

CARSEY INSTITUTE

Building Knowledge for Families and Communities

Regional Issue Brief #35

Fall 2013

Mental Health Among Northern New Hampshire Young Adults

Depression and Substance Problems Higher Than Nationwide

Karen T. Van Gundy

The highest rates of mental disorder are observed in young adulthood, and in the United States, young adult women suffer from higher rates of major depressive disorder and lower rates of substance use disorder than do young adult men.¹ National estimates in 2010 find that, although rural (non-metropolitan) rates are similar to non-rural (metropolitan) rates nationwide, sex differences in depressive and substance abuse disorders are less apparent in rural America.² Whereas non-rural young women show higher rates of depressive disorder than non-rural young men, such rates are comparable for rural young women and men nationwide. Likewise, rural young men abuse alcohol at higher rates than rural young women, but unlike their non-rural counterparts, rural young men are no more likely than rural young women to abuse tobacco, marijuana, or other illicit substances.³ Within rural contexts, then, it would appear that depressive and substance abuse disorders are more or less equally distributed across sex.

To situate Coös County's young-adult mental health within the broader national context, this brief uses data on depressive and substance abuse symptoms from two surveys administered in 2011. The first survey, the Coös Youth Study (CYS),⁴ is an on-going panel study of youth who completed paper-and-pencil questionnaires in all Coös public middle and high schools in 2008 or 2009, and who were surveyed again in 2011.⁵ For this brief, the analyses focus on 214 young adults, ages 18 to 21, who completed online or in-class surveys in 2011 and provided usable data on depressive and substance abuse symptoms.⁶ The second survey, the National Survey on Drug Use and Health (NSDUH),⁷ is a nationally representative survey based on computer assisted self-interviews with non-institutionalized civilians residing in the United States.⁸ For this

KEY FINDINGS



Coös County young adults, ages 18 to 21, report more symptoms of depression, substance abuse, and co-occurring depression and substance abuse than rural young adults nationwide.



Relative to rural young women nationwide, Coös young women report higher rates of depressive symptoms and similar rates of substance abuse symptoms.



Relative to rural young men nationwide, Coös young men report higher rates of substance abuse symptoms and similar rates of depressive symptoms.



Rates of co-occurring depressive and substance abuse symptoms are four times higher for Coös County young adults than for rural young adults nationwide.

brief, the analyses focus on the 1,477 young adult respondents, ages 18 to 21, who were living in non-metropolitan areas in 2011 and who provided usable data on depressive and substance abuse symptoms.

Depressive Symptoms

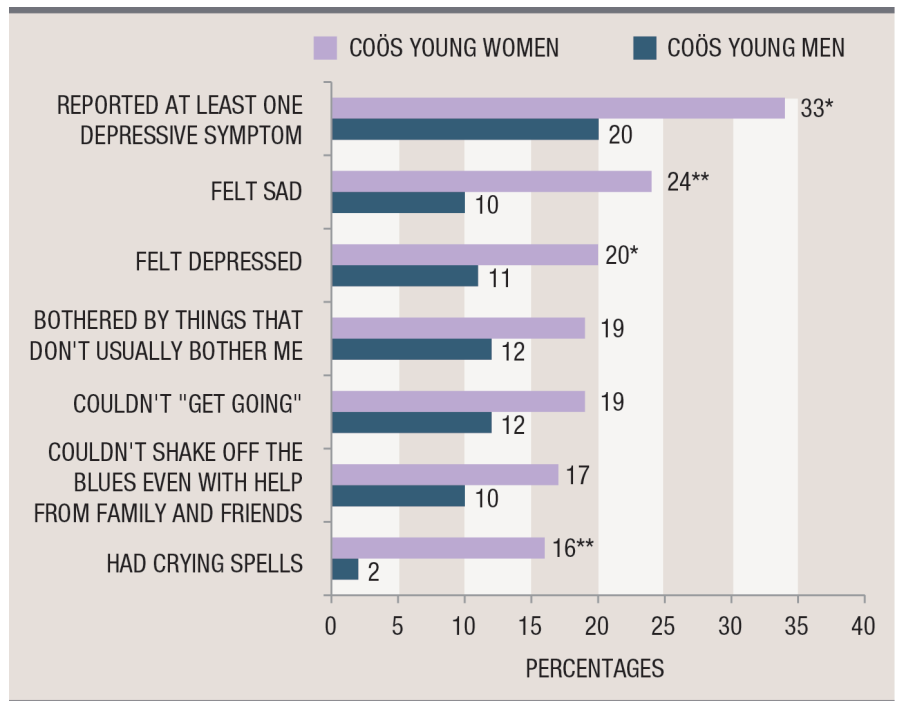
As stated above, rates of depressive disorder tend to be highest among young adults. Thus, the focus of this brief on depressive symptoms in young adulthood is especially appropriate. In the analyses presented below, comparisons between the percentages of depressive

symptoms reported by young adult women and men, ages 18 to 21, in the previous thirty days are made. Due to different measures of depressive symptoms in the two surveys analyzed, however, direct comparisons of individual depressive symptoms are not possible across samples. Yet, previous research has shown that the items used in both surveys tend to cluster together.⁹ That is, even though the items are not exactly the same in both surveys, as a whole, they all measure depressed mood. Therefore, comparisons of total symptom scores across the surveys are possible.

Figure 1 shows the percentages of depressive symptoms reported by Coös young adult women and men “frequently” or “almost all the time” in the previous thirty days. As shown, 33 percent of Coös young adult women reported at least one of six depressive symptoms, compared to 20 percent of Coös young adult men.¹⁰ In particular, Coös young women are significantly more likely than their male counterparts to report feeling sad, feeling depressed, and having “crying spells.” Such findings suggest that, unlike some prior research on rural young adults has indicated,¹¹ patterns of depression in Coös County may indeed vary by sex.¹²

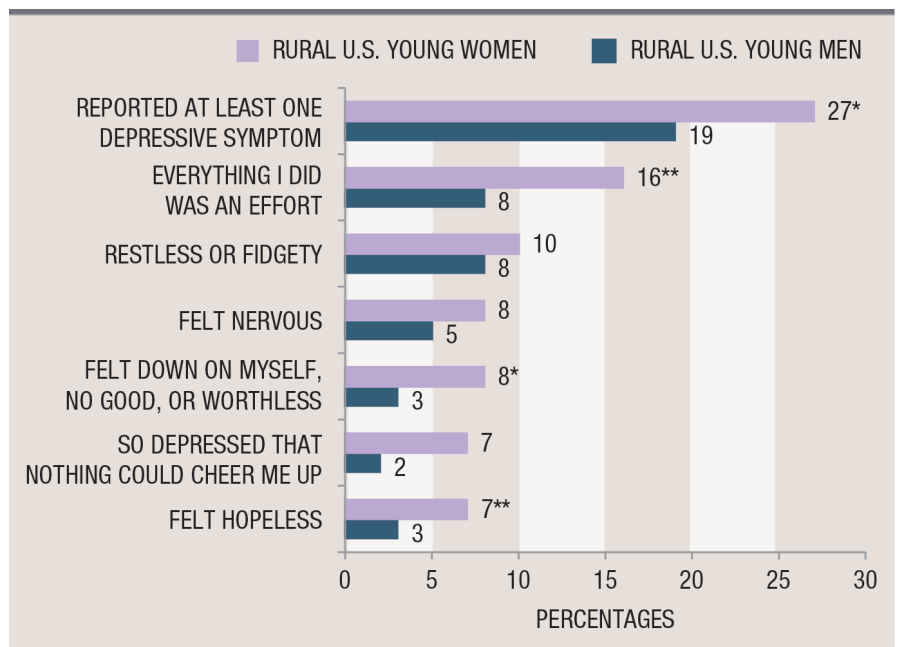
Figure 2 shows the percentages of depressive symptoms reported by rural young women and men nationwide “most of the time” or “all of the time” in the prior thirty days. As shown, 27 percent of rural young women reported at least one of six depressive symptoms, compared to 19 percent of rural young men nationwide.¹³ In particular, rural young women nationwide are more likely than their male counterparts to report feeling “down on myself,” no

FIGURE 1: DEPRESSIVE SYMPTOMS AMONG COÖS COUNTY YOUNG ADULTS IN THE PRIOR 30 DAYS



Note: Asterisks denote statistically significant differences between Coös young adult women and men: * p < .05; ** p < .01.

FIGURE 2: DEPRESSIVE SYMPTOMS AMONG RURAL YOUNG ADULTS NATIONWIDE IN THE PRIOR 30 DAYS



Note: Asterisks denote statistically significant differences between rural young adult women and men nationwide: * p < .05; ** p < .01.

good, worthless, that “everything I did was an effort,” and hopeless. Again, unlike the findings from prior research on rural young adults nationwide suggest, patterns of depressive symptoms do vary by sex.¹⁴

Findings presented in Figures 1 and 2 suggest that, contrary to some national estimates, there may be sex differences in depression for rural young adults. Both in Coös County and among U.S. rural young adults ages 18 to 21, depressive symptoms are higher for young women than for young men. Comparisons of Coös rates to nationwide estimates suggest that depressed mood may be especially high among Coös young women.¹⁵ On the other hand, rates of depressive symptoms are essentially equal for Coös young men and rural young men nationwide.

Given the elevated rate of depression among Coös young women, local policies and practices that confront the unique challenges of young adult women in the region should be employed. Previous research has shown that lower levels of stress are related to lower levels of depression among young adults,¹⁶ and that Coös County teenage girls are more “stressed out” than are Coös County teenage boys.¹⁷ In particular, girls experience higher rates of interpersonal strain, that is, stress related to their relationships with family and friends, and such stress exposure can increase depression. In addition, recent research shows that stressful life events increase depressed mood among Coös youth even when accounting for prior levels of depressed mood.¹⁸ As such, it appears that exposure to stress increases risk for depressive symptoms rather than the reverse.

In fact, analyses for this brief found that Coös young women who

Services that can help teenage girls cope with life strains could help to reduce their risk for depression in young adulthood. In addition, previous research has shown that stress increases risk for substance abuse symptoms for Coös girls and boys. Therefore, programs that help Coös youth manage or reduce their stress also may lessen their risk for substance abuse in adulthood.

had reported higher levels of stress in 2009 were significantly more likely to report depressive symptoms in 2011. As such, services that can help teenage girls cope with life strains could help to reduce their risk for depression in young adulthood. In addition, previous research has shown that stress increases risk for substance abuse symptoms for Coös girls and boys.¹⁹ Therefore, programs that help Coös youth manage or reduce their stress also may lessen their risk for substance abuse in adulthood.

Substance Abuse Symptoms

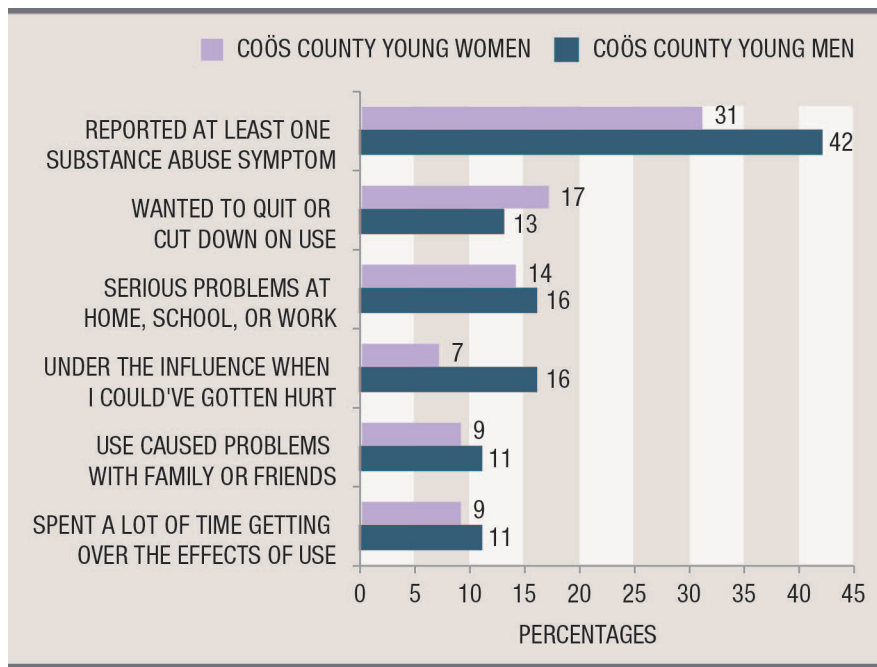
As with rates of depressive disorder, substance abuse disorders also are more common in young adulthood than at any other period during the life course.²⁰ National estimates of substance abuse in 2010 have suggested that, while alcohol abuse may be more common among rural young men nationwide, rates of other substance abuse are similar for rural young men and women.²¹ Below, comparisons between the percentages of substance abuse symptoms reported in 2011 by young adult women and men, ages 18 to 21, in the prior twelve months are made.

For comparison purposes, only items that were similar in the two surveys are used, resulting in a total of nine substance abuse symptoms. Figures 3 and 4 show the percentages of young-adult self-reports of at least one of those symptoms in the previous twelve months, as well as the five most commonly reported symptoms for young adults in Coös County and nationwide, respectively.

As shown in Figure 3, 31 percent of Coös young women report at least one substance abuse symptom, compared to 42 percent of Coös young men.²² Although these rates appear higher for young men, no significant sex differences are apparent for the individual symptoms or for reporting at least one symptom.²³ In line with prior research, the results suggest that young adult women and men in Coös County tend to report substance abuse symptoms at equivalent rates.

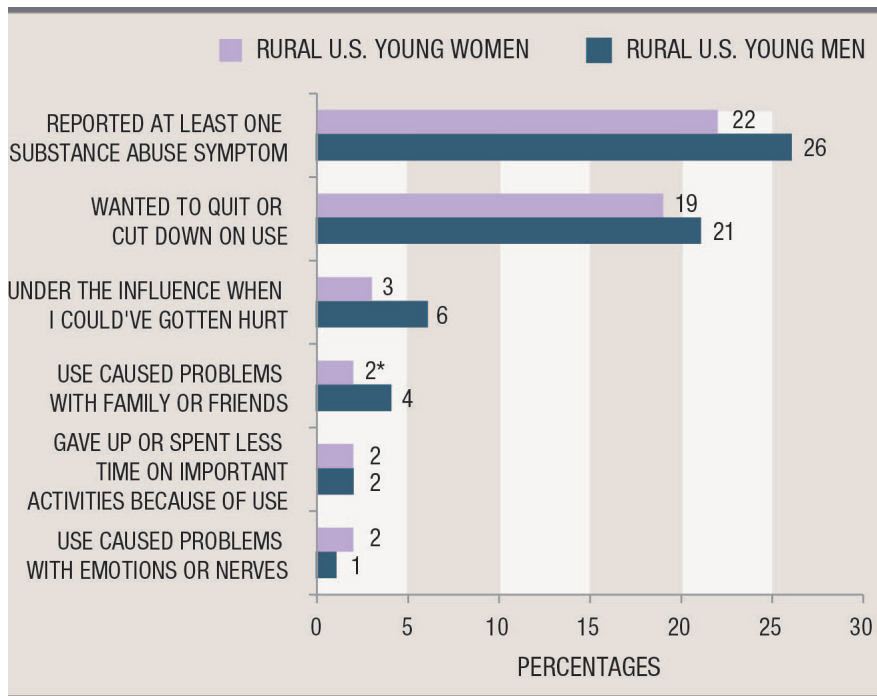
Figure 4 shows the percentages of the five most commonly reported substance abuse symptoms by rural young adult women and men nationwide in the prior year. As shown, 22 percent of young women and 26 percent of young men reported at least one substance abuse symptom.²⁴ Although young men report higher rates of most symptoms than do

FIGURE 3: SUBSTANCE ABUSE SYMPTOMS AMONG COÖS COUNTY YOUNG ADULTS IN THE PAST YEAR



Note: No significant sex differences are observed between Coös young adult women and men.

FIGURE 4: SUBSTANCE ABUSE SYMPTOMS AMONG RURAL YOUNG ADULTS NATIONWIDE IN THE PAST YEAR



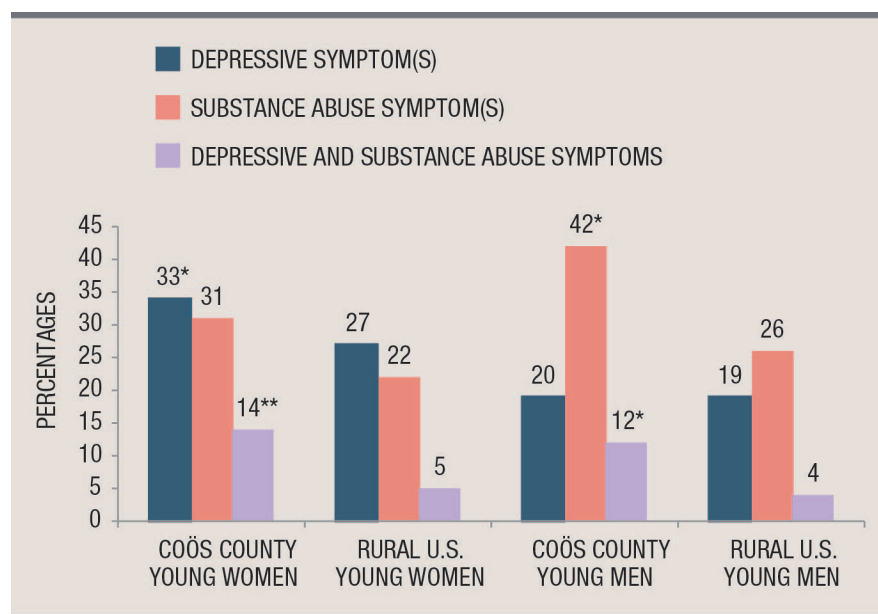
Note: Asterisks denote statistically significant differences between rural young adult women and men nationwide: * $p < .05$; ** $p < .01$.

women, only one of these differences is statistically significant: young men are more likely than young women to report use-related problems with family or friends. Similar to Coös County young adults, however, symptoms of substance abuse are largely the same for rural young women and men nationwide.

Findings in Figures 3 and 4 confirm what prior research has found with respect to sex differences in rural substance abuse. Specifically, there are no apparent differences between young adult women and men in percentages of self-reported substance abuse symptoms. When compared to their nationwide counterparts, however, Coös young women and men report significantly higher percentages of substance abuse symptoms.²⁵

The most effective strategies for addressing the elevated young-adult substance abuse symptoms in Coös are likely to be those that build on the strengths of its communities.²⁶ Previous work has shown that, among Coös youth, stress exposure increases risk for later alcohol and drug abuse symptoms,²⁷ even when accounting for prior substance use problems.²⁸ Moreover, a strong sense of community among Coös youth can mitigate the harmful effects of stress on substance use problems,²⁹ especially for Coös boys.³⁰ Analyses for this brief show that Coös young adults who reported higher levels of teen stress (in 2009) were significantly more likely to report substance abuse symptoms as young adults (in 2011). Thus, programs that foster community attachment could lessen adult substance abuse in the region. In addition, combined or co-occurring symptoms of depression and substance abuse in Coös County require careful consideration.

FIGURE 5: CO-OCCURRING DEPRESSIVE AND SUBSTANCE ABUSE SYMPTOMS AMONG COÖS COUNTY YOUNG ADULTS AND RURAL YOUNG ADULTS NATIONWIDE



Note: Asterisks denote statistically significant differences between Coös young adults and rural young adults nationwide: * $p < .05$; ** $p < .01$.

Co-occurring Symptoms

Often the most serious mental health struggles involve co-occurring disorders or symptoms, and prior studies show that both women and men with depressive or substance abuse disorders are at an increased risk for experiencing the other.³¹ Figure 5 shows a summary of the percentages of young adult women and men in Coös County and in rural areas nationwide who reported at least one depressive symptom, one substance abuse symptom, and at least one of each symptom type together. As shown, 14 percent of Coös young adult women and 12 percent of Coös young adult men report co-occurring depressive and substance abuse symptoms, compared to 5 percent of young adult women and 4 percent of young adult men in rural areas

nationwide. These percentages are significantly higher for Coös young adults than for rural young adults nationwide.³²

In fact, Coös young adults are *four times* more likely than their national counterparts to report co-occurring depressive and substance abuse symptoms.³³ Analyses for this brief found that a strong sense of attachment to one's community in adolescence (in 2009) reduced the co-occurrence of depressive and substance abuse symptoms in young adulthood (in 2011), even for the most "stressed out" teens. Arguably then, strategies that emphasize community attachment in adolescence can minimize the suffering of even the most "at-risk" Coös youth and young adults.

Conclusion

The findings in this brief indicate that Coös County young adults are more likely than rural young adults nationwide to suffer from symptoms of depression and substance abuse, and these patterns vary by sex. Coös young women tend to experience more depressive symptoms than their national counterparts, and Coös young men tend to experience more substance abuse symptoms than their national counterparts. Reasons for elevated rates among Coös young adults are unclear; yet, it seems plausible that the stresses and strains related to economic uncertainty might increase risk for mental health problems, especially for young adults in this region.

Young adulthood is a critical stage of the life course when perceptions of educational and economic opportunities are shaped and realized. Even though economic hardship persists in many rural areas, the rural northeast has more recently seen the dramatic loss of manufacturing jobs—jobs that historically helped to sustain the region's rural economy.³⁴ Young adults raised in Coös County have witnessed this economic decline firsthand. In addition, compared to non-rural young adults, rural young adults confront a particularly troubling choice between their "rural heritages" and aspirations for employment or educational opportunities that may not exist in their home communities.³⁵ Exposure to these and other strains can increase risk for depression and substance abuse,³⁶ and analyses in this brief confirm that Coös young adults who were more "stressed out" as adolescents report more symptoms of depression and substance

abuse as young adults. Thus, Coös County’s emerging adults may encounter higher rates and different types of stress than their national counterparts, and as a result, suffer from poorer mental health.

In addition, findings from this brief show that young adults in Coös County are four times more likely to experience co-occurring depressive and substance abuse symptoms than rural young adults nationwide. Analyses show also that Coös young adults who were more attached to their commu-

nities or less “stressed out” as teenagers (in 2009) are less likely to report co-occurring symptoms of depression and substance abuse in young adulthood (in 2011). A strong sense of community attachment in adolescence, moreover, buffers the harmful effects of teenage stress on co-occurring symptoms of depression and substance abuse in young adulthood. That is, even when facing high levels of stress, Coös teens who are attached to their communities experience relatively low rates of co-occurring depressive and substance abuse symptoms as young adults.

complete data in 2011 were more likely than those who completed the 2011 survey to report weaker attachments to their communities and higher rates of depressive, substance abuse, and co-occurring symptoms as teens. Given that community attachment is related to better mental health, and that prior mental health is a strong predictor of subsequent mental health, it seems likely that those participants who were not surveyed in 2011 experience higher rates of mental disorder as young adults. As such,

and engage them in their broader communities can serve to promote their mental health in young adulthood. To meet the long-term health challenges in the region, an expansion of services that emphasize teen stress management and community attachment is strongly recommended.

Findings in this brief suggest that prevention programs that help Coös teens manage the stressful realities of their lives and engage them in their broader communities can serve to promote their mental health in young adulthood.

nities or less “stressed out” as teenagers (in 2009) are less likely to report co-occurring symptoms of depression and substance abuse in young adulthood (in 2011). A strong sense of community attachment in adolescence, moreover, buffers the harmful effects of teenage stress on co-occurring symptoms of depression and substance abuse in young adulthood. That is, even when facing high levels of stress, Coös teens who are attached to their communities experience relatively low rates of co-occurring depressive and substance abuse symptoms as young adults.

Because the Coös Youth Study (CYS) is a longitudinal study, careful attention must be paid to the respondents who were surveyed in 2008 or 2009 but are not represented in the analyses for this brief. Participants who did not provide

estimates presented in this brief may underestimate the extent of suffering among young adults in Coös County.³⁷

Unfortunately, New Hampshire’s level of unmet need for services is among the highest in the nation,³⁸ and service providers in New Hampshire’s North Country continue to face obstacles that can impede their ability to meet the mental health needs of the communities they serve.³⁹ In particular, local providers have called for: increases in the number of available mental health professionals in the area, more variety in the types of services offered, and a more conscious effort to include the community’s youth members in leadership roles.⁴⁰ Similarly, findings in this brief suggest that prevention programs that help Coös teens manage the stressful realities of their lives

Endnotes

1. Ronald C. Kessler, "Overview of Descriptive Epidemiology of Mental Disorders," in *Handbook of the Sociology of Mental Health, Second Edition*, edited by Carol S. Aneshensel, Jo C. Phelan, and Alex Bierman (New York: Springer, 2013): 169–182.
2. Karen T. Van Gundy and Meghan L. Mills, "Health and the Stress Process in Rural America," in *Poverty and Health, A Crisis Among America's Most Vulnerable, Volume 2: The Importance of Place in Determining their Future*, edited by Kevin M. Fitzpatrick (Santa Barbara, CA: Praeger, 2013), 207–233; National Survey on Drug Use and Health: Public Use Codebook (Research Triangle Park, NC: RTI International, 2011).
3. Karen T. Van Gundy and Meghan L. Mills, "Health and the Stress Process in Rural America."
4. Eleanor M. Jaffee, "Coös County's Class of 2009: Where Are They Now?" Issue No. 31 (Durham, NH: Carsey Institute, University of New Hampshire, 2012); Nena F. Stracuzzi, "Youth Aspirations and a Sense of Place in a Changing Rural Economy: The Coös Youth Study," Issue No. 11 (Durham, NH: Carsey Institute, University of New Hampshire, 2009); Corinna Jenkins Tucker et al., "Sibling Proactive and Reactive Aggression in Adolescence," *Journal of Family Violence* 28 (2013): 299–310; Karen T. Van Gundy et al., "Perceived Community Cohesion and the Stress Process in Youth," *Rural Sociology* 76 (2011): 293–318.
5. Included in the 2008 and 2009 data waves, respectively, were 83 percent of the population of 7th and 11th grade students, and 86 percent of the population of 8th and 12th grade students, who were attending all public middle and high schools in Coös County, New Hampshire.
6. The vast majority of 2011 young-adult participants completed online surveys. Only respondents who were part of the 2008 7th grade cohort or the 2009 8th grade cohort completed paper-and-pencil questionnaires in 2011.
7. "National Survey of Drug Use and Health: Public Use Codebook, 2011." All NSDUH analyses are based on weighted data.
8. Respondents' perceived lack of anonymity or privacy during in-person interviews may lead to lower estimates of illegal behaviors, like underage or illicit substance use, compared to online or in-class surveys like the CYS. To reduce this possible bias, the NSDUH uses computer-assisted techniques that afford respondents a level of privacy akin to online or in-class surveys. As stated in the 2011 NSDUH codebook, "Use of [audio computer-assisted self-interviewing] is designed to provide respondents with a highly private and confidential means of responding to questions and to increase the level of honest reporting of illicit drug use and other sensitive behaviors." Still, comparisons of CYS and NSDUH estimates should bear in mind potential reporting bias.
9. Lenore S. Radloff, "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population," *Applied Psychological Measurement* 1 (1977): 385–401; M.M. Weisman, B. Prusoff, and P. Newberry, *Comparison of the CES-D with Standardized Depression Rating Scales at Three Points in Time* (New Haven, CT: Yale University Press, 1975).
10. This sex difference is statistically significant, even when controls for age, educational status, and employment status are applied. Participants in the 2008 or 2009 surveys who did not participate in the 2011 survey were significantly older than those who did participate. As such, controls for age are applied here.
11. Karen T. Van Gundy and Meghan L. Mills, "Health and the Stress Process in Rural America."
12. The CYS does not contain clinical measures of major depressive disorder or substance abuse or dependence; however, it does include measures of depressive and substance abuse symptoms, which provide proxies for moderate levels of distress and disorder.
13. Similar to the Coös young adults, sex differences in depressive symptoms nationwide are statistically significant, even with statistical controls for age, race/ethnicity, educational status, and employment status.
14. In the 2011 NSDUH, rural young adult women, ages 18 to 21, were twice as likely as their male counterparts to meet DSM-IV criteria for major depressive disorder (8 percent of women compared to 4 percent of young men) and half as likely to meet criteria for substance abuse or dependence (5 percent of women compared to 10 percent of men).
15. With controls for age, educational status, and employment status, Coös young women show significantly higher rates of depressive symptoms compared to rural young women nationwide.
16. Karen Van Gundy, "Gender, the Assertion of Autonomy, and the Stress Process in Young Adulthood," *Social Psychology Quarterly* 65 (2002): 346–63.
17. Karen T. Van Gundy and Meghan L. Mills, "Teen Stress and Substance Use Problems in Coös: Survey Shows Strong Community Attachment Can Offset Risk."
18. Meghan L. Mills and Karen T. Van Gundy, "Socioeconomic Status and the Stress Process in Rural Youth: The Role of Social Attachments." Presented at the annual meeting of the *American Sociological Association*, Denver, CO (August, 2012).
19. Meghan L. Mills and Karen T. Van Gundy, "Socioeconomic Status and the Stress Process in Rural Youth." Karen T. Van Gundy and Meghan L. Mills, "Teen Stress and Substance Use Problems in Coös."
20. Karen Van Gundy, "Substance Abuse in Rural and Small Town America," *Reports on Rural America*, Volume 1, Issue 2 (Durham, NH: Carsey Institute, University of New Hampshire, 2006).
21. Karen T. Van Gundy and Meghan L. Mills, "Health and the Stress Process in Rural America."

22. Separate analyses conducted these same analyses for Coös young adults who reported substance abuse symptoms only “sometimes” or “often” in the prior twelve months. With these more conservative estimates, only 13 percent of young women and 11 percent of young men reported at least one substance abuse symptom in the previous year.
23. Other substance abuse symptoms included: participating in fewer important activities because of substance use (2 percent for women and 8 percent for men), trouble with the law because of substance use (7 percent for women and 12 percent for men), use-related problems with physical health (8 percent for women and 5 percent for men), and use-related problems with emotions or nerves (8 percent for women and 8 percent for men).
24. Other substance abuse symptoms included: serious problems at home, work, or school (1 percent for women and 2 percent for men); trouble with the law because of substance use (0 percent for women and 2 percent for men); use-related problems with physical health (1 percent for women and 0 percent for men); and spending a lot of time getting over the effects of substance use (2 percent for women and 1 percent for men).
25. These differences are significant even with statistical controls for age, sex, race/ethnicity, educational status, and employment status.
26. Laura V. Scaramella and Angela W. Keyes, “The Social Contextual Approach and Rural Adolescent Substance Use: Implications for Prevention in Rural Settings,” *Clinical Child and Family Psychology Review* 4 (3) (2001): 231–51.
27. Karen T. Van Gundy and Meghan L. Mills, “Teen Stress and Substance Use Problems in Coös.”
28. Meghan L. Mills and Karen T. Van Gundy, “Socioeconomic Status and the Stress Process in Rural Youth.”
29. Karen T. Van Gundy et al., “Community Cohesion and the Stress Process in Youth.”
30. Karen T. Van Gundy and Meghan L. Mills, “Teen Stress and Substance Use Problems in Coös.”
31. Ronald C. Kessler, “Overview of Descriptive Epidemiology of Mental Disorders.”
32. Separate analyses found no significant differences between Coös young adults and their counterparts nationwide with more conservative measures of substance abuse symptoms, which included only symptoms reported “sometimes” or “often” in the prior twelve months.
33. Analyses control statistically for race/ethnicity, employment status, and educational status.
34. A. Glasmeier, and P. Salant, “Low-Skill Workers in Rural America Face Permanent Job Loss,” Issue No 2 (Durham, NH: Carsey Institute, University of New Hampshire, 2006).
35. Robert A. Petrin et al., “Interpersonal Competence Configurations, Attachment to Community and Residential Aspirations of Rural Adolescents,” *Journal of Youth and Adolescence* 40 (2011) 1091–1105).
36. Karen T. Van Gundy et al., “Perceived Community Cohesion and the Stress Process in Youth.”
37. When compared to CYS respondents who were 11th graders in 2008 and who provided complete data in 2011, those who did not also were more likely to be male and less likely to be college bound (see Eleanor M. Jaffee, “Coös County’s Class of 2009: Where Are They Now?”). As such, estimates presented in this brief may underestimate the extent of mental health struggles among Coös young men and Coös young adults who are not in college.
38. Karen Van Gundy, “Substance Abuse in Rural and Small Town America.”
39. Meghan L. Mills, “Help in a Haystack: Youth Substance Abuse and Mental Health Services in the North Country,” Issue No. 20 (Durham, NH: Carsey Institute, University of New Hampshire, 2010).
40. Meghan L. Mills, “Help in a Haystack.”

The Carsey Institute Coös Youth Study

The Carsey Institute is conducting a panel study of Coös County youth that will provide data about the attitudes and experiences of the county's youth as they approach young adulthood and face the decision to remain in their community, seek opportunities elsewhere, or leave for an education and then return. By following the entire populations of two age groups over a ten-year period, we will help North Country leaders gain a better understanding of young people's decision making.

Research Team

Eleanor M. Jaffee is an evaluation research associate at the Carsey Institute and research assistant professor of social work. She provides program evaluation and project management for the Coös Youth Study, as well as technical assistance to organizations seeking to build internal capacity for evaluation. Her dissertation research focused on the quality of life of women enrolled in a supported housing program for adults with psychiatric disabilities and histories of homelessness.

Cesar J. Rebellon is a faculty fellow at the Carsey Institute and an associate professor in sociology at the University of New Hampshire. His primary research interests focus on family and peer correlates of juvenile crime and delinquency, with a particular emphasis on the manner in which delinquency may yield reinforcing social rewards among adolescents.

Erin Hiley Sharp is a Carsey Institute faculty fellow and assistant professor in family studies at the University of New Hampshire. Her research interests include activity involvement as a context for adolescent development; parental, family, and broader contextual influences on adolescent development; and prevention research and theory from a positive youth development perspective.

Nena F. Stracuzzi is a senior teaching and research fellow in the doctorate of education program at Northeastern University and a faculty fellow at the Carsey Institute. Her research for the Carsey Institute has focused primarily on vulnerable youth and families.

Corinna Jenkins Tucker is a faculty fellow at the Carsey Institute and an associate professor in family studies at the University of New Hampshire. Her primary research interests focus on the nature and context of family relationships and their links to adolescent psychosocial development.

Karen T. Van Gundy is an associate professor of sociology, a core member of the Justice Studies faculty, and a faculty fellow at the Carsey Institute at the University of New Hampshire. Her work applies 'stress process' and 'life course' approaches to understanding place-linked variations in physical, emotional, and behavioral health outcomes over time.

About the Author

Karen T. Van Gundy is an associate professor of sociology, a core member of the Justice Studies faculty, and a faculty fellow at the Carsey Institute at the University of New Hampshire (karen.vangundy@unh.edu).

Acknowledgements

The National Survey on Drug Use and Health, which is made available by the Inter-University Consortium for Political and Social Science, is supported by the Substance Abuse and Mental Health Services Administration and the U.S. Department of Health and Human Services. The Coös Youth Study is supported by the National Science Foundation (Grant No. 1155797) and the Neil and Louise Tillotson Fund of the New Hampshire Charitable Foundation (Grant No. 79127). Any opinions, findings, conclusions, or

recommendations expressed in this brief are those of the author and do not necessarily reflect the views of the funders. This work relies also on the generous participation of the respondents, their families, teachers, school officials, and the communities involved in the Coös Youth Study. Special thanks go to Meghan Mills and Michael Staunton, who have been crucial to the ongoing success of this project, and to Curt Grimm, Laurel Lloyd, Bruce Mallory, Beth Mattingly, and Amy Sterndale at the Carsey Institute for their helpful comments and suggestions.



CARSEY INSTITUTE

Building knowledge for families and communities

The Carsey Institute conducts policy research on vulnerable children, youth, and families and on sustainable community development. We give policy makers and practitioners timely, independent resources to effect change in their communities.

This work was supported by the The Neil and Louise Tillotson Fund of the New Hampshire Charitable Foundation.

Huddleston Hall
73 Main Street
Durham, NH 03824

(603) 862-2821

www.carseyinstitute.unh.edu