

Introduction

A Lens on Adolescence: The 1997 National Longitudinal Survey of Youth

Robert T. Michael

PROBABLY no other span of life is associated with greater personal or public angst than the teenage years—the years of transition from childhood to adulthood. With an inexorability that is much anticipated but not well controlled, the child's body changes. With these physical developments come associated changes in capabilities, interests, and sense of self as well as in social relationships with family members, peers, and authority figures. Communities, schools, and other social institutions as well as family members and friends attempt to guide the judgments and actions of adolescents as they explore new options and prepare for the responsibilities of adulthood. The early teen years can be a time of great danger, and much social policy is meant to help young people negotiate the challenges that they face—for example, avoid teen pregnancy, improve school performance, remain in school, and curb excessive physical and sexual risk taking as well as the abuse of drugs, alcohol, and tobacco. But these years can also be a time of extraordinary achievement—in learning, in sports, in leadership, and in commitment—and a great deal of social policy is also meant to encourage such positive activity. A principal motivation for much social research has been to understand the influences on these varied choices adolescents make, and to offer guidance to the youths, their families, and to social-policy makers about how best to encourage the potentials and avoid the dangers that some of those choices entail.

The essays in this volume represent an attempt to further our understanding of the early teen years by utilizing an important new resource—the data set known as the National Longitudinal Survey of Youth, 1997 Cohort (NLSY97). The NLSY97 is the newest data set in the federal government's arsenal of surveys designed to help us understand what factors

influence and what consequences follow from the actions and aspirations of a whole age cohort of Americans. These new data on some nine thousand young men and women aged twelve to sixteen were collected by means of lengthy interviews (with the youth and one parent), and they will be updated periodically for years to come. The information thus obtained will allow social scientists to explore a wide range of influences on behavior and experience. Even with only the first round of data available, however, we can begin to tell the story of these youths' lives and to detail the circumstances associated with their behavior.

In this volume, we focus principally on the role that the family plays in teenagers' lives—how its characteristics are related to various aspects of their behavior (whether they date, become sexually active, use alcohol, tobacco, or other drugs, engage in criminal activity), their health, how they spend their free time, and their expectations about their own futures. One of the advantages of extensive, omnibus interviews like the NLSY97 is that a wide array of behaviors and experiences can be investigated. And an understanding of the linkages thus revealed can help us design social policies that promote a healthy and successful transition to adulthood. Before I describe the nature of the findings detailed in subsequent chapters, however, it will help to place the data set in context and describe its key features.

Since the mid-1960s, social scientists have had available to them the results of several national longitudinal surveys. These surveys report on many facets of behavior and have therefore allowed the testing of a wide range of theories and formal structural models. The Department of Labor's National Longitudinal Survey (NLS) Program began its first field survey in 1966, running four concurrent cohorts through the 1970s, and then in 1979 began a new youth cohort (the NLSY79) that continues to be followed. Also in the 1960s, the National Science Foundation began to support the Panel Study of Income Dynamics (PSID), another longitudinal survey of families that continues to this day. Both the NLS and the PSID have introduced innovations and special foci that have substantially augmented the ability of analysts to study and to understand what influences choices and outcomes. These, together with a half dozen key surveys conducted through the Bureau of the Census and the several longitudinal school-based surveys sponsored by the Department of Education, are the major sources of information used by social-science and social-policy researchers. They are the grist used in Ph.D. mills, the basis of innumerable findings presented in testimony before legislative bodies, and a key reason for the considerable success of the social sciences over these past four decades.

So it is a time of considerable excitement when a new national survey comes along, NLSY97—sponsored by the Bureau of Labor Statistics (BLS)—is the newest of these major omnibus, longitudinal surveys. There is the expectation that it will be up-dated annually for the next two or three decades,

as were its predecessors. Thus, it provides the opportunity to study a whole new generation of teenagers as they make the transition from school to work and from childhood to adulthood in the face of a perplexing, demanding, and extraordinary future. The NLSY97 offers us the opportunity to confirm or refute what we think we know, to explore what we could not explore with older or less complex data sets.

In constructing the NLSY97, a large number of scholars crafted questionnaire modules in their various areas of expertise. These modules were then molded into a cohesive whole that met the constraints imposed both by the budget and by the patience of the randomly selected youths and their parents. The database that resulted is a national, stratified, clustered sample of households in the United States, selecting all persons residing therein who were age twelve through sixteen on December 31, 1996, who spoke either English or Spanish. The resulting cross-sectional sample was supplemented by oversamples of African American and Hispanic youths. The number of household addresses fielded totaled 90,957. This number was expected to locate some ten thousand youths. Although the National Opinion Research Center (NORC) found some 88 percent of these addresses eligible for screening, and although of those eligible addresses a remarkable 94 percent were successfully screened, only 9,808 youths were found, of whom 92 percent were successfully interviewed. The final result was a sample of 9,022 (for details about the sample, see Moore et al. 2000; for a description of the survey effort see Michael and Pergamit 2001).

The sample of 9,022 youths represents the teenage American population at the start of the twenty-first century—all were age fifteen to nineteen on the last day of 1999. The sample is described in table I.1 by age, gender, and race (panel A), separately by region, health status, and urban-rural residence (panel B), separately by religion, Hispanic ethnicity, and parents' education (panel C), and separately by family income and family structure (panel D). The oversampling of blacks and Hispanics is evident in table I.1, which shows simple, unweighted counts of cases. Most of the other chapters in this book use sampling weights so that the reported statistics represent estimates that pertain to the population of adolescents in the United States. I leave it to the reader to look over the description of this sample as reflected in table I.1. The goodwill and cooperation of the respondents—"rebellious" adolescents—is affirmed by the high response rate and the evident face validity of the answers they provided.

The survey protocol was complex and intended to yield an exceptionally rich amount of information about the youths. There were three distinct components to Round 1 of the field effort. The first component was a screening of all targeted households to determine whether eligible youths were living there. If an eligible youth was found in a household, an extensive rostering was undertaken of all family members and basic demographic

TABLE I.1 *Characteristics of Youths in Round 1 of the NLSY97*

A. Number of Cases by Age, Gender, and Race

Age	Males				Females				Total
	All	White	Black	Other ^a	All	White	Black	Other ^a	
Twelve	160	108	34	17	171	107	45	17	331
Thirteen	885	528	226	123	832	481	215	125	1,717
Fourteen	923	557	230	126	845	477	241	123	1,768
Fifteen	976	547	279	144	901	543	211	137	1,877
Sixteen	944	550	254	134	936	540	256	126	1,880
Seventeen	692	402	168	115	690	377	221	88	1,382
Eighteen	39	20	12	6	28	14	9	5	67
Total	4,619	2,712	1,203	665	4,403	2,539	1,198	621	9,022

B. Number of Cases by Region, Health Status, and Urban-Rural Residence, Separately

Region		Health		Urban-Rural	
North	1,588	Excellent	3,497	Rural	3,808
North-Central	2,061	Very good	3,037	Urban	5,214
South	3,243	Good	2,025	Total	9,022
West	2,130	Fair	430		
Total	9,022	Poor	28		
		Total	9,017		

C. Number of Cases by Religion, Hispanic Ethnicity, Parent's Education, Separately

Current Religion		Hispanic Ethnicity		Parent's Education ^b	
Protestant	5,027	Hispanic	1,904	None	25
Catholic	2,532	Non-Hispanic	7,091	Less than high school	1,528
Jewish	83	Total	8,995	High school	2,614
Muslim	55			Some college	2,103
Other	119			College graduate	1,133
None	1,083			Postcollege	928
Total	8,899			Total	8,331

D. Number of Cases by Family Income and Family Structure, Separately

Family Income		Family Structure			
< \$15,000	1,788	Intact (both biological parents)	4,419	Biological mother only	2,561
\$15,000 to \$30,000	1,570	Biological mother and spouse	975	Biological father only	311

TABLE I.1 *Continued*

Family Income		Family Structure			
\$30,000 to \$50,000	1,883	Biological father and spouse	211	No parent	414
\$50,000 to \$100,000	2,235	Cohabiting parent	131	Total	9,022
> \$100,000	618				
Total	8,094				

Source: Author's compilation.

Note: If numbers do not sum to 9,022, the remaining cases are not specified for that category.

^a Includes 61 American Indians, Eskimos, or Aleuts, 160 Asian or Pacific Islanders, and 1,065 others.

^b If two parents, the higher level achieved by either of the two parents.

information collected. Information was also obtained about key nonresident family members, in particular biological parents, siblings, and offspring. Depending on the complexity of the family structure, that rostering exercise could take as little as a few minutes (if an eligible youth was not found) or as much as half an hour or more (if the family involved was large or their relationships complex). The detailed information thus obtained about family structure is one of the many strengths of this new data set. Several chapters in this volume—particularly chapters 1, 2, and 4—make special use of it, combined with information provided later in the interview about transitions in living arrangements over the youth's lifetime.

The second component was an hour-long interview with one of the youth's parents, usually the mother or mother figure in the home. This interview was designed to collect information usually available only to the adults in a household—source and amount of family income; assets and debts; marital, residential, and employment histories of the adults in the family; social-program participation; certain assessments of the youth in question—as well as family background and the youth's health status. More sensitive issues were handled by means of a self-administered questionnaire (SAQ). This parent interview was one important difference between the NLSY97 and earlier surveys, including the NLSY79. Previously, there was no extensive parental interview, and, while the young people surveyed were asked to provide some basic financial information, much less detail about the family's history and circumstances was available in the NLSY79. Moreover, the new survey included even younger youths (aged twelve and thirteen) than had been included in NLSY79 and they, especially, would not have been expected to be able to provide this detailed information. Such information is vital, however, when studying certain public-policy issues, and the NLSY97 therefore represents an important new source of evidence

about the effects of social-welfare programs. Several of the later chapters in this volume—particularly chapter 9—demonstrate the potential inherent for this type of analysis.

The third component was an interview with the youth. The interview covered education, job training and employment history, health status, peer relationships, time use, social behavior, attitudes and expectations, and a characterization of the relationship with each parent. Again, more sensitive issues were handled by means of an SAQ. The duration of interviews varied, depending on the complexity of the life of the youth in question, but the average interview lasted seventy-five minutes. An exceptional amount of information was obtained about schooling—both the social and the curricular dimensions. The survey focused particularly on math education, including a short math test so that skill level could be evaluated and compared to courses taken and grades received. Also included were innovative questions about expectations one year from the interview date, by age twenty, and by age thirty. Chapters 7 and 8 make special use of this information and show how useful such a line of questioning can be.

The survey was conducted, from beginning to end, by means of a laptop computer, including the SAQ which featured an audio-assisted capability in English and Spanish. One of the key differences between this survey and most other large-scale surveys is that the NLSY97 was designed from the start as a computer-assisted interview. This means that the questions were couched in terms of the context of previous responses. It also implies that, while the flow of the interview was thereby more conversational and natural, the information obtained was more complex and rich—and more difficult to analyze. Details that might previously have been captured in the response to a single question are now spread throughout the interview and more elaborated. Consider, for example, how much more information can be obtained about *family income* when instead of asking simply “What was your family’s income last year?” the interviewer poses some two dozen very specific questions about each relevant family member’s wages, fringe benefits, interest, dividend, and transfer payments. (There will always, of course, be the occasional piece of missing information with which the analyst must contend.)

Since the first round of the NLSY97 became available for public use in January 1999, an “early results” conference was held in November 1999 to begin exploring the data.¹ Following the conference, its organizers—Michael Horrigan of the BLS, who oversees the NLS Program; Robert Michael, the project director of the NLSY97 for the first several years; and James Walker, the current project director—arranged to publish three collections of papers disseminating the results of the conference. Those papers dealing with employment issues will appear in a special issue of the *Monthly Labor Review* (see Horrigan 2001). Those papers dealing with schooling will appear in a

special issue of the *Journal of Human Resources* (see Walker 2001). Those papers dealing with social-relationship issues appear in the present volume.

It should be noted that, while each of the essays in this volume can stand on its own—each presents hypotheses, findings, and suggestions for further research worth reflection in their own right—in this introduction I attempt, not just to highlight the more interesting results of each essay, but to illustrate the potential that the NLSY97 holds for future research. The characterization of authors' results that follows may therefore differ in emphasis from their own. The volume is organized around four general topics: family background; dating and sexual behavior; adolescents' expectations; and antisocial behavior. In what follows, I review each chapter in turn.

Adolescents' Families and Their Influences on Youths

The Effect of Family Structure on Youth Outcomes in the NLSY97

Charles R. Pierret examines the relation between family structure and the transition to adulthood and attempts to determine why "the transition to adulthood appears to be much more difficult for youths who come from broken families" (23). His study offers us an overview of the range of living situations experienced by adolescents in the United States today: overall, only about half (51 percent) have lived their whole lives in intact families; when the figures are broken down by race, that proportion is slightly higher for whites (58 percent) and dramatically lower for blacks (22 percent). Pierret divides the sample into eight distinct subgroups on the basis of family-structure history. For the African Americans, the modal experience shared by 28 percent is always to have lived with a single mother. Table 1.2 details the full array of these eight patterns for youths by race-ethnicity. Table 1.3 offers a very interesting breakdown of the amount of the youth's lifetime spent living in the various family arrangements, reminding us that the current description of family arrangement often does not reflect the full experience. For example, those currently living with a remarried mother are estimated to have spent more than a quarter of their life with both biological parents, about one-third with their mother only, and a bit more than one-third with their mother and a stepfather.

Pierret's work emphasizes how valuable an extensive interview with a parent can be when it comes to eliciting information about family-structure history. He provides "a first glimpse at the relation between family structure and the successful transition to adulthood" (24) by examining grade-point average in the eighth grade and the incidence of five "potentially troubling behaviors" (24)—smoking cigarettes, drinking alcohol, smoking marijuana, engaging in sexual activity, and getting arrested. In his reduced-

form estimates of these behaviors, Pierret finds a strong and consistent relation with family structure: in comparison with living in an intact family, "all the family-structure variables except having been adopted significantly predict a lower grade-point average and a greater probability of problem behaviors" (36). The implied magnitude of many of these effects is quite large. Compared to the effect of gender, for example, the family-structure effect is typically twice as large.

Building on his thoughtful discussion of the relation of family structure to child outcomes, Pierret returns to the issue of causation and tries to go behind the strong ordinary least squares (OLS) effects to explore why these correlations with family structure are so strong. He suggests several mechanisms. One is the *instability* introduced into youths' lives by family-structure changes. A second is the *conflict* that prevails in most disrupted families. A third is unobserved *economic and social* factors that accompany divorce. Some of these mechanisms can be measured directly, some can be instrumented, but the resulting analyses prove unsatisfactory. Pierret concludes by suggesting strategies for further, more sophisticated analyses, the results of which, he emphasizes, will become increasingly powerful as additional survey rounds are completed and researchers are able to exploit the longitudinal feature of the data set, a theme often repeated in this volume, as befits essays that began life as part of an "early results" conference.

Patterns of Nonresident-Father Involvement

Like Pierret's essay, this essay, by Laura M. Argys and H. Elizabeth Peters, is motivated by negative youth outcomes, approaching the problem via the issue of the father-child relationship. Argys and Peters focus on children with a nonresident father, their initial analysis distinguishing among those fathers who are absent because they are divorced from the child's mother, those who are absent because they are separated from her, and those who are absent because they never married her. Subsequent analysis distinguishes among absent fathers in terms of the method by which paternity was established. Unlike Pierret, who examines youth outcomes directly, Argys and Peters investigate both the reasons for and the nature of father-child involvement and the relation between the level of involvement and the amount of child support received, but they do not extend the analysis to measures of child behavior or outcomes. While theirs is the only analysis presented in this volume that remains at the background level, their through exploration of the subject provides a solid basis on which subsequent analyses can build.

Also like Pierret's essay, this essay reveals how complex the task of characterizing the child's circumstances is. Consider but one example. On average, the length of time that the father has been absent from the home

ranges from as little as five years for those parents who are separated, to nine years for those parents who are divorced, to as long as twelve years for those parents who never married (and the reader should keep in mind that, in these data, the child is on average age fourteen). If an analyst does not control for the length of time that the father has been absent, it might erroneously be inferred that it is type of separation that affects child outcomes. Conversely, if type of separation is not controlled for, it might erroneously be inferred that it is length of separation that affects child outcomes.

Argys and Peters consider only a subset of the NLSY97 sample, the nearly 2,500 adolescents whose biological father is alive, identified, but nonresident: about 1,100 whose parents are divorced, another 1,100 whose parents never married, and about 250 whose parents are separated. They characterize the extent of father-child involvement, the amount of child support provided by the father, the nature of the father-child relationship as described by the youth, and the nature of the parents' interactions as described by the youth. These relationships are defined in terms of the father's supportiveness, his habits of offering praise or criticism, and whether he knows the youth's friends, for example.

Among the conclusions drawn from this analysis are the following: Both the extent and the quality of the father-child relationship are greater if the parents had at one point been married. An interesting pattern is also revealed regarding financial support—the amount of court-ordered child support is greater where the parents had previously been married, but the actual receipt of child support, conditional on an award, is more likely if the parents never married. Among African Americans, the payment of child support is less likely and the amount of father-child contact is less if the parents had been married, whereas the amount of contact is likely to be greater if the parents never married. There appears to be less communication between parents who never married than between those who were previously married.

Argys and Peters have previously researched the issue of paternity establishment, and they pursue that topic with these new data. They classify families in the never-married sample into four categories: both parents on the birth certificate; voluntary paternity; involuntary paternity; and no paternity. Tables 2.6 and 2.7 reveal the dramatic effect that paternity type has on child custody as well as the close relation that it has to both father-child contact and financial support. As might be expected, the fact that paternity has been established greatly influences whether child support has been awarded. Also, the extent of father-child contact is greater if paternity has been established voluntarily.

There are many papers each of us can probably recall that claim to control for family structure with one or two variables. Argys and Peters's work represents a strong rebuke of that practice. It emphasizes—as does Pierret's—

that family structure has many dimensions, financial as well as social, and that both past and present circumstances must be taken account of, even when the focus of study is a young child. Changing family relationships, past legal agreements, and various other negotiations between the parents all surely influence many youth outcomes.

Parental Regulation and Adolescent Discretionary Time-Use Decisions: Findings from the NLSY97

Round 1 of the NLSY97 contained a small survey module on adolescent time use, and Robin L. Tepper exploits that information in her essay. She offers the basic descriptive information that one would expect to find: focusing on twenty-four hundred youths aged twelve to thirteen, she reports that, on average, only 5.5 hours per week are devoted to homework and even less time, 3.1 hours, to reading for pleasure but a whopping 17.5 hours to television viewing. So much for the “Too Much Homework” headlines!

Tepper’s essay, however, goes well beyond a simple description of time use and fits well in this section dealing with the influence of families on adolescent behavior. Tepper uses the time-use information to explore the role that parents play in the socialization and developmental experiences of their children. She discusses three types of parental regulation: regulation through rules, through monitoring, and through what she calls *structure*. (Structure is measured in terms of whether the family eats dinner together each night [45 percent of the families of those youths surveyed did], whether the adolescent participates in religious activities each week [66 percent of those surveyed did], and whether he or she takes any extra classes or lessons during the week [31 percent did].) And she constructs indices of regulation through rules and regulation through monitoring and uses these as well as the three indicators of structure in her separate multivariate OLS analyses of time spent on homework, watching television, and reading for pleasure.

Controlling for several youth personal characteristics, Tepper finds that monitoring and structure, but not rules per se, seem to be the ways parents influence the time allocation of their adolescents. As one would expect, parental guidance is associated with more time spent doing homework and reading for pleasure and less time watching television. Tepper also documents other relationships: girls report spending more time doing homework and reading for pleasure and less time watching television than do boys, and blacks report spending more time doing homework and watching television. Tepper pursues her point further by fully interacting the parenting styles and background factors with several key pairs of attributes: race (black versus white), parent’s education (more highly versus less highly educated), and family type (single versus two parent). The pattern that emerges suggests

that regulation through structure has a greater effect on white than on black adolescents, on adolescents in two-parent families than on those in single-parent families, and on adolescents whose parents are more highly educated than on those whose parents are less highly educated. Throughout, monitoring is relatively consistently correlated with time use, while the indicator *rules* per se seldom exhibits statistical significance.

Tepper's essay is but one way the time-use module can be used, but in it she shows the value of measuring the psychologists' notion of parenting style and exploring it in these data. Her concept of family structure is a real contribution, I think—one that others will probably want to explore further.

Adolescents' Dating and Sexual Behavior Family Environment and Adolescent Sexual Debut in Alternative Household Structures

With Mignon Moore's essay, the focus of the volume narrows to particular important adolescent behaviors, in this case the beginning of partnered sexual activity, which she terms *sexual debut*. Moore uses sexual debut as a vehicle with which to investigate the influence of family structure, the concept *family* here being refined so as to capture the distinctions between two-biological-parent families, remarried stepfamilies, first-marriage stepfamilies, cohabiting households, maritally disrupted single-parent families, and never-married single-parent families. She is interested in documenting how family structure is related to sexual debut—what differences there are among whites and blacks, and whether the observed differences are associated with the nature of parental support and discipline, characterized as parenting style.

Moore's sample is between the ages of fourteen and sixteen, and her focus is on a dummy variable indicating whether the youth has had intercourse; a weighted logistic regression model is used. Confirming previous results, Moore initially shows that youths in intact families are much less likely to have had sex than are those in any of the other family-structure types. A more refined analysis, one fully interacting these effects by race, finds a similar association with family structure for whites and blacks, but only for some types of family structure—that is, for maritally disrupted and never-married single-parent families compared to intact families but not for remarried black stepfamilies or cohabiting black households. Her decomposition of the white-black results reveals gender differences among the two races: among the blacks, but not among the whites, girls are much less likely to have had intercourse than are boys (see table 4.3).

Moore also introduces measures of parenting style, in particular the strictness and the supportiveness of each parent, and she does so taking

account of family structure. The results are complicated, differing by race and family structure. One of the complications is that the influence of a biological father and that of a stepfather are quite distinct, causing Moore to suggest that "it appears as though most parenting efforts by stepfathers in remarried stepfamilies are likely to be rebuffed, at least initially" (125). Moore's essay shows again how important a full elaboration of family structure can be in investigating the influence of families on adolescents.

Exploring Determinants of Adolescents' Early Sexual Behavior

This essay takes a direct look at the information provided in the NLSY97 about dating and sexual behavior. Descriptive tables show the distributions of behaviors measured in the survey, including age at first sex, number of sex partners, and frequency of sex in the past year. The survey also contains somewhat comparable information about dating behavior, allowing parallel analyses to be conducted of both dating and sexual behavior. While there are steep age gradients over the age range considered (fourteen to seventeen years), the overall prevalence of social dating is 72 percent (with boys reporting a rate seven points higher than that of girls), that of partnered sexual activity 30 percent (with boys reporting a rate two points higher). As is typically found in similar studies, the sexually active boys report having more sex partners than do the sexually active girls: 34 percent of the boys and 20 percent of the girls report having had five or more sex partners ever.

The gender-specific multivariate models of ever having had sex and ever having dated show several similar relations: both behaviors increase dramatically with age and with earlier age at puberty, both show a strong positive relation with the absence of the father, and both occur more frequently among those who have no religious affiliation. Many other characteristics show quite different relations with these two behaviors.

The central concern of the essay is an exploration of the widely observed negative relation between parent's education and the onset of adolescent sexual activity. The authors argue that parent's education proxies youth career aspirations and that those with strong aspirations (that is, those with more highly educated parents) have a strong motivation to avoid sexual activity and thus pregnancy and other associated risks. The evidence is presented in two steps: first, the effect of parent's education on age at first sex is demonstrated; then, direct indicators of career prospects are introduced, diminishing the effect of parent's education dramatically.

Further evidence supporting this hypothesis is revealed in the analysis of dating behavior. Since dating per se does not present the same risks as sexual activity, the same relations should not be observed, and they are not.

For the girls, there is even a positive relation between parent's education and dating.

Body Weight and the Dating and Sexual Behaviors of Young Adolescents

John Cawley's essay takes yet another look at the onset of sexual activity and dating, but with a quite narrow and focused perspective: he is interested in whether being overweight influences dating and sexual behavior. Many adolescents are obsessively concerned with their weight, and Cawley, who has worked extensively with data on obesity from the National Health and Nutrition Examination Survey, seeks evidence here about the effects of being overweight on these social behaviors. He wants to go beyond simple correlation to say something about causality. To do so, he uses an instrumental-variables approach and offers a clear discussion of this methodology for any reader who is not familiar with it.

The instrumental variable used is the youth's biological father's body mass index (BMI). Cawley explains that, if the father's BMI is correlated with the youth's BMI but not with the youth's dating or sexual behavior, he can proceed statistically to determine whether it is the youth's weight per se that affects dating and sexual behavior.

Cawley finds that weight (specifically, being overweight) does not affect boys' likelihood or frequency of dating. (He notes that taller boys are more likely to date.) He also finds slight evidence that heavier boys are less likely to engage in sexual activity and stronger evidence that they are less likely to have sex frequently. Different patterns emerge for girls. Heavier girls are less likely to date and less likely to do so frequently. Among girls, however, there is no association between weight and reported sexual behavior.

Adolescents' Expectations and Their Well-Being Adolescents' Expectations Regarding Birth Outcomes: A Comparison of the NLSY79 and NLSY97 Cohorts

James R. Walker uses the expectations questions asked of the youths—one of the novel features of the NLSY97—to explore adolescent fertility. The scope of his essay is broad, and he addresses issues of both methodology and behavior.

Walker delves deeply and instructively into the problems involved in analyzing the answers to expectations questions—questions about “the percent chance” that something will happen by some specific point in the future. His discussion of the “heaping” of answers is particularly interest-

ing (see table 7.2). He performs a convincing assessment of the internal consistency of the answers provided, in terms of both strict logic (for example, for a fifteen-year-old, the likelihood of dying in the next year must be lower than that of dying by age twenty) and contextual relevance (those who are already sexually active are objectively more likely to get pregnant within the next year than are those who are not yet sexually active) (see table 7.3). He also argues that youths' answers to expectations questions are more sensible if the content of those questions is salient to their lives, demonstrating the better consistency found among answers to questions about fertility than among answers to questions about mortality.

Walker makes informative comparisons between the NLSY79 and the NLSY97 data. Since the fertility-expectations questions—and therefore the responses—differ between surveys, one of Walker's most useful contributions is a demonstration of how to transform the information available in one survey into a form comparable to that available in the other. Walker also exploits the longitudinal nature of the NLSY, comparing NLSY79 fertility expectations with subsequent actual fertility behavior. Overall, he finds that, although most teens can reliably assess short-term fertility outcomes, there are important exceptions, particularly among poor black women, who experience many more teen births than anticipated.

Perhaps his most substantive and important finding, however, is that fertility expectations remained essentially unchanged in the interval between the two surveys: 15 percent of the youths surveyed in 1979 and 17 percent of those surveyed in 1997 expected to become a parent before age twenty. There is, of course, much left to study regarding this interesting stability over time, as Walker notes.

Who Are Youth "At Risk"? Expectations Evidence in the NLSY97

Jeff Dominitz, Charles F. Manski, and Baruch Fischhoff also use the expectations questions—in this case to explore which youths are "at risk," an attribute commonly found in social-welfare analysis. Typically, the designation at risk is assigned on the basis of demographic attributes or of experiences usually associated with adverse outcomes. Dominitz, Manski, and Fischhoff, however, take a different tack, exploiting information in the NLSY97 about expectations of completing high school by age twenty, serving jail or prison time by age twenty, and becoming a parent by age twenty. They consider a youth to be at risk if his or her assessed chance of receiving a high school diploma is less than 90 percent, of serving jail time is 5 percent or higher, and of becoming a parent is 10 percent or higher. Three levels of severity of risk are presented, based on these criteria.

Applying this algorithm to information collected from both the youths and their parents, Dominitz, Manski, and Fischhoff calculate that 6.2 percent of the youths are at risk by their own assessment and that 4.8 percent are at risk by their parents'. They go on to characterize risk status by gender and by race-ethnicity. And they also show that the pattern of risk is positively associated with living in a single-parent family and negatively associated with family income. Finally, they show that risk status is quite strongly associated with whether a youth has smoked cigarettes, used marijuana, carried a handgun, dealt drugs, repeated a grade in school, or engaged in sexual activity.

Since both youths' self-assessments and parents' assessments of the youths were collected, Dominitz, Manski, and Fischhoff compare the two. While youth and parent assessments are closely correlated, it turns out that a larger percentage of the parents than of the youths themselves see no chance at all of the three target adverse outcomes. This is, as the authors comment, counter to the common wisdom that adolescents see themselves as invulnerable.

Dominitz, Manski, and Fischhoff offer us an important, innovative way of identifying those youths who are at risk. As they themselves emphasize, this first-wave data will become even more valuable as the youths are tracked over time. We can then see whether their own and their parent's predictions are borne out.

Food Stamp Program Participation and Health: Estimates from the NLSY97

Diane Gibson begins her essay with an investigation of the relation between four measures of the youth's health and the family's use of Food Stamps if impoverished. The theory motivating the essay suggests that the added resources made available through the Food Stamp Program should improve youth health. The challenge of the empirical study undertaken is, of course, controlling adequately for health status in the absence of Food Stamps. As Gibson points out, her controls are incomplete because currently available data allow her to control only for current income levels and a few past years of Food Stamp receipt, not for the family's complete income and program-participation history.

The measures of health that Gibson uses are indicators of whether a youth is underweight or obese, a youth's self-reported health status, and chronic-illness status as reported by a youth's parent, all obtained from the NLSY97. (Note that Gibson's measure of obesity is more stringent than Cawley's—BMI over thirty rather than BMI over twenty-five.) The NLSY97 data also contain information about the receipt of Food Stamps in the most

recent complete year (1996) and the number of years over the past five in which Food Stamps were received.

Gibson shows that, in these data at least, the receipt of Food Stamps is not systematically associated with the measures of youth health that she investigates. As she stresses, however, strong conclusions should not be drawn from these early results since the controls for the counter-factual comparisons are not as adequate as she would like, and subsequent waves of the data will offer a much richer statistical opportunity to control for some of these.

Gibson also shows that among those personal characteristics that are associated with health status, girls are less likely than boys to report themselves as underweight or in good health and more likely to be obese and (by parent assessment) to have a chronic illness.

Adolescents' Antisocial Behavior

What Determines Adolescent Demand for Alcohol and Marijuana? A Comparison of Findings from the NLSY79 and the NLSY97

The three chapters in this section share a common focus on the prevalence and the determinants of several illegal, dangerous, or inappropriate behaviors by the adolescents. All three make comparisons of the information in the new NLSY97 with information obtained in the NLSY in 1980 and subsequently, and so these chapters speak to the differences in these antisocial behaviors over the past two decades.

Pinka Chatterji uses information contained in the NLSY79 and the NLSY97 to examine differences in substance-use patterns over the last two decades. She also brings to bear information obtained from other sources—data on price as well as on other determinants of substance use (for example, minimum drinking age and legal penalties for possession). (Incidentally, a very useful feature of the NLSY data set is that, under certain, restricted conditions, researchers can obtain information about state and county of residence of the respondent, thereby permitting the researcher to import into the analysis additional relevant information.) Not many would have thought to include the price of beer by year and state, but that is a piece of information Chatterji uses effectively in this chapter.

Chatterji first tackles the important issue of underreporting, showing some indication of underreporting in the NLSY97, but less than what has been documented as occurring the NLSY79. The probability of greater underreporting in the earlier data set somewhat clouds the evidence of a trend in smoking and drinking among adolescents. That said, a much higher pro-

portion of youths today report having used marijuana and alcohol by age seventeen than did so in the early 1980s.

Chatterji next presents a series of multivariate models showing the correlates of alcohol and marijuana use before age seventeen for both the new 1997 data and the earlier data; she also estimates models on the frequency of alcohol and marijuana use both ever and within the last month. Many patterns found in this analysis confirm previous evidence. For example, girls are less likely to report using alcohol or marijuana and, among those who do drink, to report drinking less in the past month, although both boys and girls report about the same rates of binge drinking in the past month. Whites appear to be more likely to use alcohol and marijuana, as are youths living in single-parent families. Those with an alcoholic relative are much more likely to use both alcohol and marijuana.

The results of the analysis using price information are mixed. The money prices of substances—beer, cigarettes, and cocaine—do not show the expected relations, which is puzzling since other data sets do show price responsiveness in youth demand. Chatterji points out that her 1979 analysis is not able to link the price and behavior information fully and that that fact may help explain the absence of price sensitivity for that era, but she is not yet able to explain the lack of a price effect in the 1997 data. By contrast, the legal penalties for marijuana possession seem to elicit the expected response of lower demand. There is, in fact, evidence of cross-price effects on binge drinking, suggesting that the two activities may be complements. Chatterji urges that caution be used, however, when drawing conclusions.

Changes in Gender and Racial Gaps in Adolescent Antisocial Behavior: The NLSY97 Versus the NLSY79

Yasuyo Abe addresses trends in antisocial behavior over the last two decades, using multivariate models to explore the effect of various demographic and economic characteristics. She distinguishes between two types of antisocial behavior: covert (including committing property crime and vandalism, stealing, and selling illegal drugs) and overt (including fighting, attacking, and strong-arming). The NLSY79 and the NLSY97 ask about similar, but not identical, sets of behaviors that can be fitted into these two categories.

While Chatterji shows that alcohol and marijuana use rose substantially over the last two decades, Abe's evidence is that the rates of antisocial behavior fell by nearly half, and that reduction is seen in both overt and covert activity and consistently across all age, gender, and racial/ethnic groups. But, as Abe emphasizes, the NLSY79 definitions of antisocial behavior are much looser than the NLSY97 definitions are, so some undeter-

mined amount of that decline is only definitional, unfortunately. She therefore uses relative rates and finds quite similar patterns: for example, young men are more likely than young women to engage in all types of delinquent activity in both years, and whites more likely to engage in covert criminal behavior, African Americans in overt criminal behavior.

Abe also presents an interesting, detailed picture of specific behaviors by single year of age for the two time periods, allowing a simple comparison of rates over time as well as patterns across ages. According to her analysis, juvenile crime rates peak in the age range of fifteen to seventeen.

A multivariate analysis is performed as well, focusing on the two covert and overt sets of antisocial behavior and conducted in parallel for the 1980 and the 1997 data. It is striking how similar are the patterns of relations between family-background and socioeconomic factors and the target behaviors across the two years. As Abe summarizes, "the coefficient estimates for 1980 and 1997. . . appear to have the same signs and to be generally comparable in magnitude" (348). She also undertakes a standard decomposition of the white–African American differences in overall antisocial activity.

City Kids and Country Cousins: Rural and Urban Youths, Deviance, and Labor Market Ties

L. Susan Williams also examines deviant behavior, this time with an emphasis on urban-rural differences. She offers a strong defense for studying rural adolescent behavior and notes how little attention the topic receives. She focuses on both the differential levels of deviance in the two contexts and the interaction of rural-urban setting with race and gender patterns of deviant behavior.

Williams points out that FBI statistics on juvenile arrests suggest that rates of *property* crime have declined over the period from 1980 to 1997, with the urban-rural rates converging toward the lower, rural levels. There has been a convergence in rates of violent crime as well, with a decline in urban but a noticeable increase in rural crime. Williams looks to the NLSY79 for 1980 and the NLSY97 for 1997 for youths aged fifteen to seventeen to check on these trends and rural-urban gaps in the survey responses. Like Abe, she notes that the differences in the definitions of behaviors across the two survey questionnaires make the comparison of absolute levels difficult. She shows, however, that the sizable urban-rural gaps revealed in 1980 have mostly disappeared in the 1997 data, qualitatively reflecting the same trends as seen in the FBI's Uniform Crime Reports (UCR) on arrests. Also consistent with UCR reports, NLSY data reveal that rural arrest rates rose and that the ratio of urban-to-rural rates declined. However, while, according to the UCR, urban arrest rates fell, according to the NLSY data they rose.

Williams estimates a multivariate logistic regression on a composite of any of seven relatively severe deviant or criminal acts. That model shows that the rate of criminal activity is higher among young men and those who have had what she identifies as *bad experiences* (for example, being bullied, being threatened, seeing someone shot, having one's house burglarized) and lower among blacks, those in good schools, and, importantly for her focus, youths in urban areas. So, for this composite indicator of deviance, rural youths have a higher rate when controls are included. Using her multivariate model for a subset of the younger youths and including additional controls for family and personal attributes, Williams also shows that the rates on the composite index are quite high—10 to 20 percent higher in rural than in urban areas for both the boys and the girls in several specific social conditions.

There are systematic differences in reported crime-victimization rates as well as in reported crime-commission rates. Williams documents the patterns by gender and rural-urban residence, revealing some interesting differences. Notably, and somewhat surprisingly, I think, she reports that rural women are more likely to be threatened at school than are their urban counterparts.

This final chapter also looks at several separate additional issues. Williams shows a very strong positive association between reported criminal acts and reported arrests; interestingly, when the incidence of criminal acts is controlled for, arrest rates are higher among young men and urban youths. She also addresses the issue of whether engaging in antisocial acts is statistically associated with youths' self-assessment of the chance of completing college, finding a strong negative association, other things held constant. She addresses as well the alleged deterioration of parental influence and social control in rural areas as more women enter the workforce, contending that "the evidence lends some support to the notion that there still exists a rural culture that exerts influence via the family" (392).

While I will not attempt to summarize the results presented in this volume, I think that a few general reflections are in order. The NLSY97 makes available a wide range of detailed information about some nine thousand young men and women across the United States, all collected from the youths themselves and their parents. Unfortunately, not all youths and parents responded to all the questions, so subsets of respondents must occasionally be used. Since this is, as yet, a one-time or cross-sectional survey, there is not much opportunity to structure longitudinal analyses and thereby get at real causal relations. Researchers will be able to undertake such analyses shortly, however, as new waves of data become available. Current limitations aside, the essays in this volume show

the wonderful strength of the NLSY97 data and give us some very important early results.

One conclusion that readers will surely draw from these essays is how complex is family structure and how strongly it affects the lives of these adolescents. We see the varied experiences of youths in terms of the proportions of their short lives spent in one or another family circumstance and the subtlety of the nature of their interactions with noncustodial fathers. We see the varied nature of parental discipline and regulation and the strong association with adolescents' actions. We see much evidence of a strong association between family characteristics and the expectations, aspirations, and behaviors of the youths and indications that family structure can predispose youths to favorable or adverse outcomes. While the mechanisms or routes of influence are not always clarified, one cannot read these essays and doubt the importance and breadth of family influence on these adolescents.

It is not only the structure of the family that matters, of course. There is much evidence here of the strong influence of parent's education, family income, race, and place of residence as well. And the gender differences observed in various behaviors and attributes are fascinating, if not bewildering. As the youths age, and as new rounds of data become available, the role of other, nonfamily influences—peer groups, social institutions (including schools), religious institutions, job markets, communities—will be made increasingly clear. And, as the youths make key decisions that define their adult behavior and affect their overall well-being—decisions about education level and content, career, marital status, family size and structure, and location—the early results reported here will provide a fine basis on which to build a growing understanding.

The temptation to offer a litany of the fascinating and important "facts" reported here is almost too great to be resisted. As a compromise, I offer just a few.

We learn that about two-thirds of the life of the average youth in the study have been spent with both parents, about a quarter with the mother only, and the rest in a variety of other arrangements. We learn that the average twelve- to fourteen-year-old spends only about five hours per week doing homework, three hours per week reading for pleasure, and seventeen hours per week watching television. We learn that three-quarters of the youths aged fourteen to seventeen have begun dating and that about one-third have also begun to have sex. We learn that one in six girls is overweight and one in six underweight and that one in seven boys is overweight and nearly one in three underweight. We learn that the median youth reports that he or she has a 5 percent chance of becoming a parent by age twenty, a 10 percent chance of not living to age twenty, and about an 85 per-

cent chance of graduating from college by age thirty. (These are not the same youths, so cross-event consistency is not at issue here.) This does not imply that only 5 percent of the youths will have a baby before they reach twenty or that anything close to 10 percent will die before that age, but these expectations influence the youth's motivation and his or her calculation about behaviors of all sorts. We learn that 3 percent of girls and 7 to 8 percent of boys are at severe risk of adverse socioeconomic outcomes. And we learn that over 40 percent of the entire sample of twelve- to seventeen-year-olds report having used alcohol, that nearly 10 percent report binge drinking in the last thirty days, and that well over half report engaging in antisocial and even criminal activity.

No doubt readers will assemble their own sets of most interesting facts. But the importance of this volume lies, not just in the facts presented, but in the fact that the whole represents the beginning of an effort to document more thoroughly than has been done before the factors and circumstances that motivate teenagers and that constrain their behaviors. There is a payoff to be had now but a greater payoff to come as successive waves of data are collected. And an important part of the research effort will be to integrate the findings reported here with those reported in the two companion volumes that feature behavior pertaining to schooling and employment.

Overall, it is stunning, I think, how consistently the characteristics of the youth and his or her family that are associated with one aspect of behavior are also those associated with other aspects, whether substance abuse, criminal activity, sexual activity, self-image, or school achievement. Of course, such consistency is not news to the researcher. Still, it is reassuring to have it confirmed by new survey data. I do not mean to imply, of course, that collecting new data sets and conducting new analyses are redundant activities. Social-science research of necessity builds on prior work, honing interpretations and conducting more precise analyses. New efforts always offer the possibility of new insights as well as confirmation. And new insights are, after all, the motivation behind new data sets.

It is especially interesting, I think, to see what new strategies, measures, and methods different researchers use to exploit the same basic resources. It is these different approaches that will lead to far richer understandings of the data and more robust findings—and to an understanding of what further work must be undertaken. The several essays in this volume that approach similar topics with different techniques and emphases surely underscore this point. I think that, in the end, readers will agree that the essays collected in this volume affirm the value of this new data source and the contributions that it can make to our understanding of adolescent behavior at the turn of the century.

Note

1. In turning to these early results, I remind the reader that we are dealing with a longitudinal survey that has moved beyond the first round of interviewing. In the summer following the interviews that produced the data used in this volume, the youths were scheduled to take a battery of tests assessing their abilities, interests, and career potential, testing funded by the Department of Defense. (For those familiar with earlier NLSY data, these assessments included the modern version of the Armed Services Vocational Aptitude Battery.) By the conference date, the second round of surveying had been completed, the third round was about to commence, and preparations were being made for the fourth. In other words, the survey program is well under way.

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