”) and are reported as low (10 to 20), medium (21 to 30), and high (31 to 40). Very few youth score low in personal autonomy (3%), whereas about equal proportions score in the medium and high ranges (48% and 50%, respectively; Exhibit 1).

**Exhibit 1**  
**SELF-DETERMINATION SCORES OF**  
**YOUTH WITH DISABILITIES**



Sources: NLTS2 student assessment, 2002 and 2004.

Youth’s autonomy in career planning is measured on a summative scale that ranges from 5 to 20. Scores are reported as low (5 to 9), medium (10 to 15), and high (16 to 20). Relative to personal autonomy scores, youth have somewhat lower scores in autonomy in career planning, with more youth scoring in the low range (12%), 60% scoring in the medium range, and 28% scoring in the high range. Youth appear to feel more independent in making choices and acting on personal preferences and beliefs related to their personal and social

lives than in making choices related to the future or choices that may be constrained by academic or career-related factors in their school or community.

Self-realization, or knowledge of one's strengths and limitations, is an important component in acting in a self-determined manner. Self-knowledge and self-understanding form through experiences in one's environment, influences from significant others, and reinforcement of one's behavior (Wehmeyer, 1997). Items included in the self-realization subscale<sup>3</sup> assess how youth perceive their strengths, limitations, and confidence in their abilities and interactions with others.

Youth's self-realization is measured on a 4-point scale ranging from "never agree" to "always agree" with a series of statements. A summative scale of self-realization ranges from 5 (all responses "never agree") to 20 (all responses "always agree") and are reported as low (5 to 9), medium (10 to 15), and high (16 to 20). Nearly all youth score in the medium (42%) to high range (57%), indicating that youth feel they have an understanding of their abilities.

Psychological empowerment refers to a combination of attitudes (internal locus of control) and abilities (self-efficacy) leading individuals to believe they have the ability to achieve a desired outcome (Ward, 1988; Zimmerman, 1990). Items used in this subscale ask youth to consider and select one of two opposing perceptions about their abilities in the areas of decision-making,

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<sup>3</sup> Self-realization items:

I can like people even if I don't agree with them.  
I know what I do best.  
I like myself.  
I know how to make up for my limitations.  
I am confident in my abilities.

perseverance, and locus of control.<sup>4</sup> Items are scored "0" to reflect a nonempowered self-perception or "1" to reflect an empowered self-perception. A summative scale of psychological empowerment ranges from 0 to 6, with scores reported as low (0 to 2), medium (3 to 4), and high (5 to 6). Most youth score in the high range on psychological empowerment (81%).

### **Disability Differences in Self-Determination**

There is considerable variation on each self-determination subscale between youth in different disability categories. Personal autonomy scores, those focused on independent behavior in one's personal and social life, are the highest for youth with learning disabilities, speech or visual impairments (Exhibit 2). More than half of these youth score in the high range (52%, 54%, and 53%, respectively), compared with fewer than one-third of youth with autism (29%). The scores of the majority of youth with emotional disturbances (56%), orthopedic impairments (53%), other health impairments (57%), autism (66%), or deaf-blindness (55%) are in the medium range.

The majority of youth in every disability category score in the medium range on autonomy in career planning (52% to 66%).

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<sup>4</sup> Psychological empowerment items:

I tell others when I have a new or different opinion, or I usually agree with others' opinions and/or ideas.  
I can make my own decisions, or Other people make decisions for me.  
I can get what I want by working hard, or I need good luck to get what I want.  
I keep trying even after I get something wrong, or It is no use to keep trying because it will not work.  
I usually make good choices, or I usually do not make good choices.  
I will be able to make choices that are important to me, or My choices will not be honored.

**Exhibit 2**  
**SELF-DETERMINATION SCORES, BY DISABILITY CATEGORY**

	Learning Disability	Speech/ Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities	Deaf-Blindness
<b>Percentage with scores in the low, medium, or high range</b>												
Personal autonomy												
Low	2	3	2	4	3	1	3	1	5	2	5	1
Medium	46	43	49	56	46	45	53	57	66	51	50	55
High	52	54	48	40	51	53	44	42	29	47	45	44
Autonomy in career planning												
Low	12	12	11	15	9	9	18	11	17	13	23	9
Medium	61	56	52	58	63	64	61	66	64	54	54	62
High	27	32	37	28	28	28	21	23	20	34	23	28
Self-realization												
Low	1	1	2	2	1	1	1	1	4	1	3	3
Medium	40	42	47	42	49	41	43	47	55	40	50	45
High	59	57	51	56	51	59	56	53	45	59	47	52
Psychological empowerment												
Low	2	2	7	2	2	2	3	1	5	2	6	2
Medium	14	16	25	18	21	12	18	16	36	16	33	21
High	84	82	68	79	77	87	79	82	59	83	61	76

Sources: NLTS2 student assessments, 2002 and 2004.

About one-third of youth with speech impairments (32%), mental retardation (37%), or traumatic brain injuries (34%) score in the high range on autonomy in career planning, compared with only about one-fifth of youth with autism (20%) or orthopedic (21%) or other health impairments (23%). Relatively large percentages of youth with autism (17%) or multiple disabilities (23%) score in the low range, compared with youth with hearing or visual impairments (9%).

The vast majority of youth from all disability categories score in the medium or high range on self-realization, the understanding of one's strengths and limitations. In fact, with the exception of youth with autism and multiple disabilities (42% and 47% respectively), more than half of youth in all other disability categories

score in the high range on self-realization (51% to 59%).

Scores on psychological empowerment, the measure of belief in one's ability to achieve desired outcomes, are the highest of all the subscales for all disability categories. About 75% to 85% of youth in most disability categories scored in the high range. Only youth with mental retardation, autism, and multiple disabilities (68%, 59%, and 61%, respectively) were significantly less likely than those in other categories to score in the high range.

Across the four subscales, youth in certain disability categories score consistently higher or lower relative to each other. Youth with autism have the lowest scores on each of the subscales. Youth with multiple disabilities also score lower relative to most of their peers. Youth with learning

disabilities, speech, and visual impairments score among the highest on the subscales.

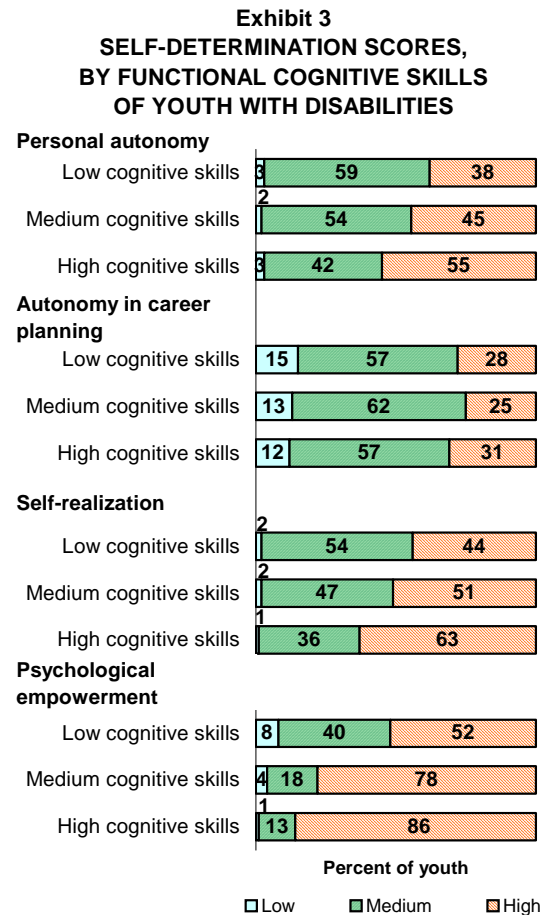
### Functional Skills Differences in Self-Determination

There are some youth with high, medium, and low scores on each self-determination subscale within each disability category. Differences between youth in cognitive, social, and communication skills are likely to account for some of these within-disability differences. NLTS2 examined self-determination scores for youth with disabilities who differed in their functional cognitive skills, social skills, and communication skills. Ratings of performance on these skills were provided by the youth’s parents on a 4-point scale, and summative scores are reported as low, medium, and high.

**Functional cognitive skills.** The functional cognitive skills scale score is a composite measure of youth’s ability to read and understand common signs, tell time on an analog clock, count change, and look up telephone numbers and use a telephone. Higher cognitive skills are associated with higher self-determination scores on three of the four subscales examined in NLTS2. A larger percentage of youth with high functional cognitive skills score in the high range on personal autonomy, acting independently on the basis of personal preferences and beliefs, compared with increasingly smaller percentages of youth with medium and low cognitive skills (55% vs. 45% and 38%, respectively; Exhibit 3).

A similar relationship occurs regarding self-realization, with a larger percentage of youth with high cognitive skills being more aware of their strengths and limitations, compared with youth with medium and low cognitive skills (63% vs. 51% and 44%, respectively). Regarding psychological

empowerment, higher cognitive skills are associated with higher skills in



Sources: NLTS2 student assessment, 2002 and 2004, and Wave 1 parent interviews.

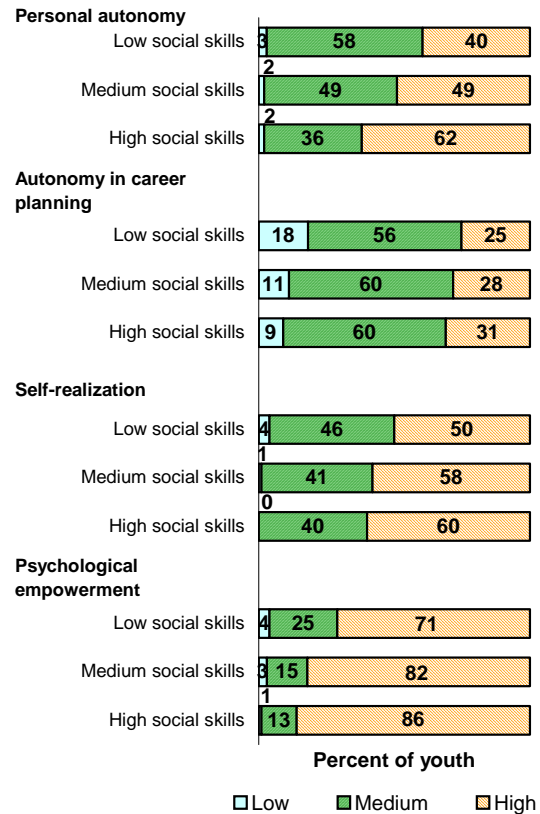
psychological empowerment (86% vs. 78% and 52%; 78% vs. 52%).

**Social skills.** The social skills scale score is a composite measure of ratings by parents of youth’s ability and willingness to become involved in social activities, cope with frustration and deal with conflict, and cooperate and stay on task. There is a somewhat less powerful relationship between social skills and self-determination than was apparent for functional cognitive skills. Significant relationships are found between social skills ratings and the three self-determination domains of personal autonomy, autonomy in career planning, and psychological empowerment. Youth with

high social skills are more likely to score in the high range on personal autonomy than youth with medium or low skills (62% vs. 49% and 40%, respectively; Exhibit 4). This finding is not surprising, given that the self-determination domain of personal autonomy deals with many of youth's recreation and leisure activities. Regarding autonomy in career planning, differences are found only between youth with low social skills and their peers with high social skills, and then only for the percentages that score in the lowest range on autonomy in career planning (18% vs. 9%). Youth with medium and high social skills are more likely than youth with low social skills to score in the high range on psychological empowerment skills (82% and 86% vs. 71%).

**Communication skills.** Communication, the expression and reception of information, thoughts, and ideas, can involve many mechanisms, including speech, manual communication, body language, listening, understanding, and writing. It is as likely to be an important component of self-determination as it is in other areas of functioning in the school and community. Communication skills were assessed by parents, who reported youth's ease or difficulty in communicating by any means. Significant relationships are found between communication skill and two self-determination domains: personal autonomy and psychological empowerment. Youth who have no trouble communicating are more likely to have high personal autonomy scores compared with youth who experience some trouble communicating (54% vs. 44%, Exhibit 5). A similar relationship is found regarding psychological empowerment scores. A larger percentage of youth with no trouble in communication score in the high range of psychological empowerment, compared with youth who have some trouble communicating (84% vs. 73%).

**Exhibit 4  
SELF-DETERMINATION SCORES, BY SOCIAL SKILLS OF YOUTH WITH DISABILITIES**



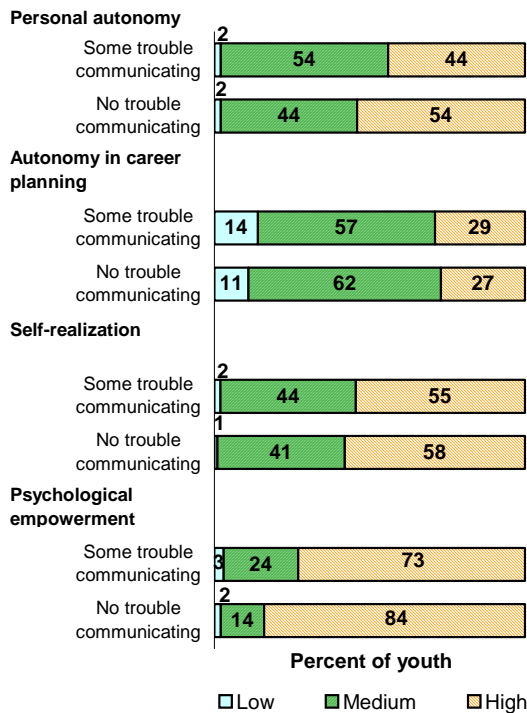
Sources: NLS2 student assessment, 2002 and 2004, and Wave 1 parent interviews.

### Demographic Differences in Self-Determination

Few differences in self-determination scores are associated with youth's demographic characteristics. However, boys express a similar greater sense of self-realization than girls; 62% of boys have high scores, compared with 48% of girls. Scores on autonomy in career planning are similar for white and African-American youth, but these differ from those of Hispanic youth. Hispanic youth are less likely to score in the high range of this self-determination domain and more likely to score in the low range



**Exhibit 5  
SELF-DETERMINATION SCORES, BY COMMUNICATION SKILLS OF YOUTH WITH DISABILITIES**



Sources: NLTS2 student assessment, 2002 and 2004, and Wave 1 parent interviews.

than peers in other racial/ethnic groups (18% vs. 30% or 32% high and 21% vs. 10% or 12% low, Hispanic vs. white and African-American, respectively).

**Implications of Self-Determination for Transition Planning in Secondary School**

Educators have an opportunity to support the self-determination of youth with disabilities in the transition planning and IEP process. One opportunity that all youth have is to attend and participate in their IEP planning to the extent appropriate. Specific instruction may be provided to train youth in a variety of skills needed to make informed decisions about their transition to adult life. Youth with transition plans can participate in discussions and express preferences and interests in selecting postschool goals and in

planning their school programs to achieve those goals. NLTS2 asked school staff who knew youth well to describe the level of participation of these youth in their individual transition planning process. Using a 4-point scale, school staff rated youth’s participation as “has not attended planning meetings or participated in the transition planning process,” “has been present in discussions of transition planning, but participated very little or not at all,” “has provided some input into transition planning as a moderately active participant,” or “has taken a leadership role in the transition planning process, helping set the direction of discussions, goals, and programs or service needs identified.”

Significant relationships are noted between self-determination skills and participation in the IEP and transition planning process. Youth with high scores on personal autonomy are more likely than youth with low scores to take a leadership role in their transition planning process (20% vs. 2%). Youth with medium and high scores on psychological empowerment also are more likely than youth with low scores to take a leadership role in their transition planning process (17% and 16% vs. 1%). Youth with high scores on self-realization are more likely than their peers with medium scores in this domain to help set the direction of discussion about goals and service needs (20% vs. 12%). Youth with medium scores on autonomy in career planning are more likely than peers scoring in the high range to simply be present but participate little in their transition planning process (24% vs. 14%).

**Summary**

NLTS2 investigated self-determination among 16- to 18-year-old youth with disabilities using items selected from The Arc’s Self-Determination Scale (Wehmeyer,

2000) as part of an in-person interview. The interview was designed to capture youth's self-perceptions in four domains: personal autonomy, autonomy in career planning, self-realization, and psychological empowerment.

The majority of youth score in the medium or high ranges in the domains of personal autonomy, autonomy in career planning, self-realization, and psychological empowerment. There is considerable variation in scores for youth in different disability categories. Youth with learning disabilities, speech and visual impairments score among the highest in all domains, whereas youth with autism or multiple disabilities score the lowest. The functional skills of youth generally are positively associated with self-determination domain scores. Youth with higher self-determination scores in several domains are more likely to be actively engaged in planning for their transition to adult life.

With higher scores in the domains of personal autonomy, autonomy in career planning, self-realization, and psychological empowerment, youth may be able to negotiate their immediate environment independently. Scores are lowest for autonomy in career planning for youth with disabilities, suggesting that they may view themselves as subject to the decisions of other people when planning for their careers.

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