Published in final edited form as:

Int J Sociol. 2011 January ; 41(1): 67–86. doi:10.2753/IJS0020-7659410104.

Life-Course Transitions Among Adolescents With and Without Disabilities:

A Longitudinal Examination of Expectations and Outcomes

Carrie L. Shandra [assistant professor of sociology]

Hofstra University, Department of Sociology, Hempstead, NY 11549;

Carrie.Shandra@hofstra.edu.

Abstract

Research on adolescents suggests that young people are able to form reasonable expectations about future life-course transitions—and that these expectations are predictive of future outcomes. However, less is known about how these expectations might vary for adolescents with disabilities, who might face additional challenges when transitioning to adulthood. The present study addresses this gap in the literature by using nationally representative data from the National Longitudinal Survey of Youth (NLSY97) to suggest that young people's expectations about pregnancy, parenthood, education, and employment do vary according to disability status. Furthermore, disability status conditions the relationship between these expectations and their future outcomes. In general, adolescents with disabilities are more proficient in the prediction of educational outcomes than employment or pregnancy outcomes. However, their expectations about education are significantly lower—and expectations about teenage parenthood much higher—than those of adolescents without disabilities.

Markers of adulthood in the United States are commonly conceptualized using demographic indicators such as school completion, financial independence, full-time employment, marriage, and parenthood (see Hogan and Astone 1986 and Shanahan 2000). The duration and pathways through which adolescents achieve these markers vary significantly, and a growing body of research suggests that individualistic criteria, such as increasing responsibility and the development of a belief system, are more important than role transitions for transitioning to adulthood (Arnett 1997, 1998, 2001). However, many social scientists (Benson and Furstenberg 2007; Johnson, Berg, and Sirotzki 2007; Liefbroer and Toulemon 2010) and a majority of Americans (Furstenburg et al. 2005) still report that the above markers are at least somewhat important to being considered an adult.

Values and expectations set during adolescence play an important role in determining future trajectories to adulthood (Mortimer, Staff, and Lee 2005). Examinations of young people's expectations suggest that they are able to form reasonable beliefs about most significant life events (Fischhoff et al. 2000). Furthermore, adolescents' expectations are positively related to their actual experiences (Bruine de Bruin, Parker, and Fischhoff 2007). While previous research suggests that racial and ethnic background, gender, and socioeconomic position are

associated with different expectations (Dominitz, Manski, and Fischhoff 2001), less is known about the relationship between expectations and outcomes for adolescents with disabilities.

Including this population in expectation research is important for several reasons. First, more than 10 percent of young people in the United States ages fifteen to twenty-four in 2005 had a disability—with 5 percent reporting a severe disability (Brault 2008). Second, the development and funding of effective transition-planning programs for adolescents with disabilities are the focus of extensive attention at the academic, legislative, and service-delivery levels (Cameto, Levine, and Wagner 2004; Halpern 1994; Phelps and Hanley-Maxwell 1997).

The present study addresses this gap in the literature by using nationally representative data from the National Longitudinal Survey of Youth (NLSY97) to explore two questions. First, do young people's expectations about pregnancy, parenthood, education, and employment vary according to disability status? Second, does the relationship between these expectations and their future outcomes vary by disability status? I consider how multiple indicators of disability—including both type of condition and severity of disability—may affect these relationships. Results indicate that expectations are not equal by disability status nor are the abilities of adolescents to predict future life events.

Literature Review

The NLSY97 offers a unique opportunity for studying adolescent expectations for several reasons. First, respondents are asked to report their expectations as subjective probabilities—in other words, as a 0 to 100 percent chance of experiencing a certain event within a specific amount of time (for a discussion of measurement issues in the expectation literature, see Manski 2004). Fischhoff et al. (2000) compared young people's responses to the questions in the NLSY97 expectation module to national statistical estimates of education, employment, and fertility in the United States. Results indicate that most estimates are relatively accurate, suggesting that the questions “captur[e] relatively well articulated ordinal beliefs” (ibid., 199). The authors conclude that teenagers are generally optimistic about staying in school, attaining degrees, getting jobs, and delaying pregnancy. Interestingly, they find similar expectations across genders and racial/ethnic groups for questions regarding events that will happen within the next year. However, expectations diverge across these groups on long-term questions—a pattern the authors suggest might reflect discrimination and limited opportunities. This variation across socially advantaged versus disadvantaged groups suggests that expectations might also be stratified according to ability and disability.

Second, the NLSY97's longitudinal design allows for the examination of the relationship between what respondents expect to occur within one year or by age twenty and the actual outcome. Results from Bruine de Bruin, Parker, and Fischhoff's (2007) analysis of this association among the full sample of eligible NLSY97 respondents indicate a statistically significant relationship between expectations and outcomes for all education, employment, and fertility questions. However, respondents were able to predict some outcomes better

than others. For example, the mean probability for expectations about high school completion was highly accurate, whereas females underestimated the likelihood of becoming pregnant within a year and becoming a teen parent, while males overestimated both outcomes. Overall, however, the authors conclude that, in addition to the validity of cross-sectional probability judgments, the longitudinal data indicate “judgments are also predictive, as revealed in significant correlations with later experiences” (Bruine de Bruin, Parker, and Fischhoff 2007: 210). Less is known about how differences in disability status affect the relationship between expectations and outcomes. However, variation in the expectations of other disadvantaged social groups (Dominitz, Manski, and Fischhoff 2001; Fischhoff et al. 2000; Walker 2001), along with the difficulties some young people with disabilities might have in learning about or planning for the future (Blomquist et al. 1998), suggest that disability might be important to consider when examining how young people think about the future.

Young people's expectations about future life events are affected by several factors that might disproportionately influence individuals with disabilities. In general, research suggests that youth from more advantageous socioeconomic backgrounds are likely to have higher educational expectations or aspirations (Frost 2007; Hossler and Stage 1992; Morgan 1998; Sewell and Shah 1968)—either due directly to reduced financial constraints and greater human capital or indirectly to parents' higher expectations and a youth's greater educational achievement. Family income also shapes adolescents' expectations about teenage pregnancy and parenthood (Trent 1994; Walker 2001). Yakusheva's (forthcoming) analysis of the *High School and Beyond* study suggests that educational and fertility expectations are strongly related. Thus, if youth with higher socioeconomic resources have higher educational aspirations, the opportunity costs of becoming a parent will be greater for these youth than for youth with lower resources and lower educational aspirations.

However, families that have young people with disabilities often face greater financial challenges than families without young people with disabilities. Children with disabilities incur significantly higher average health expenditures than children without disabilities (Newacheck, Inkelas, and Kim 2004). They are also more likely than children without disabilities to grow up in households that are in poverty, experience material hardship, and are single-parent (Fujiura and Yamaki 2000; Newacheck, Inkelas, and Kim 2004; Parish et al. 2008). Thus, a child's disability may decrease a family's socioeconomic background, which may also reduce expectations, net of any limitations associated with their condition.

Furthermore, adult expectations, especially about education, are also important contributors to a young person's expectations and the achievement of those expectations. Parents can act as important socialization agents by offering information and encouragement about daily activities and future life events. Research suggests that parental expectations about a child's highest level of education are related to the child's performance on achievement tests (Davis-Kean 2005) as well as high school graduation and college enrollment (Shandra and Hogan 2009). Similarly, a teacher's educational expectations are also related to a child's classroom achievement (Good 1981), even when examining the persistence of this effect over time (de Boer, Bosker, and van der Werf 2010).

These adult expectations are another mechanism through which children with disabilities may have lower educational expectations than children without disabilities. Parental educational expectations are affected by a child's academic performance (Neuenschwander et al. 2007), and adolescents with disabilities who do not receive appropriate accommodations or who have difficulty with standard methods of assessment might have lower achievement in school. However, research (Shandra and Hogan 2009) suggests that even after considering grades, remedial education, the repetition of a school year, parental educational involvement, and other demographic characteristics, the presence of a child's mild or serious disability remains negatively associated with a parent's expectation that the child will complete high school. There is evidence that teachers, too, reduce their performance expectations of their students in response to a child's disability. Peeters, Verhoeven, and de Moor (2009) find that teachers of children with cerebral palsy (CP) had lower expectations of reading and writing success than teachers of children without CP. Furthermore, teachers had higher expectations of the future failure of a hypothetical student with a learning disability than a student without a learning disability (Clark 1997).

Taken together, this body of research suggests that adolescents with and without disabilities may form varying expectations about future life events, and that these different expectations may be associated with different outcomes.

Data and Methods

The National Longitudinal Survey of Youth 1997 (NLSY97) is a nationally representative household-based sample of the noninstitutional population of young people in the United States (U.S. Department of Labor 2005). This is a longitudinal survey that collects annual data on an age cohort of children who were twelve to sixteen years old as of December 31, 1996. Data are primarily utilized from waves 1 through 9, at which time all adolescents have reached age twenty. However, retrospective data on the timing of events prior to age twenty are utilized from all twelve currently released waves of data in order to address missing cases. The data file is created such that each respondent has one set of observations corresponding to his or her disability status and expectations in 1997, and the appropriate corresponding outcome of those expectations later in life. NLSY97 is particularly advantageous for this study in that it includes information on disability, expectations, educational histories, employment histories, fertility histories, and pregnancy.

The sample eligibility includes all adolescents in the NLSY97 who are age fifteen or older as of December 31, 1996 ($n = 3,536$). Of these, 446 are excluded due to missing data on any of the disability variables. The final samples for these analyses range from 460 to 3,041 respondents, depending on the outcome.

Disability

The conceptual model of disability used in this study is drawn from the World Health Organization's (2001) International Classification of Functioning, Disability, and Health (ICF) model, which has been adopted internationally by the member states of the World Health Organization "as the basis for the scientific standardization of data on health and disability world-wide" (World Health Organization 2002: 5). The ICF model describes a

child's health and well-being in terms of four components: (1) body structures, (2) body functions, (3) activities, and (4) participation. Body structures are anatomical parts of the body, such as organs and limbs, as well as structures of the nervous, sensory, and musculoskeletal systems. Body functions are the physiological functions of body systems, including motor and sensory abilities and psychological functions, such as attending, remembering, and thinking. Activities are tasks, including learning, communicating, walking, carrying, feeding, dressing, using the toilet, bathing, reading, preparing meals, shopping, and washing clothes. Participation means involvement in family and community life, such as relationships, education, and work, and recreational, religious, civic, and social activities. The ICF model also accounts for contextual factors in a child's life, including environmental and personal factors.

Disability is measured in two overall ways in this study—type of condition and severity of condition—in order to further explore whether the relationship between expectations and outcomes varies by disability status. Both measures are constructed from the same domains from which parents reported youth activity limitations in the NLSY97 in 1997:

Learning disability—Does [this youth] now have or has [he/she] ever had a learning or emotional problem that limits or has limited the kind of schoolwork or other daily activities [he/she] can perform, the amount of time [he/she] can spend on these activities or [his/her] performance in these activities?

Physical, emotional, or mental condition—(Excluding pregnancy), does [this youth] have or has [he/she] ever had any physical, emotional, or mental condition that limits or has limited [his/her] ability to attend school regularly, do regular school work, or work at a job for pay?

Chronic health condition—Does [this youth] now have or has [he/she] ever had any other chronic health condition or life threatening disease such as asthma, heart condition, anemia, diabetes or cancer?

Missing or deformed body part—Does [this youth] now have or has [he/she] ever had a part of [his/her] body that (is/was) deformed or missing?

Sensory—Does [this youth] now have or has [he/she] ever had trouble seeing, hearing or speaking?

The small number of youth requires that *missing or deformed body part* is combined with *physical, emotional, or mental condition*.¹ Therefore, the type of disability measures includes six dichotomous variables from these responses. Four variables indicate whether a youth *has ever* had each condition. Two variables indicate whether a youth *has ever* had more than one condition (“multiple conditions”) or whether they *have never* had any condition (“no conditions”). In addition, the categories are not mutually exclusive, as

¹The wording of the “physical, emotional, or mental condition” is broad, and shares features of the other disability categories. Results should be interpreted as representing a spectrum of conditions, but are referred to in the text as “physical” for brevity.

limiting the number of youth in each category to those with one condition *only* would further reduce the statistical power to perform hypothesis tests.²

The severity of disability categories determines whether a child had one or more *mild* or *serious* limitations as of the 1997 survey date. In cases where a child has multiple limitations, the more serious limitation is categorized. Remaining children were classified as not having a disability if their parents reported a past limitation that was not limiting in 1997 or if they never experienced a limitation. Categories of the severity of disability measure are mutually exclusive.

Expectations and Outcomes

Respondents are asked to reply to a series of expectation questions, each of which required them to provide the percent chance of experiencing a certain event in a varying window of time. Coding schemes for the corresponding outcome measures differ depending on the available data.

In school next year asked respondents, “What is the percent chance that you will be a student in a regular school one year from now?” To create the outcome measure, I first determined the month of the wave 1 interview. Second, I utilized monthly event history data on enrollment status corresponding to one year from the wave 1 interview. The original event history measure included the following available categories: “Not enrolled,” “Attending grade K–12,” “On vacation,” “Expelled from school,” and “Other.” For this analysis, these categories are collapsed such that “not enrolled” respondents are not considered students, and all other responses are considered students. Missing data were imputed using the NLSY97’s created variable of enrollment status at the 1998 interview. Alternative coding schemes (e.g., excluding missing cases or considering those who are “on vacation,” “expelled,” or “other” as nonstudents) revealed comparable results. Overall, respondents reported a mean chance of being in school next year of 92.5 percent, with 84.3 percent experiencing this outcome.

The variable *in school and working next year* asked respondents, “If you are in school a year from now, what is the percent chance that you will also be working for pay more than 20 hours per week?” To create the outcome measure, I first determined whether or not a respondent was in school using the event history measures described above. Then, among those who were in school, I determined the week of the wave 1 interview. I utilized weekly event-history data on total number of hours worked in the week corresponding to one year from the wave 1 interview. A dichotomous measure was then created to distinguish those who worked zero to nineteen hours per week from those who worked twenty or more hours per week. Missing data occurred primarily due to an inability to determine start and stop dates for all jobs. Alternative coding schemes (e.g., creating a monthly average of hours worked per week corresponding to one year from the wave 1 interview) revealed comparable results. Overall, respondents reported a mean chance of being in school and

²For example, restricting the analysis for “Parent by 20 (females)” to respondents with a learning or emotional condition only reduces the sample size to 19.

working next year of 59.0 percent, with 26.2 percent of those enrolled in school experiencing this outcome.

The variable *not in school and working next year* asked respondents, “If you are not in school a year from now, what is the percent chance that you will be working for pay more than 20 hours per week?” This measure was created the same way as the “in school and working next year question”; however, it was restricted to those who were not in school. Overall, respondents reported a mean chance of not being in school and working next year of 82.1 percent, with 40.9 percent of those not enrolled in school experiencing this outcome.

The variable *high school diploma* asked respondents, “What is the percent chance that you will have received a high school diploma by the time you turn 20?” To create the outcome measure, I first determined the month of the respondent's birthday (the greatest level of precision available in the public release of NLSY97). Then, I utilized information on the date of receipt of either a high school diploma or certificate of General Educational Development (GED). A dichotomous measure was then created to distinguish those who received their diploma before or during the month of their twentieth birthday from those who received their diploma after the month they turned twenty years old. Respondents who were interviewed after age twenty, and who did not report a diploma, were also coded as not receiving a degree. Missing cases, when possible, were imputed using NLSY97's created measures of highest degree as of the survey date such that respondents who reported receiving a degree before turning twenty were coded 1, and respondents who reported not attaining a degree after twenty were coded 0. The small number of respondents who reported receiving a diploma as of wave 1 were also excluded from the analysis. Overall, respondents reported a mean chance of receiving a high school diploma by age twenty of 94.0 percent, with 82.2 percent experiencing this outcome.

The variable *pregnant next year* asked female respondents, “What is the chance you will become pregnant within one year from now?” Respondents were coded as becoming pregnant within a year if (1) they reported a current pregnancy as of the wave 2 interview, and the number of weeks pregnant fell within fifty-two weeks of their wave 1 interview, (2) they reported a live birth, with conception estimated within twelve months of their wave 1 interview (unfortunately, data are not available to indicate whether a live birth was full term; therefore I estimate conception at nine months prior to the birth month), or (3) they reported a nonlive birth, and the date of the nonlive birth minus the number of months pregnant occurred within twelve months of their wave 1 interview. Respondents were coded as not becoming pregnant within a year if they experienced any of the above events more than a year from their wave 1 interview or they reported never having sex or never becoming pregnant within the corresponding time frame. Respondents were excluded if they reported being pregnant as of the wave 1 interview, with missing data primarily due to refusals or reporting inconsistencies that prevented the timing of pregnancy from being identified. Overall, female respondents reported a mean chance of becoming pregnant within the year of 6.0 percent, with 9.4 percent experiencing the outcome.

The variable *get someone pregnant next year* asked male respondents, “What is the percent chance that you will get someone pregnant within the next year?” NLSY97 contains less

information on male fertility than female fertility (with no data available at wave 1 or in subsequent survey waves on the timing of nonlive births); however, respondents were coded as getting someone pregnant within a year if they (1) reported any live births for which conception was estimated within twelve months from the wave 1 interview, (2) reported that anyone is currently pregnant with their child at the wave 2 interview, or (3) reported only one pregnancy in wave 2, and their age at that pregnancy occurred later than their age at the wave 1 interview. Respondents were coded as not getting someone pregnant within a year if they reported never getting anyone pregnant or never having sex. Overall, male respondents reported a mean chance of getting someone pregnant within the year of 8.6 percent, with 6.3 percent experiencing the outcome.

The variable *parent by 20* asked respondents, “What is the percent chance that you will become the [mother/father] of a baby sometime between now and when you turn 20?” To create the outcome measure, I utilized information on each child's birth month (following Bruine de Bruin, Parker, and Fischhoff [2007], I use information on biological children only). A dichotomous measure was then created to distinguish those who reported a first birth before or during the month of their twentieth birthday from those who reported a first birth after the month they turned twenty years old. Respondents who were interviewed after age twenty, and who did not report a first birth, were also coded as not being parents. Sixty respondents who reported already being the parent of a biological child as of wave 1 were also excluded from the analysis. I stratify the sample by sex, following de Bruin, Parker, and Fischhoff (2007). Overall, female respondents reported a mean chance of becoming a parent of 15.9 percent and male respondents reported a mean chance of 19.2 percent. Among females, 20.4 percent experienced the outcome, with 11.9 percent of males becoming parents.

My first research question considers whether young people with disabilities form significantly different educational, employment, or fertility expectations—and subsequently, experience significantly different outcomes—than young people without disabilities. To evaluate this question, I compare means or proportions between those without and with various disability statuses using the independent groups *t*-test procedure in Table 1. I first test for equality of variances and use the Satterthwaite method when appropriate. My second research question considers whether there is a difference in the relationship between a young person's future expectations and their outcomes according to disability status. To evaluate this question, I examine bivariate Pearson correlation coefficients across various disability statuses in Table 2. All significance tests are two-tailed.

Results

Table 1 presents means and proportions for each set of expectations and outcomes. Examining the results for the full sample, we see that respondents' mean expectations for being in school next year (92.5 percent chance) and having a high school diploma by age twenty (94.0 percent chance) are slightly inflated when compared to their outcome rate (84.3 percent and 82.2 percent, respectively). Respondents are less proficient at judging their school and work configurations, as the mean expectation of being in school and working more than twenty hours per week is much higher (59.0 percent chance) than the outcome

(26.2 percent). The same pattern emerges among those who are not in school and working more than twenty hours per week. Fertility expectations and outcomes are slightly more similar, with 9.4 percent of females experiencing a pregnancy within a year and 20.4 percent becoming a parent by age twenty—compared with a 6.0 percent and a 15.9 percent mean expected chance, respectively. Among males, 6.3 percent report getting someone pregnant and 11.9 percent report becoming a parent versus corresponding mean expectations of 8.6 percent and 19.2 percent.

Significant differences consistently emerge between those with and without disabilities regarding their short- and long-term educational expectations and outcomes. Those with mild and serious disabilities have significantly lower expectations and outcomes than those without a disability in 1997. Those with a history of learning, multiple, or physical, emotional, or mental conditions also have significantly lower expectations and lesser experiences of one-year enrollment and high school graduation than those without any condition. Those with chronic health conditions have lower enrollment expectations and lower graduation experiences than those without any condition.

Only one significant difference emerges between disability groups when examining school and work configurations. Among those who are enrolled in school, respondents with serious disabilities are significantly less likely to be working (14.3 percent) than those without disabilities (26.8 percent). The lack of difference among other disability categories may be partially attributed to the general inability of all adolescents to accurately form expectations about joint school and work experiences.

Notable differences also emerge across disability groups for female fertility outcomes. Females with mild disabilities are significantly more likely to become a parent by age twenty (28.2 percent) than females without disabilities (19.5 percent). While those with serious disabilities have significantly higher mean expectations for becoming a teen parent (30.6 percent chance) than those without disabilities (15.0 percent chance), they are not significantly more likely to experience the outcome. Differences in expectations and outcomes also emerge among those without any condition and those with learning, physical, sensory, and multiple conditions. No significant differences emerge between groups with respect to pregnancy in one year.

Males with disabilities also differ from males without disabilities regarding fertility. Interestingly, while there is no difference in expectations of getting someone pregnant, males with mild disabilities (12.3 percent) are significantly more likely than those without disabilities (5.4 percent) to get someone pregnant. Similarly, those with learning (11.8 percent), physical (11.3 percent), or multiple (11.8 percent) conditions are significantly more likely than those without a condition (4.9 percent) to get someone pregnant. A somewhat opposite pattern emerges for longer-term prospects, with only one significant difference in becoming a parent by age twenty between males with mild disabilities (17.8 percent) versus those without a disability (11.1 percent). Instead, those with mild (25.4 percent chance) or serious (29.2 percent chance) disabilities have higher mean expectations of parenthood than those without disabilities (17.9 percent chance). The same is true for those with learning conditions (25.3 percent) when compared to males without a condition (18.4 percent).

Table 2 presents bivariate Pearson correlation coefficients between all expectations and their outcomes according to disability group. Young people with disabilities are most similar to those without disabilities when it comes to their proficiency at predicting short- and long-term educational outcomes. In both cases, expectations of being in school next year and gaining a high school diploma by age twenty are significantly related to their outcomes across disability groups. There is a less consistent pattern of results when considering school/work configurations, as a relationship only emerges for those with sensory and learning conditions who are in school and working next year and with serious disabilities who are not in school and working.

Results indicate that young people with disabilities are less able to predict fertility outcomes than educational outcomes. A significant correlation between pregnancy in the next year and its outcome occurs only among females with sensory conditions and is marginally significant for females with a mild disability (see note 3 for slightly different results from supplemental analyses). However, there is at least a marginally significant relationship between becoming a teen parent and the outcome for all female disability groups. Among males, only those with a sensory condition are able to significantly predict becoming a teen parent, with marginal significance reached among those with seriously limiting conditions.³

Discussion and Conclusion

This study had two main research goals. First, I examined whether young people's expectations about pregnancy, parenthood, education, and employment varied according to their disability status. Overall, the results provided strong evidence that adolescents with disabilities form different expectations and experience different outcomes about their future life-course transitions than adolescents without disabilities. These differences are especially consistent when examining educational events, as young people in at least five of the seven disability categories expressed different expectations and experienced different outcomes for the shorter-term outcome of school enrollment in one year and the longer-term outcome of high school completion by age twenty. In general, however, they are not significantly different from young people without disabilities when forming expectations about education and work configurations. However, there are some notable exceptions. Specifically, only those with serious conditions are significantly different from those with no condition in experiencing the outcome of being in school and working more than twenty hours per week. Aside from marginally significant differences in adolescents' expectations of not being in school and working twenty hours per week, it is worth noting the approximate nine-percentage-point difference in experiencing these statuses between youth with learning and physical conditions and those without a condition.

³Robustness checks were performed on the results to explore potential concerns about small sample size and nonlinearity. *T*-tests were bootstrapped, confirming the consistency of Table 1 results. The relationships considered in Table 2 were reexamined using nonparametric tests. Spearman's rank correlations (which do not assume linear relationships) and gamma coefficients (which were used previously in Bruine de Bruin, Parker, and Fischhoff's [2007] examination of adolescent expectations) reveal highly comparable results, with minor exceptions. Relationships between expecting and experiencing a pregnancy became statistically significant for females with chronic health and multiple conditions and for males with learning disabilities ($p < 0.05$). In addition, a marginally significant relationship ($p < 0.10$) emerged between expecting to be in school and working and the outcome, among youth with physical conditions. Overall, the substantive pattern of results remains comparable.

Considering the fertility outcomes, results indicate that females and males with disabilities form comparable short-term expectations about becoming or getting someone pregnant within the next year as their peers without disabilities. On the whole, females with and without disabilities also experience a comparable number of pregnancies, although 6 percent more females with serious and physical disabilities experience a pregnancy than those without conditions. A different pattern emerges among males: Despite similar expectations between those with and without disabilities, males in four out of seven disability categories are more likely to get someone pregnant. Conversely, consistent differences emerge between adolescents with and without disabilities when examining the longer-term fertility pattern for becoming a parent before age twenty. Females in five out of seven disability categories were more likely to expect and experience teen parenthood. Males with mild, serious, and learning conditions also formed higher expectations about teen parenthood than those without disabilities; however, only those with mild disabilities were significantly more likely to become teen parents.

The second goal of this study was to explore whether the relationship between these expectations and their future outcomes varied by disability status. Bivariate correlations suggest that young people with disabilities are adept at predicting short-and long-term educational outcomes, as there is a significant relationship between expectations and behaviors for enrollment in one year and high school degree by age twenty. However, with few exceptions, results suggest that young people with disabilities are not able to predict school and work configurations as well as their peers without disabilities. Nor are adolescents in most disability categories able to predict short-term fertility outcomes. Finally, an interesting sex difference emerges between females and males with disabilities regarding their ability to predict teen parenthood. There was a significant relationship between expecting a birth before age twenty and experiencing it for females in all disability categories. This relationship only appeared among males with sensory conditions, with a marginally significant association occurring for those with serious conditions.

These results raise several concerns about the transition to adulthood for adolescents with disabilities. Young people with disabilities anticipate a lower likelihood of completing school than those without disabilities and act in line with these expectations—to an extent. Those with serious disabilities still expect to have a mean chance of completing high school of 85.9 percent. While this is almost 9 percent below that of their peers without disabilities, it is far above the 50.5 percent of youth with serious disabilities in this sample who actually complete high school by age twenty. This discrepancy is especially noteworthy when considering that a full two-thirds of young people in this group report a 100 percent chance of receiving a degree, with another 17 percent reporting they have a 75–95 percent chance. These results are consistent with previous analyses that suggest a substantial number of children with disabilities leave high school and neither continue their education nor work for pay (Blackorby and Wagner 1996; Wells, Sandefur, and Hogan 2003), even though the majority have transition goals to the contrary (Cameto, Levine, and Wagner 2004). The Individuals with Disabilities Education Act is a U.S. federal law that was instituted to improve the educational opportunities and outcomes of children with disabilities; however, the analyses presented here indicate that students with disabilities are not achieving

educational parity when compared to those without disabilities nor do they achieve according to their own individual expectations.

It is also worth noting the discrepancy in becoming a parent between female youth with and without disabilities. Females in the majority of disability categories are not only more likely to expect teen parenthood but also more likely to experience a birth before age twenty. Women with physical, emotional, or mental conditions are more than 15 percent more likely than women without conditions to become teen parents. This is not altogether surprising. Cheng and Udry's (2002) analyses of the Add Health data indicate that girls with a severe physical disability hold more positive attitudes toward pregnancy than girls without physical disabilities. Other research (Shandra, Hogan, and Chowdhury 2010) suggests women with disabilities are significantly more likely to want a pregnancy at first sex than women without disabilities. The results presented here indicate that women with mild disabilities and those with learning, physical, sensory, and multiple conditions are more likely to become teen parents than young women without disabilities. Furthermore, the expectation of teen parenthood and the outcome are related across all disability groups. Thus, family planning assistance would be most beneficial if provided early in the life course in order to better prepare and support women with disabilities to pursue whatever parenthood aspirations they may hold.

The same pattern does not consistently emerge for men. These results may arise in part because young women with disabilities anticipate fewer labor market opportunities later in adulthood. Some evidence suggests that women with disabilities are more likely than men with disabilities and women without disabilities to follow a “family track” of marriage and full-time parenthood after high school (Wells, Sandefur, and Hogan 2003). However, an analysis of emerging adults in their mid-twenties finds that “young people who have a visual, hearing, speech or ‘other’ impairment are more likely than their nondisabled peers to find themselves among the respondents who did not complete any of the adult transitions [finding full-time employment, establishing an independent residence, marrying and having children] examined in the analysis” (Janus 2009: 99).

The results presented here extend previous findings on the stratification of expectations by sociodemographic position (Dominitz, Manski, and Fischhoff 2001) to suggest that young people with disabilities do not have the same expectations about their transition to adulthood as those without disabilities. This pattern emerges most starkly regarding education and teen parenthood for females, with notable fertility differences between males and females as well as between shorter- and longer-term outcomes. Thus future research should explore how expectations about education, employment, and fertility play out by gender and through later adulthood as additional waves of data are released. Furthermore, multivariate analyses can help disentangle the mechanisms through which severity of disability affects these outcomes—particularly via socioeconomic status and parental expectations. Finally, given the small number of adolescents with each specific condition in the NLSY97, qualitative longitudinal studies would be especially advantageous for considering how adolescents with specific impairments form and realize expectations.

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Descriptive Statistics and *T*-Tests for Expectations and Outcomes by Disability Status

Table 1

	Severity of condition ^a				Type of condition ^b					
	Full sample	None in 1997	Mild	Serious	None ever	Learning disability	Physical, emotional, or mental	Chronic health	Sensory	Multiple
In school next year										
Expectation	92.5 (22.3)	93.2 (21.3)	89.9 (24.9)	82.4 (32.5)	93.3 (21.0)	86.4 (28.6)	87.4 (27.9)	89.9 (26.9)	93.6 (19.9)	88.7 (26.3)
Outcome	84.3 (36.4)	85.3 (35.4)	78.9 (40.9)	75.5 (43.2)	85.6 (35.1)	76.6 (42.4)	73.5 (44.2)	82.6 (38.0)	87.1 (33.6)	80.3 (39.9)
N	3,041	2,632	303	106	2,040	303	257	356	503	314
In school and working next year										
Expectation	59.0 (32.7)	59.0 (32.6)	58.0 (32.2)	61.4 (36.2)	58.5 (32.8)	58.4 (31.9)	57.2 (34.2)	59.6 (32.2)	60.3 (33.4)	59.2 (33.2)
Outcome	26.2 (44.0)	26.8 (44.3)	24.2 (43.0)	14.3 (35.2)	26.0 (43.9)	23.0 (42.2)	28.3 (45.2)	26.9 (44.4)	25.5 (43.6)	24.5 (43.1)
N	2,520	2,212	231	77	1,719	226	187	290	428	249
Not in school and working next year										
Expectation	82.1 (26.4)	81.8 (27.4)	83.1 (22.9)	84.8 (18.8)	80.7 (28.0)	80.3 (26.5)	86.4 (19.4)	86.6 (20.2)	80.7 (26.1)	82.0 (22.4)
Outcome	40.9 (49.2)	41.9 (49.4)	36.5 (48.5)	36.0 (49.0)	43.6 (49.7)	34.8 (48.0)	34.4 (47.9)	37.1 (48.7)	45.3 (50.2)	43.3 (50.0)
N	460	372	63	25	282	69	64	62	64	60
High school diploma										
Expectation	94.0 (17.9)	94.7 (16.6)	90.4 (22.7)	85.9 (27.1)	94.5 (17.0)	87.8 (25.5)	90.2 (23.4)	93.3 (18.7)	94.0 (17.7)	90.5 (22.2)
Outcome	82.2 (38.3)	84.4 (36.3)	73.9 (44.0)	50.5 (50.2)	84.4 (36.3)	63.1 (48.3)	67.9 (46.8)	76.8 (42.3)	81.7 (38.7)	67.2 (47.0)
N	2,971	2,571	295	105	1,997	293	252	349	491	308
Pregnant next year (females)										
Expectation	6.0 (15.8)	6.0 (15.6)	6.1 (15.7)	8.0 (21.4)	6.2 (16.1)	8.8 (20.6)	7.5 (17.9)	5.1 (14.1)	6.1 (15.5)	8.3 (18.8)
Outcome	9.4 (29.2)	9.4 (29.2)	6.7 (25.2)	15.9 (37.0)	9.0 (28.7)	8.9 (28.6)	15.7 (36.5)	8.3 (27.7)	11.5 (32.0)	12.3 (33.0)
N	1,435	1,272	119	44	999	101	121	157	235	130
Get someone pregnant next year (males)										
Expectation	8.6 (17.3)	8.2 (16.9)	10.5 (18.6)	11.9 (21.6)	8.3 (17.0)	10.3 (18.3)	9.7 (18.2)	8.4 (17.0)	8.5 (18.0)	9.7 (18.9)

	Severity of condition ^a				Type of condition ^b					
	Full sample	None in 1997	Mild	Serious	None ever	Learning disability	Physical, emotional, or mental	Chronic health	Sensory	Multiple
Outcome	6.3 (24.3)	5.4 (22.7)	12.3 (32.9) *	8.3 (27.9)	4.9 (21.5)	11.8 (32.4) **	11.3 (31.8) *	6.6 (25.0)	7.7 (26.7)	11.8 (32.3) *
N	1,366	1,163	155	48	883	169	115	166	235	153
Parent by 20 (females)										
Expectation	15.9 (25.9)	15.0 (24.8)	19.5 (30.2)	30.6 (37.0) **	14.8 (24.7)	26.2 (34.0) **	24.5 (31.7) **	17.4 (26.9)	18.2 (28.6) †	24.7 (32.6) **
Outcome	20.4 (40.3)	19.5 (39.7)	28.2 (45.2) *	22.7 (42.4)	18.5 (38.9)	28.0 (45.1) *	33.9 (47.5) ****	17.5 (38.2)	24.9 (43.3) *	27.5 (44.8) *
N	1,407	1,239	124	44	973	100	118	154	241	131
Parent by 20 (males)										
Expectation	19.2 (25.5)	17.9 (24.4)	25.4 (29.0) **	29.2 (33.0) *	18.4 (24.9)	25.3 (30.7) **	22.1 (30.2)	17.7 (24.4)	18.7 (24.3)	21.2 (27.9)
Outcome	11.9 (32.4)	11.1 (31.5)	17.8 (38.4) *	11.3 (32.0)	11.5 (31.9)	13.2 (33.9)	15.0 (35.9)	12.2 (32.8)	11.2 (31.6)	12.8 (33.5)
N	1,457	1,241	163	53	949	182	120	181	242	164

Source: National Longitudinal Survey of Youth 1997. Data shown are means or proportions with standard deviations in parentheses.

^a *T*-tests test difference from no condition in 1997. Categories are mutually exclusive.

^b *T*-tests test difference from no condition ever. Categories are not mutually exclusive.

[†] $p < 0.10$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$ (two-tailed tests).

Table 2

Correlations Between Expectations and Outcomes by Disability Status

	Severity of condition ^a				Type of condition ^b					
	Full sample	None in 1997	Mild	Serious	None ever	Learning disability	Physical, emotional, or mental	Chronic health	Sensory	Multiple
In school next year	.362***	.349***	.377***	.452***	.333***	.373***	.361***	.484***	.450***	.431***
In school and working next year	.157***	.168***	.071	.118		.147*	.119	.075	.103*	.086
Not in school and working next year	.119*	.135**	-.080	.416*	.158**	.151	-.005	-.043	.006	.024
High school diploma	.322***	.333***	.177**	.325***	.319***	.265***	.278***	.328***	.379***	.286***
Pregnant next year (females)	-.127***	.134***	.161 [†]	-.061	.118***	.044	.135	.115	.224***	.135
Get someone pregnant next year (males)	.124***	.141***	-.014	.255 [†]	.125***	.101	.135	.061	.127 [†]	.039
Parent by 20 (females)	.297***	.286***	.385***	.273 [†]	.288***	.240*	.177 [†]	.368***	.348***	.278**
Parent by 20 (males)	.163***	.182***	.017	.241 [†]	.201***	.090	.061	-.021	.187**	-.002

Source: National Longitudinal Survey of Youth 1997. Data shown are Pearson correlation coefficients.

^aCorrelations between expectations and outcomes within each category. Categories are mutually exclusive.^bCorrelations between expectations and outcomes within each category. Categories are not mutually exclusive.[†] $p < 0.10$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$ (two-tailed tests).