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Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 26

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2011

child welfare

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Recommended Citation

Courtney, M., Dworsky, A., Brown, A., Cary, C., Love, K., & Vorhies, V. (2011). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 26.* Chicago, IL: Chapin Hall at the University of Chicago

ISSN: 1097-3125

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Acknowledgments

The authors wish to thank our three state partners, the Illinois Department of Children and Family Services, the Wisconsin Department of Health and Family Services, and the Iowa Department of Human Services. The study would not have been possible without their ongoing cooperation and early financial support. We also want to acknowledge the Bill and Melinda Gates Foundation, which funded the fifth wave of survey data collection and analysis, as well as the Annie E. Casey Foundation, Casey Family Programs, the Jim Casey Youth Opportunities Initiative, the Stuart Foundation, the Walter S. Johnson Foundation, the W.T. Grant Foundation, and the National Institute for Justice, all of which have previously provided funding for the Midwest Study. Finally, we would like to thank the University of Wisconsin Survey Center in Madison, Wisconsin for all of their hard work.

Table of Contents

Introduction 1
The Midwest Study: Background and Overview 3
Demographic Characteristics 7
Living Arrangements 9
Relationships with Family of Origin 13
Social Support 17
Education 20
Employment and Earnings 28
Income 36
Economic Hardships 39
Receipt of Government Benefits 43
Physical Health and Access to Health Care Services 46
Mental Health: Symptoms and Service Utilization 51
Marriage, Cohabitation, and Relationships 62
Sexual Orientation, Sexual Behaviors, and Sexually Transmitted Infections 67
Pregnancy 74
Parenthood 80
Illegal Behavior and Criminal Justice System Involvement 90
Victimization 94
Civic Participation 96
Mentoring 98
Life Satisfaction and Future Orientation 100
Connectedness 103
Change Over Time 104
Discussion and Next Steps 113
References 115

List of Figures

Figure 1. Trends in Young Women's Educational Attainment 105
Figure 2. Trends in Young Men's Educational Attainment 106
Figure 3. Trends in Young Women's School Enrollment 107
Figure 4. Trends in Young Men's School Enrollment 107
Figure 5. Trends in Current Employment by Gender 108
Figure 6. Trends in Family Formation among Females 109
Figure 7. Trends in Family Formation among Males 110
Figure 8. Trends in Criminal Justice System Involvement among Females 111
Figure 9. Trends in Criminal Justice System Involvement among Males 111
Figure 10. Trends in Connectedness among Females 112
Figure 11. Trends in Connectedness among Males 112

List of Tables

Table 1. Data Collection and Response Rates at Waves 1 to 5 4
Table 2. Months Since Most Recent Interview 5
Table 3. Demographic Characteristics of Study Participants Interviewed at Wave 5 7
Table 4. Demographic Characteristics at Baseline: Full Sample Compared with Wave 5 Sample 8
Table 5. Current Living Arrangements: Midwest Study Compared with Add Health Study 10
Table 6. Number of Other People in Household 10
Table 7. Time in Current Residence 11
Table 8. Perceptions of and Experiences in Neighborhood 11
Table 9. Ever Lived with Parent or Relative Since Exiting Foster Care 11
Table 10. Homelessness and Couch Surfing Since Most Recent Interview 12
Table 11. Closeness to Biological Family Members 14
Table 12. Frequency of Contact with Biological Family Members 15
Table 13. Perceived Social Support 18
Table 14. Adequacy of Social Support Network 19
Table 15. Highest Grade Completed by Gender 20
Table 16. Highest Grade Completed: Midwest Study Compared with Add Health Study 21
Table 17. Friends' Attitudes towards Education 21
Table 18. Current and Prior School Enrollment 22
Table 19. College Major 23
Table 20. Ways of Paying for Postsecondary Education 23
Table 21. Progress Paying Back Student Loans 24
Table 22. Dropping Out of Postsecondary Education 25
Table 23. Reason No Longer Enrolled in School 25
Table 24. Barriers to Continuing Education by Gender 26
Table 25. Plans to Return to School 26
Table 26. Education Needed to Achieve Career Goals 27
Table 27. Receipt of Job Training 27
Table 28. Reason No Longer Receiving Job Training 27
Table 29. Employment: Midwest Study Compared with Add Health Study 28
Table 30. Hours Worked Per Week at Current Job 29

Table 31. Main Reason for Working Part-Time 29
Table 32. Hourly Wages at Current Job 30
Table 33. Months at Current Job 30
Table 34. Joblessness during the Past Year 31
Table 35. Benefits Provided by Current Employer 31
Table 36. Job Satisfaction 32
Table 37. Employment by Gender 32
Table 38. Hours Worked Per Week and Hourly Wages at Current Job by Gender 33
Table 39. Gender Difference in Hours Worked by Parenting Status 33
Table 40. Ability and Desire to Work if Not Currently Employed 34
Table 41. Recent Job Search Activities 34
Table 42. Length of Current Job Search 35
Table 43. Earnings during the Past Year: Midwest Study Compared with Add Health Study 36
Table 44. Income from Other Sources during the Past Year 37
Table 45. Asset Accumulation: Midwest Study Compared with Add Health Study 37
Table 46. Debts 38
Table 47. Economic Hardships during the Past Year: Midwest Study Compared with Add Health Study 39
Table 48. Non-USDA Measures of Food Insecurity 40
Table 49. USDA Measures of Food Insecurity 41
Table 50. Food Insecurity Scale Scores for Households With and Without Children 42
Table 51. Receipt of Government Benefits during the Past Year by Gender 44
Table 52. Current Receipt of Government Benefits by Gender 45
Table 53. Physical Health Status: Midwest Study Compared with Add Health Study 46
Table 54. Physical and Mental Health Conditions by Gender 47
Table 55. Emergency Room Visits and Hospitalizations during the Past Year 48
Table 56. Insurance Coverage: Midwest Study Compared with Add Health Study 49
Table 57. Access to Health Care: Midwest Study Compared with Add Health Study 50
Table 58. Symptoms of Social Phobia during the Past Year 51
Table 59. Symptoms of Social Phobia during the Past Year by Gender 52
Table 60. Symptoms Associated with Social Avoidance during the Past Year by Gender 52
Table 61. Symptoms of Depression during the Past Year by Gender 53

Table 62. Exposure to Traumatic Events by Gender 54
Table 63. Most Stressful Traumatic Event Experienced by Gender 55
Table 64. PTSD Symptoms during the Past Year by Gender 56
Table 65. Alcohol Use during the Past Year by Gender 57
Table 66. Symptoms of Alcohol Abuse and Dependence during the Past Year by Gender 58
Table 67. Substance Use during the Past Year by Gender 59
Table 68. Symptoms of Substance Abuse or Dependence during the Past Year by Gender 60
Table 69. Mental and Behavioral Health Care Services Utilization 61
Table 70. Marriage and Cohabitation by Gender: Midwest Study Compared with Add Health Study 62
Table 71. Other Intimate Partner Relationships by Gender 63
Table 72. Intimate Partner Violence by Gender 64
Table 73. Intimate Partner Violence: Midwest Study Compared with Add Health Study Females 65
Table 74. Intimate Partner Violence: Midwest Study Compared with Add Health Study Males 66
Table 75. Sexual Orientation 67
Table 76. Sexual Orientation: Midwest Study Compared with Add Health Study by Gender 68
Table 77. Sexual Behavior by Gender 68
Table 78. Young Women's Sexual Behavior: Midwest Study Compared with Add Health Study 70
Table 79. Young Men's Sexual Behavior: Midwest Study Compared with Add Health Study 71
Table 80. Age at First Sexual Intercourse by Gender: Midwest Study Compared with Add Health Study 72
Table 81. Sexually Transmitted Infections by Gender 72
Table 82. Sexually Transmitted Infections among Young Women: Midwest Study Compared with Add Health Study 73
Table 83. Sexually Transmitted Infections among Young Men: Midwest Study Compared with Add Health Study 73
Table 84. Young Women's Pregnancy History 74
Table 85. Characteristics of Most Recent Pregnancy: Midwest Study Compared with Add Health Study 76
Table 86. Pregnancy History of Young Men's Partners: Midwest Study Compared with Add Health Study 77
Table 87. Characteristics of Most Recent Pregnancy: Males in the Midwest Study Compared with Males in the Add Health Study 78
Table 88. Parenthood by Gender 80
Table 89. Motherhood: Midwest Study Compared with Add Health Study 80
Table 90. Fatherhood: Midwest Study Compared with Add Health Study 81

Table 91. Number of Resident and Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study 82

Table 92. Total Number of Resident and Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study 83

Table 93. Current Residence of All Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study 83

Table 94. Frequency of Visitation with All Nonresident Children during the Past Year 84

Table 95. Parents of Resident and Nonresident Children with Health Problems and Disabilities: Midwest Study Compared with Add Health Study 84

Table 96. Health Problems and Disabilities among Resident and Nonresident Children: Midwest Study Compared with Add Health Study 84

Table 97. Parenting Resources and Role Models 85

Table 98. Parenting Stress 86

Table 99. Disciplinary Actions Taken during the Past Year by Gender 88

Table 100. Indicators of Neglect during the Past Year by Gender 89

Table 101. Illegal Behaviors during the Past Year by Gender 91

Table 102. Criminal Justice System Involvement Since Last Interview by Gender 92

Table 103. Cumulative Criminal Justice System Involvement by Gender 92

Table 104. Cumulative Criminal Justice System Involvement by Gender: Midwest Study Compared with Add Health Study 93

Table 105. Criminal Victimization by Gender 94

Table 106. Sexual Victimization by Gender 95

Table 107. Organization or Group for which Volunteer or Community Service Work Was Performed during the Past Year 96

Table 108. Voting Behavior and Political Participation 97

Table 109. Political Beliefs and Party Identification: Midwest Study Compared with Add Health Study 97

Table 110. Mentoring Relationships 98

Table 111. Life Satisfaction 100

Table 112. Optimism 100

Table 113. Future Expectations 101

Table 114. Life Orientation 101

Table 115. Mastery 102

Table 116. Self-Esteem 102

Table 117. Connectedness 103

Introduction

For most young people, the transition to adulthood is a gradual process (Furstenberg, Rumbaut, & Settersten, 2005). Many continue to receive financial and emotional support from their parents or other family members well past age 18. This is in stark contrast to the situation confronting youth in foster care. Too old for the child welfare system, but often not yet prepared to live as independent young adults, the approximately 28,000 foster youth who "age out" of care each year (U.S. Department of Health and Human Services, 2011) are expected to make it on their own long before the vast majority of their peers.

The federal government has recognized the need to help prepare foster youth for this transition to adulthood since Title IV-E of the Social Security Act was amended in 1986 to create the Independent Living Program. For the first time, states received funds specifically intended to provide their foster youth with independent living services. Federal support for foster youth making the transition to adulthood was enhanced in 1999 with the creation of the John Chafee Foster Care Independence Program. This legislation doubled available funding to $140 million per year, expanded the age range deemed eligible for services, allowed states to use funds for a broader range of purposes (e.g., room and board), and granted states the option of extending Medicaid coverage for youth who age out of foster care until age 21. Vouchers for postsecondary education and training have also been added to the range of federally funded services and supports potentially available to current and former foster youth making the transition to adulthood.

More recently, there has been a fundamental shift toward greater federal responsibility for supporting foster youth during the transition to adulthood. The Fostering Connections to Success and Increasing Adoptions Act of 2008 amended Title IV-E to extend the age of Title IV-E eligibility from 18 to 21. States are now able to claim federal reimbursement for the costs of foster care maintenance payments made on behalf of Title IV-E eligible foster youth until they are 21 years old.

To qualify for reimbursement, Title IV-E eligible foster youth age 18 and older must be either completing high school or participating in an equivalent program; enrolled in postsecondary or vocational school; participating in a program or activity designed to promote or remove barriers to employment; employed for at least 80 hours per month; or incapable of doing any of these activities due to a medical condition. They can be living independently in a supervised setting as well as placed in a foster home or group care

setting, but the protections afforded to foster children under age 18 (e.g., judicial or administrative case review every 6 months) still apply. State child welfare agencies are also required to help young people develop a youth-directed transition plan during the 90 days immediately before they exit care.

This change in federal policy was informed by findings from the Midwest Evaluation of the Adult Functioning of Former Foster Youth (the "Midwest Study"), the largest longitudinal study of young people aging out of foster care and transitioning to adulthood since the passage of the John Chafee Foster Care Independence Act in 1999.

The Midwest Study: Background and Overview

The Midwest Study is a collaborative effort among the public child welfare agencies in the three participating states (Illinois, Iowa, and Wisconsin), Chapin Hall at the University of Chicago, and the University of Wisconsin Survey Center. Its purpose is to provide states with the first comprehensive view of how former foster youth are faring as they transition to adulthood since the John Chafee Foster Care Independence Act of 1999 became law. Planning for this project began in early 2001 when the public child welfare agencies in Illinois, Iowa, and Wisconsin agreed to use some of their federal Chafee funds to study the outcomes for youth who age out of care. Chapin Hall assumed primary responsibility for overseeing the project, constructing the survey instruments, analyzing the data, and preparing reports for the participating states. Each state provided Chapin Hall with a list of all youth who met the study's eligibility criteria (see below), and the University of Wisconsin Survey Center was contracted to conduct the in-person interviews.

Youth were eligible to participate in the study if they were in the care of the public child welfare agency at age 17, if they had entered care prior to their 16th birthday, and if the primary reason for their placement was not delinquency. Youth with developmental disabilities or severe mental illness that made it impossible for them to participate in the initial interviews and youth who were incarcerated or in a psychiatric hospital were excluded from participation. Youth were also ineligible to participate if they were on run or otherwise missing from their out-of-home care placement over the course of the field period for the initial interviews, or if they were in a placement out of state. The final sample of 732 included all of the Iowa and Wisconsin youth as well as two-thirds of the Illinois youth who fit the study criteria.[1]

Baseline interviews were conducted with 732, or 96 percent, of the eligible youth (63 from Iowa, 474 from Illinois, and 195 from Wisconsin) between May 2002 and March 2003. Among the reasons eligible youth were not interviewed were the care provider's refusal to participate, the youth's refusal to

[1] This was done because Illinois has a much larger out-of-home care population than either Wisconsin or Iowa.

participate, or inability to make contact with the youth. All of the youth were 17 or 18 years old when they were interviewed, and the results were reported in *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Conditions of Youth Preparing to Leave Care* (Courtney et al., 2004).

Four additional waves of survey data have since been collected (see Table 1). Eighty-two percent (*n* = 603) of the baseline sample were re-interviewed between March and December 2004 when most of the study participants were 19 years old, 81 percent (*n* = 591) were re-interviewed between March 2006 and January 2007 when nearly all of the study participants were age 21, and 82 percent (*n* = 602) were interviewed between July 2008 and April 2009 when the study participants were either 23 or 24 years old. Findings from the second, third, and fourth waves of data collection were reported in *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 19* (Courtney et al., 2005), *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 21* (Courtney et al., 2007) and *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 23 or 24* (Courtney et al., 2010).

Table 1. Data Collection and Response Rates at Waves 1 to 5

					Wave Last Interviewed			
Wave	**Dates**	***N***	**Age**	**Response Rate**	**Wave 1**	**Wave 2**	**Wave 3**	**Wave 4**
1	5/02–3/03	732	17-18	—	—	—	—	—
2	3/04–12/04	603	19	82% [a]	603	—	—	—
3	3/06–1/07	591	21	81% [b]	78	512	—	—
4	7/08–4/09	602	23-24	83% [c]	26	44	532	—
5	10/10–5/11	596	25-26	83% [d]	6	20	29	541

[a] Because one respondent had died by the 3rd wave of data collection, the response rate at wave 3 was computed based on a sample of 731.

[b] Because one respondent had died by the 3rd wave of data collection, the response rate at wave 3 was computed based on a sample of 731.

[c] Because seven respondents had died by the 4th wave of data collection, the response rate at wave 4 was computed based on a sample of 725.

[d] Because 12 respondents had died by the 5th wave of data collection, the response rate at wave 5 was computed based on a sample of 720

This report is based on the fifth wave of survey data. These data were collected between October 2010 and May 2011 from 596 of the 732 young adults who comprise the baseline sample.[2] The interviews were conducted when most of the study participants were 26 years old. Because 12 of the original study participants are known to be deceased, the response rate for wave five is 83 percent.

[2] Unless otherwise noted, any discrepancies between the sample sizes reported in the tables and the overall sample size are due to missing data on particular survey items.

Because data were collected from 91 percent of these young adults during the fourth wave of data collection, a majority had last been interviewed less than 27 months before and another quarter had been interviewed at least 27 but less than 30 months before (see Table 2). The mean length of time since their most recent interview was 29.9 months, or almost 2.5 years.

Table 2. Months Since Most Recent Interview

(*N* = 596)	**#**	**%**
Less than 24 months	135	22.7
At least 24 but less than 27 months	215	36.1
At least 27 but less than 30 months	146	24.5
At least 30 but less than 33 months	45	7.6
At least 33 but less than 36 months	0	0
At least 36 months	55	9.2

The report describes what we learned about how these young adults were faring across a variety of domains, including living arrangements, relationships with family of origin, social support, education, employment, economic well-being, receipt of government benefits, physical and mental well-being, health and mental health service utilization, sexual behaviors, pregnancy, marriage and cohabitation, parenting, and criminal justice system involvement. In some cases, results are reported separately for females and for males.

As in the earlier reports, we make comparisons between the 596 young adults in our sample of former foster youth and a nationally representative sample of 890 25- and 26-year-olds who participated in the fourth wave of the National Longitudinal Study of Adolescent Health (henceforth referred to as the "Add Health Study").[3] However, due to changes in the Add Health survey instrument between waves 3 and 4, we had comparable data for fewer outcomes than had previously been the case.

Where appropriate, we conducted tests of statistical significance. For categorical variables, we used chi squared as our test statistic and for continuous variables we used a t-statistic. All of the statistical tests were done using a significance level of $p < .05$. Unless otherwise noted, statistically significant differences are indicated by a single asterisk.

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[3] Add Health is a federally funded study designed to examine how social contexts (families, friends, peers, schools, neighborhoods, and communities) influence the health-related behaviors of adolescents and how those health-related behaviors are related to young adult outcomes. A nationally representative sample of 7th through 12th graders completed in-home interviews in 1994. These young people were interviewed a second time in 1996 and a third time in 2001–2002. A fourth wave of Add Health data was collected in 2007–2008, when study participants were 24 to 34 years old. Although the wave 1 sample included oversamples of several groups (i.e., African American youth with a college-educated parent), the 890 Add Health Study participants in our comparison group belonged to the core sample. The Add Health Study is directed by Kathleen Mullan Harris, and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill. Ronald R. Rindfuss and Barbara Entwisle assisted with the original design. The study is funded by NICHD grant P01-HD31921, which did not provide direct support for this analysis, as well as 23 other federal agencies and foundations. Information about obtaining Add Health data is available at www.icpsr.umich.edu/icpsrweb/DSDR/studies/21600.

The picture that emerges from the following chapters is disquieting, particularly if we measure the success of the young people in our study in terms of self-sufficiency during early adulthood. Across a wide range of outcome measures, including postsecondary educational attainment, employment, housing stability, public assistance receipt, and criminal justice system involvement, these former foster youth are faring poorly as a group. As we discuss in the conclusion of the report, our findings raise questions about the adequacy of current efforts to help young people make a successful transition out of foster care.

Demographic Characteristics

Most of the 596 young adults who completed an interview at wave 5 were 26 years old (mean = 26.1). As has been the case at each follow-up interview, the young women outnumbered the young men (see Table 3). Seventy percent of these young adults identified themselves as nonwhite, including 55 percent who identified themselves as African American.

Table 3. Demographic Characteristics of Study Participants Interviewed at Wave 5

(*N* = 596)	#	%
Age		
25	20	3.4
26	512	85.9
27	64	10.7
Gender		
Male	264	44.3
Female	332	55.7
Race/Ethnicity		
White	177	29.7
African American	328	55.0
Hispanic or Latino	22	3.7
Native American	5	0.8
Asian or Pacific Islander	4	0.7
Multiracial	52	8.7
Other	7	1.2
Don't know/Refused	1	0.2
State		
Illinois	375	62.9
Wisconsin	168	28.2
Iowa	53	8.9

These 596 young adults represent 81 percent of the 732 foster youth who completed a baseline interview.[4] Table 4 compares their demographic characteristics to the demographic characteristics of the full baseline sample of 732.[5] None of the differences between the young adults who were interviewed at wave 5 and the full sample was statistically significant.

Table 4. Demographic Characteristics at Baseline: Full Sample Compared with Wave 5 Sample

	Full Baseline Sample (*N* = 732)		**Wave 5 Sample (*N* = 596)**		**Sample Not Interviewed at Wave 5 (*N* = 136)**	
	#	**%**	**#**	**%**	**#**	**%**
Gender[a]						
Male	354	48.4	267	44.8	87	64.0
Female	378	51.6	329	55.2	49	36.0
Race						
White	226	30.9	190	31.9	36	26.5
African American	417	57.0	338	56.7	79	58.1
Multi-racial	71	9.7	55	9.2	16	11.8
Other	14	1.9	10	1.7	4	2.9
Don't know/ Refused	4	0.5	3	0.5	1	0.7
Hispanic Origin						
Non-Hispanic	666	91.0	546	91.6	120	88.2
Hispanic	63	8.6	47	7.9	16	11.8
Don't know	3	0.4	3	0.5	0	0.0
State						
Illinois	474	64.8	375	62.9	99	72.8
Wisconsin	195	26.6	168	28.2	27	19.9
Iowa	63	8.6	53	8.9	10	7.4

[a] Three respondents who had identified themselves as male at baseline identified themselves as female at wave 5. Because the figures in this table are based on the data collected at baseline, the gender distribution is different from the gender distribution shown in Table 3.

[4] As noted in Table 1, 12 of the 732 original respondents were deceased by wave 5.

[5] This comparison uses the race/ethnicity data collected at baseline. Seventy-six respondents identified themselves as belonging to one racial group at baseline and a different racial/ethnic group at wave 5. Twenty-two of these discrepancies can be explained by the fact that baseline survey did not give respondents the option of identifying their race as "Latino/Hispanic." Instead, a separate question was asked about ethnicity. Another 26 were respondents who had initially identified themselves as belonging to a single race but now identified themselves as multiracial. Conversely, 26 respondents who now identified themselves as belonging to one racial or ethnic group had previously identified themselves as multiracial.

Living Arrangements

Just under one-third of the young adults in the Midwest Study described themselves as living in their "own place" compared with nearly one-half of their Add Health counterparts (see Table 5). Conversely, more than one-third of the Midwest Study participants reported that they were living with a spouse or partner compared with just over one-quarter of the young adults in the Add Health Study. Although only 4 percent of the young adults in the Midwest Study were living with a biological parent, compared with 17 percent of the Add Health Study peers, 18 percent of the Midwest Study participants were living with a biological parent or other relative.

About 5 percent of the Midwest Study participants were interviewed while they were incarcerated, compared with less than 1 percent of their counterparts in the Add Health Study. All of the incarcerated young adults in the Midwest Study were male, which means that 12 percent of the young men were currently in jail or prison.

Table 5. Current Living Arrangements: Midwest Study Compared with Add Health Study

	Midwest Study (*N* = 595)		Add Health Study[a] (*N* = 890)	
	#	%	#	%
Own place	185	31.1	431	48.4
With biological parent(s)	23	3.9	153	17.2
With other relative	82	13.8	—	—
With nonrelative foster parent(s)	11	1.8	—	—
In another person's home[c]	—	—	57	6.4
With spouse/partner[b]	213	35.7	232	26.1
With a friend	26	4.4	—	—
Group quarters (e.g., dormitories; barracks)	8	1.3	7	.7
Jail or prison	31	5.2	5	.5
Homeless	8	1.3	0	0
Other	9	1.5	6	.6

[a] Add Health Study participants had fewer response options from which to choose to describe their current living arrangements than young adults in the Midwest Study. In some cases, answers to the household roster questions or the "prison interview" flag were used to determine the current living arrangements of Add Health Study participants.

[b] "In another person's home" was not one of the response option from which Midwest Study participants could choose.

[c] 122 Midwest Study participants who described themselves as living in their "own place" also reported that they were living with a spouse or a partner in response to the questions about marriage and cohabitation. Those respondents are included in the "with spouse/partner" category.

Forty-five percent of the Midwest Study participants reported that they were living with three or more other people, and only 13 percent reported living alone (see Table 6).

Table 6. Number of Other People in Household [a]

(*N* = 538)	Number of Other People		Number of Adults		Number of Children	
	#	%	#	%	#	%
Zero	69	12.8	141	26.2	210	39.0
One	96	17.8	230	42.8	116	21.6
Two	131	24.3	115	21.4	117	21.7
Three	105	19.5	33	6.1	59	11.0
Four	70	13.0	12	2.2	18	3.3
Five or more	67	12.6	7	1.4	18	3.3

[a] Respondents were not asked about the size of their household if they were currently homeless ($n = 8$), currently incarcerated ($n = 31$), living in group quarters ($n = 8$), or in a treatment facility ($n = 1$).

Thirty-seven percent of the Midwest study participants had lived in their current residence for less than one year compared with only 20 percent who had lived there for three years or more (see Table 7).

Table 7. Time in Current Residence[a]

(*N* = 537)	#	%
Less than 6 months	37	6.9
At least 6 months but less than 1 year	163	30.4
At least 1 but less than 2 years	152	28.3
At least 2 but less than 3 years	77	14.3
At least 3 but less than 4 years	35	6.5
4 years or more	73	13.6

a Data are missing for the 8 currently homeless respondents, the 31 currently incarcerated respondents, and the 20 respondents who did not know the month that they moved in.

Although only 37 percent of the Midwest study participants reported knowing most of the people in their neighborhood, nearly nine in ten reported feeling safe and two-thirds reported feeling happy living there (see Table 8).

Table 8. Perceptions of and Experiences in Neighborhood

	N	#	%
Know most people in their neighborhood	557	205	36.8
Have stopped on the street to talk with someone in their neighborhood	557	354	63.6
Believe people in their neighborhood look out for one another	484	313	64.7
Usually feels safe in their neighborhood	553	476	86.1
Feel very or somewhat happy to be living in their neighborhood	556	369	66.4

Nearly one-quarter of the Midwest Study participants reported that they had lived with one or both of their birth parents since exiting foster care and nearly one-third reported that they had lived with another relative (see Table 9). Those who had lived with a relative were most likely to have lived with a sibling.

Table 9. Ever Lived with Parent or Relative Since Exiting Foster Care

(*N* = 596)	#	%
Ever lived with one or both birth parents	128	21.5
Ever lived with former foster parents	29	4.9
Ever lived with another relative[a]	173	29.0
Aunt or uncle	74	42.8
Grandmother or grandfather	42	24.3
Brother or sister	93	53.8
Cousin	39	22.5
Other	14	8.1

[a] Some respondents reported having lived with more than one type of relative.

Only 1 percent of these young adults were interviewed while they were homeless, but 13 percent reported being homeless for at least one night since their most recent interview (see Table 10).[6] Nearly twice as many reported that they had couch surfed.[7] Thirty-one percent of the Midwest Study participants reported having couch surfed or been homeless, including 7 percent who had experienced episodes of both.

Unfortunately, repeated episodes of homelessness were not uncommon. Almost half of the Midwest Study participants who had been homeless since their most recent interview had been homeless more than once, including nearly one-quarter who had been homeless four or more times. Even more common were repeated episodes of couch surfing. Nearly 60 percent of the young adults who had couch surfed since their most recent interview had done so more than once, including 35 percent who reported at least four episodes.

Equally troubling was the amount of time some Midwest Study participants spent homeless or couch surfing. One-third of the young adults who had been homeless reported an episode of homelessness that lasted at least one month and nearly 40 percent of those who had couch surfed reported an episode of couch surfing that lasted a month or more.

Table 10. Homelessness and Couch Surfing Since Most Recent Interview [a]

	Homeless		**Couch Surfed**		**Either**	
(*N* = 588)	#	%	#	%	#	%
Ever since last interview	85	14.5	144	24.5	182	31.0
Number of times since most recent interview						
1	45	52.9	49	34.0	73	40.1
2	11	12.9	21	14.6	27	14.8
3	8	9.4	16	11.1	12	6.6
4 or more	20	23.5	51	35.4	66	36.3
Don't know	1	1.2	7	4.9	4	2.2
Longest episode of homelessness since most recent interview						
1 night	12	14.1	9	6.3	15	8.2
2 to 7 nights	25	29.4	32	22.2	40	22.0
8 to 30 nights	17	20.0	41	28.5	46	25.3
31 to 90 nights	13	15.3	30	20.8	38	20.9
More than 90 nights	16	18.8	25	17.4	36	19.8
Don't know	2	2.4	7	4.9	7	3.8

[a] The 8 respondents for whom data are missing had been incarcerated for at least two years.

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[6] If some of the 124 young adults who did complete an interview during this wave of data collection could not be located because they were homeless, homelessness would be more common among the Midwest Study participants than Table 6 suggests.

[7] Homeless was defined as "sleeping in a place where people weren't meant to sleep, or sleeping in a homeless shelter, or not having a regular residence in which to sleep." Couch surfing was defined as "moving from one temporary housing arrangement provided by friends, family or strangers to another."

Relationships with Family of Origin

Despite having been removed from home and placed in foster care, almost all of the Midwest Study participants had maintained family ties and, in many cases, those ties were quite strong. Seventy-four percent reported feeling *very close*, and another 20 percent reported feeling *somewhat close*, to at least one biological family member (see Table 11). These young people were most likely to report feeling close to their siblings and least likely to report feeling close to their fathers.

Table 11. Closeness to Biological Family Members

(*N* = 596)	#	%
Biological mother		
Very Close	161	27.0
Somewhat Close	149	25.0
Not Very Close	55	9.2
Not at All Close	115	19.3
Not living	97	16.3
Don't know if alive	17	2.9
Missing	2	0.3
Biological father		
Very Close	83	13.9
Somewhat Close	101	16.9
Not Very Close	39	6.5
Not at All Close	160	26.9
Not living	124	20.8
Don't know if alive	88	14.8
Missing	1	0.2
Grandparents		
Very Close	172	28.9
Somewhat Close	103	17.3
Not Very Close	35	5.9
Not at All Close	68	11.4
Not living	195	32.7
Don't know if alive	21	3.5
Missing	2	0.3
Siblings		
Very Close	331	55.5
Somewhat Close	145	24.3
Not Very Close	28	4.7
Not at All Close	65	10.9
No siblings	20	3.4
Don't know if alive	2	0.3
Missing	5	0.8
Close to any other relative	231	38.8

Another measure of family ties is frequency of contact. Eighty-one percent of these young adults reported having contact with a biological family member at least once a week (see Table 12). Contact was most frequent with siblings and least frequent with fathers, the same family members to whom they reported feeling the most and least close.

Table 12. Frequency of Contact with Biological Family Members

(*N* = 596)	#	%
Biological mother		
Every day	144	24.2
At least once a week but not everyday	136	22.8
At least once a month but not once a week	68	11.4
At least once a year but not once a month	51	8.5
Less than once a year	12	2.0
Never	69	11.6
Not living	97	16.3
Don't know if alive	17	2.9
Missing	2	0.3
Biological father		
Every day	44	7.4
At least once a week but not everyday	70	11.7
At least once a month but not once a week	78	13.1
At least once a year but not once a month	58	9.7
Less than once a year	20	3.4
Never	113	18.9
Not living	124	20.8
Don't know if alive	88	14.8
Missing	1	0.2
Grandparents		
Every day	73	12.2
At least once a week but not everyday	91	15.3
At least once a month but not once a week	70	11.8
At least once a year but not once a month	68	11.4
Less than once a year	35	5.9
Never	42	7.0
Not living	195	32.7
Don't know if alive	21	3.5
Missing	1	0.2
Siblings		
Every day	177	29.7
At least once a week but not everyday	187	31.3
At least once a month but not once a week	92	15.4
At least once a year but not once a month	56	9.2
Less than once a year	17	2.9
Never	42	7.1
No siblings	20	3.4
Don't know if alive	2	0.3
Missing	4	0.7

Other relative (*n* = 231)		
Every day	78	33.8
At least once a week but not everyday	94	40.7
At least once a month but not once a week	41	17.7
At least once a year but not once a month	12	5.2
Less than once a year	1	0.4
Never	5	2.2

Social Support

Social support can play an important role during the transition to adulthood. However, relatively little is known about the availability of social support among young adults who have exited foster care. We measured perceptions of social support among young adults in the Midwest Study using the Medical Outcomes Study (MOS) Social Support Survey (Sherbourne & Stewart, 1991). This 19-item measure contains subscales for four types of social support: emotional/informational, tangible, positive social interaction, and affectionate. In this sample, Cronbach's alphas were acceptable for the full measure (α= .97) and each of the subscales ($\alpha \geq .86$). For each item, respondents rate how often a specific type of support is available to them using a 5-point scale that ranges from 1 = *none of the time* to 5 = *all of the time*.

Table 13 shows the mean scores for each of the four subscales as well as for each of the individual items.[8] The mean scores for affectionate support and positive social interaction were higher than the mean scores for emotional/informational support or tangible support. The mean score across all items was 3.8, indicating that these young adults perceived themselves as having social support some or most of the time.

[8] The mean subscale scores and total score were computed for respondents with no missing values.

Table 13. Perceived Social Support

	N	Mean	SD
Emotional/Informational Support			
Someone to listen to you when you need to talk	595	3.81	1.21
Someone to give you information to help you understand a situation	595	3.86	1.16
Someone to give you good advice about a crisis	594	3.80	1.18
Someone to confide in or talk to about yourself or your problems	595	3.82	1.26
Someone to give you advice you really want	595	3.51	1.29
Someone to share your most private worries and fears with	595	3.49	1.46
Someone to turn to for suggestions for dealing with a personal problem	595	3.68	1.28
Someone who understands your problems	595	3.59	1.31
Emotional/Informational Scale Score	594	3.70	1.09
Tangible Support Items			
Someone to help you if you were confined to a bed	591	3.47	1.30
Someone to take you to the doctor	594	3.74	1.29
Someone to prepare your meals if you were unable to do it yourself	595	3.64	1.35
Someone to help you with daily chores if you were sick	593	3.58	1.34
Tangible Support Scale Score	590	3.61	1.12
Positive Social Interaction Support Items			
Someone to have a good time with	595	3.98	1.18
Someone to get together with for relaxation	595	3.75	1.34
Someone to do something enjoyable with	595	3.85	1.22
Someone to do things with to help you get your mind off things	595	3.86	1.26
Positive Social Interaction Scale Score	595	3.82	1.13
Affectionate Support Items			
Someone to show you love and affection	595	4.06	1.23
Someone to love and make you feel wanted	595	3.99	1.27
Someone who hugs you	595	3.98	1.31
Affectionate Support Scale Score	595	4.01	1.16
Total MOS Scale Score	589	3.76	1.03

We also asked these young adults about the adequacy of their social support network. In other words, did they have enough people to whom they could turn for help with different types of needs? Depending on the specific type of support, those reporting that they had enough people to whom they could turn ranged from slightly less than half to roughly two-thirds (see Table 14).

Table 14. Adequacy of Social Support Network

		Enough		Too few		No one	
	N	**#**	**%**	**#**	**%**	**#**	**%**
People to listen to you	595	379	63.7	180	30.3	36	6.1
People to help with favors	594	330	55.6	212	35.7	52	8.8
People to loan you money	594	254	42.8	238	40.1	102	17.2
People to help you meet goals	595	360	60.5	181	30.4	54	9.1

Education

The educational deficits that were observed among Midwest Study participants at each of the first four waves of data collection (Courtney, Terao, & Bost, 2004; Courtney, Dworsky, Ruth, Keller, Havlicek, & Bost, 2005; Courtney, Dworsky, Cusick, Havlicek, Perez, & Keller, 2007) have persisted into their mid-twenties. One-fifth of these 25- and 26-year-olds did not have a high school diploma or a GED (see Table 15).[9] Moreover, although 47 percent of these young adults had completed at least one year of college, only 8 percent had a postsecondary degree from either a 2- or 4-year school.

Also evident were the gender differences in educational attainment that we had observed at prior waves. Specifically, young men in the Midwest Study continued to lag behind their female counterparts. Twenty-three percent of the young men had no high school credential compared with only 17 percent of the young women. Conversely, 44 percent of the young women had completed at least one year of college compared with only one-third of the young men. Young women were also more than twice as likely as their male counterparts to have a 2- or 4-year degree.

Table 15. Highest Grade Completed by Gender

	Total (*N* = 593)		**Females (*n* = 330)**		**Males (*n* = 263)**	
	#	**%**	**#**	**%**	**#**	**%**
No high school diploma or GED[a]	118	19.9	57	17.3	61	23.2
High school diploma only	182	30.7	96	29.1	86	32.7
GED only	56	9.4	27	8.2	29	11.0
At least one year of college, but no degree	188	31.7	114	34.5	74	28.1
2-year college degree	26	4.4	18	5.5	8	3.0
4-year college degree	15	2.5	12	3.6	3	1.1
One or more years of graduate school	4	0.7	3	0.9	1	.4

[a] Includes 10 respondents (2 males and 8 females) who had received a certificate of completion.

Equally persistent was the gap in educational attainment between these young adults who aged out of foster care and their peers in the general population. Compared with their Add Health counterparts, Midwest Study participants were three times more likely *not* to have a high school diploma or GED (see Table 16). Conversely, Add Health Study participants were over six times more likely to have a postsecondary degree (46.1% vs. 7.6%), and over 11 times more likely to have a degree from a four-year school than their counterparts in the Midwest Study (36.3% vs. 3.2%).

Table 16. Highest Grade Completed: Midwest Study Compared with Add Health Study

	Midwest Study (*N* = 593)		**Add Health Study (*N* = 890)**	
	#	**%**	**#**	**%**
No high school diploma or GED[a]	118	19.9	54	6.1
High school diploma only	182	30.7	161	18.1
GED only[b]	56	9.4	34	3.8
One or more years of college, but no degree	188	31.7	231	26.0
2-year college degree	26	4.4	87	9.8
4-year college degree	15	2.5	209	23.5
One or more years of graduate school	4	0.7	114	12.8

[a] Midwest Study figure includes 10 respondents who had received a certificate of completion.

[b] Five Add Health participants who reported having a college degree were recoded as having only a high school diploma (n = 4) or having neither a high school diploma nor a GED based on their responses to other questions.

Although relatively few young adults in the Midwest Study had either a 2- or 4-year degree, 90 percent reported that "graduating from college" is something their friends expect or are impressed by (see Table 17). At the same time, only half reported that most or nearly all of their high school friends studied hard.

Table 17. Friends' Attitudes towards Education

(*N* = 596)	**#**	**%**
How would you describe your friends in high school?		
Nearly all of them studied hard in school	50	8.4
Most of them studied hard in school	255	42.8
Only a few of them studied hard in school	277	46.5
Don't know	14	2.3
Graduating from college is something my friends are		
Really impressed by	311	52.2
Something they look down on	34	5.7
Something routine and expected	227	38.1
Don't know	24	4.0

Seventeen percent of the Midwest Study participants were currently enrolled in school (see Table 18). Another 28 percent had been enrolled since their most recent interview. Two-year colleges accounted for

a majority of both the current and former enrollment. Given that 20 percent of the Add Health Study participants were currently enrolled in school, it seems unlikely that the gap in educational attainment between the young adults who aged out of foster care and their peers in the general population will close any time soon.

Table 18. Current and Prior School Enrollment

(*N* = 593)	**#**	**% of sample**	**% of enrolled**
Currently enrolled in school	102	17.2	—
Full time	57	9.6	55.9
Part-time	45	7.6	44.1
Not currently enrolled but enrolled since most recent interview	138	28.1	—
Ever enrolled since most recent interview	240	45.3	—
Type of school currently enrolled in (*n* = 102)			
GED program	11	1.9	10.8
2-year college	57	9.6	55.9
4-year college	28	4.7	27.5
Graduate school	4	0.7	3.9
Type of school formerly enrolled in (*n* = 138)			
High school	2	0.3	1.4
GED program	25	4.2	18.1
2-year college	80	13.5	58.0
4-year college	23	3.9	16.7
Graduate school	5	0.8	3.6

Midwest Study participants who were currently enrolled in college or graduate school and those who had been enrolled in college or graduate school since their most recent interview were asked about their major and their need for remediation during their first year of college (see Table 19). They were most likely to have majored in the field of nursing or health care, followed by criminal justice or business. Thirty-one percent (*n* = 54) reported that they had taken remedial courses; another 4 percent did not know.[10]

[10] Twenty-five study participants who were currently enrolled in college but who had not yet completed at least one year of school were not asked the remediation question.

Table 19. College Major [a]

(*N* = 170)	#	%
Business Administration/Accounting/Marketing/Economics/Finance	17	10.0
Education/Early Childhood Education/Child Care	14	8.2
Nursing/Health Care	33	19.4
Computer Science/ Information Technology/ Engineering	10	5.9
Social Sciences/Psychology	10	5.9
Criminal Justice/Criminology	22	12.9
Culinary Arts	5	2.9
Communication	5	2.9
Social Work	10	5.9
Other[a]	44	25.9

[a] Twenty-five study participants who were currently enrolled in college but who had not yet completed at least one year of school were not asked about their major.

[b] The following majors were reported by two or fewer respondents: agriculture, fine or performing arts, cosmetology, law and environmental studies.

These same young adults were also asked how they were paying for their education. The two most common funding sources were scholarships and loans (see Table 20). Nearly three-quarters of those currently enrolled and two-thirds of those formerly enrolled had a scholarship. Approximately two-thirds of those currently enrolled and 46 percent of those formerly enrolled had taken out student loans. Using earnings from employment was a distant third. Not surprisingly, perhaps, very few reported that their parents or other relatives were helping them pay for school.

Table 20. Ways of Paying for Postsecondary Education[a]

	Currently Enrolled (*n* = 65)[a]		Formerly Enrolled (*n* = 108)	
(*N* = 173)	#	%	#	%
Scholarships or grants	48	73.8	73	67.6
Partner/spouse	2	3.1	2	1.9
Birth parent/relative	1	1.5	4	3.7
Foster or adoptive parent	1	1.5	1	0.9
Loans	44	67.7	50	46.3
Employment	17	26.2	21	19.4
Savings	3	4.6	6	5.6
Independent living program	1	1.5	4	3.7
Education or training voucher	2	3.1	4	3.7
Other	8	12.5	4	3.7
More than one funding source	44	67.7	54	50.0

[a] Twenty-five study participants who were currently enrolled in a 2- or 4-year college but who had not yet completed at least one year of school were not asked how they were paying for their postsecondary education.

Half of the Midwest Study participants who had taken out student loans reported that they have a long way to go before their loans were paid off (see Table 21). Another 42 percent predicted that their loans would be paid off within a few years.

Table 21. Progress Paying Back Student Loans

(*N* = 93)	**#**	**%**
Not responsible for paying off any loans	2	2.2
Long way to go before my loans are paid off	47	50.5
Loans will be paid off in the next few years	39	41.9
Loans are already paid off	5	5.4

Just over one-third of the Midwest Study participants reported that they had ever dropped out of a postsecondary educational program (i.e., a vocational or technical school, a 2-year college, a 4-year college, or graduate school) (see Table 22). By far, those who dropped out were most likely to have dropped out of a 2-year school. The most common reason for dropping out (for the most recent time they dropped out if they dropped out more than once) was needing to work. However, females were more likely than males to cite childcare responsibilities and males were more likely than females to cite family emergencies.

Table 22. Dropping Out of Postsecondary Education

(*N* = 596)	#	% of sample	% of dropouts
Ever dropped out of a postsecondary educational program[a]	211[a]	35.4	—
Vocational/technical school	49	8.2	23.2
2-year college	151	25.3	71.6
4-year college	51	8.6	24.2
Graduate school	7	1.2	3.3
Type of program dropped out of most recently (*n* = 210)			
Vocational/technical school	33		15.7
2-year college	133		63.3
4-year college	35		16.7
Graduate school	2		1.0
Most recent reason for dropping out[b] (*n* = 211)			
Pregnancy	30		23.6
Child care responsibilities	78		47.0
Needed to work	129		61.1
Family emergency	46		21.8
Couldn't afford tuition and fees	93		44.1
Too many required classes were not useful	56		25.3
Some classes were too difficult	54		25.6
Returned to program most recently dropped out of (*n* = 211)	23		10.3

[a] Respondents could report dropping out of more than one type of program.

[b] Respondents could cite more than one reason for dropping out.

Midwest Study participants who were not enrolled in school were asked why they were not enrolled (see Table 23). The three most commonly cited reasons were graduating, becoming employed and becoming a parent/caring for children.

Table 23. Reason No Longer Enrolled in School[a]

(*N* = 488)	#	%
Graduated	131	26.8
Could no longer afford to attend	93	19.1
Academic difficulties	40	8.2
Lost interest in my studies	75	15.4
Became employed	127	26.0
Became a parent/caring for children	105	21.5
No transportation	41	8.4
Discouraged by significant other	6	1.2
Other	123	25.2

[a] Respondents could report more than one reason for not being enrolled.

These same young adults were also asked if any barriers were preventing them from continuing their education. Half identified at least one (see Table 24). Regardless of gender, the most commonly cited barrier, by far, was being unable to pay for school. The second most common barrier cited by young men was needing to work full time; the second most common barriers cited by young women were needing to care for children and needing to work full time.

Table 24. Barriers to Continuing Education by Gender

	Total (*N* = 488)		**Female (*n* = 260)**		**Male (*n* = 228)**	
	#	**%**	**#**	**%**	**#**	**%**
Any barrier to continuing education	245	49.9	136	52.3	109	47.8
Biggest barrier to continuing education						
Cannot pay for school	145	59.4	73	54.1	72	66.1
Need to work full time	105	42.9	64	47.1	41	37.6
Need to care for child(ren)	82	33.5	64	47.1	18	16.5
No transportation	38	15.5	19	14.0	19	17.4
Don't think any college would accept me	22	9.0	11	8.1	11	10.1
Classes near me don't fit my schedule	14	5.7	11	8.1	3	2.8
Criminal record	23	9.4	7	5.1	16	14.7
Don't know how to enroll in school	10	4.1	6	4.4	4	3.7

A majority of those who were not currently enrolled in school had given a lot of thought to returning. Most of those who had given going back to school some or a lot of thought had either seriously looked into a specific school or were planning to look at schools soon (see Table 25).

Table 25. Plans to Return to School

	#	**%**
Amount of thought given to going back to school (***n*** = 488)		
A lot of thought	288	59.0
Some thought	159	32.6
No thought at all	41	8.4
Steps taken to return to school (***n*** = 444) [a]		
Seriously looked into a specific school	196	44.1
Have not yet looked but plan on doing so soon	171	38.5
No plans to look	72	16.2
Already chosen/accepted into a school	5	1.1

[a] Three respondents who had given some or a lot of thought to going back to school did not know what steps they had taken.

Nearly 80 percent of the Midwest Study participants believed they need additional education to achieve their career goals (see Table 26).

Table 26. Education Needed to Achieve Career Goals

(*N* = 592)	Total		Currently Enrolled (*n* = 105)		Not Currently Enrolled (*n* = 487)	
	#	%	#	%	#	%
Have just the right amount of education	102	17.1	14	13.3	88	18.1
Need additional education[a]	465	78.7	90	85.7	375	77.0
Have more education than needed	25	4.2	1	1.0	24	4.9

[a] Four respondents did not know if they were currently enrolled in school.

Only 9 percent of these young adults were currently participating in a job training program; another 17 percent had received job training since their most recent interview (see Table 27). Sixty-one percent of those who had participated or were participating in job training had obtained a license or certificate.

Table 27. Receipt of Job Training

(*N* = 596)	#	%
Currently receiving	54	9.1
Received since most recent interview, but not currently receiving	101	16.9
Resulted in a certificate or license (*n* = 155)	94	60.6

A majority of those who had received job training since their most recent interview but who were not currently receiving it reported that they had graduated from their program (see Table 28). Other commonly cited reasons for no longer receiving job training were becoming employed, or becoming a parent or caring for children.

Table 28. Reason No Longer Receiving Job Training

(*N* = 101)	#	%
Graduated, received license or certificate	54	53.4
Could no longer afford to attend	7	6.9
Academic difficulties	8	7.9
Lost interest in my studies	3	3.0
Became employed	16	15.8
Became a parent or was caring for children	11	10.9
No transportation	5	5.0
Discouraged by significant other	2	2.0
Other	20	19.8

Employment and Earnings

Nearly all of the young adults in the Midwest Study reported that they had some prior work experience (see Table 29). However, only 46 percent were currently employed. This rises to 48 percent if the 31 young men who were incarcerated at the time they were interviewed are excluded. Another 25 percent were not currently employed but had worked during the past year. By comparison, 80 percent of the Add Health Study participants currently had a job.

Table 29. Employment: Midwest Study Compared with Add Health Study

	Midwest Study (*N* = 596)		**Add Health Study (*N* = 890)**		**p**
	#	**%**	**#**	**%**	
Ever held a job	557	93.6	874	98.2	
Currently employed	273	45.8	708	79.6	*
Currently employed (nonincarcerated only)	273	48.3	708	79.9	*
Not currently employed	279	46.8			
Worked within the past year [a]	141	24.7	—	—	
Last worked more than a year ago [a]	138	23.2	—	—	

[a] Add Health Study participants were asked about the year but not the month in which their last job ended so it was not possible to compute how long ago they had last worked.

Currently employed Midwest Study participants reported working a mean of 36 and a median of 40 hours per week (see Table 30). Although Add Health Study participants also worked a median of 40 hours per week if they were employed, their average workweek was nearly five and a half hours longer than the average work week of their Midwest Study counterparts.

Table 30. Hours Worked Per Week at Current Job

	Midwest Study (*N* = 273)		Add Health Study (*N* = 708)		p
	#	%	#	%	
Hours worked per week					
Less than 20 hours	22	8.1	30	4.2	
20 - 34 hours	66	24.2	73	10.3	
35 – 40	141	51.6	356	50.3	
More than 40 hours	44	16.1	249	35.2	
Mean	36.16	—	41.46	—	*
Median	40.0	—	40.0	—	

The most common reasons for working part-time (i.e., less than 35 hours per week) were being unable to find full-time work and slack work or business conditions (see Table 31). Nearly three-quarters of those who were employed part-time (*n* = 65) reported that they wanted full-time work.

Table 31. Main Reason for Working Part-Time

(*N* = 88)	#	%
Slack work or business conditions	15	17.0
Could only find part-time work	18	20.5
Seasonal work	1	1.1
Child care problems	4	4.5
Other family obligations	12	13.6
Health problems	1	1.1
School or training	13	14.8
Full time work is less than 35 hrs a week	6	6.8
Only want to work part-time	3	3.4
Other	15	17.0

Midwest Study participants who were currently employed earned a mean of $10.73 and a median of $10.00 per hour (see Table 32).[11]

[11] Add Health Study participants were not asked about their hourly wages at Wave 4.

Table 32. Hourly Wages at Current Job[a]

(*N* = 212)	#	%
Less than $8.00	26	12.3
$8.00 to $8.99	35	16.5
$9.00 to $9.99	34	16.0
$10.00 to $10.99	34	16.0
$11.00 to $11.99	21	9.9
$12.00 or more	62	29.2
Mean hourly wage	$10.73	—
Median hourly wage	$10.00	—

[a] Sixty-one currently employed respondents were either not paid by the hour (*n* = 55) or did not report their hourly wage (*n* = 6).

Almost half of the employed Midwest Study participants had been working at their current job for less than one year, but nearly one-quarter had held that job for 3 years or more (see Table 33).

Table 33. Months at Current Job[a,b]

(*N* = 270)	#	%
Less than 6 months	87	32.2
At least 6 but less than 12 months	44	16.3
At least 12 but less than 24 months	39	14.4
At least 24 but less than 36 months	34	12.6
At least 36 months	66	24.4
Mean number of months	23.5	—
Median number of months	13.3	—

[a] Three currently employed respondents did not report when they had started working at their job.

[b] Add Health only asks about the year but not the month their current job began so length of time at current job cannot be calculated.

Sixty-nine percent of those who had been working at their current job for less than one year had experienced a period of joblessness during the past 12 months (see Table 34). The mean number of months they had been jobless was 5.3.

Table 34. Joblessness during the Past Year[a]

(*N* = 131)	#	%
Currently employed, but out of work sometime during the past year	90	68.7
Length of time without a job during the past year (*n* = 90)		
None of the time	1	1.1
0 to 3 months	30	33.3
4 to 6 months	32	24.4
7 to 9 months	13	9.9
10 to 12 months	14	10.7
Mean number of months	5.3	—
Median number of months	5.0	—

[a] If working at current job for less than one year.

Seventy percent of the currently employed Midwest Study participants were eligible for at least one of eight employer-provided benefits (see Table 35). The only two benefits for which a majority was eligible were paid vacation days and health insurance. Although 52 percent of those currently employed were custodial parents, only 14 percent reported that their employer provided assistance with childcare.

Table 35. Benefits Provided by Current Employer

	Midwest Study (*n* = 273)		Add Health Study (*n* = 708)		p
	#	%	#	%	
Paid vacation days[a]	142	52	543	76.7	*
Health insurance	140	51.3	556	78.6	*
Dental insurance	132	48.4	—	—	
Paid sick days[a]	111	40.7	543	76.7	*
Family medical leave	119	43.6	—	—	
Retirement plan	106	38.8	508	71.8	*
Maternity leave	107	39.2	—	—	
Childcare	39	14.3	—	—	
Employer provides at least one	190	70.4	—	—	

[a] Add Health data reports employer provided paid vacation days and paid sick days combined.

Although most of the employed Midwest Study participants were earning less than $12 per hour and many were not receiving benefits from their employer, 69 percent reported being satisfied or extremely satisfied with their current job (see Table 36). By comparison, 78.5 percent of employed Add Health Study participants reported being satisfied or extremely satisfied with their current job.

Table 36. Job Satisfaction

	Midwest Study (*n* = 273)		Add Health Study (*n* = 708)		p
	#	%	#	%	
Satisfied or extremely satisfied	188	68.9	556	78.5	
Neither satisfied nor dissatisfied	56	20.5	103	14.5	
Dissatisfied or extremely dissatisfied	28	10.3	49	6.9	
Don't know	1	0.4	0	0.0	

There was no gender difference in the likelihood of ever having held a job (see Table 37). Although young women were more likely than young men to be currently employed, the gender difference was not quite statistically significant ($p = .053$). Excluding the young men who were currently incarcerated (11.7% of the males) from the analysis reduces the gender difference even more.

Table 37. Employment by Gender

	Females (*n* = 332)		Males (*n* = 263)		p
	#	%	#	%	
Ever held a job	312	94.0	245	93.2	
Currently employed	171	51.5	102	38.8	
Currently employed (nonincarcerated)	171	51.5	102	43.8	
Not currently employed, but worked in the last year	76	22.9	65	24.6	
Not currently employed, worked more than a year ago	69	20.8	69	26.1	

On average, employed young women in the Midwest Study worked significantly fewer hours per week and were paid less per hour than employed young men (see Table 38).

Table 38. Hours Worked Per Week and Hourly Wages at Current Job by Gender

	Females (*n* = 171)		Males (*n* = 102)		p
	#	%	#	%	
Hours worked per week					
Less than 20 hours	12	7.0	10	9.8	
20-34 hours	51	29.8	15	14.8	
35-40 hours	92	53.8	49	48.0	
More than 40 hours	16	9.4	28	27.5	
Mean hours worked per week	34.3	—	39.3	—	*
Median hours worked per week	38	—	40.0	—	
Hourly wages[a]					
Less than $8.00	17	9.9	9	8.8	
$8.00 to $8.99	26	15.2	9	8.8	
$9.00 to $9.99	24	14.0	10	9.8	
$10.00 to $10.99	18	10.5	16	15.7	
$11.00 to $11.99	11	6.4	10	9.8	
$12.00 or more	36	21.1	26	25.5	
Mean hourly wages	$10.30	—	$11.40	—	
Median hourly wages	$9.70	—	$10.00	—	

[a] Hourly wage data were missing for 22 employed males and 39 employed females who were not paid by the hour or did not report their hourly wage.

One possible explanation for the gender difference in hours worked per week is that employed young women were more likely to have parenting responsibilities than employed young men. However, and contrary to this hypothesis, employed mothers living with one or more of their children worked significantly more hours per week, on average, than nonparenting young women (i.e., not parents or parents not living with their children) (see Table 39). Also contrary to the hypothesis, employed nonparenting young women worked significantly fewer hours per week, on average, than employed nonparenting young men.

Table 39. Gender Difference in Hours Worked by Parenting Status

	Living with children		Not living with children	
	n	Mean hours worked	*n*	Mean hours worked
Male	36	42.8	66	37.3
Female	107	35.6	64	32.1

Most of the Midwest Study participants who did not currently have a job reported that they were physically able to work, and more than 90 percent of those able to work reported wanting to do so (see Table 40).

Table 40. Ability and Desire to Work if Not Currently Employed

(*N* = 322)	#	%
Able to work[a]	256	79.5
Not able to work due to a disability	21	6.5
Not able to work due to incarceration	31	9.6
Not able to work due to another reason	12	3.7
Don't know	2	0.6
Want to work if physically able (*n* = 256)	236	92.2

[a] This includes 5 men and 2 women who were currently serving in the military.

Two-thirds of those physically able to work but not currently employed had actively looked for a job during the past 4 weeks (see Table 41). Nearly all of these young adults had completed at least one job application. Other common job search activities included contacting employers, responding to help wanted signs, sending resumes, soliciting help from friends and contacting employment agencies.

Table 41. Recent Job Search Activities

(*N* = 256)	#	%
Actively sought work during the past 4 weeks	171	66.8
Type of job search activities[a] (*n* = 171)		
Completed job application	160	93.6
Contacted employers	114	66.7
Responded to a help-wanted sign	106	62.0
Solicited help from friends	103	60.2
Contacted employment agency	96	56.1
Sent resume	106	62.0
Job interview	70	40.9
Contacted school employment center	34	19.9
Attended job training	37	21.6
Other	18	10.5

[a] Respondents could report more than one job search activity.

On average, Midwest Study participants who were looking for a job had been searching for 5.3 months (see Table 42). More than 20 percent had been searching for a year or more.

Table 42. Length of Current Job Search[a]

(*N* = 157)	#	%
Less than 1 month	51	32.5
At least one but less than 6 months	64	40.8
At least 6 but less than 12 months	16	10.2
At least 12 but less than 24 months	24	15.3
At least 24 months	9	5.7
Mean length of current job search	5.3	—
Median length of current job search	2	—

[a] Seven respondents did not report the length of their job search.

Income

Seventy percent of the young adults in the Midwest Study reported having any income from employment during the past year compared with 94 percent of their Add Health counterparts (see Table 43). Moreover, when Midwest Study participants did have any income from employment, they had earned significantly less than their Add Health Study peers. In fact, the difference in median annual earnings between the groups was more than $18,000.

Table 43. Earnings during the Past Year: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study[c]			p
	N	#	%	*N*	#	%	
Any income from employment during the past year [a]	580	408	70.3	881	824	93.5	*
Amount of income from employment (if any)[b]	408			824			
$5,000 or less		155	38.0		63	7.6	
$5,001 to $10,000		67	16.4		66	8.0	
$10,001 to $25,000		102	25.0		240	29.1	
$25,001 to $50,000		70	17.2		341	41.4	
More than $50,000		10	2.5		104	12.6	
Missing		4	1.0		10	1.2	
Mean		$ 13,989			$32,312		*
Standard Deviation		$ 15,413			$36,277		
Median		$ 8,950			$27,310		

[a]The 14 respondents who had been incarcerated for at least one year were not asked the income questions

[b] Midpoint of categories was used in the calculation of means, medians, and standard deviations if an income range rather than a specific value was reported.

[c] Because the data were collected in 2007 and 2008, Add Health Study participant earnings were adjusted for inflation using the CPI. The values shown are in 2010 real dollars.

Many of these young adults reported income from sources other than their own employment. Nearly two-thirds of those who were married or cohabiting reported income from their spouse or partner's employment and more than half of those who had earnings from their own or a spouse or partner's

employment reported income from the EITC (see Table 44).[12] By contrast, only 9 percent of those who were the custodial parent of a child whose other parent lived elsewhere reported receiving any child support.

Table 44. Income from Other Sources during the Past Year

	N	#	%
Any income from spouse's employment past year[a]	225	146	64.9
Any income from child support during the past year[b]	119	11	9.2
Any income from the EITC during the past year[c]	403	210	52.1
Reason did not receive the EITC	190		
Not eligible		82	43.2
Not aware		50	26.3
Other		58	30.5
Received money from a family member	595	156	26.2
Received money from a friend	595	101	17.0
Received money from a social service agency	595	5	0.8

[a] Limited to young adults who were currently married or cohabiting. Eight married or cohabiting respondents did not answer this question.

[b] Limited to young adults who were with the custodial parent of at least one child whose other parent was not in the household.

[c] Limited to young adults who had earnings from their own or their spouse's employment. Sixteen respondents who had earnings from their own or their spouse's employment did not know the answer to this question.

Asset accumulation is especially important for young people aging out of foster care who are less likely than other young adults to be able to depend on their parents or other family members for financial support in times of need. However, less than half of the Midwest Study participants reported having a checking or savings account (see Table 45). About the same percentage owned a motor vehicle and only 9 percent owned a home compared with 30 percent of their Add Health Study peers.

Table 45. Asset Accumulation: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	N	#	%	*N*	#	%	
Any savings/checking account	593	277	46.7	—	—	—	
Owns a vehicle	595	288	48.4	—	—	—	
Owns a residence[a]	564	53	9.4	889	271	30.4	*

[a] Midwest Study respondents who were incarcerated were not asked this question.

[12] Although most EITC recipients are parents, very-low-income workers with no children are also eligible for a much smaller EITC.

Not only did many of the Midwest Study participants lack assets, but in addition, they often had incurred debt. Although only 12 percent reported borrowing at least $200 from family or friends, more than one-third reported having other debt, excluding student, home, or auto loans (see Table 46).

Table 46. Debts

	N	#	%
Borrowed at least $200 from relative or friend since most recent interview[a]	594	70	11.8
Any other outstanding debts	593	211	35.6

[a] Does not include money borrowed for school or to purchase a home

Economic Hardships

The precarious economic situation faced by many of these young adults was also reflected in the material hardships they reported. Forty-five percent reported experiencing at least one of five material hardships during the past year compared with fewer than one-fifth of their Add Health Study peers (see Table 47). However, both samples were most likely to report "not having enough money to pay a utility bill." Midwest Study participants reported a mean of 2.4 hardships; their Add Health Study peers reported a mean of 1.7.

Table 47. Economic Hardships during the Past Year: Midwest Study Compared with Add Health Study

	Midwest Study[a]			**Add Health Study**			**p**
	N	**#**	**%**	***N***	**#**	**%**	
Not enough money to pay rent	581	162	27.9	886	52	5.9	*
Not enough money to pay utility bill	582	183	31.4	888	116	13.1	*
Gas or electricity shut off	582	78	13.4	889	37	4.2	*
Phone service disconnected[b]	582	166	28.5	890	72	8.1	*
Evicted	582	60	10.3	889	7	0.8	*
At least one hardship	581	269	45.1	890	164	18.4	*
Mean number of hardships	2.4			1.7			*

[a] The 14 respondents who had been incarcerated for at least one year were not asked the economic hardship questions.

[b] Add Health Study participants were asked if they had been without phone service for any reason.

Another indicator of economic hardship is food insecurity. Food insecurity was measured using a set of 19 items, including 15 items taken from the USDA's measure of food insecurity (Bickel, Nord, Price, Hamilton, & Cook, 2000). Approximately one-quarter of these young adults put off paying a bill in order to buy food and nearly as many received emergency food from a pantry (see Table 48).

Table 48. Non-USDA Measures of Food Insecurity[a]

	N	#	%
Got food or borrowed money for food from friends or family	581	120	20.7
Put off paying a bill to buy food	582	150	25.8
Received emergency food from a pantry	581	134	23.1
Received a meal from a soup kitchen	582	37	6.4

[a] The 14 respondents who had been incarcerated for at least one year were not asked the food security questions.

The 19-item USDA food insecurity measure was developed by researchers at the National Center for Health Statistics in collaboration with Abt Associates, Inc. (Blumberg, Bialostosky, Hamilton, & Briefel, 1999). All of the Midwest Study participants were asked the first 11 items. The other 8 items were only asked if the respondent was a parent living with at least one child.

Two items (i.e., "worried about running out of food" and "food didn't last and could not afford more") were responded to affirmatively by at least one-third of the Midwest Study participants (see Table 49). Another two (i.e., "could not afford to eat balanced means" and "relied on only a few kinds of low-cost food to feed children") received affirmative responses from at least one-fifth.

Table 49. USDA Measures of Food Insecurity[a]

	N	#	%
All households			
Sometimes or often not enough food in the household during the past month[b]	580	38	6.6
Sometimes or often worried about running out of food	581	221	38.0
Sometimes or often food didn't last and could not afford more	581	198	34.1
Sometimes or often could not afford to eat balanced meals	581	125	21.5
Cut size of meals because could not afford more	581	89	15.3
Cut size of meals almost every month	581	15	2.6
Not enough money for food so didn't eat as much as should have	581	101	17.4
Hungry but didn't eat because could not afford food	582	85	14.6
Lost weight because didn't have enough food	582	42	7.2
Not enough money for food so didn't eat for a whole day	581	29	5.0
Didn't eat for a whole day almost every month	581	2	0.3
Households with children[c]			
Sometimes or often relied on only a few kinds of low-cost food to feed children	254	61	24.0
Sometimes or often couldn't feed my children a balanced meal	254	24	9.4
Sometimes or often couldn't afford enough food so children didn't eat	254	6	2.4
Cut the size of children's meals because there was not enough money for food	254	8	3.1
Children skipped meals because there was not enough money for food	254	1	0.4
Children skipped meals almost every month	254	0	0.0
Couldn't afford more food so children went hungry	254	2	0.8
Not enough money for food so children didn't eat for a whole day	254	1	0.4

[a] The 14 respondents who had been incarcerated for at least one year were not asked the food security questions.

[b] The first item is a screener and not used to compute the composite food security score.

[c] Twenty-five respondents with at least one resident child were not asked the food insecurity questions due to a problem with the programming of the survey instrument.

The first 11 items were used to compute a food insecurity composite score for young adults who were not parents or young adults who were parents but not living with any of their children. These items plus eight additional items were used to compute a food insecurity composite score for young adults who were parents living with at least one child. Based on the number of affirmative responses that they gave, 28 percent of the young adults with no resident children and one-quarter of the young adults with at least one resident child would be categorized as having low or very low food security (see Table 50).

Table 50. Food Insecurity Scale Scores for Households With and Without Children

	# of affirmative responses	***n***	**%**
*Households with no resident child present (**N = 317**)*			
High food security	Zero	159	50.2
Marginal food security	One or two	56	17.7
Low food security	Three to five	42	13.2
Very low food security	Six or more	46	14.5
*Households with at least one resident child (**N = 279**)*			
High food security	Zero	142	50.9
Marginal food security	One or two	67	24.0
Low food security	Three to seven	56	20.1
Very low food security	Eight or more	14	5.0

Receipt of Government Benefits

Many of the young adults in the Midwest Study had relied on government benefits to help support themselves during the past year.[13] Food stamp receipt was especially common. Two-thirds of the young women and 42 percent of the young men reported that they had been food stamp recipients.

Where gender differences were found, young women were more likely than young men to report receiving benefits. During the past year, three-quarters of the young women compared with less than half of the young men had received benefits from at least one means-tested program (i.e., TANF, Food Stamps, SSI, WIC or housing assistance) (see Table 51). Among custodial parents, 86 percent of mothers compared with only 40 percent of fathers received benefits from one or more means-tested programs during the past year.

[13] Comparable data were not collected from Add Health Study participants. They were only asked if any member of their household had received government benefits over a period of several years.

Table 51. Receipt of Government Benefits during the Past Year by Gender[a]

	Females			Males			p
	n	#	%	*n*	#	%	
Unemployment Insurance	332	43	13.0	250	38	15.2	
Supplemental Security Income (SSI)	332	55	16.6	250	29	11.6	
Food Stamps	332	225	67.8	249	104	41.8	*
Public Housing/Rental Assistance	332	48	14.5	250	6	2.4	*
TANF[b]	217	42	19.4	62	1	1.6	*
Supplemental Nutrition Program for Women, Infants and Children (WIC)[c]	217	96	34.4	—	—	—	
Any means-tested program	332	254	76.5	250	119	47.6	*
Any means-tested program except WIC	332	241	72.6	250	119	47.6	*
Any means-tested program (custodial parents only)	217	188	86.6	62	25	40.3	*
Any means-tested program except WIC (custodial parents only)	217	177	81.6	62	25	40.3	*

[a] The 13 respondents who had been incarcerated for at least one year were not asked about government benefit receipt.

[b] Only custodial parents were asked about TANF receipt.

[c] Only female custodial parents were asked about receipt of WIC.

Gender differences were also observed when these young adults were asked about their current receipt of government benefits. Seventy-one percent of the young women compared with 40 percent of the young men were receiving benefits from one or more means-tested programs (see Table 52).[14] Among custodial parents, 77 percent of the mothers but less than one-third of the fathers were receiving benefits from at least one means-tested program.

[14] It is not surprising that almost all of the young adults who had received SSI during the past year were currently receiving SSI because individuals must have a "physical or mental impairment that keeps [them] from performing any 'substantial' work and is expected to last 12 months" in order to qualify (Social Security Administration, 2001).

Table 52. Current Receipt of Government Benefits by Gender[a]

	Females			Males			p
	n	#	%	*n*	#	%	
Unemployment insurance	332	21	6.3	232	11	4.7	
Supplemental Security Income (SSI)	332	54	16.3	232	27	11.6	
Food stamps	332	208	62.7	232	79	34.1	*
Public housing/rental assistance	332	36	10.8	232	3	1.3	*
TANF[b]	217	24	11.1	62	0	0.0	*
Supplemental Nutrition Program for Women, Infants and Children (WIC)[c]	217	78	28.0	—	—	—	
Any means-tested program	332	238	71.7	232	93	40.1	*
Any means-tested program except WIC	332	226	68.1	232	93	40.1	*
Any means-tested program (custodial parents only)	217	178	82.0	59	18	30.5	*
Any means-tested program except WIC (custodial parents only)	217	168	77.4	59	18	30.5	*

[a] The 31 respondents who identified as currently incarcerated were not asked about government benefit receipt.

[b] Only custodial parents were asked about TANF receipt.

[c] Only female custodial parents were asked about receipt of WIC.

Physical Health and Access to Health Care Services

More than four-fifths of the Midwest Study participants described their health as *good* to *excellent* and fewer than one in five reported having a chronic health condition (see Table 53). However, they were twice as likely as their Add Health counterparts to describe their health as fair or poor and nearly twice as likely to report that a health condition or disability limits their daily activities.

Table 53. Physical Health Status: Midwest Study Compared with Add Health Study

	Midwest Study (*N* = 596)		**Add Health Study (*N* = 890)**		**p**
	#	**%**	**#**	**%**	
Description of general health					*
Excellent	154	25.8	165	18.5	
Very good	175	29.4	357	40.1	
Good	161	27.0	291	32.7	
Fair	93	15.6	67	7.5	
Poor	13	2.2	10	1.1	
Any chronic medical condition	91	15.3			
Health condition or disability limits daily activities[a]	88	14.8	72	8.1	*

[a] Add Health Study participants were asked whether any health condition limits their ability to engage in moderate activities.

Twelve percent of the Midwest Study participants reported having at least one of eight health conditions or disabilities that limit their daily activities (see Table 54). Attention deficit hyperactive disorder and asthma were the most common health conditions or disabilities they reported having. Only 7 percent reported that they were currently taking medication or receiving treatment for their health condition or disability.

Table 54. Physical and Mental Health Conditions by Gender

	Total (*N* = 596)		Males (*n* = 264)		Females (*n* = 332)		p
	#	%	#	%	#	%	
Epilepsy	10	1.7	3	1.1	7	2.1	
High cholesterol/lipids	6	1.0	4	1.5	2	0.6	
High blood pressure/hypertension	27	4.5	13	4.9	14	4.2	
Diabetes/high blood sugar	5	0.8	1	0.4	4	1.2	
Asthma/reactive airways disease	37	6.2	14	5.3	23	6.9	
Eating disorder	12	2.0	3	1.1	9	2.7	
Attention deficit hyperactive disorder	42	7.0	21	8.0	21	6.3	
Polycystic ovarian syndrome/irregular, heavy, or absent periods	13	2.2	—	—	13	3.9	
Any of the above	70	11.7	27	10.2	43	13.0	
Two or more of the above	28	4.7	9	3.4	19	5.7	
Developed condition in past year	12	2.0	6	2.3	6	1.8	
Took prescription medication in past year	63	10.6	22	8.3	41	12.3	
Currently takes daily medications or receives treatment for medical condition	43	7.2	13	4.9	30	9.0	

Over half of the Midwest Study participants reported at least one emergency room visit during the past year, and one-fifth reported being hospitalized at least once (see Table 55). The reasons cited for their most recent hospitalization varied by gender. Young women were most likely to cite pregnancy or illness; young men were most likely to cite injuries or accidents.

Table 55. Emergency Room Visits and Hospitalizations during the Past Year

	N	#	%
Number of ER visits during the past year	595		
0		290	48.7
1		130	21.8
2 or more		175	29.4
Number of hospitalizations during the past year	596		
0		472	79.2
1		81	13.6
2 or more		43	7.2
Reason for most recent hospitalization	122		
Illness		40	32.8
Injury or accident		17	13.9
Alcohol or other drug problem		1	0.8
Emotional or mental health problem		12	9.8
Pregnancy-related		36	29.5
Other		16	13.1

Nearly 6 in 10 Midwest Study participants reported having health insurance, and almost half reported having insurance for dental care (see Table 56). Approximately two-thirds of the young adults who had health insurance, and just over 60 percent of those who had dental insurance were covered by a government program (e.g., Medicaid or S-CHIP).

Young adults in the Midwest Study were significantly less likely to report having health insurance than their Add Health counterparts. Moreover, among those young adults who did have health insurance, Midwest Study participants were more likely than their Add Health counterparts to report be covered by Medicaid and less likely than their Add Health counterparts to report being covered by insurance provided by an employer.

Table 56. Insurance Coverage: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	N	#	%	*N*	#	%	
Has health insurance	596	347	58.7	890	700	78.0	*
Source of health insurance	347			701			
Parents' insurance		4	1.2		14	2.0	
Spouse's insurance		22	6.3		75	10.7	
Employer provided insurance		70	20.2		465[a]	66.3	*
School provided insurance		3	0.9		26	3.7	
Purchase own private insurance		4	1.2		27	3.9	
Medicaid or medical assistance		165	47.6		66	9.4	*
State Children's Health Insurance Program (S-CHIP)		68	19.6		—	—	
Other		11	3.2		16	2.3	
Don't know type of insurance		0	0		12	1.7	
Has dental insurance	589	279	47.4		—	—	
Source of dental insurance	279			—			
Parents' insurance		1	0.4		—	—	
Spouse's insurance		23	8.2		—	—	
Employer provided insurance		77	27.6		—	—	
School provided insurance		2	0.7		—	—	
Purchase own private insurance		2	0.7		—	—	
Medicaid or medical assistance		124	44.4		—	—	
State Children's Health Insurance Program (S-CHIP)		45	16.1		—	—	
Other		5	1.8		—	—	

[a] This includes 11 respondents who had health insurance through their union.

Approximately two-thirds of the young adults in the Midwest Study reported having had a physical exam during the past year (see Table 57). Although this is very similar to what their Add Health counterparts reported, their Add Health counterparts were more likely to have reported having had a dental exam.

Only 13 percent of the Midwest Study participants reported not receiving medical care when needed during the past year, compared with one-quarter of the young adults in the Add Health Study.[15] Midwest Study participants who did not receive treatment cited the cost of care and not having insurance as the primary reasons. Nearly one-fifth of the Midwest Study participants reported not receiving dental care when needed during the past year. Again, the main reasons cited for not receiving treatment were not having insurance and the cost of care.

[15] Midwest Study participants who currently had insurance could still cite lack of insurance as a reason for not receiving care during the past year.

Table 57. Access to Health Care: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	N	#	%	*N*	#	%	
Last physical exam	596			870			
Less than a year ago		384	64.4		550	63.2	
1 to 2 years ago		109	18.3		138	15.9	
More than 2 years ago		102	17.1		182	20.9	
Missing or don't know		1	0.2	—	—	—	
Did not receive needed medical care	596	76	12.8	889	225	25.3	*
Reason(s) did not receive medical care	76						
Didn't know where to go		9	11.8		—	—	
Cost too much		41	53.9		—	—	
No transportation		11	14.5		—	—	
Hours were inconvenient		6	7.9		—	—	
Would lose pay for missing work		9	11.8		—	—	
No insurance		45	59.2		—	—	
Other		17	22.4		—	—	
Last dental exam[a]	595			890			*
Less than a year ago		265	44.5		481	54.0	
1 to 2 years ago		137	23.0			46.0	
More than 2 years ago		193	32.4				
Don't know		1	0.1				
Did not receive needed dental care	596	116	19.5		—	—	
Reason(s) did not receive dental care	116						
Didn't know where to go		20	17.2		—	—	
Cost too much		75	64.7		—	—	
No transportation		10	8.6		—	—	
Hours were inconvenient		6	5.2		—	—	
Would lose pay for missing work		10	8.6		—	—	
No insurance		63	54.8		—	—	
Other		17	14.7		—	—	

[a] Add Health participants were only asked if they had had a dental exam during the past year.

Mental Health: Symptoms and Service Utilization

Mental Health Symptoms

Midwest Study participants were asked a series of questions taken from the World Health Organization's (1998) 12-month version of the Composite International Diagnostic Interview (CIDI). The CIDI is a highly structured interview, designed for use by nonclinicians, that generates psychiatric diagnoses according to the criteria listed in the fourth edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

Each psychiatric diagnosis has its own module. Rather than administering the entire 12-month version of the CIDI, we selected questions from the modules used to diagnosis social phobia, depression, post-traumatic stress disorder, and substance use disorders. In addition, instead of asking all of the questions in each module, we selected questions pertaining to specific symptoms of each disorder.

Social Phobia

Over one-third of the Midwest Study participants reported having experienced unusually strong fears of social situations during the past year (see Table 58). Just half of those who had experienced unusually strong fears of social situations also reported avoiding the situations that they feared.

Table 58. Symptoms of Social Phobia during the Past Year

(*N* = 591)	Had an unusually strong fear of the situation		Often avoided the feared situation[a]	
	#	%	#	%
Eating or drinking where someone could watch you	26	4.4	17	65.4
Talking to people because you might have nothing to say or might sound foolish	90	15.2	47	52.2
Writing while someone watches	40	6.8	19	47.5
Taking part or speaking in a meeting or class	101	17.1	55	54.5
Going to a party or other social outing	74	12.5	46	62.2
Giving a speech or speaking in public	130	22.0	69	53.1
At least one of the above	205	34.7	106	51.7

[a] Of respondents who had a fear of the situation.

Compared to young men, young women were more likely to report having at least one unusually strong fear of a social situation (see Table 59). They were also more likely to report having unusually strong fears of two particular situations: taking part or speaking in a meeting or class and giving a speech or

speaking in public. However, no significant gender differences were found in the percentage who reported that they avoided any of the social situations that they had feared.

Table 59. Symptoms of Social Phobia during the Past Year by Gender

	Had an unusually strong fear of the situation					Often avoided the feared situation[a]				
	Males (*n* = 262)		Females (*n* = 329)		p	Males (*n* = 74)		Females (*n* = 105)		p
	#	%	#	%		#	%	#	%	
Eating or drinking where you could be watched	7	2.7	19	5.8		3	4.1	14	13.3	
Talking to people because you might have nothing to say or might sound foolish	33	12.5	57	17.3		19	25.7	28	26.7	
Writing while someone watches	13	4.9	27	8.2		5	6.8	14	13.3	
Taking part or speaking in a meeting or class	34	12.9	67	20.4	*	18	24.3	37	35.2	
Going to a party or other social outing	34	12.9	40	12.2		19	25.7	27	25.7	
Giving a speech or speaking in public	45	17.1	85	25.8	*	23	31.1	46	43.8	
At least one of the above	82	31.2	129	39.2	*	36	45.0	70	66.7	

[a] If respondent had a fear of the situation.

Thirty percent of the Midwest Study participants reported that they had often avoided social situations where they could be the center of attention during the past year (see Table 60). Nearly half of those who had often avoided social situations did so because they might show anxiety or act in a way that could be humiliating. Almost as many had been very upset with themselves because of their fear, and females were more likely to have been very upset with themselves than males.

Table 60. Symptoms Associated with Social Avoidance during the Past Year by Gender

	Total (*N* = 591)		Males (*n* = 262)		Females (*n* = 329)		p
	#	%	#	%	#	%	
Often avoided situations with potential to be center of attention	179	30.3	74	28.2	105	31.9	
	(*n* = 179)		(*n* = 74)		(*n* = 105)		
Fear of situation where one might show anxiety or act in a humiliating way	83	46.4	30	40.5	53	50.5	
Excessive fear of situation with potential to be center of attention	62	34.4	21	28.0	41	39.0	
Unreasonable fear of situation with potential to be center of attention	62	34.4	22	29.3	40	38.1	
Very upset with self for fearing situations with potential to be center of attention	79	43.9	26	34.7	53	50.5	*
Fear of situations with potential to be center of attention interfered with life or activities a lot	36	19.9	12	16.0	24	22.6	

Depression

Nearly one in four Midwest study participants reported having experienced at least 2 weeks of feeling sad, empty or depressed for most of the day during the past year, and more than one in five reported having lost interest in most activities they usually enjoy (see Table 61). Approximately 6 percent reported thinking about suicide within the past 12 months, including 2 percent who reported attempting suicide. Compared to males, females were more likely to report feeling sad, empty, or depressed for most of the day and more likely to report losing interest in activities they usually enjoyed.

Table 61. Symptoms of Depression during the Past Year by Gender

	Total (N = 592)		Male (n = 263)		Female (n = 329)		p
	#	%	#	%	#	%	
Felt sad, empty, or depressed for most of the day for two weeks or longer	141	23.8	50	19.0	91	27.7	*
Told a doctor about feeling sad, empty, or depressed	51	36.2	10	20.0	41	45.1	*
Told other professional about feeling sad, empty, or depressed	27	19.1	8	16.0	19	20.9	
Took medication more than once for feeling sad, empty, or depressed	40	28.4	9	18.0	31	34.1	*
Feeling sad, empty, or depressed interfered with life or activities a lot	78	55.3	26	52.0	52	57.1	
Lost interest in work, hobbies, or other things you usually enjoyed for 2 weeks or longer	123	20.8	49	18.6	74	22.5	
Told a doctor about loss of interest in most things	39	31.7	6	12.2	33	44.6	*
Told other professional about loss of interest in most things	20	16.3	6	12.2	14	18.9	*
Took medication more than once for loss of interest in most things	32	26.0	6	12.2	26	35.1	*
Loss of interest in most things interfered with life or activities a lot	66	53.7	22	44.9	44	59.5	*
Felt so low you thought a lot about committing suicide	36	6.1	13	4.9	23	7.0	
Made a plan as to how you might do it	17	48.6	5	38.5	12	54.5	
Attempted suicide	13	37.1	4	30.8	9	40.9	

Posttraumatic Stress Disorder (PTSD)

Over 60 percent of the Midwest Study participants reported being exposed to at least one of nine specific types of traumatic events over the course of their lifetime (see Table 62). The traumatic events they were most likely to report being exposed to were sexual molestation, witnessing someone being badly injured or killed, and being seriously physically attacked or assaulted. An additional 17 percent reported being exposed to some other extremely stressful or upsetting event not specifically mentioned. The average age at time of first exposure was 16 years old.

Although males were as likely as females to report being exposed to at least one of the nine traumatic events, females were younger, on average, than males when their first exposure occurred (14.3 vs. 17.8

years old). We did find gender differences in the types of events to which study participants were exposed. Males were more likely to report being involved in a life-threatening accident; witnessing someone being badly injured or killed; being seriously physically attacked or assaulted; being threatened with a weapon, held captive, or kidnapped; and having direct combat experience in a war. Conversely, females were more likely than males to report being sexually molested or raped.

Three-quarters of the Midwest Study participants who were exposed to at least one of the nine extremely stressful or upsetting events reported feeling terrified and helpless when the event occurred, and females were significantly more likely than males to report feeling helpless and terrified.

Table 62. Exposure to Traumatic Events by Gender

	Total (*N* = 592)		**Male (*n* = 263)**		**Female (*n* = 329)**		**p**
	#	**%**	**#**	**%**	**#**	**%**	
Ever had direct combat experience in a war	10	1.7	9	3.4	1	0.3	*
Ever involved in a life-threatening accident	96	16.2	63	24.0	33	10.0	*
Ever involved in a fire, flood or other natural disaster	85	14.4	41	15.6	44	13.4	
Ever witnessed someone being badly injured or killed	158	26.7	102	38.8	56	17.0	*
Ever raped	100	18.7	17	6.5	93	28.6	*
Ever sexually molested	167	28.5	28	10.7	139	42.9	*
Ever seriously physically attacked or assaulted	129	21.9	69	26.2	60	18.3	*
Ever threatened with a weapon, held captive, or kidnapped	114	19.3	66	25.1	48	14.6	*
Ever tortured or the victim of terrorists	3	0.5	2	0.8	1	0.3	
Exposed to any of the above	347	58.6	149	56.7	198	60.2	
Exposed to more than one of the above	255	73.5	114	76.5	141	71.2	
Mean number of events exposed to (SD)	2.86 (1.7)		3.05 (1.8)		2.72 (1.67)		
Mean age at first exposure (SD)	15.6 (7.3)		17.7 (6.9)		14.1 (7.2)		*
Felt terrified when event happened[a]	261	75.2	96	64.4	165	83.3	*
Felt helpless when event happened[a]	278	80.1	107	71.8	171	86.4	*
Suffered great shock because an extremely stressful or upsetting event happened to someone close	123	20.8	41	15.6	44	13.4	

[a] If exposed to at least one event.

Among those who had been exposed to more than one type of traumatic event, females were more likely than males to identify rape or molestation as the most stressful whereas males were more likely than females to identify witnessing someone being badly injured or killed as the most stressful (see Table 63).

Table 63. Most Stressful Traumatic Event Experienced by Gender[a]

	Total (*N* = 255)		Male (*n* = 114)		Female (*n* = 141)		p
	#	%	#	%	#	%	
Direct combat experienced in a war	7	2.7	6	5.3	1	0.7	
Involved in a life-threatening accident	18	7.1	12	10.5	6	4.3	
Involved in a fire, flood or other natural disaster	10	3.9	4	3.5	6	4.3	
Witnessed someone being badly injured or killed	36	14.1	23	20.2	13	9.2	*
Raped	46	18.0	5	4.4	41	29.1	*
Sexually molested	40	15.7	7	6.1	33	23.4	*
Experienced serious physical attack or assault	13	5.1	7	6.1	6	4.3	
Threatened with a weapon, held captive, or kidnapped	18	7.1	12	10.5	6	4.3	
Tortured or victim of terrorists	0	0	0	0	0	0	
Suffered a great shock because a traumatic event happened to someone close to you.	33	12.9	19	16.7	14	9.9	
Exposure to another traumatic event	34	13.3	19	16.7	15	10.6	

[a] Among respondents who experienced more than one type of traumatic event.

Nearly 60 percent of the Midwest Study participants who were exposed to an extremely stressful or upsetting event reported experiencing at least one negative cognitive, emotional, or physical symptom during the past 12 months when reminded of the event (see Table 64). Those who experienced at least one negative cognitive, emotional, or physical symptom were most likely to report being much more concerned about danger or being more careful and deliberately trying not to think or talk about the event. No significant gender differences in PTSD symptoms were observed.

Table 64. PTSD Symptoms during the Past Year by Gender

	Total (*N* = 347)		Males (*n* = 149)		Females (*n* = 198)		p
	#	%	#	%	#	%	
Kept remembering the incident despite not wanting to	156	45.0	67	45.0	89	44.9	
Kept having bad dreams or nightmares	72	20.8	29	19.5	43	21.8	
Acted or felt as though the incident was happening again	55	15.9	17	11.4	38	19.2	*
Got very upset when reminded of the incident	141	40.6	58	38.9	83	41.9	
Sweated, heart beat fast, or trembled if reminded of incident	93	26.9	36	24.2	57	28.7	
Any of the above	200	57.6	84	56.4	116	58.6	
	(*N* = 200)[a]		(*n* = 84)[a]		(*n* = 116)[a]		
Had trouble sleeping	106	53.0	46	54.8	60	51.7	
Felt unusually irritable or lost your temper	115	57.5	49	58.3	66	56.9	
Had difficulty concentrating	115	57.5	45	53.6	70	60.3	
Much more concerned about danger or much more careful	144	72.0	60	71.4	84	72.4	
Jumpy or easily startled by ordinary noises or movements	64	32.0	26	31.0	38	32.8	
Deliberately tried not to think or talk about the incident	131	65.8	51	60.7	80	69.0	
Avoided places, people or activities that might be reminders of the incident	100	50.0	38	45.2	62	53.4	
Memory blank for all or part of the time	47	23.5	18	21.4	29	25.0	
Less interested in doing things that were once important	79	39.5	37	44.0	42	36.2	
Felt more isolated or distant from other people	87	43.5	42	50.0	45	38.8	
Had difficulty experiencing normal feelings	58	29.0	30	35.7	28	24.1	
Felt that there was no point in thinking about the future	41	20.5	22	26.2	19	16.4	

[a] Respondents were only asked about the second set of symptoms if they reported having at least one of the first five.

Alcohol Use

Fifty-six percent of the Midwest Study participants reported consuming at least 12 alcoholic beverages during the past year (see Table 65). Seventeen percent of those respondents reported drinking on 3 or more days each week. On average, those who had at least 12 drinks during the past year consumed 5 drinks in a single day. Males were more likely than females to report having at least 12 alcoholic beverages during the past year, but no gender difference in the frequency of drinking was observed among those who had consumed at least 12 alcoholic beverages.

Table 65. Alcohol Use during the Past Year by Gender

	Total (*N* = 592)		Males (*n* = 263)		Females (*n* = 329)		p
	#	%	#	%	#	%	
Had at least 12 drinks of any alcoholic beverage	330	55.7	164	62.4	176	53.5	*
Frequency of having at least one drink							
Almost everyday	19	5.8	11	6.7	8	4.6	
3-4 days a week	37	11.2	24	14.6	13	7.4	
1-2 days a week	79	23.9	40	24.4	39	22.2	
1-3 days a month	108	32.7	45	27.4	63	35.8	
Less than once a month	96	29.1	44	26.8	52	29.5	
Average number of drinks in single day (SD)	4.9 (5.8)		5.6 (6.9)		4.2 (4.5)		

Sixteen percent of those who reported having at least 12 drinks during the past year met the DSM-IV criteria for alcohol abuse and 13 percent met the criteria for alcohol dependence.[16] The most common symptom of alcohol abuse was often being under the influence of alcohol in potentially harmful situations. The two most common symptoms of dependence were having had more to drink than intended and wanting to stop or cut down on drinking.

Several gender differences in the symptoms of alcohol abuse or dependence were observed. Compared to females, males were significantly more likely to report being arrested due to alcohol intoxication, wanting to cut back or quit drinking, and having to drink more alcohol to get the same effect (see Table 66). Compared to males, females were significantly more likely to report wanting a drink so badly they couldn't think of anything else.

[16] An individual meets the DSM-IV criteria for alcohol abuse if he or she experiences *at least one* of the following over a 12-month period: (1) recurrent use resulting in failure to fulfill major role obligation at work, home, or school; (2) recurrent use in physically hazardous situations; (3) recurrent alcohol related legal problems; or (4) continued use despite persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol. An individual meets to the criteria for alcohol dependence if he or she experiences *at least three* of the following over a 12-month period: (1) tolerance; (2) withdrawal; (3) alcohol consumed in larger amounts or over longer periods than intended; (4) persistent desire or repeated unsuccessful attempts to cut down or control use; (5) a great deal of time is spent obtaining, using, and recovering from the effects of alcohol; (6) important social, occupational, or recreational activities given up or reduced; or (7) continued use despite knowledge of persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol (APA, 1994).

Table 66. Symptoms of Alcohol Abuse and Dependence during the Past Year by Gender

	Total (*N* = 339)		Males (*n* = 164)		Females (*n* = 175)		p
	#	%	#	%	#	%	
Symptoms of abuse							
Drinking or being hung over frequently interfered with work at school, job, or home	20	5.9	11	6.7	9	5.1	
Frequently got into physical fights while drinking	21	6.2	13	7.9	8	4.6	
Drinking frequently caused trouble between you and a family member or friend	24	7.1	13	7.9	11	6.3	
Arrested for disturbing the peace or driving while under the influence	13	3.8	11	6.7	2	1.1	*
Often under the influence of alcohol in situations where you could get hurt	28	8.3	16	9.8	12	6.9	
Experienced at least one of the above	53	15.6	29	17.7	24	13.7	
Symptoms of dependence							
Had to drink much more than before to get the desired effect	34	10.0	17	10.4	17	9.7	
Same amount of alcohol had less effect than it once did	18	5.3	13	7.9	5	3.2	*
Had to drink due to a strong desire or urge to drink	26	7.7	14	8.5	12	6.9	
Couldn't think of anything else due to wanting a drink so badly	8	2.4	1	0.7	7	4.3	*
Often had more to drink than intended	114	33.6	61	37.2	56	32.0	
Often kept drinking much longer than intended	12	3.5	5	3.0	7	5.7	
Wanted to stop or cut down on drinking	89	26.3	56	34.1	33	18.9	*
Spent a great deal of time drinking or getting over its effects	27	8.0	15	9.2	12	6.9	
Gave up or greatly reduced important activities due to drinking	15	4.4	9	5.5	6	3.4	
Experienced at least three of the above	44	13.0	26	15.9	18	10.3	

Substance Use

Twenty-five percent of the Midwest Study participants reported using any of a long list of substances during the past year, with marijuana being the most commonly used by far (see Table 67). Males were more likely than females to report any substance use, primarily because they were almost twice as likely to report using marijuana. No other significant gender differences in substance use were observed.

Table 67. Substance Use during the Past Year by Gender

Drug Class	Total (*N* = 592) #	Total (*N* = 592) %	Males (*n* = 263) #	Males (*n* = 263) %	Females (*n* = 329) #	Females (*n* = 329) %	p
Marijuana (Marijuana, Hashish, Bhang, Ganja)	132	22.2	79	30.0	53	16.1	*
Stimulants (Amphetamines, Khat, Betel nut)	3	0.5	2	0.8	1	0.3	
Sedatives (Tranquilizers, Sleeping pills, Barbiturates, Seconal, Valium, Librium, Xanax, Quaaldudes)	20	3.4	8	3.0	12	3.6	
Opioids (Heroin, Codeine, Demerol, Morphine, Percodan, Methadone, Darvon, Opium, Dilaudid)	9	1.5	1	0.4	8	2.4	
Cocaine (Cocaine, Crack, Coca Leaves)	6	1.0	3	1.1	3	0.9	
PCP	2	0.3	2	0.8	0	0	
Psychedelics (LSD, Mescaline, Peyote, Psilocybin, DMT)	1	0.2	1	0.4	0	0	
Inhalants/Solvents (Glue, Toluene, Gasoline)	0	0	0	0	0	0	
Any of the above	146	24.6	81	30.7	65	19.6	*

Nearly 23 percent of the Midwest Study participants who reported using drugs during the past year met the DSM-IV criteria for substance abuse and 20 percent met the criteria for substance dependence.[17] The most common symptom of substance abuse was drug use leading to problems with the police. The two most common symptoms of substance dependence were wanting to stop or cut down on drug use and experiencing withdrawal symptoms.

Significant gender differences in symptoms of drug abuse and dependence were observed. Males were much more likely than females to report problems with the police due to drugs and three times more likely to report that drugs were causing significant problems in their lives (see Table 68).

[17] An individual meets the DSM-IV criteria for substance abuse if he or she experiences *at least one* of the following over a 12-month period: (1) recurrent use resulting in failure to fulfill major role obligation at work, home, or school; (2) recurrent use in physically hazardous situations; (3) recurrent substance related legal problems; and (4) continued use despite persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance. An individual meets the DSM-IV criteria for substance dependence if he or she experiences *at least three* of the following over a 12 month period: (1) tolerance; (2) withdrawal; (3) substance used in larger amounts or over longer periods than intended; (4) persistent desire or repeated unsuccessful attempts to cut down or control substance use; (5) a great deal of time spent on obtaining, using, or recovering from the effects of the substance; (6) important social, occupational, or recreational activities given up or reduced; and (7) continued use despite knowledge of a persistent physical or psychological problem that is likely to have been caused or exacerbated by the substance (APA, 1994).

Table 68. Symptoms of Substance Abuse or Dependence during the Past Year by Gender

	Total (*N* = 151)		Males (*n* = 83)		Females (*n* = 68)		p
	#	%	#	%	#	%	
Symptoms of abuse							
Drug use frequently interfered with work at school, job, or home	9	6.0	8	9.6	1	1.5	
Use of drugs ever led to problems with your family, friends, at work, or at school	12	7.9	9	10.8	3	4.4	
Drug use ever led to problems with the police	17	11.3	16	19.3	1	1.5	*
Used drugs in situations where you could get hurt	14	9.3	10	12.0	4	5.9	
Experienced at least one of the above	34	22.5	27	32.5	7	10.3	*
Symptoms of dependence							
Had to use much more drugs than before to get the desired effect	20	13.2	12	14.5	8	11.8	
Same amount of drugs had less effect than it once did	22	14.6	16	19.3	6	8.9	
Had to use drugs due to a strong desire or urge to use	17	11.3	10	12.0	7	10.3	
Couldn't think of anything else due to wanting drugs so badly	10	6.7	6	7.2	4	5.9	
Wanted to stop or cut down on drug use	50	33.1	33	39.8	17	25.0	
Spent a great deal of time using drugs, getting them, or getting over their effects	11	7.3	9	10.8	2	2.9	
Used more drugs or used drugs for much longer periods than intended	11	7.3	7	8.4	4	5.9	
Often found it difficult to stop using drugs before becoming intoxicated or high	11	73	3	3.6	8	11.8	
Experienced withdrawal symptoms within a few hours or days of stopping or cutting down on drug use	37	24.5	19	22.9	18	26.5	
Used drugs just like it to keep from having any of these problem	11	7.3	6	7.2	5	7.4	
Medical problems as a result of using drugs	2	1.3	0	0	2	2.9	
Experienced at least 3 of the above	30	19.9	19	22.9	11	16.2	

Mental Health Service Utilization

One in five Midwest Study participants reported receiving mental or behavioral health care services during the past year, with psychotropic medication being the most common and substance use treatment being the least common (see Table 69). Twelve percent reported receiving psychological or emotional counseling, which means that they were about as likely to report receiving counseling as their Add Health

Study peers (11.3%).[18] Five percent reported being hospitalized for mental health problems since their last interview.

Young women were significantly more likely to have received psychological or emotional counseling and medication for emotional problems than young men. Four percent of these young adults reported not receiving mental health care when they needed it during the past year. The most frequently cited reasons for not receiving mental health care were similar to the most frequently cited reasons for not receiving physical health care: treatment being too expensive and not having insurance.

Table 69. Mental and Behavioral Health Care Services Utilization

	Total			**Males**			**Females**			**p**
	N	**#**	**%**	***n***	**#**	**%**	***n***	**#**	**%**	
Received psychological or emotional counseling[a]	595	71	11.9	263	23	8.8	332	48	14.5	*
Received substance use treatment[a]	596	25	4.2	264	15	5.7	332	10	3.0	
Received medication for emotional problems[a]	595	86	14.5	263	24	9.1	332	62	18.7	*
Any of the above	596	116	19.5	263	40	15.2	332	76	22.9	
Hospitalized for mental health problems[b]	595	30	5.0	263	8	3.0	332	22	6.6	
Timing of most recent mental health related hospitalization[b]	29			8			21			
Within the past 3 months		11	37.9		1	12.5		10	47.6	
4 to 6 months ago		5	17.2		2	25.0		3	14.3	
7 to 9 months ago		5	17.2		1	12.5		4	19.0	
10 to 12 months ago		2	6.9		1	12.5		1	4.8	
> 1 but < 2 years ago		4	13.8		2	25.0		2	9.5	
At least 2 years ago		2	6.9		1	12.5		1	4.8	
Did not receive mental health care[a]	596	22	3.7	264	13	4.9	332	9	2.7	
Reason didn't receive care[b]	22			13			9			
Didn't know where to go		4	18.2		1	77		3	33.3	
Cost too much		8	36.4		6	46.2		2	22.2	
No transportation		3	13.6		2	15.4		1	11.1	
Hours were inconvenient		5	22.7		2	15.4		3	33.3	
No insurance		5	22.7		4	30.8		1	11.1	
Other		8	36.4		5	38.5		3	33.3	

[a] In the past year

[b] Since most recent interview

[18] The Add Health Study asked about receipt of emotional or psychological counseling during the past 12 months, but not about substance use treatment, psychotropic medications, or psychiatric hospitalizations.

Marriage, Cohabitation, and Relationships

Thirty-eight percent of the 25- and 26-year-old young women and 37 percent of the 25- and 26-year-old young men in the Midwest Study were either married or cohabiting (i.e., living with a partner in a marriage-like relationship) compared to 57 percent and 47 percent, respectively, of their Add Health counterparts (see Table 70). Not only were the Midwest Study participants less likely to be currently married or cohabiting than the young women and young men in Add Health, but they were also less likely to ever have been married.

Although nearly all of the married Add Health Study participants were living with their spouse, more than one-third of the married young women and 14 percent of the married young men in the Midwest Study were not.

Table 70. Marriage and Cohabitation by Gender: Midwest Study Compared with Add Health Study

	Midwest Study				**Add Health Study**			
	Female ***n*** **= 332**		**Male** ***n*** **= 264**		**Female** ***n*** **= 508**		**Male** ***n*** **= 382**	
	#	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Ever married (A, B)	73	22.0	49	18.6	181	35.6	108	28.3
Currently married (A, B)	60	18.1	42	15.9	157	30.9	91	23.8
Currently living with spouse[a] (A, B)	39	11.7	36	13.6	148	29.1	84	22.0
Currently cohabiting (A, B)	67	20.2	57	21.6	135	26.6	92	24.0
Either married or cohabiting (A, B)	127	38.3	98	37.1	288	56.7	180	47.1
Very important to marry someday (if never married)	105	31.6	92	34.8	—	—	—	—

[a] Household roster data were used to determine the number of Add Health Study participants who were living with a spouse.

A = Statistically significant difference between Midwest Study and Add Health Study males

B = Statistically significant difference between Midwest Study and Add Health Study females

Regardless of gender, nearly one-third of the young adults in the Midwest Study who were neither married nor cohabiting were involved in a relationship, and a majority of those young adults were dating one partner exclusively (see Table 71).

Table 71. Other Intimate Partner Relationships by Gender

	Females (*n* = 332)		**Males (*n* = 264)**	
	#	**%**	**#**	**%**
Currently involved in a relationship	108	32.5	81	30.7
Type of relationship				
Dating exclusively	82	75.9	53	65.4
Dating frequently	14	13.0	16	19.8
Dating once in a while	9	8.3	7	8.6
Only having sex	3	2.8	4	4.9
Don't know	0	0.0	1	1.2

The revised *Conflict Tactics Scale* (CTS2) is commonly used to measure how dating, cohabiting, or marital partners deal with conflict. (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The 39 pairs of items represent five subscales: negotiation, psychological aggression, physical assault, sexual coercion, and partner-inflicted physical injury. One item in each pair asks about the frequency with which the respondent has engaged in a particular behavior towards his or her partner; the other asks about the frequency with which the partner has engaged in that behavior towards the respondent.

Midwest Study participants who were currently married, living with a partner, or in a dating relationship were asked to respond to four pairs of items, with one pair representing each subscale except negotiation. These items were either modified versions or composites of several items from the CTS2. They were the only CTS2 items included in the most recent version of the Add Health survey instrument.

Approximately 20 percent of the young women and 17 percent of the young men who had a dating, cohabiting, or marital partner reported that their partner had engaged in one or more of the four behaviors towards them (see Table 72). Conversely, 21 percent of the young women and 10 percent of the young men reported that they had engaged in one or more of the four behaviors towards their partner.

Although intimate partner violence is often thought of as something that is perpetrated by young men against young women, the young women in the Midwest Study were more than twice as likely as young men to report that they had been a perpetrator. This gender difference should be interpreted with caution both because the complete CTS2 scale was not administered and because all of the items that were used

involved "minor" acts. A different result may have been observed if more items or items involving "severe" acts had been used.[19]

Table 72. Intimate Partner Violence by Gender

	Females			Males			p
	N	#	%	*N*	#	%	
Partner							
Threatened you with violence, pushed or shoved you, or threw something at you that could hurt	217	38	17.5	165	20	12.1	
Slapped, hit, or kicked you	216	24	11.1	166	20	12.0	
Made you have sexual relations	216	9	4.2	165	6	3.6	
Caused you to have an injury, such as a sprain, bruise, or cut	216	16	7.4	166	13	7.8	
Any of the above [a]	216	43	19.9	164	27	16.5	
Respondent							
Threatened your partner with violence, pushed or shoved your partner, or threw something at your partner that could hurt	216	35	16.2	166	10	6.0	*
Slapped, hit, or kicked your partner	216	33	15.3	166	8	4.8	*
Made your partner have sexual relations	216	3	1.4	166	7	4.2	
Caused your partner to have an injury such as a sprain, bruise, or cut	216	7	3.2	166	6	3.6	
Any of the above [a]	216	45	20.8	165	17	10.2	*

[a] Based only on respondents who answered all four questions.

Young women in the Midwest Study were more likely to report both that their partner had slapped, hit, or kicked them and that they had slapped, hit, or kicked their partner than their Add Health counterparts (see Table 73).

[19] Strauss et al. (1996) characterize 4 of the 8 pairs of psychological aggression items, 7 of the 12 pairs of physical assault items, 4 of the 8 pairs of sexual coercion items, and 4 of the 6 pairs of physical injury items as involving "severe" acts. All of the other items are characterized as involving "minor" acts, except for the six negotiation items, which are not characterized.

Table 73. Intimate Partner Violence: Midwest Study Compared with Add Health Study Females

	Midwest Study			Add Health Study			p
	N	#	%	*N*	#	%	
Partner							
Threatened you with violence, pushed or shoved you, or threw something at you that could hurt	217	38	17.5	489	61	12.5	
Slapped, hit, or kicked you	216	24	11.1	491	21	4.3	*
Made you have sexual relations	216	9	4.2	490	16	3.3	
Any of the above [a]	216	42	19.4	489	73	14.9	*
Respondent							
Threatened your partner with violence, pushed or shoved your partner, or threw something at your partner that could hurt	216	35	16.2	489	59	12.1	
Slapped, hit, or kicked your partner	216	33	15.3	489	40	8.2	*
Made your partner have sexual relations	216	3	1.4	489	4	0.8	
Any of the above [a]	216	44	20.4	491	70	14.3	*

[a] Based only on respondents who answered all three questions.

[a] Add Health Study participants were asked about their current (or most recent) partner. Also, they were only asked to respond to the physical injury item if they answered affirmatively to the "slapped, hit or kicked" item.

Although young men in the Midwest Study were as likely as their Add Health counterparts to report that they had engaged in any of these behaviors against their partner, the former were less likely to report that their partner had engaged in any of these behaviors against them (see Table 74).

Table 74. Intimate Partner Violence: Midwest Study Compared with Add Health Study Males

	Midwest Study			Add Health Study[a]			p
	N	#	%	*N*	#	%	
Partner							
Threatened you with violence, pushed or shoved you, or threw something at you that could hurt	165	20	12.1	371	67	18.1	
Slapped, hit, or kicked you	166	20	12.0	371	56	15.1	
Made you have sexual relations	165	6	3.6	371	25	6.7	
Any of the above[b]	164	27	16.5	370	94	25.4	*
Respondent							
Threatened your partner with violence, pushed or shoved your partner, or threw something at your partner that could hurt	166	10	6.0	370	21	5.7	
Slapped, hit, or kicked your partner	166	8	4.8	370	15	4.1	
Made your partner have sexual relations	166	7	4.2	370	21	5.7	
Any of the above[b]	166	16	9.6	370	42	11.4	

[a] Add Health Study participants were asked about their current (or most recent) partner. Also, they were only asked to respond to the physical injury item if they answered affirmatively to the ”slapped, hit, or kicked” item.

[b]Based only on respondents who answered all three questions

Sexual Orientation, Sexual Behaviors, and Sexually Transmitted Infections

Although most Midwest Study participants identified themselves as 100 percent heterosexual, young women were more likely than young men to identify themselves as something else (see Table 75). In particular, young women were over five times more likely to identify themselves as bisexual or mostly heterosexual as young men.

Table 75. Sexual Orientation[a]

	Female (*n* = 321)		**Male (*n* = 251)**		**p**
	#	%	#	%	
100% heterosexual	233	72.6	233	92.8	*
Mostly heterosexual	41	12.8	8	3.2	*
Bisexual	22	6.9	1	0.4	*
Mostly homosexual	3	0.9	1	0.4	
100% homosexual	9	2.8	3	1.2	
Not sexually attracted to either gender	6	1.9	2	0.8	
Don't know	7	2.2	3	1.2	

[a] Three males and two females did not answer any of the questions about sexual behavior because they skipped the ACASI section of the interview. Another young woman broke off the interview after answering the first question about sexual behavior (i.e., "Have you ever had sexual intercourse?"). Five males and three females who either refused to answer or did not know the answer to the first question about sexual behavior were not asked any of the subsequent sexual behavior questions. Data were also missing for five males and five females who refused to answer the question about sexual orientation.

Young adults in the Midwest Study were as likely to describe themselves as 100 percent heterosexual as their Add Health counterparts (see Table 76). However, young women in the Midwest Study were less likely than young women in the Add Health Study to describe themselves as mostly heterosexual.

Table 76. Sexual Orientation: Midwest Study Compared with Add Health Study by Gender

	Females				p	Males				p
	Midwest Study (*n* = 321)[a]		Add Health Study (*n* = 507)[b]			Midwest Study (*n* = 251)[a]		Add Health Study (*n* = 381)[b]		
	#	%	#	%		#	%	#	%	
100% heterosexual	233	72.6	369	72.8		233	92.8	359	94.2	
Mostly heterosexual	41	12.8	99	19.5	*	8	3.2	10	2.6	
Bisexual	22	6.9	22	4.3		1	0.4	2	0.5	
Mostly homosexual	3	0.9	7	1.4		1	0.4	5	1.3	
100% homosexual	9	2.8	8	1.6		3	1.2	5	1.3	
Not sexually attracted to either gender	6	1.9	2	0.4		2	0.8	0	0.0	
Do not know	7	2.2	0	0.0		3	1.2	0	0.0	

[a] Three males and two females did not answer any of the questions about sexual behavior because they skipped the ACASI section of the interview. Another young woman broke off the interview after answering the first question about sexual behavior (i.e., "Have you ever had sexual intercourse?"). Five males and three females who either refused to answer or did not know the answer to the first question about sexual behavior were not asked any of the subsequent sexual behavior questions. Data were also missing for five males and five females who refused to answer the question about sexual orientation.

[b] One young man and one female in the Add Health Study refused to answer the sexual orientation question.

Almost all of the Midwest Study participants reported ever having had sexual intercourse, and most of these young adults had been sexually active during the past year (see Table 77). Although young women were as likely as young men to have had sexual intercourse, they did report having fewer sexual partners. Young women and young men also reported similar rates of birth control and condom use but an alarming percentage of these young adults were having unprotected sex.

Young women were nearly three times more likely than young men to report having a partner who had a sexually transmitted infection (STI) during the past year. Although relatively few of these young adults reported being paid by someone or paying someone to have sex, young men were significantly more likely to report paying someone to have sex than young women.

Table 77. Sexual Behavior by Gender

	Females			Males			p
	N	#	%	*N*	#	%	
Ever had sexual intercourse[a]	327	307	93.9	256	245	95.7	
Number of partners ever[b]	252			194			*
One or two		79	31.3		44	22.7	
Three or four		52	20.6		31	16.0	
Five or more		121	48.0		119	61.3	
Had sexual intercourse during the past year[c,d]	293	270	92.2	222	204	91.9	

Number of partners during the past year[e]	259			198			*
One or two		226	87.3		131	66.2	
Three or four		27	10.4		30	15.2	
Five or more		6	2.3		37	18.7	
Used birth control							
All or most of the time during the past year[f]	253	140	55.3	193	103	53.4	
At time of most recent sexual intercourse[g]	255	140	54.9	200	107	53.5	
Used a condom							
All or most of the time during the past year[h]	257	105	40.8	194	86	44.3	
At time of most recent sexual intercourse[i]	258	104	40.3	202	84	41.6	
Any sexual partner had an STI during the past year[j]	252	36	14.3	195	10	5.1	*
Ever paid *by* someone to have sex[k]	300	27	9.0	244	22	9.0	
Paid *by* someone to have sex during the past year[l]	267	7	2.6	205	6	2.9	
Ever paid someone to have sex[m]	303	2	0.7	243	13	5.3	*
Paid someone to have sex during the past year[n]	269	1	0.4	205	6	2.9	*
Ever had sex with injection drug user[o]	302	7	2.3	243	1	0.4	
Had sex with an injection drug user during the past year[p]	267	2	0.7	205	0	0.0	

[a] Three males and two females did not answer any questions about sexual behavior because they skipped the ACASI section of the interview. One female broke off the interview after answering the first question (i.e., "Have you ever had sexual intercourse?") Five males and three females who either refused to answer or did not know the answer to the first sexual behavior question were not asked any of the subsequent questions.

[b] Four males and 4 females who answered *yes* to "Have you ever had sexual intercourse?" reported no sexual partners. Data were missing for 19 males and 35 females who refused to answer or did not know the answer to this question and for 28 males and 16 females who were not asked this question.

[c] The 13 males who had been incarcerated for at least one year were not asked any of the questions about sexual behavior during the past 12 months.

[d] Data were missing for 8 males and 13 females who refused to answer or did not know the answer to this question, for 13 males who were had been incarcerated for at least 12 months, and for the one female who broke off the interview after answering the first sexual behavior question..

[e] Six males and 10 females who answered *yes* to "Have you had sexual intercourse during the past year?" reported no sexual partners. Data were missing for 1 male and 1 female who refused to answer or did not know the answer to this question.

[f] Data were missing for 11 males and 17 females who refused to answer or did not know the answer to this question.

[g] Data were missing for 5 males and 15 females who refused to answer or did not know the answer to this question.

[h] Data were missing for 10 males and 13 females who refused to answer or did not know the answer to this question.

[i] Data were missing for 4 males and 12 females who refused to answer or did not know the answer to this question.

[j] Data were missing for 3 males and 7 females who refused to answer or did not know the answer to this question.

[k] Data were missing for 1 male and 6 females who refused to answer or did not know the answer to this question.

[l] Data were missing for 3 females who refused to answer or did not know the answer to this question.

[m] Data were missing for 2 males and 3 females who refused to answer or did not know the answer to this question.

[n] Data were missing for 1 female who refused to answer or did not know the answer to this question.

[o] Data were missing for 4 males and 4 females who refused to answer or did not know the answer to this question.

[p] Data were missing for 3 females who refused to answer or did not know the answer to this question.

Young women in the Midwest Study were as likely to report having had sexual intercourse as their Add Health counterparts (see Table 78). However, compared with young women in the Add Health Study, young women in the Midwest Study were more likely to report having had a total of four or fewer partners and less likely to report having had a total of five or more partners since they became sexually active. Young women in the Midwest Study were also less likely to report having had anal sex.

Table 78. Young Women's Sexual Behavior: Midwest Study Compared with Add Health Study

	Midwest Study			**Add Health Study**			**p**
	n	**#**	**%**	***n***	**#**	**%**	
Ever had sexual intercourse[a,b]	327	307	93.9	506	476	93.7	
Number of partners ever[c]	252			463			*
One or two		79	31.3		111	23.9	
Three or four		52	20.6		70	15.1	
Five or more		121	48.0		282	60.9	
Had sexual intercourse during the past year[d]	293	270	92.2	463	418	90.3	
Number of partners past year[e,f]	259			436			
One or two		226	87.3		360	82.6	
Three or four		6	2.3		51	11.7	
Five or more		27	10.4		25	5.7	
Ever had anal sex	262	74	28.2	506	209	41.3	*
Ever paid by someone or paid someone to have sex[g]	304	8	2.6	437	6	1.4	

[a] Two Midwest Study females did not answer any of the questions about sexual behavior because they skipped the ACASI section of the interview. Three females who either refused to answer or did not know the answer to the first sexual behavior question were not asked any of the subsequent questions. Another broke off the interview after answering the first question about sexual behavior (i.e., "Have you ever had sexual intercourse?")

[b] Add Health Study females were asked specifically about vaginal sex and the number of partners they ever had vaginal sex with. Midwest Study females had been asked specifically about vaginal sex at prior waves of data collection and so they may have answered the question as if they were being asked about vaginal sex.

[c] Four Midwest Study females who answered *yes* to "Have you ever had sexual intercourse?" reported that they had had no sexual partners. Data were missing for 35 females who refused to answer or did not know the answer to this question and for 16 females who were not asked this question.

[d] Data were missing for 13 Midwest Study females who refused to answer or did not know the answer to this question and for the one female who broke off the interview after answering the first sexual behavior question.

[e] Midwest Study females were asked about the total number of sexual partners they had had during the past year whereas Add Health Study females were asked one question about male sexual partners and one about female sexual partners.

[f] Ten Midwest Study females who answered *yes* to "Have you had sexual intercourse during the past year?" reported that they had had no sexual partners. Data were missing for1 female who refused to answer or did not know the answer to this question.

[g] The Midwest Study survey instrument contained one question about being paid by someone to have sex and the another about paying someone to have sex. The Add Health Study survey instrument combined these two events into a single question.

Young men in the Midwest Study were as likely as their Add Health counterparts to report having had sexual intercourse (see Table 79). However, they were less likely to report having had a total of five or more partners both during the past year and since they became sexually active. Compared with young men in the Add Health Study, young men in the Midwest Study were also less likely to report having had anal sex.

Table 79. Young Men's Sexual Behavior: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	N	#	%	*N*	#	%	
Ever had sexual intercourse[a,b]	256	245	95.7	380	359	94.5	
Number of sexual partners ever[c]	194			333			*
One or two		44	22.7		56	16.8	
Three or four		31	16.0		41	12.3	
Five or more		119	61.3		236	70.9	
Had sexual intercourse during the past year[d]	222	204	91.9	348	326	93.7	
Number of sexual partners during the past year[e,f]	197			331			*
One or two		130	66.6		241	72.8	
Three or four		30	15.2		49	14.8	
Five or more		37	18.8		41	12.4	
Ever had anal sex	204	34	16.7	378	168	44.4	*
Paid by someone or paid someone to have sex[g]	244	10	4.1	331	13	3.9	

[a] Three Midwest Study males did not answer any of the questions about sexual behavior because they skipped the ACASI section of the interview. Five males who either refused to answer or did not know the answer to the first sexual behavior question were not asked any of the subsequent questions.

[b] Add Health Study males were asked specifically about vaginal sex and the number of partners they ever had vaginal sex with. Midwest Study males had been asked specifically about vaginal sex at prior waves of data collection and so they may have answered the question as if they were being asked about vaginal sex.

[c] Four Midwest Study males who answered *yes* to "Have you ever had sexual intercourse?" reported that they had had no sexual partners. Data were missing for 19 males who refused to answer or did not know the answer to this question and for 28 males who were not asked this question.

[d] The 13 males who had been incarcerated for at least one year were not asked about their sexual behaviors during the past 12 months.

[e] Midwest Study males were asked about the total number of sexual partners they had had during the past year whereas Add Health Study males were asked one question about male sexual partners and one about female sexual partners.

[f] Data were missing for 11 Midwest Study males who refused to answer or did not know the answer to this question.

[g] The Midwest Study survey instrument contained one question about being paid by someone to have sex and the another about paying someone to have sex. The Add Health Study survey instrument combined the two events into a single question.

Among Midwest Study participants, young women were, on average, older than young men when they first had sexual intercourse (see Table 80). Although young adults in the Midwest Study tended to be younger, on average, than their Add Health Study counterparts the first time they had sexual intercourse, only the difference between young women was statistically significant.

Table 80. Age at First Sexual Intercourse by Gender: Midwest Study Compared with Add Health Study[a]

	Female			Male		
	n	**Median**	**Mean**	***n***	**Median**	**Mean**
Midwest Study	269	16	15.7[b,c]	215	15	15.1[b]
Add Health Study	473	17	16.7[c]	351	16	16.5

[a] Midwest Study participants were asked how old they were when they first had sexual intercourse; Add Health Study participants were asked about the age at which they first had vaginal sex.

[b] Difference between mean for Midwest Study females and Midwest Study males was statistically significant at $p < .05$.

[c] Difference between mean for Midwest Study females and Add Health Study females was statistically significant at $p < .05$.

Young women in the Midwest Study were more than twice as likely their male counterparts to report ever being diagnosed with an STI (see Table 81). Regardless of gender, the three most commonly reported STIs were chlamydia, trichomoniasis, and gonorrhea.

Table 81. Sexually Transmitted Infections by Gender

	Females			Males			p
	n	**#**	**%**	***n***	**#**	**%**	
Ever been told had an STI	265	116	43.8	199	38	19.1	*
Type of STI							
Chlamydia	264	72	27.3	199	31	15.6	*
Gonorrhea	265	31	11.7	199	15	7.5	
Trichomoniasis	265	36	13.6	198	3	1.5	*
Syphilis	265	2	0.8	199	1	0.5	
Genital Herpes	265	15	5.7	198	0	0	*
Genital Warts	265	8	3.9	199	0	0	*
Human Papillomavirus (HPV)	264	23	8.7	198	1	0.5	*
Pelvic Inflammatory Disease	265	13	4.9	—			*
Cervicitis or Mucopurulent Certicitis (MPC)	265	3	1.1	—			
Urethritis	265	1	0.4	199	1	0.5	
Vaginitis	264	19	7.2	—			*
HIV or AIDS	265	2	0.8	199	0	0	
Any other STI	264	1	0.4	199	1	0.5	

Young women in the Midwest Study were almost twice as likely to report ever being diagnosed with an STI as their Add Health Study peers (see Table 82). The most commonly reported STI among Midwest Study females was chlamydia; the most commonly reported STI among their peers in Add Health was human papillomavirus (HPV).

Table 82. Sexually Transmitted Infections among Young Women: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	n	#	%	*n*	#	%	
Ever diagnosed with an STI	265	116	43.8	508	119	23.4	*
Type of STI							
Chlamydia	264	72	27.3	508	8	1.6	*
Gonorrhea	265	31	11.7	503	25	5.0	*
Trichomoniasis	265	36	13.6	503	20	4.0	*
Syphilis	265	2	0.8	503	0	0	
Genital Herpes	265	15	5.7	503	15	3.0	*
Genital Warts	265	8	3.0	503	7	1.4	*
Human Papillomavirus (HPV)	264	23	8.7	501	63	12.6	
Pelvic Inflammatory Disease	265	13	4.9	501	11	2.2	*
Cervicitis or Mucopurulent Certicitis (MPC)	264	3	1.1	501	2	0.4	*
Urethritis	264	1	0.4	501	1	0.2	
Vaginitis	263	19	7.2	501	17	3.4	*
HIV or AIDS	265	2	0.8	—	—	—	
Any other STI	264	1	0.4	501	2	0.4	

Young men in the Midwest Study were more likely than their Add Health Study peers to report ever being diagnosed with an STI (see Table 83). The most commonly reported STI among Midwest Study males was chlamydia; the most commonly reported STI among their peers in Add Health was gonorrhea.

Table 83. Sexually Transmitted Infections among Young Men: Midwest Study Compared with Add Health Study

	Midwest Study			Add Health Study			p
	n	#	%	*n*	#	%	
Ever diagnosed with an STI	207	38	18.4	381	42	11.0	*
Type of STI							
Chlamydia	199	31	15.6	381	7	1.8	*
Gonorrhea	199	15	7.5	375	11	2.9	*
Trichomoniasis	198	3	1.5	375	5	1.3	
Syphilis	199	1	0.5	376	1	0.3	
Genital Herpes	198	0	0	376	2	0.5	*
Genital Warts	199	0	0	376	7	1.9	*
Human Papilloma Virus (HPV)	198	1	0.5	372	8	2.2	
Pelvic Inflammatory Disease	207	0	0	372	0	0	*
Cervicitis or Mucopurulent Certicitis (MPC)	207	0	0	372	0	0	
Urethritis	199	1	0.5	372	0	0	
Vaginitis	207	0	0	372	1	0.3	
HIV or AIDS	199	0	0	—	—	—	
Any other STI	200	1	0.5	372	3	0.8	

Pregnancy

Nearly 80 percent of the 25- and 26-year-old young women in the Midwest Study had ever been pregnant compared with only 55 percent (***n*** = 276) of their Add Health Study counterparts (see Table 84). Nearly one-third of the young women in the Midwest Study had been pregnant before age 18, and 44 percent had been pregnant since their most recent interview.

Table 84. Young Women's Pregnancy History

	n	#	%
Ever pregnant	327	259	79.2
Ever pregnant before age 18	327	105	32.1
Ever pregnant since most recent interview[a]	325	144	44.3
Number of pregnancies since most recent interview	144		
One		105	72.9
Two or more		39	27.1

[a] Two young women either refused to answer or did not know the answer to this question.

Nearly 90 percent of the young women in the Midwest Study who had been pregnant since their last interview had received prenatal care during their most recent pregnancy compared with almost all of the peers in the Add Health Study (see Table 85). Although three-quarters of the young women in the Midwest Study who received prenatal care began doing so during their first trimester, their prenatal care was less likely to begin during the first trimester and more likely to begin during the third trimester than the prenatal care their Add Health Study counterparts received.

Compared with the young women in the Add Health Study who had been pregnant, young women in the Midwest Study who had been pregnant since their most recent interview were less likely to report using birth control, less likely to report being married to their partner, and less likely to report wanting to

become pregnant the last time they conceived.[20] In fact, nearly three-quarters of the young women in the Midwest Study reported that this last pregnancy had been unplanned compared with just over half of their peers in the Add Health Study.

Although most of the young women in both samples reported that their last pregnancy had ended in a live birth, young women in the Midwest Study were more likely to report that they were still pregnant and less likely to report that their pregnancy had been terminated than their Add Health Study counterparts.

[20] At least some of these differences may be due to differences in the wording of the questions. First, the Midwest Study question asked about birth control use at the time of conception, whereas the Add Health Study question asked about birth control use in the month before conception. Second, the Midwest Study question asked about marital status at the time of conception whereas the Add Health Study question asked about marital status at the time of birth for those whose pregnancy had ended in a live birth or about current marital status for those who were still pregnant. Third, the Midwest Study question asked about wanting to become pregnant whereas the Add Health Study question asked about wanting to have a child.

Table 85. Characteristics of Most Recent Pregnancy: Midwest Study Compared with Add Health Study[a]

	Midwest Study			Add Health Study			p
	n	#	%	*n*	#	%	
Received prenatal care [b, c]	142	124	87.3	192	187	97.4	*
Trimester first received prenatal care [d]	109			182			*
First		83	76.1		153	84.1	*
Second		12	11.0		23	12.6	
Third		14	12.8		6	3.3	*
Using birth control at time of conception[e, f]	139	22	15.8	272	66	24.3	*
Married at time of conception[g,h]	144	22	15.3	274	83	30.3	*
Definitely or probably wanted to become pregnant [i,j]	143	38	26.6	271	132	48.7	*
Outcome of pregnancy	136			273			*
Still pregnant		22	16.2		13	4.8	*
Live birth[k]		93	68.4		179	65.6	
Stillbirth or miscarriage[l]		12	8.8		39	14.3	
Abortion		9	6.6		42	15.4	*

[a] Young women in the Midwest Study were asked about the most recent pregnancy since their last interview; young women in the Add Health Study were asked about their most recent pregnancy.

[b] Two young women in the Midwest Study who had been pregnant since their most recent interview either refused to answer or did not know the answer to the question about prenatal care.

[c] Young women in the Add Health Study were not asked about prenatal care if their pregnancy had been ectopic or if it had ended in an abortion, miscarriage, or stillbirth.

[d] Fifteen young women in the Midwest Study who had been pregnant either refused to answer or did not know the answer to the question about when they first received prenatal care.

[e] Five young women in the Midwest Study who had been pregnant either refused to answer or did not know the answer to this question.

[f] Young women in the Add Health Study were asked about birth control use in the month before they became pregnant. Two young women who had conceived their child via artificial insemination were counted as not using birth control.

[g] Two young women in the Midwest Study who had been pregnant refused to answer this question.

[h] Young women in the Add Health Study whoser pregnancy had ended in a live birth were asked if they had been married at the time of birth whereas those who were still pregnant were asked if they were currently married.

[i] The 24 young women in the Midwest Study who had been married at the time of conception were not asked if they had wanted to become pregnant and two young women who had been pregnant since their most recent interview either refused to answer or did not know the answer to this question.

[j] Young women in the Add Health Study were asked if they had wanted to have a child whereas young women in the Midwest Study were asked if they had wanted to become pregnant.

[k] Six young women in the Midwest Study who had been pregnant since their most recent interview either refused to answer or did not know the answer to the question about the outcome of their pregnancy.

[l] Ectopic or tubal pregnancies reported by young women in the Add Health Study were counted as stillbirths or

miscarriages.

Two-thirds of the 25- and 26-year-old young men in the Midwest Study reported that they had ever gotten a partner pregnant compared with 39 percent (*n* = 148) of their Add Health Study peers (see Table 86). Fifteen percent of the young men in the Midwest Study had gotten a partner pregnant before age 18 and 38 percent had gotten a partner pregnant since their most recent interview. In fact, young men in the Midwest Study were about as likely to have gotten a partner pregnant *since their most recent interview* as young men in the Add Health Study to have *ever* gotten a partner pregnant.

Table 86. Pregnancy History of Young Men's Partners: Midwest Study Compared with Add Health Study

	N	**#**	**%**
Any partner ever became pregnant[a]	250	168	67.2
Number of partners who became pregnant ever	160		
1		93	58.1
2		41	25.6
3 or more		26	16.3
Any partner ever became pregnant before age 18[b]	249	37	14.9
Any partner become pregnant since last interview[c]	249	98	39.4
Number of partners who became pregnant since most recent interview	98		
1		79	80.6
2 or more		19	19.4

[a] Three young men did not answer the pregnancy questions because they did not complete the ACASI section of the interview.

[b] One young man who had ever gotten a partner pregnant did not answer this question.

[c] Four young men who had ever gotten a partner pregnant refused to answer this question.

Although most of the young men in the Midwest Study who had gotten a partner pregnant since their most recent interview reported that their last pregnant partner had received prenatal care, they were less likely to report that their partner had received prenatal care than their Add Health Study counterparts (see Table 87). They were also less likely to report that her prenatal care began during the first trimester.

Young men in the Midwest Study who had gotten a partner pregnant since their most recent interview were less likely to report that they had been married to their partner and less likely to report that they had been using birth control around the time of conception than their peers in the Add Health Study.[21] However, they were no less likely to report that they had wanted their partner to become pregnant. In

[21] At least some of these differences may be due to differences in the wording of the questions. First, the Midwest Study question asked about birth control use at the time of conception, whereas the Add Health Study asked about birth control use in the month before conception. Second, the Midwest Study question asked about marital status at the time of conception, whereas the Add Health Study question asked about marital status at the time of birth for those who reported live births and current marital status for those whose partners were still pregnant. And third, the Midwest Study question asked about wanting their partner to become pregnant whereas the Add Health Study question asked about wanting to have a child.

fact, young men in both groups reported that nearly 60 percent of their partner's pregnancies had been unplanned.

Although about two-thirds of the young men in both groups reported that their partner's most recent pregnancy had ended in a live birth, young men in Midwest study were more likely to report that their partner was still pregnant and less likely to report that their partner's pregnancy had been terminated.

Table 87. Characteristics of Most Recent Pregnancy: Males in the Midwest Study Compared with Males in the Add Health Study[a]

	Midwest Study			Add Health Study			p
	n	#	%	*n*	#	%	
Pregnant partner received prenatal care [b,c]	93	82	88.2	95	90	94.7	*
Trimester first received care [d,e]	57						
First		54	94.7	—	—	—	
Second		2	3.5		—	—	
Third		1	1.8		—	—	
Using birth control at time of conception[f,g]	95	13	13.7	144	42	29.2	*
Married to partner at time of conception[h,i]	96	17	17.7	145	33	22.8	*
Definitely or probably wanted partner to become pregnant[j,k]	96	39	40.6	144	62	43.1	
Outcome of pregnancy[l]	90			145			*
Still pregnant		12	13.3		3	2.1	*
Live birth		59	65.6		93	64.1	
Stillbirth or miscarriage [m]		12	13.3		21	14.5	
Abortion		7	7.8		28	19.3	*

[a] Young men in the Midwest Study were asked about the most recent time a partner became pregnant since their last interview; young men in the Add Health Study were asked about the most recent time a partner became pregnant.

[b] Five young men in the Midwest Study who had gotten a partner pregnant since their most recent interview either refused to answer or did not know the answer to the question about prenatal care.

[c] Young men in the Add Health Study were not asked about prenatal care if their partner's pregnancy had been ectopic or if it had ended in an abortion, miscarriage, or stillbirth.

[d] Twenty-five young women in the Midwest Study who had gotten a partner pregnant either refused to answer or did not know the answer to the question about when their partner first received prenatal care.

[e] Young men in the Add Health Study were not asked about the trimester in which their partner first received prenatal care.

[f] Three young men in the Midwest Study who had gotten a partner pregnant either refused to answer or did not know the answer to the question about their use of birth control.

[g] Young men in the Add Health Study were asked about birth control use in the month before their partner became pregnant. The partner of one young man whose child was conceived via artificial insemination was counted as not using birth control.

[h] Two young men in the Midwest Study who had gotten a partner pregnant refused to answer this question.

[i] Young men in the Add Health Study whose partner's pregnancy had ended in a live birth were asked if they had been married at the time she gave birth, whereas those whose partners were still pregnant were asked if they were currently married.

[j] The young men in the Midwest Study who had been married at the time of conception were not asked if they had wanted their partner to become pregnant and two young men who had gotten a partner pregnant either refused to answer or did not know the answer to this question.

[k] Young men in the Add Health Study were asked if they had wanted to have a child whereas young men in the Midwest Study were asked if they had wanted their partner to become pregnant.

[l] Eight young men in the Midwest Study who had gotten a partner pregnant either refused to answer or did not know the answer to the question about the outcome of her pregnancy.

[m] Ectopic or tubal pregnancies reported by young women in the Add Health Study were counted as stillbirths or miscarriages.

Parenthood

At age 25 or 26, 72 percent of the young women and 53 percent of the young men in the Midwest Study reported to be the birth parent of at least one living child (see Table 88). Sixty-five percent of the young women, or 91 percent of the mothers, but only 24 percent of the young men, or 45 percent of the fathers, reported to be living with at least one biological child. Conversely, 35 percent of the young men, or two-thirds of the fathers, but only 14 percent of the young women, or 19 percent of the mothers, reported that at least one biological child was living with someone else. All of these gender differences were statistically significant.

Table 88. Parenthood by Gender

	Female (*n* = 332)			**Male (*n* = 264)**			**p**
	#	**%**	% of parents	#	%	% of parents	
At least one living child	238	71.7	—	139	52.7	—	*
Living with any children	217	65.4	91.2	62	23.5	44.6	*
Any nonresident children	46	13.9	19.3	92	34.8	66.2	*

Young women in the Midwest Study were 1.8 times more likely than their Add Health counterparts to report being the birth mother of at least one living child (see Table 89). Although Midwest Study mothers were about as likely to as their Add Health counterparts to report living with at least one biological child, they were over six times as likely to report that at least one biological child was living with someone else.

Table 89. Motherhood: Midwest Study Compared with Add Health Study

	Midwest Study (*n* = 332)			**Add Health Study (*n* = 508)**			**p**
	#	%	% of mothers	#	%	% of mothers	
At least one living child	238	71.7	—	207	40.7	—	*
Living with any children	217	65.4	91.2	204	40.2	98.6	
Any nonresident children	46	13.9	19.3	6	1.2	2.9	*

Young men in the Midwest Study were almost twice as likely as their Add Health counterparts to report being the birth father of at least one living child (see Table 90). Compared with their Add Health counterparts, Midwest Study fathers were less likely to report living with at least one biological child and 1.8 times more likely to report that at least one biological child was living with someone else.

Table 90. Fatherhood: Midwest Study Compared with Add Health Study

	Midwest Study (*n* = 264)			Add Health Study (*n* = 382)			p
	#	%	% of fathers	#	%	% of fathers	
At least one living child	139	52.7	—	106	27.7	—	*
Living with any children	62	23.5	44.6	73	14.4	68.9	*
Any nonresident children	92	34.8	66.2	39	7.7	36.8	*

Midwest Study mothers reported having more living children, on average, than Midwest Study fathers and the average number of biological children reported to be living with Midwest Study mothers was more than double the average number of those reported to be living with fathers (see Table 91). By contrast, the average number of nonresident children reported by Midwest Study fathers was three times higher than the average number of nonresident children reported by mothers.

Birth mothers and birth fathers in the Midwest Study had more living children, on average, than their Add Health counterparts. Although Midwest Study mothers reported having about the same number of biological children living with them, on average, as mothers in the Add Health Study, Midwest Study fathers reported having significantly fewer biological children living with them than fathers in the Add Health Study. On average, both mothers and fathers in the Midwest Study also reported having more biological children living with someone else than their Add Health counterparts.

Table 91. Number of Resident and Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study

	Midwest Study				Add Health Study			
	Female		Male		Female		Male	
	#	%	#	%	#	%	#	%
Number of children	**(*n* = 238)**		**(*n* = 139)**		**(*n* = 207)**		**(*n* = 106)**	
1	74	31.1	66	47.5	98	47.3	51	48.1
2	99	41.6	42	30.2	77	37.2	43	40.6
3 or more	65	27.3	31	22.3	32	15.5	12	11.3
Mean number of children (ABC)	2.1		1.9		1.7		1.7	
Number of "resident" children	**(*n* = 238)**		**(*n* = 139)**		**(*n* = 207)**		**(*n* = 105)**	
0	21	8.8	77	55.4	3	1.4	32	30.5
1	81	34.0	44	31.7	99	47.8	39	37.1
2	90	37.8	10	7.2	74	35.7	29	27.6
3 or more	46	19.3	8	5.7	31	15.0	5	4.8
Mean number of resident children (AB)	1.8		0.7		1.7		1.1	
Number of "nonresident" children	**(*n* = 238)**		**(*n* = 139)**		**(*n* = 207)**		**(*n* = 105)**	
0	192	80.7	47	33.8	201	97.1	66	62.9
1	22	9.2	45	32.4	4	1.9	22	21.0
2 or more	24	10.1	47	33.8	2	1.0	17	16.2
Mean number of nonresident children (ABC)	0.3		1.2		0.04		0.6	

*The denominator used to compute the percentages is the number of parents.

A = Statistically significant difference between Midwest Study males and females

B = Statistically significant difference between Midwest Study and Add Health Study males

C = Statistically significant difference between Midwest Study and Add Health Study females

The children whose birth parents were in the Midwest Study were much more likely than children whose birth parents were in the Add Health Study to be living with someone other than that birth parent (see Table 92). Sixteen percent of the children whose birth mothers and 65 percent of the children whose birth fathers were in the Midwest Study were living with someone else compared with just 2 percent of the children whose birth mothers and 37 percent of the children whose birth fathers were in the Add Health Study.

Table 92. Total Number of Resident and Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study

	Midwest Study		Add Health Study	
	Female (*n* = 238)	**Male (*n* = 139)**	**Female (*n* = 207)**	**Male (*n* = 106)**
Total number of children	500	259	357	182[a]
Total number of "resident" children	419	92	349	113
Total number of "nonresident" children	81	167	8	67
Percentage of all children who are nonresident	16.2	64.5	2.2	37.2

[a] One Add Health Study father did not report whether his two biological children were living with him or with someone else.

Nonresident children of birth mothers in the Midwest Study were most likely to be living with foster or adoptive parents, whereas nonresident children of birth mothers in the Add Health Study were most likely to be living with maternal grandparents or other relatives (see Table 93). In fact, 8 percent (*n* = 42) of all children of birth mothers in the Midwest Study were living with foster or adoptive parents. The nonresident children of birth fathers in both studies were most likely to be living with their mother.

Table 93. Current Residence of All Nonresident Children by Gender of Parent: Midwest Study Compared with Add Health Study[a]

	Midwest Study				Add Health Study			
	Female (*n* = 81)		**Male (*n* = 167)**		**Female[b] (*n* = 8)**		**Male (*n* = 67)**	
	#	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Total children living with other parent (A)	17	21.8	155	93.4	0	0.0	56	87.5
Total children living with maternal grandparents or other maternal relatives	10	12.8	12	7.3	5	71.4	3	4.7
Total children living with paternal grandparents or other paternal relatives (A)	7	9.0	0	0.0	1	14.3	2	3.1
Total children living with adoptive parents (AB)	20	25.7	0	0.0	1	14.3	3	4.7
Total children living with foster parents (A)	22	28.2	6	3.6	0	0.0	0	0.0

[a] The denominator used to compute the percentages is the number of nonresident children. Some nonresident children were reported as living with both their other parent and with their maternal grandparent or other maternal relative.

[b] Due to the small size of the Add Health female sample, the statistical difference between Midwest Study females and Add Health females was not tested

A = Statistically significant difference between Midwest Study males and females

B = Statistically significant difference between Midwest Study and Add Health Study males.

In the previous 12 months, between 40 and 50 percent of all children not living with their Midwest Study parent visited with their Midwest Study parent at least once per week (see Table 94). Children of

nonresident fathers in the Midwest Study were more likely to be visited by their father than children of nonresident mothers were to be visited by their mother.

Table 94. Frequency of Visitation with All Nonresident Children during the Past Year[a]

	Female (*n* = 76)		**Male (*n* = 163)**	
	#	%	#	%
Never	22	28.9	25	15.3
Once a month or less	18	23.7	41	25.2
Two or three times per month	4	5.3	20	12.3
Weekly	22	28.9	39	23.9
Daily	10	13.2	38	23.3

[a] The denominator used to compute the percentages is the number of nonresident children.

Relatively few Midwest Study parents and even fewer Add Health Study parents reported that at any of their children had a health problem or learning disability (see Table 95). However, Midwest Study parents were significantly more likely than Add Health Study parents to report having at least one child being in fair or poor health or having a learning disability.

Table 95. Parents of Resident and Nonresident Children with Health Problems and Disabilities: Midwest Study Compared with Add Health Study

	Midwest Study			**Add Health Study**			**p**
	n	**#**	**%**	***n***	**#**	**%**	
Any child in fair or poor health	375	21	5.6	310	4	1.3	*
Any child has learning disability	370	47	12.7	310	7	2.3	*
Any child's disability limits activities	373	20	5.4				

Similarly, relatively few children of birth parents in the Midwest Study and even fewer children of birth parents in the Add Health Study were reported to have a health problem or learning disability (see Table 96). Nevertheless, children of birth parents in the Midwest Study were more likely to be in fair or poor health and more likely to have a learning disability than children of birth parents in the Add Health Study.

Table 96. Health Problems and Disabilities among Resident and Nonresident Children: Midwest Study Compared with Add Health Study

	Midwest Study			**Add Health Study**			**p**
	n	**#**	**%**	***n***	**#**	**%**	
Any child has fair or poor health	745	26	3.5	523	4	0.8	*
Any child has a learning disability	739	54	7.3	523	7	1.3	*
Any child has a disability that limits activities	748	48	6.4				

Despite having been placed in foster care, Midwest Study parents were most likely to identify their biological mothers as a source of information about parenting and as someone who had taught them how

to be a good parent (see Table 97). They were least likely to identify their caseworker or a social worker as a source of information or someone who had taught them how to be a good parent.

Table 97. Parenting Resources and Role Models

	Provided information about parenting (*n* = 359)		**Taught how to be a good parent by (*n* = 362)**	
	#	**%**	**#**	**%**
Biological mother	90	25.1	70	19.3
Biological father	12	3.3	11	3.0
Foster mother	35	9.7	55	15.2
Foster father	7	1.9	6	1.7
Grandparent	42	11.7	50	13.8
Other relative	54	15.0	51	14.1
Friend	52	14.5	22	6.1
Social worker/caseworker	4	1.1	3	0.8
Book/parenting magazine	7	1.9	8	2.2
Parenting class	9	2.5	21	5.8
Other	34	9.5	51	14.1
Refused	9	2.5	10	2.8

Midwest Study parents who were living with one or more of their biological children completed a nine-item parenting stress measure. Each item asked parents to rate how frequently their child (or their oldest child if they were living with more than one) caused them to feel a particular way using a five-point scale that ranged from 1 = *not at all true* to 5 = *very true*.[22] The five-point scale was reduced to a three-point scale by combining *moderately true* with *a little true* (2) and *mostly true* with *very true* (3). Cronbach's alpha for this three-point scale equaled 0.80. [23]

Overall, the Midwest Study parents reported relatively low levels of parenting stress (see Table 98). Their mean total score was 11.8 (SD = 2.7) on a scale with a minimum score of 9 and a maximum score of 27. Midwest Study mothers (M = 12.1, SD = 2.9) scored higher, on average, than Midwest Study fathers (M = 11.4, SD = 2.5). Although the reported level of parenting stress was relatively low, a majority of these parents agreed to some extent that being a parent was harder than they had expected.

[22] This measure has been used in studies of low-income parents (Bos, Polit, and Quint, 1997; Huston et al., 2003; Courtney et al., 2005; Dworsky et al., 2007).
[23] The reliability and mean total score were computed based on data from the 264 parents who responded to all nine items.

Table 98. Parenting Stress

	N	#	%
Feel I am giving up my life to meet my child's needs	270		
Not at all true		166	61.5
Moderately or a little true		77	28.5
Mostly or very true		27	10.0
Feel I am trapped by my responsibilities as a parent	274		
Not at all true		212	77.4
Moderately or a little true		54	19.7
Mostly or very true		8	2.9
Taking care of my child is more work than pleasure	273		
Not at all true		182	66.7
Moderately or a little true		72	26.4
Mostly or very true		19	7.0
Child seems much harder to care for than most	274		
Not at all true		238	86.9
Moderately or a little true		27	9.9
Mostly or very true		9	3.3
Child does things that really bother me a lot	273		
Not at all true		193	70.7
Moderately or a little true		72	26.4
Mostly or very true		8	2.9
Sometimes lose patience with child	271		
Not at all true		199	73.4
Moderately or a little true		68	25.1
Mostly or very true		4	1.5
Often feel angry with my child	275		
Not at all true		235	85.5
Moderately or a little true		38	13.8
Mostly or very true		2	0.7
Being a parent is harder than expected	274		
Not at all true		109	39.8
Moderately or a little true		115	42.0
Mostly or very true		50	18.2
Child has been a lot of trouble to raise	273		
Not at all true		235	86.1
Moderately or a little true		32	11.7
Mostly or very true		6	2.2

Midwest Study parents who were living with one or more of their biological children also completed the revised Child Parent Conflict Tactics Scale (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The CPCTS-R measures parents' use of various modes of discipline (i.e., nonviolent discipline, psychological aggression, minor physical assault, severe physical assault, and very severe physical assault).[24] Parents used a seven-point scale ranging from 1 = *never* to 7 = *more than 20 times* to rate how frequently they had taken 22 disciplinary actions with their oldest child during the past year.[25] They used a similar scale to rate how frequently they had engaged in five indicators of parental neglect. In this analysis, items were re-coded into dichotomous variables indicating "never in the past year" or "at least once in the past year." Cronbach's alpha equaled .91 for the discipline items and .88 for the neglect items.[26]

Midwest Study parents were most likely to report using nonviolent modes of discipline, followed by psychological aggression and minor physical assault (see Table 99). By far, the most common type of physical discipline parents reported using was *spanking with a bare hand;* nearly half of all parents reported spanking their child. Relatively few parents reported using either severe or very severe physical discipline.

A few gender differences were also observed. Mothers were more likely than fathers to report using nonviolent discipline and psychological aggression. In addition, although there was no gender difference in the overall use of severe physical assault, fathers were more likely than mothers to report having *thrown or knocked their child down.*

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[24] Strauss et al. (1998) categorize 4 of the disciplinary actions as nonviolent, 5 as psychological aggression, 4 as minor physical assault, 4 as severe physical assault and 4 as very severe physical assault. Shaking a child is categorized as either minor physical assault or very severe physical assault depending on the age of the child (i.e., younger than 2 years old or at least 2 years old).
[25] The seven categories were *never*, *once*, *twice*, *three to five times*, *six to ten times*, *11 to 20 times* and *more than 20 times*.
[26] Reliability for the discipline items was computed based on data from the 236 parents who responded to all 22 items. Reliability for the neglect items was computed based on data from the 269 parents who responded to all 5 items.

Table 99. Disciplinary Actions Taken during the Past Year by Gender

	Female			Male			p
	n	#	%	*n*	#	%	
Nonviolent Discipline							
Explained why something was wrong	194	163	84.0	56	39	69.6	*
Put child in a time-out or sent child to room	206	182	88.3	59	43	72.9	*
Took away privileges or grounded child	211	166	78.7	61	36	59.0	*
Gave child something else to do	197	153	77.7	58	47	81.0	
Any of the above	*217*	*203*	*93.5*	*62*	*52*	*83.9*	*
Psychological Aggression							
Threatened to spank or hit child but didn't do it	210	102	48.6	60	28	46.7	
Shouted, screamed, or yelled at child	206	153	74.3	59	28	47.5	*
Swore or cursed at child	207	57	27.5	61	13	21.3	
Called child dumb, lazy, or some other name	211	18	8.5	61	2	3.3	
Threatened to send child away or kick child out of the house	211	13	6.2	61	2	3.3	
Any of the above	*217*	*163*	*75.1*	*62*	*33*	*53.2*	*
Minor Physical Assault							
Spanked child on the bottom with a bare hand	208	93	44.7	61	30	49.2	
Hit child on the bottom with a belt or hard object	208	49	23.6	61	9	14.8	
Slapped child on the hand, arm, or leg	209	55	26.3	61	17	27.9	
Pinched child	211	22	10.4	61	5	8.2	
Shook child (≥ 2)	204	15	7.4	43	5	11.6	
Any of the above	*217*	*121*	*55.8*	*62*	*32*	*51.6*	
Severe Physical Assault							
Slapped child on the face, head or ears	212	6	2.8	61	2	3.3	
Hit child somewhere other than on the bottom with a belt or hard object	212	7	3.3	61	4	6.6	
Threw or knocked child down	212	2	0.9	61	3	4.9	*
Hit child with a fist or kicked the child hard	210	7	3.3	61	2	3.3	
Any of the above	*217*	*15*	*6.9*	*62*	*5*	*8.1*	
Very Severe Physical Assault							
Beat child over and over	212	2	0.9	61	2	3.3	
Grabbed child around the neck and choked him or her	210	3	1.4	61	2	3.3	
Burned or scalded child on purpose	213	2	0.9	61	2	3.3	
Threatened child with a knife or gun	212	2	0.9	61	2	3.3	
Shook child (< 2)	11	0	0.0	19	1	5.3	
Any of the above	*217*	*3*	*1.4*	*62*	*3*	*4.8*	

None of the five indicators of neglect was reported by more than 7 percent of the mothers or 7 percent of the fathers, and only 10 percent of the mothers and 8 percent of the fathers reported at least one (see Table 100).

Table 100. Indicators of Neglect during the Past Year by Gender

	Female			Male			p
	n	**#**	**%**	***n***	**#**	**%**	
Left child who needed adult supervision home alone	212	4	1.9	61	2	3.3	
Unable to show or express love to child because caught up with own problems	211	15	7.1	61	3	4.9	
Unable to make sure child was fed	211	7	3.3	61	4	6.6	
Unable to make sure child got to a doctor or hospital	210	8	3.8	60	3	5.0	
Problem taking care of child due to being drunk or high	212	4	1.9	61	2	3.3	
Any of the above	217	21	9.7	62	5	8.1	

Illegal Behavior and Criminal Justice System Involvement

One-third of the young men and 18 percent of the young women in the Midwest Study reported engaging in at least one of 17 illegal behaviors during the past year.[27] The most commonly reported illegal behaviors were deliberately damaging property and participating in group fights (see Table 101).

Where statistically significant differences were found, young men were more likely to have engaged in the illegal behavior than young women. Young men were also more likely than young women to report ever belonging to a gang.

[27] We will be updating the tables in this chapter with tables that compare illegal behavior among the Midwest Study participants to illegal behavior among their Add Health counterparts. Those tables are not included here because of problems with the Add Health data.

Table 101. Illegal Behaviors during the Past Year by Gender

	Females (*n* = 329)		Males (*n* = 261)		p
	#	%	#	%	
Deliberately damaged someone's property	25	7.6	32	12.3	*
Stole something worth < $50	10	3.4	14	5.4	
Stole something worth > $50	8	2.4	18	6.9	*
Entered a house or building to steal something	1	0.3	12	4.6	*
Used or threatened to use a weapon to get something from someone	7	2.1	16	6.1	*
Sold marijuana or other drugs	6	1.8	29	11.1	*
Bought, sold, or held stolen property	4	1.2	24	9.2	*
Used someone's credit or bank card without their permission	1	0.3	4	1.5	
Deliberately wrote a bad check	12	3.8	6	2.4	
Took part in a fight involving one group against another	20	6.3	33	13.4	*
Hurt someone so badly in a fight that medical treatment was required	8	2.5	23	9.3	*
Pulled a knife or gun on someone	11	3.4	15	6.0	
Shot or stabbed someone	2	0.6	8	3.2	*
Used a weapon in a fight	9	2.8	14	5.6	
Became so injured in a fight that medical treatment was required	5	1.6	10	4.0	
Carried a hand gun to school or work	1	0.3	9	3.6	*
Any of the above	58	17.6	86	33.0	*
Ever belonged to a named gang	16	4.9	45	18.1	*
Currently own a handgun (other than for work)	4	1.2	24	9.4	*

The gender differences in criminal justice involvement observed at prior waves of data collection were still evident at age 26 (see Table 102). Young men were more likely than young women to report having been arrested, convicted, and incarcerated since their most recent interview. A majority of the young women who had criminal justice involvement were arrested, convicted, or incarcerated for something other than a property, violent, or drug-related crime. "Other" could include a violation of probation or a serious traffic offense.[28] By contrast, property, violent, and drug-related crimes did account for a majority of the convictions and incarcerations among the young men.

[28] Respondents could report being arrested, convicted, or incarcerated for more than one type of crime. They could also report that the crime for which they were arrested, convicted, or incarcerated was not a property, violent, or drug-related crime.

Table 102. Criminal Justice System Involvement Since Last Interview by Gender[a,b]

	Females			Males			p
	n	#	%	*n*	#	%	
Arrested since last interview	329	50	15.2	261	99	37.9	*
Arrested for violent crime	48	5	10.4	93	8	8.6	
Arrested for property crime	48	7	14.6	94	9	9.6	
Arrested for drug related crime	48	5	10.4	92	30	32.6	*
Convicted of a crime since last interview	315	26	8.3	242	54	22.3	*
Convicted of violent crime	26	1	3.8	52	6	11.5	
Convicted of property crime	26	5	19.2	53	8	15.1	
Convicted of drug related crime	26	1	3.8	52	18	34.6	*
Spent at least one night in jail or prison since last interview	316	33	10.4	235	93	39.6	*
Incarcerated for violent crime	33	2	6.1	91	20	22.0	*
Incarcerated for property crime	33	5	15.2	92	10	10.9	
Incarcerated for drug related crime	33	1	3.0	91	29	31.9	*

[a] Respondents could report being arrested, convicted, or incarcerated for more than one type of crime. They could also report that the crime for which they were arrested, convicted, or incarcerated was not a property, violent, or drug-related crime.
[b] Includes the 31 respondents who were incarcerated at the time of their wave 5 interview.

We used data from all five waves of data collection to determine the cumulative percentage of Midwest Study participants who had ever been arrested, convicted, or incarcerated as well as the cumulative percentage who had been arrested, convicted, or incarcerated since their baseline interview at age 17 or 18 (see Table 103).[29] Although young men were more likely to have reported arrests, convictions and incarcerations than young women, the cumulative percentages are very high for both genders. A majority of the young women and more than four-fifths of the young men reported ever having been arrested. Nearly one-third of the young women and almost two-thirds of the young men reported spending at least one night in jail since they were 17 or 18 years old.

Table 103. Cumulative Criminal Justice System Involvement by Gender

	Females (*n* =332)		Males (*n* = 264)		p
	#	%	#	%	
Ever arrested	196	59.0	216	81.8	*
Arrested since baseline	138	41.6	180	68.2	*
Ever convicted	99	29.8	152	57.6	*
Convicted since baseline	72	21.7	126	47.7	*
Ever incarcerated	142	42.8	196	74.2	*
Incarcerated since baseline	108	32.5	169	64.0	*

[29] During the baseline interview, Midwest Study participants were asked if they had ever been arrested, convicted, or incarcerated. At each subsequent wave of data collection, they were asked if they had been arrested, convicted, or incarcerated since their most recent interview.

The cumulative percentage of young men and young women with criminal justice system involvement was considerably higher among the Midwest Study participants than among their same-sex Add Health Study counterparts (see Table 104). In fact, young women in the Midwest Study were more likely to have ever been arrested, convicted, and incarcerated than young men in the Add Health Study.

Table 104. Cumulative Criminal Justice System Involvement by Gender: Midwest Study Compared with Add Health Study

	Females					**Males**				
	Midwest Study (*n* =332)		**Add Health Study (*n* = 508)**		**p**	**Midwest Study (*n* = 264)**		**Add Health Study (*n* = 376)**		**p**
	#	**%**	**#**	**%**		**#**	**%**	**#**	**%**	
Ever arrested [a]	196	59.0	75	14.8	*	216	81.8	154	41.0	*
Arrested since age 18 [b]	138	41.6	25	4.9	*	180	68.2	83	22.1	*
Ever convicted [a]	99	29.8	22	4.3	*	152	57.6	80	21.3	*
Convicted since age 18 [b]	72	21.7	16	3.1	*	126	47.7	40	10.6	*
Ever incarcerated [a]	142	42.8	29	5.7	*	196	74.2	87	23.1	*
Incarcerated since age 18 [b]	108	32.5	15	3.0	*	169	64.0	32	8.5	*

[a] The Midwest Study figures include arrests, convictions or incarcerations reported at any of the five waves of data collection. The Add Health figures are based only on data collected during the fourth wave.

[b] The Midwest Study figures are based on arrests, convictions, or incarcerations reported after the baseline interview. However, because 38 percent of the wave 5 sample were already 18 years old when the baseline data were collected, they may underestimate the percentage arrested, convicted, or incarcerated since age 18.

Victimization

Young men in the Midwest Study were more than twice as likely as young women to report that they had been the victim of a violent crime during the past 12 months (see Table 105).[30] Alarmingly, the crime that males reported being the victim of most frequently was having a gun or knife pulled on them. In addition to reporting much lower rates of criminal victimization overall, females were almost as likely to report having had a gun or knife pulled on them as they were to report having been beaten up.

Table 105. Criminal Victimization by Gender

	Females (*n* = 329)[a]		**Males (*n* = 261)[a]**		**p**
	#	**%**	**#**	**%**	
Saw someone being shot or stabbed	11	3.3	26	10.0	*
Someone pulled a knife or gun on you	12	3.6	36	13.8	*
Shot or stabbed by someone	3	0.9	11	4.2	*
Beaten up	13	4.0	16	6.1	
Any of the above	27	8.2	57	21.8	*
Any of the above except seeing someone being shot or stabbed	22	6.7	46	17.6	*

[a] Data were missing for three male and three female respondents who did not complete the audio-CASI portion of the interview.

We used seven items adopted from the Lifetime Experiences Questionnaire (Gibb et al., 2001) to measure recent sexual victimization.[31] No difference was observed between young women and young men in the percentage who reported any type of sexual victimization; approximately 6 percent of both groups reported being sexually victimized since their most recent interview (see Table 106). Nor were any differences observed in the specific types of sexual victimization reported by young women and young men.

[30] We will be updating the tables in this chapter with tables that compare victimization among the Midwest Study participants to victimization among their Add Health counterparts. Those tables are not included here because of problems with the Add Health data.

[31] Comparable data on sexual victimization were not collected from the Add Health Study respondents.

Table 106. Sexual Victimization by Gender

	Females			Males			p
	n	**#**	**%**	***n***	**#**	**%**	
Male inserted sexual body part inside private sexual part, anus, or mouth when not desired	320	12	3.8	255	4	1.6	
Individual inserted fingers or objects inside private parts or anus when not desired	320	7	2.2	254	5	2.0	
Individual put their mouth on private parts when not desired	319	5	1.6	250	6	2.4	
Individual touched private sexual parts when not desired	318	5	1.6	254	5	2.0	
Coerced to touch an individual's private sexual parts	319	6	1.9	253	4	1.6	
Individual touched other private sexual parts when not desired	319	8	2.5	254	6	2.4	
Female put private sexual part inside her body when not desired (males only)	-	-	-	253	5	2.0	
Experienced any of the above	322	19	5.9	255	14	5.5	

Civic Participation

Nineteen percent of the young adults in the Midwest Study reported that they had performed volunteer or community service work during the past 12 months compared with 38 percent of their Add Health Study counterparts, a statistically significant difference (see Table 107). Midwest Study participants who performed unpaid volunteer or community service work were most likely to have worked for a community center or an educational organization.[32]

Table 107. Organization or Group for which Volunteer or Community Service Work Was Performed during the Past Year

(*n* = 112)[a]	**#**	**%**
Youth organizations (e.g., scouts)	15	13.4
Service organizations (e.g., Big Brother/Big Sister)	11	9.8
Political clubs or organizations	8	7.1
Ethnic support groups (e.g., NAACP)	4	3.6
Church groups	47	42.0
Community centers	40	35.7
Hospitals or nursing homes	11	9.8
Educational organizations	33	29.5
Environmental groups (e.g., Sierra Club)	5	4.5
Foster care or child welfare organizations	7	6.3
Other	33	29.5

[a] One respondent who reported performing volunteer or community service work did not report the type of organization he or she worked for.

Nearly three-quarters of the young adults in the Midwest Study reported that they were currently registered to vote and two-thirds had voted in the most recent presidential election (see Table 108).[33] About 12 percent had engaged in at least one of the four political activities about which we asked.

[32] The Add Health Study did not collect data on the types of organizations or groups for which volunteer or community service work was performed.

[33] Eight respondents who were not currently registered to vote voted in the last presidential election.

Table 108. Voting Behavior and Political Participation

	N	#	%
Currently registered to vote	587	434	73.9
Voted in most recent presidential election	442	293	66.3
During the past year			
Contributed money to political party or candidate	594	20	3.4
Contacted a government official	594	40	6.7
Ran for public office	595	2	0.3
Attended a political rally or march	595	35	5.9
Any of the above	596	71	11.9

Although a plurality of both samples described their political beliefs as "middle of the road," Midwest Study participants were significantly more likely to describe themselves as conservative or very conservative or not to know what their political ideology was and significantly less likely to describe themselves as liberal than their Add Health counterparts (see Table 109).

Almost 70 percent of the young adults in the Midwest Study reported no political party affiliation. Those who did report being affiliated with a party were most likely to identify themselves as Democrats. Finally, given that the government had, in essence, been their parent while they were in foster care, it is also interesting to note that young adults in the Midwest Study did not, in general, trust the government.

Table 109. Political Beliefs and Party Identification: Midwest Study Compared with Add Health Study

	Midwest Study			**Add Health**			**p**
	n	#	%	***n***	#	%	
Strongly agree or agree:							
I trust the federal government	592	210	35.5				
I trust my state government	591	209	35.4				
I trust my local government	590	216	36.6				
Political ideology	589			890			
Very conservative		42	7.1		29	3.3	*
Conservative		149	25.3		175	19.7	*
Middle-of-the-road		227	38.5		370	41.6	
Liberal		79	13.4		211	23.7	*
Very liberal		32	5.4		48	5.4	
Don't know		60	10.2		53	6.0	*
Political party affiliation	596						
None		408	68.5				
Democrat		145	24.3				
Republican		18	3.0				
Libertarian		3	0.5				
Independent		6	1.0				
Don't know/Other		6	1.0				

Mentoring

A majority of the young adults reported having maintained a positive relationship with a caring adult other than a parent since age 14 (see Table 110). Mentors were most often described as a family member or friend. Of those who reported having a mentor, approximately half reported telephone or e-mail contact with their mentor at least once weekly, while roughly 40 percent reported in-person contact at least once weekly. With regard to closeness, nearly three-quarters felt *very or quite close* to his or her mentor.

Table 110. Mentoring Relationships

(*N* = 596)	**#**	**%**
Ever maintained a positive relationship with a caring adult other than a parent since age 14	405	68.0
Relationship to mentor	**(*n*= 405)**	
Sibling	20	4.9
Grandparent or uncle/aunt	110	27.2
Teacher, counselor, coach	32	7.9
Clergy member	12	3.0
Employer or co-worker	9	2.2
Friend	89	22.0
Neighbor or parent of friend	16	4.0
Volunteer (e.g., Big Brothers/Sisters)	7	1.7
Social worker	20	4.9
Other	90	22.2
Email or telephone contact with mentor	**(*n*= 405)**	
Not at all	59	14.6
Once a year or less	36	8.9
Every few months	38	9.4
Monthly or every few weeks	58	14.3
Weekly or more	214	52.8

In person contact with mentor	**(*n*= 405)**	
Not at all	86	21.2
Once a year or less	51	12.6
Every few months	47	11.6
Monthly or every few weeks	53	13.1
Weekly or more	168	41.5
Closeness to mentor	**(*n*= 404)**	
Not at all close	32	7.9
A little to somewhat close	78	19.3
Very or quite close	294	72.8

Life Satisfaction and Future Orientation

Almost two-thirds of the young adults in the Midwest Study reported feeling satisfied or very satisfied with their lives as a whole (see Table 111).

Table 111. Life Satisfaction

(*N* = 594)	**#**	**%**
Satisfaction with life as a whole		
Satisfied or very satisfied	373	62.8
Neither satisfied nor dissatisfied	111	18.7
Dissatisfied or very dissatisfied	110	18.5

An even higher percentage reported feeling fairly to very optimistic about their future (see Table 112).

Table 112. Optimism

(*N* = 594)	**#**	**%**
Very optimistic	332	55.9
Fairly optimistic	198	33.3
Not very or not at all optimistic	63	10.6
Missing	2	0.3

This sense of optimism is also reflected in their responses to two other sets of questions. The first was adapted from the wave two Add Health survey instrument.[34] Study participants were asked to rate their chances of reaching a number of milestones using a five-point scale that ranged from *almost no chance* (1) to *almost certain* (5), with 3 being *a 50-50 chance* (see Table 113). On average, unmarried Midwest Study participants perceived themselves as having little more than a 50-50 chance of getting married within the next 10 years. Those who were not already divorced thought their chances of divorcing by age

[34] These questions were not included in the Add Health wave 4 survey instrument.

35 were relatively low. Overall, Midwest Study participants perceived themselves as having no more than a 50-50 chance of having at least a middle class income by age 30. It is also quite telling that 13 percent thought that they had no more than a 50-50 chance of living until at least age 35.

Table 113. Future Expectations

	N	Mean	SD
Live to 35	594	1.53	0.76
Married within the next 10 years	491	2.76	1.36
Already happened (i.e., currently married)	102	—	—
Divorced by 35	583	4.34	1.16
Already happened	24	—	—
Middle class income by age 30	592	2.64	1.12
Already happened	13	—	—
More than middle class income by age 30	591	2.98	1.28
Already happened	5	—	—

The second set of questions came from the revised version of the Life Orientation Test (LOT-R), a 10-item measure designed to assess individual differences in generalized optimism versus pessimism (Scheier, Carver, & Bridges, 1994). Study participants rated how much they agree or disagree with each statement using a five-point scale that ranged from 1 = *disagree a lot* to *5 = agree a lot*, with 3 being *neither agree nor disagree*. Overall, these young adults were fairly optimistic (see Table 114). They tended to agree with statements like "I'm always optimistic about my future" and "I expect more good things to happen to me than bad," while disagreeing with statements like "I hardly ever expect things to go my way" and "I rarely count on good things happening to me."

Table 114. Life Orientation

	N	Mean	SD
In uncertain times, I usually expect the best.	594	3.66	1.24
It's easy for me to relax.	595	3.44	1.40
If something can go wrong for me, it will. [a]	595	2.89	1.37
I'm always optimistic about my future.	592	4.07	1.16
I enjoy my friends a lot.	594	4.05	1.21
It's important for me to keep busy.	595	4.35	1.02
I hardly ever expect things to go my way. [a]	595	3.15	1.37
I don't get upset too easily.	595	3.13	1.44
I rarely count on good things happening to me. [a]	595	3.24	1.48
Overall, I expect more good things to happen to me than bad.	595	4.07	1.20
Mean		3.60	

[a] Items were reverse coded.

Study participants also completed two additional measures. The first included six items taken from the Pearlin Mastery Scale (Pearlin & Schooler, 1978; Pearlin et al., 1981), a measure of the extent to which

individuals perceive themselves as being in control of the forces that have a significant impact on their lives.[35] Respondents rated how much they agreed or disagreed with each statement on a five point scale ranging from 1 = *strongly agree* to 5 = *strongly disagree*, with 3 being *neither agree nor disagree*. A higher score indicates a greater sense of mastery over one's environment. Generally speaking, these young adults felt in control of their lives (see Table 115). They tended to agree with statements like "What happens to me in the future mostly depends on me," and "I can do just about anything I really set my mind to," while disagreeing with statements like "I have little control over the things that happen to me," and "I often feel helpless in dealing with the problems of life."

Table 115. Mastery

(*N* = 595)	**Mean**	**SD**
I have little control over the things that happen to me.	3.64	1.15
There is no way I can solve some of the problems I have.	3.07	1.21
I often feel helpless in dealing with the problems of life.	3.58	1.17
Sometimes I feel that I am being pushed around in life.	3.36	1.25
What happens to me in the future mostly depends on me. [a]	4.49	0.71
I can do just about anything I really set my mind to. [a]	4.42	0.79
Mean	3.76	

[a] Items were reverse coded

The second was a 4-item measure of self esteem taken from Rosenberg's (1989) 10-item Self Esteem Scale. Respondents rated how much they agreed or disagreed with each statement on a five point scale ranging from 1 = *strongly agree* to 5 = *strongly disagree*, with 3 being *neither agree nor disagree*. Overall, Midwest Study participants felt positively about themselves, agreeing with statements such as "I like myself just the way I am," and "I have many good qualities" (see Table 116).

Table 116. Self-Esteem

(*N* = 595)	**Mean**	**SD**
I have many good qualities.	1.48	0.64
I have a lot to be proud of.	1.58	0.74
I like myself just the way I am.	1.92	1.04
I feel I am doing things just about right.	2.15	1.02
Mean	1.78	

[35] The Perlin Mastery scale is a seven-item measure. One item, "there is little I can do to change many of the important things in my life," was not included in the wave 5 survey instrument.

Connectedness

Finally, youth aging out of foster care have been identified as being at high risk of becoming disconnected young adults (Levin-Epstein & Greenberg, 2003; Wald & Martinez, 2003; Youth Transition Funders Group, 2004)—that is, young adults who are neither working nor enrolled in school (Haveman & Wolfe, 1994; Levin-Epstein & Greenberg, 2003; Sheehy, Oldham, Zanghi, Ansell, Correia, & Copeland, 2002; Sum, Khatiwada, Pond, Trub'skyy, Fogg, & Palma, 2002; Wald & Martinez, 2003; Youth Transition Funders Group, 2004). Thus, we looked at the percentage of males and females in the Midwest Study who were connected to employment or to education. In addition, although many people who are parents work or go to school, some forego education or employment to focus on parenting. Thus, we also adopted a more expansive definition of connectedness that counted study participants as being connected if they were living with one or more of their own children.

Female study participants were more likely than their male counterparts to be connected (i.e., working or enrolled in school) at age 26 (see Table 117). Using the more inclusive definition that includes parenting increased this gender difference because it had a larger effect on "connectedness" among young women than on "connectedness" among young men. This reflects the fact that males were less likely than females to be custodial parents even if they had a child.

Table 117. Connectedness

	Females			Males			p
	N	#	%	*N*	#	%	
Employed or enrolled in school/training program[a]	331	206	62.2	263	129	49.0	*
Employed, enrolled in school/training program or parenting[b]	331	271	81.6	263	170	64.6	*

[a] Data were missing for two nonemployed respondents who did not report if they were currently enrolled in school and one respondent who did not complete the survey.

[b] Data were missing for one nonemployed respondent who did not report if he or she was currently enrolled in school and one respondent who did not complete the survey.

Change Over Time

Because we have been tracking the outcomes of the Midwest Study participants since they were 17 or 18 years old, we can examine how their circumstances have changed over time. Figures 1 through 11 show these changes across a number of domains including education, employment, family formation, and criminal justice system involvement. In the past, we have limited our "change over time" analysis to the young adults who were interviewed at every wave of data collection. If we were to apply that same criteria at wave 5, our analysis would be limited to 434 young adults or just 59% of the original sample. Limiting our analysis to these 434 young adults is problematic because they represent a select subsample of the original 732 Midwest Study participants. Consequently, the percentages shown in the figures below are based on data for all of the young adults who were interviewed at a given wave.[36] Because gender differences were observed for some of the outcomes, the results for males and females are presented separately.

Education

Not surprisingly, the percentage of study participants who had a high school diploma or GED rose substantially between age 17 or 18 and age 21.[37] It jumped several more percentage points between the two most recent waves of data collection. Although young men were as likely as young women to have completed high school when the study began, young women were more likely than young men to have their high school diploma or GED at each post-baseline interview.[38] By the time they were 26 years old, 83 percent of the young women had completed high school compared to 77 percent of the young men.

Given that many of these young people were at least a year behind in school, it is also not surprising that the largest increase in the percentage of study participants who had completed at least one year of college

[36] See Table 1 for the respective sample sizes

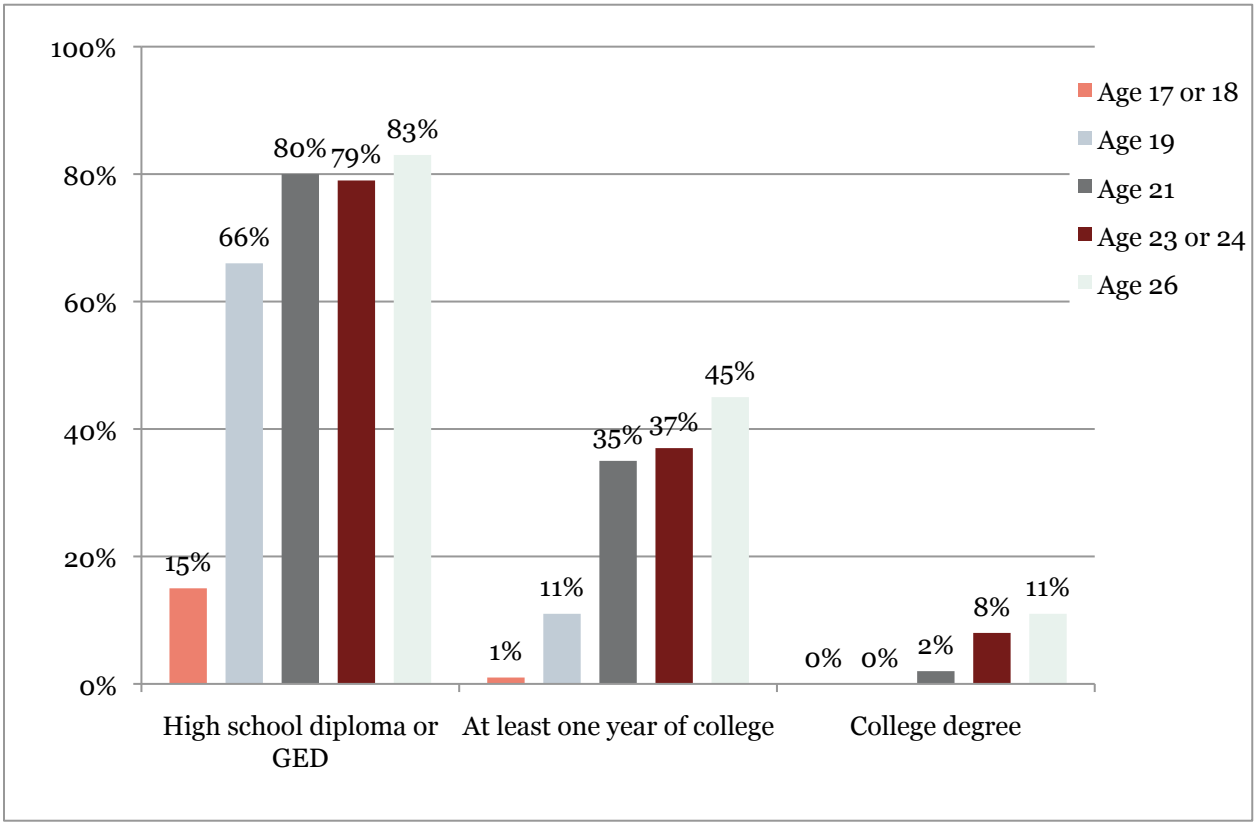
[37] The percentage of Midwest Study participants with a high school diploma or GED declines between waves three and four because the composition of the sample interviewed at the third wave was not the same as the composition of the sample interviewed at the fourth wave..

[38] Three young women and four young men who reported that they had a high school diploma or GED at wave 2 reported that they had not completed high school at wave 3. Similarly, 6 young women and 15 young men who reported that they had a high school diploma or GED at wave 3 reported that they had not completed high school at wave 4.

occurred between ages 19 and 21. Young women were more likely than young men to have completed a year of more of college at each post-baseline interview.[39] By age 26, 45 percent of the young women compared with one-third of the young men had completed at least one year of college.

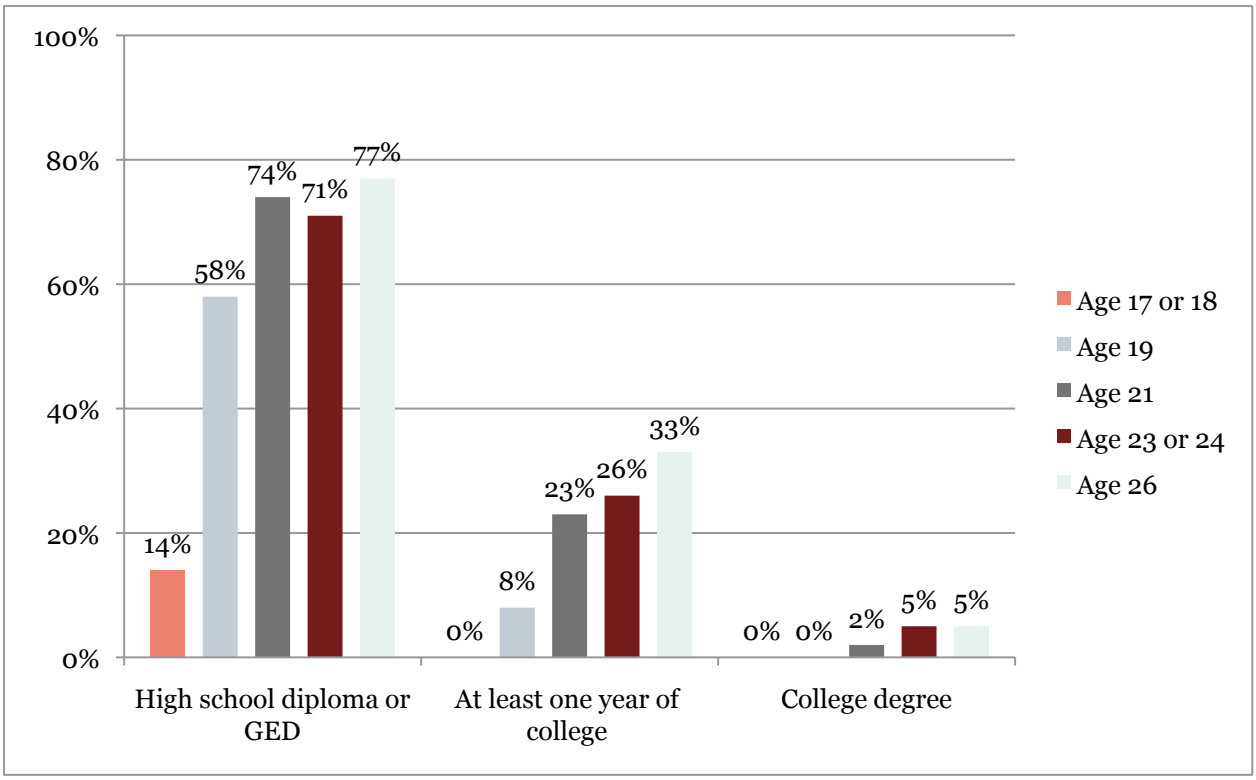
The percentage of study participants who had a two- or four-year college degree grew at a much slower rate. By age 26, only 11 percent of the young women and 5 percent of the young men had graduated from a 2- or 4-year school (see Figures 1 and 2).

Figure 1. Trends in Young Women's Educational Attainment



[39] Two young men who reported that they had completed at least one year of college at wave 2 reported that they had only completed high school at wave 3. Similarly, 23 young women and 9 young men who reported that they had completed at least one year of college at wave 3 reported that they had only completed high school at wave 4.

Figure 2. Trends in Young Men's Educational Attainment



Enrollment in school or training programs declined steadily over the first four waves of data collection then leveled out at the most recent interview. The biggest drop occurred between the baseline interview and the interview at age 19, when college enrollment peaked (see Figures 3 and 4). With the exception of the baseline interview, when young men were about as likely to be enrolled in college as young women, the percentage of young women enrolled in college was consistently higher than the percentage of young men.

Figure 3. Trends in Young Women's School Enrollment

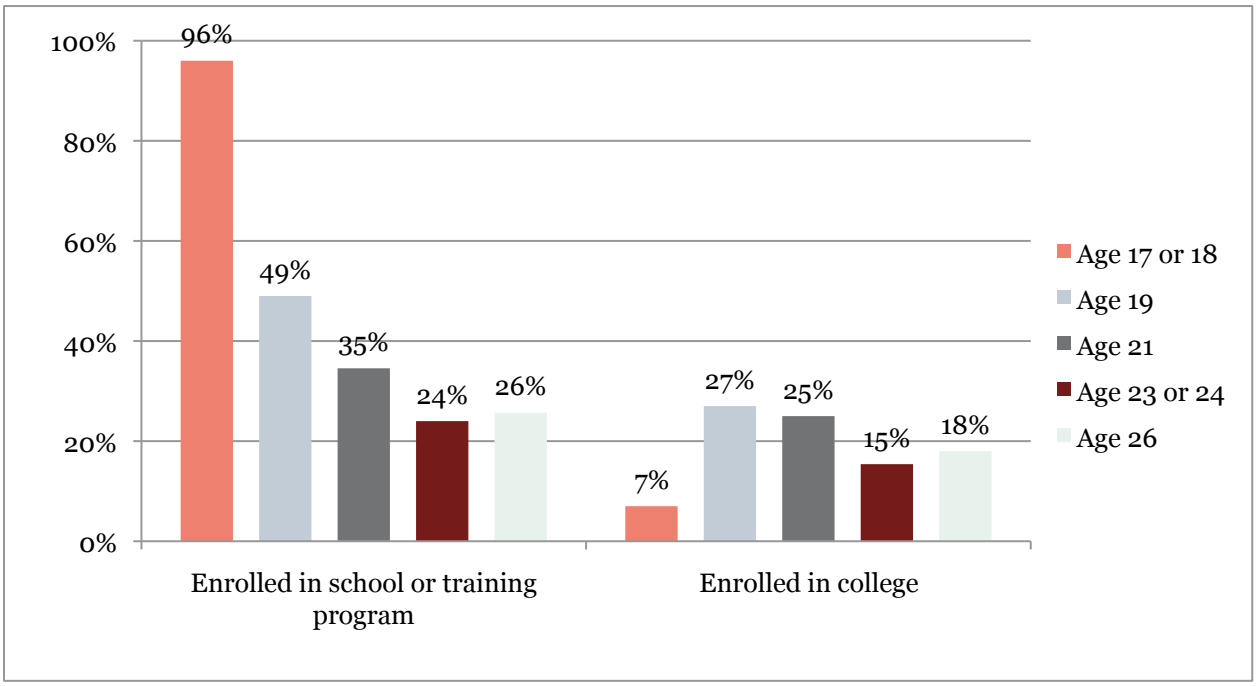
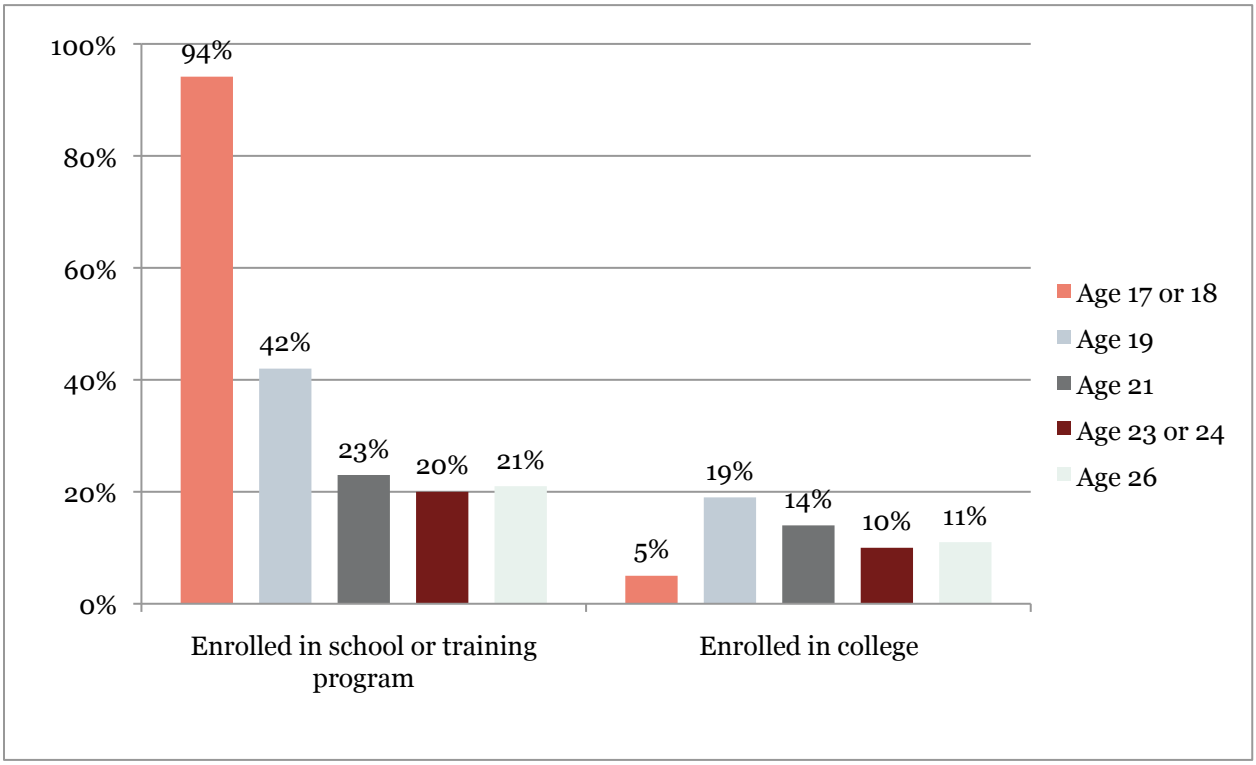


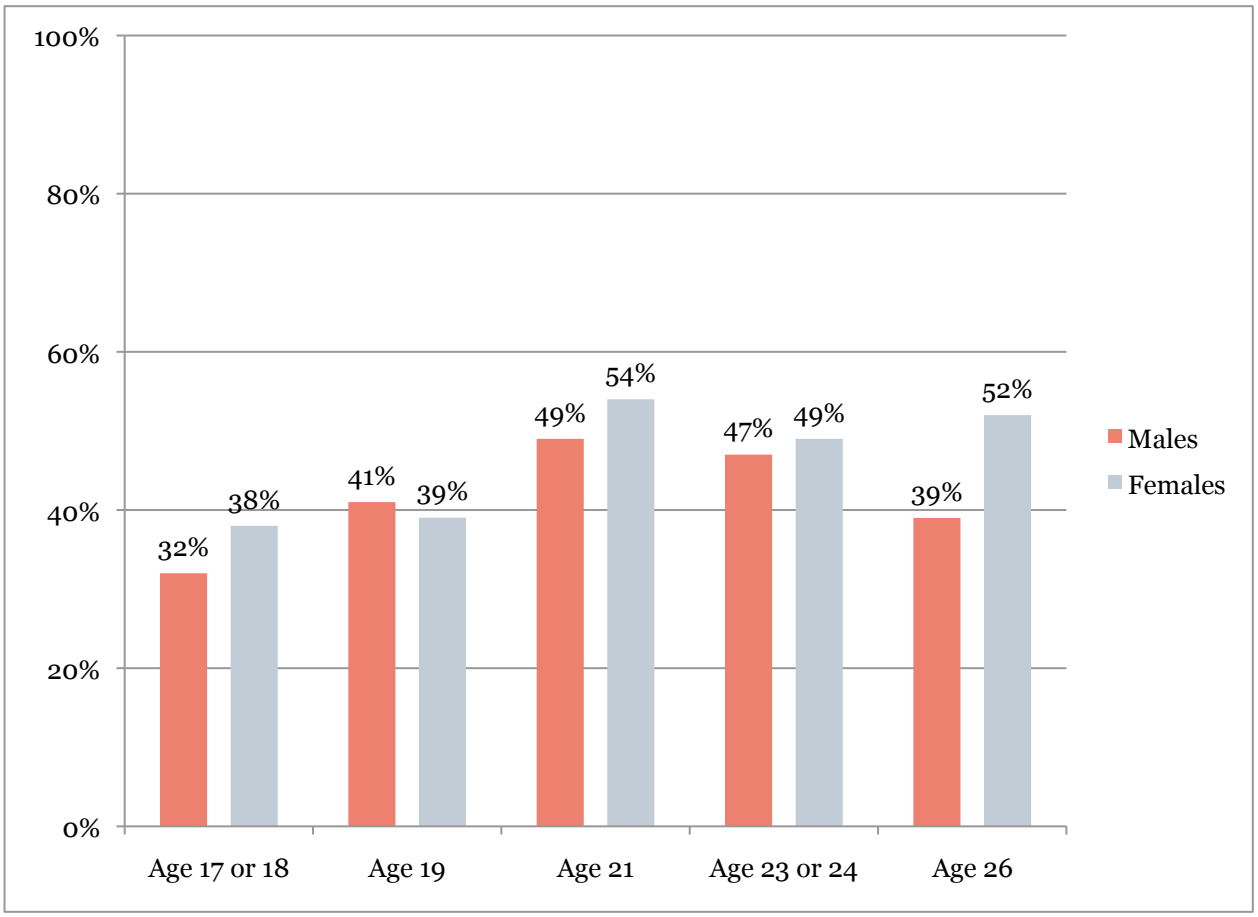
Figure 4. Trends in Young Men's School Enrollment



Employment

The percentage of young adults who were currently employed peaked at age 21(see Figure 5). The difference between the percentage of young women who had jobs and the percentage of young men who had jobs was larger at age 26 than it had been at any prior wave. In addition, although less than half of the young men were employed at any given wave of data collection, a majority of the young women were working at ages 21 and 26.

Figure 5. Trends in Current Employment by Gender



Family Formation

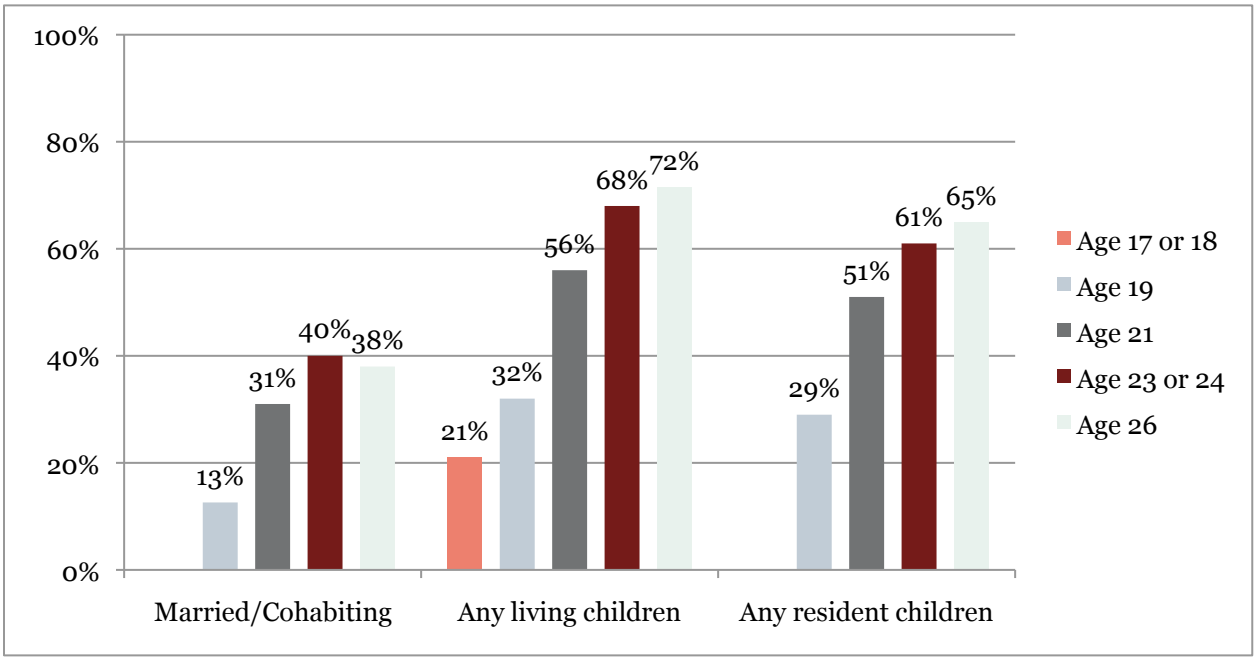
Because most of the study respondents were still in foster care at age 17 or 18 and none reported being married, our analysis of marriage and cohabitation begins at age 19.[40] The percentage of young men who were married or cohabiting rose gradually over time, but the percentage of young women who were married or cohabiting fell slightly between the two most recent interviews (see Figures 6 and 7). As a result, the gender gap was less evident at wave 5 than it had been at prior waves, although the percentage

[40] We do not have information about cohabitation at wave 1. However, the percentage of study participants who were cohabiting at age 17 or 18 was probably very low because most of the young people were still in foster care.

of young women who were married or cohabiting was consistently higher than the percentage of young men.

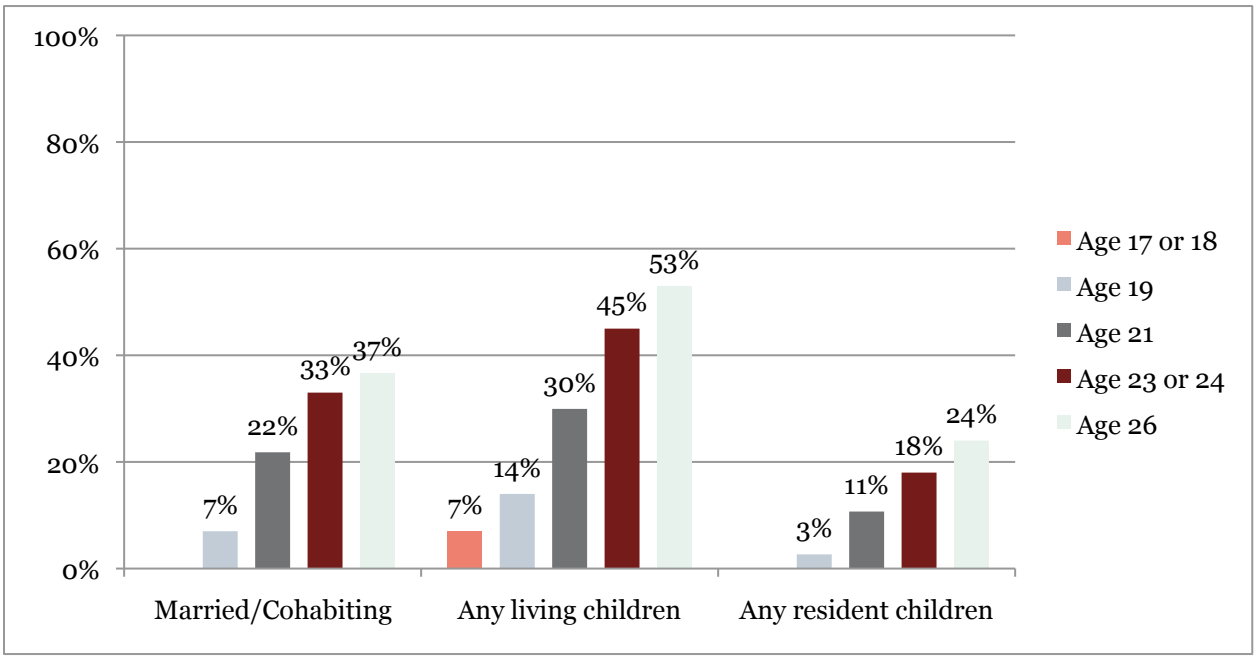
The percentage of young adults who were parents of at least one biological child increased steadily over time, but young women were consistently more likely to be mothers than young men were to be fathers. In fact, the young women were more likely to be mothers at age 21 than young men were to be fathers at age 26. Young women were also far more likely to be living with a child to whom they had given birth than young men were to be living with a child they had fathered at each wave of data collection.[41]

Figure 6. Trends in Family Formation among Females



[41] Midwest Study participants were not asked if they were living with one or more of their own children at wave 1.

Figure 7. Trends in Family Formation among Males



Criminal Justice System Involvement

Unlike the baseline interview, when study participants were asked if they had *ever* been arrested, convicted, or incarcerated, study participants were asked about arrests, convictions, and incarcerations that had occurred since their most recent interview at subsequent waves of data collection. For this reason, we limit our analysis to criminal justice system involvement since age 19.

The percentage of young adults who reported an arrest declined over time, the percentage who reported a conviction was fairly stable, and the percentage who reported an incarceration rose and then declined (see Figures 8 and 9). Although similar trends were observed among young women and young men, young men were at least twice as likely as young women to report being arrested, convicted or incarcerated at each of wave of data collection.

Figure 8. Trends in Criminal Justice System Involvement among Females

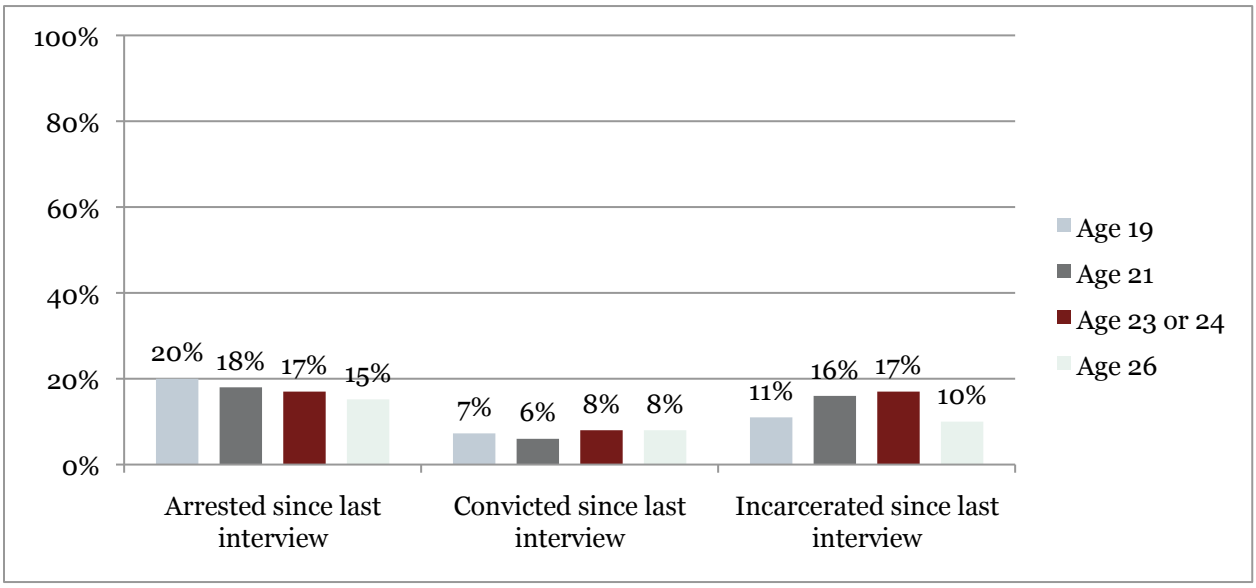
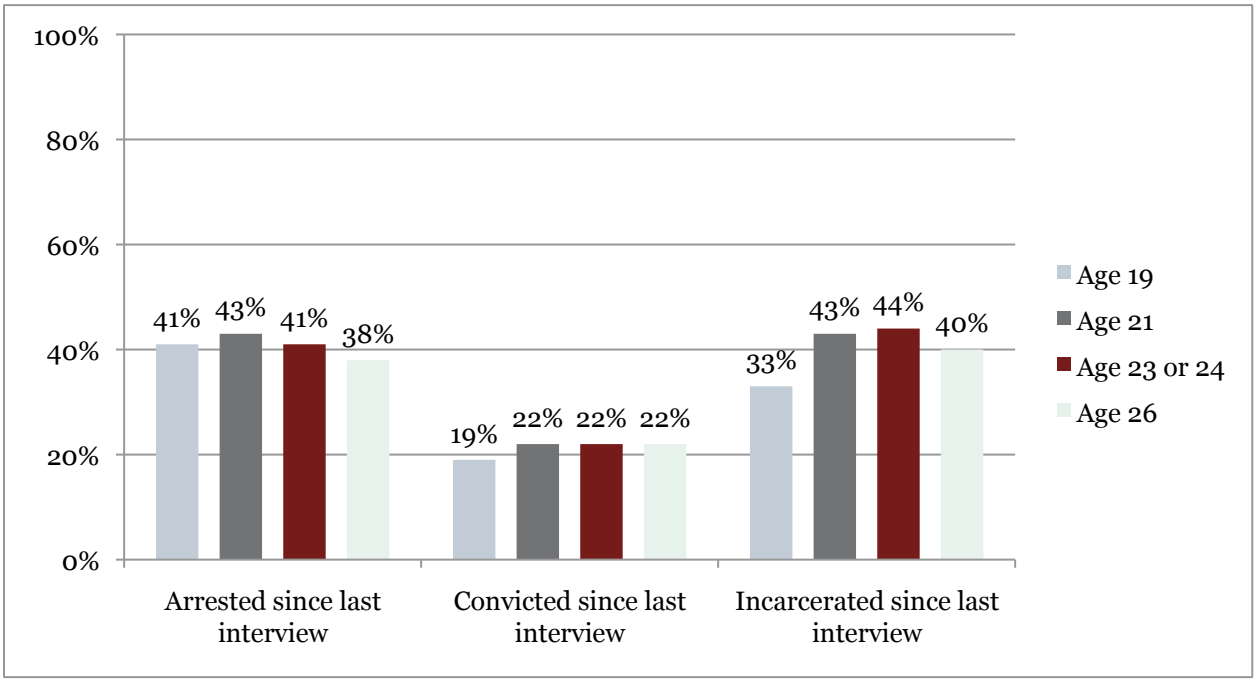


Figure 9. Trends in Criminal Justice System Involvement among Males



"Connectedness"

No gender difference in "connectedness" was observed at the first two waves of data collection, but young women were more likely than young men to report that they were working or in school at the three most recent waves (see Figures 10 and 11). Although counting young adults who were parenting as "connected" increased the percentage who were connected regardless of gender, the increase was consistently bigger among young women than young men because young men were much less likely to be

living with a child they had fathered than young women were to be living with a child to whom they had given birth.[42]

Figure 10. Trends in Connectedness among Females

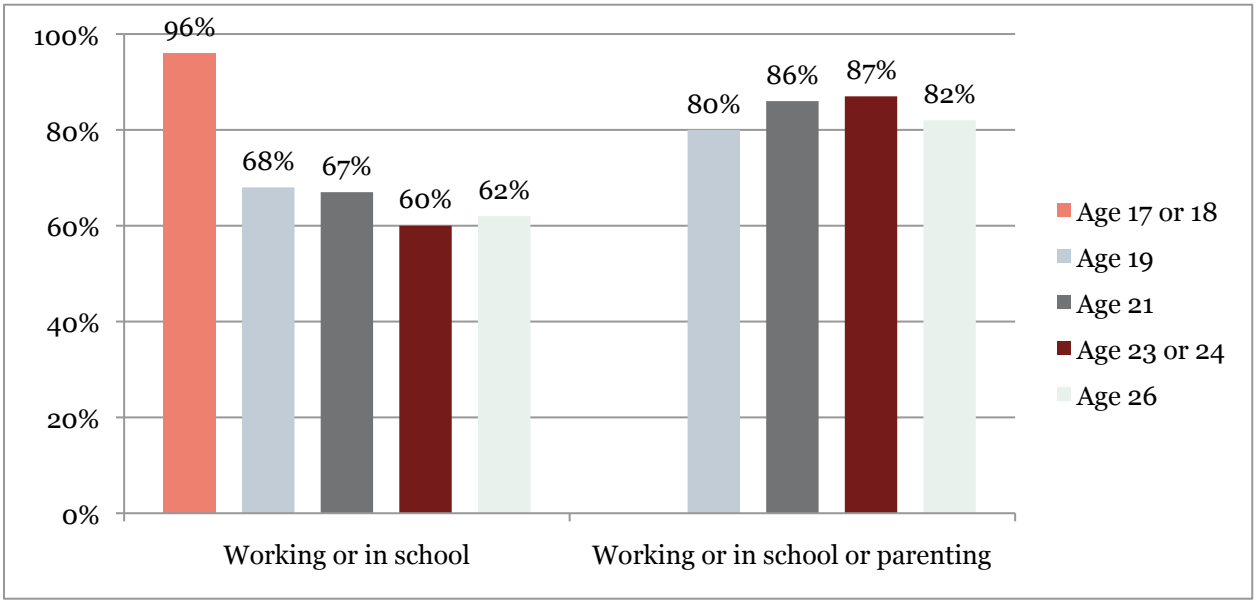
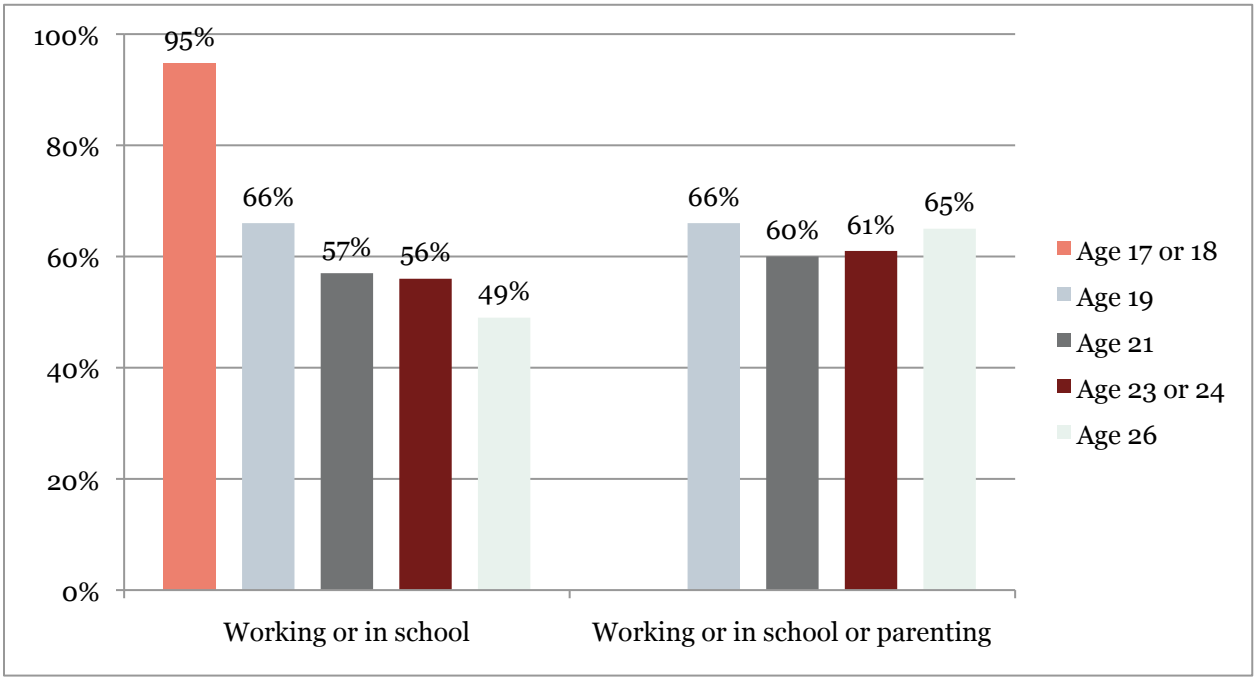


Figure 11. Trends in Connectedness among Males



[42] Midwest Study participants were not asked if they were living with one or more of their own children at wave 1. Consequently, the second measure of connectedness was not calculated when participants were age 17.

Discussion and Next Steps

We began following this sample of young adults when they were just 17 or 18 years old and still in foster care. We wanted to know what would happen as they transitioned out of foster care and into early adulthood. Would they become economically self-sufficient or struggle to support themselves? Would they be able to overcome the challenges often faced by former foster youth? And how would their outcomes compare to those of their peers who had never been in foster care?

Although these 26-year-olds still have much of their lives ahead of them, they are now well into early adulthood. Unfortunately, as a group, they are faring poorly. About four-fifths of these young adults have a high school diploma or a GED, but only 11 percent of the young women and 5 percent of the young men have even an associate's degree. This is not much higher than the percentage of young women and no higher than the percentage of young men who had graduated from college by age 23 or 24. Moreover, it is considerably lower than the percentage of young adults who are college graduates in the general population. Given that only 15 percent of the Midwest Study participants were still enrolled in school, it seems unlikely that they will "catch up" with their peers in terms of educational attainment.

Equally troubling was their state of economic well-being. Fewer than half of these 26-year-olds were currently employed, and most of those who had a job were not earning a living wage. Half of the young adults who had worked during the past year reported annual earnings of $9,000 or less, and more than one-quarter had had no earnings at all. This probably explains why nearly half the sample had experienced at least one economic hardship and why one quarter had experienced food insecurity during the past year. Their lack of self-sufficiency was also reflected in their receipt of means-tested benefits from government programs. Two-thirds of the young women and two-fifths of the young men had received food stamps during the past year.

No less disconcerting were some of the other outcomes we observed. Far too many of these young adults, and especially the young men, have been or are currently incarcerated. Far too many of the young women who cannot support themselves are raising children alone, and far too many of the young men have children with whom they have little or no relationship.

At the same time, it is important to keep in mind that some of Midwest Study participants have managed to "beat the odds" and made significant progress toward self-sufficiency (Courtney, Hook, & Lee, 2010).

They have graduated from college or are still enrolled in school. They have adequate earnings from a steady job that provides employee benefits. They have stable housing and families they are able to support. They have stayed out of trouble with the criminal justice system, and have maintained good physical and mental health.

In addition to these seemingly "objective" measures of success, we also find less tangible evidence of resiliency among this sample of former foster youth. Many expressed satisfaction with their lives and optimism about their futures. Moreover, although the child welfare system failed to find them permanent homes, most of these young people continue to have close ties to members of their family.

What, then, should we conclude from our data about current efforts to prepare young people aging out of foster care for a successful transition to adulthood? The outcomes of the Midwest Study participants at age 26 suggest that young people are aging out of foster care without the knowledge and skills they need to make it on their own. Hence, more attention should be paid to evaluating the services and supports that this population now receives, using methodologically sound research designs (Montgomery, Donkoh, & Underhill, 2006).

Some states have responded to the older-youth provisions in the Fostering Connections Act by extending foster care through age 21; others will do so over the coming years. The National Youth in Transition Database will, over time, reveal whether these changes bear fruit in terms of improved foster youth outcomes. Moving forward, we will continue to analyze the Midwest Study data to identify factors that predict which young people are likely to struggle to make it on their own and which are likely to experience a successful transition to adulthood.

References

Bickel, G., Nord, M., Price, C., Hamilton, W., & Cook, J. (2000). *Guide to measuring household food security*. Washington, DC: United States Department of Agriculture, Food and Nutrition Service, Office of Nutrition, Analysis and Evaluation.

Blumberg, S., Bialostosky, K., Hamilton, W., & Briefel, R. (1999). The effectiveness of a short form of the household food security scale. *American Journal of Public Health*, *89*, 1231-34.

Bos, J., Polit, D. & Quint, J. (1997). *New Chance: Final report on a comprehensive program for young mothers in poverty and their children*. New York: MDRC.

Courtney, M., Dworsky, A., & Rapp, A. (2010). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 23 or 24*. Chicago, IL: Chapin Hall at the University of Chicago.

Courtney, M.E., Dworsky, A., Piliavin, I., & Zinn, A. (2005). Involvement of TANF applicant families with child welfare services. *Social Service Review*, *79(1),* 119-157.

Courtney, M., Dworsky, A., Ruth, G., Havlicek, J., & Perez, A. (2007). *Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at age 21*. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.

Courtney, M., Dworsky, A., Ruth, G., Keller, T., Havlicek, J., & Bost, N. (2005). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 19*. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.

Courtney, M. E., Hook, J. L., & Lee, J. S. (2010). *Distinct subgroups of former foster youth during the transition to adulthood: Implications for policy and practice*. Chicago: Chapin Hall at the University of Chicago.

Courtney, M., Terao, S., & Bost, N. (2004). *Midwest evaluation of the adult functioning of former foster youth: Conditions of the youth preparing to leave state care*. Chicago: Chapin Hall Center for Children at the University of Chicago.

Dworsky, A., Courtney, M., & Zinn, A. (2007). Child, parent and family level predictors of child welfare services involvement among TANF applicant families. *Children and Youth Services Review, 29,* 802-820.

Furstenberg, F. F., Rumbaut, R. G., & Settersten, R. A. (2005). On the frontier of adulthood: Emerging themes and new directions. In R. A. Settersten, F. F. Furstenberg, & R. G. Rumbaut (Eds.), *On The Frontier of Adulthood: Theory, Research, and Public Policy* (pp. 3-25). Chicago: University of Chicago Press.

Gibb, B., Alloy, L., Abramson, L., Rose D., Whitehouse, W., Donovan, P., Hogan, M., Cronholm, J., & Tierney, S. (2001). History of childhood maltreatment, negative cognitive styles, and episodes of depression in adulthood. *Cognitive Therapy and Research, 25*, 425–446.

Haveman, R., & Wolfe, B. (1994). Succeeding generations: On the effects of investing in children. New York: Russell Sage Foundation.

Huston, A., Miller, C., Richburg-Hayes, L., Duncan, G., Eldred, C., Weisner, T., Lowe, E., McLoyd, E., Crosby, D., Ripke, M., & Redcross, C. (2003). *New Hope for families and children: Five-year results of a program to reduce poverty and reform welfare*. New York: MDRC.

Levin-Epstein, J., & Greenberg, M. (2003). *Leave no youth behind: Opportunities for Congress to reach disconnected youth*. Washington, DC: Center for Law and Social Policy.

Montgomery, P., Donkoh, C, & Underhill, K. (2006). Independent living programs for young people leaving the care system: The state of the evidence. *Children and Youth Services Review*, *28*(12), 1435–48.

Pearlin, L., Lieberman, M., Menaghan, E., & Mullan, J. (1981). The stress process. *Journal of Health and Social Behavior*, 22, 337-353.

Pearlin, L. & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*(1), 2-21.

Rosenberg, M. (1989). *Society and the adolescent self-image.* Revised edition. Middletown, CT: Wesleyan University Press.

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, *67*, 1063-1078.

Sheehy, A., Oldham, E., Zanghi, M., Ansell, D., Correia, P., & Copeland, R. (2001). *Promising practices: Supporting transition of youth served by the foster care system*. Baltimore, MD: Annie E. Casey Foundation.

Sherbourne, C., & Stewart, A. (1991). The MOS Social Support Survey. *Social Science Medicine*, *32*(6), 705-714.

Social Security Administration. (2001). *Desktop guide to SSI eligibility requirements. SSA Publication No. 05-11001.* Retrieved on May 25, 2007 from http://permanent.access.gpo.gov/lps4345/11001.html

Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the parent-child conflict tactics scales: Development and psychometric data for a national sample of American parents. *Child Abuse and Neglect, 22*(4), 249-270.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1996). Revised conflict tactics scale. *Journal of Family Issues, 17*(2), 283-316.

Sum, A., Khatiwada, I., Pond, N., Trub'skyy, M., Fogg, N., & Palma, S. (2002). *Left behind in the labor market: Labor market problems of the nation's out-of-school young adult populations*. Boston, MA: Center for Labor Market Studies at Northeastern University.

U. S. Department of Health and Human Services. (2011). *The AFCARS Report: Preliminary Estimates for FY 2010 as of June 2011.* Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. Retrieved October 27, 2011 from http://www.acf.hhs.gov/programs/cb/stats_research/afcars/tar/report18.htm

Wald, M., & Martinez, T. (2003). *Connected by 25: Improving the life chances of the country's most vulnerable 14 – 24 year olds.* Hewlett Foundation Working Paper. Menlo Park, CA: Hewlett Foundation.

World Health Organization (1998). *The Composite International Diagnostic Interview* (CIDI). Geneva, Switzerland: World Health Organization.

Youth Transition Funders Group. (2004). *Connected by 25: A plan for investing in successful futures for foster youth.* Takoma Park, MD: Youth Transition Funders Group.

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