

BRIEF REPORT

The Influence of Parental Divorce and Alcohol Abuse on Adult Offspring Risk of Lifetime Suicide Attempt in the United States

Dana Alonzo and Ronald G. Thompson
Columbia University

Mahlki Stohl
New York State Psychiatric Institute

Deborah Hasin
Columbia University and New York State Psychiatric Institute

The influences of parental divorce and alcohol abuse on adult offspring lifetime suicide attempt have not been examined in national data. This study analyzed data from the 2001–2002 NESARC to estimate main and interaction effects of parental divorce and alcohol abuse on lifetime suicide attempt. Adjusted for controls, parental divorce and parental alcohol abuse independently increased odds of lifetime suicide attempt. The effect of parental divorce was not significantly moderated by parental alcohol abuse. Further research is needed to examine whether additional parental and offspring psychiatric and substance use covariates attenuate the association between parental divorce and lifetime suicide attempt.

Suicide remains a major public health concern in the United States, where, in the last two decades, there have been approximately 30,000 suicide deaths per year (Center for Substance Abuse Treatment, 2008). Unfortunately, the lifetime prevalence of suicide attempts in the United States has not decreased over the past decade (Goldsmith, Pellmar, Kleinman, & Bunny, 2002; National Center for Health Statistics, 2007). This suggests a need to further investigate preventable and treatable risk factors for lifetime suicide attempt at the national level, as well as whether these risk factors interact to differentially influence the likelihood of suicidal attempt, to inform the development of effective prevention and treatment.

Several factors (e.g., sociodemographics, depression, alcohol use disorders) have been shown to increase the likelihood of lifetime suicide attempt. One factor in particular, experiencing parental divorce during childhood, is a common disruptive stressor

in the United States that has been linked to adult offspring lifetime suicide attempt (Lizardi, Thompson, & Hasin, 2010; Lizardi, Thompson, Keyes, & Hasin, 2009). Even after adjusting for sociodemographics, depression, and parental history of depression, adults who experienced parental divorce during childhood were at approximately 30% increased likelihood for lifetime suicide attempt (Lizardi et al., 2009, 2010) than those from intact families. However, prior studies on parental divorce and lifetime suicide attempt have not accounted for the influence of parental alcohol abuse in analyses.

Parental alcohol abuse has been associated with poor parenting skills and inadequate child supervision (Kelly, 2000; Størksen, Roysamb, Holmen, & Tambs, 2006), lack of affection, high levels of criticism or hostility, lax or inconsistent discipline or supervision, and general lack of involvement (Keyes, Hatzenbuehler, & Hasin, 2011; Larson & Halfon, 2013; Summers, Forehand, Armistead, & Tannenbaum, 1998; Wolfinger, 1998), all of which are also associated with elevated risk for lifetime suicide attempt. Additionally, parents with alcohol use problems often exhibit and model maladaptive coping and cognitive styles that deemphasize problem solving, which, in turn, can be internalized by offspring and lead to increased risk for depression and suicide attempt (Glowinski et al., 2004; Goodwin, Beautrais, & Fergusson, 2004; Kendler, Prescott, Myers, & Neale, 2003).

However, despite their associations with suicidal behavior, no study has examined the independent and combined effects of parental divorce and parental alcohol abuse on the risk for lifetime suicide attempt, including whether parental alcohol abuse moder-

Dana Alonzo, Graduate School of Social Work, Columbia University; Ronald G. Thompson, Department of Psychiatry, College of Physicians and Surgeons, Columbia University; Mahlki Stohl, New York State Psychiatric Institute; Deborah Hasin, Department of Psychiatry, College of Physicians and Surgeons, Columbia University, Department of Epidemiology, Mailman School of Public Health, Columbia University, and New York State Psychiatric Institute.

Correspondence concerning this article should be addressed to Dana Alonzo, Columbia University School of Social Work, 1255 Amsterdam Avenue, New York, NY 10027. E-mail: dl2298@columbia.edu

ates the relationship between parental divorce and lifetime suicide attempt, in a U.S. national sample. Thus, this study examined whether parental divorce and parental alcohol abuse affected the likelihood of adult offspring lifetime suicide attempt, while controlling for offspring sociodemographic characteristics, offspring depression and alcohol use disorders, and parental history of depression.

Method

Sample

Data were drawn from the 2001–2002 National Epidemiological Survey on Alcohol and Related Conditions (NESARC), a nationally representative U.S. survey of 43,093 noninstitutionalized civilian participants aged 18 years and over, interviewed in person. The National Institute on Alcohol Abuse and Alcoholism sponsored the study and the U.S. Bureau of the Census conducted fieldwork. Further details of the interviewers, training, and field quality control are described elsewhere (Grant et al., 2003, 2004). Young adults, Hispanics, and African Americans were oversampled, and rates are weighted to the 2000 decennial census in terms of age, race, sex, and ethnicity, and are further weighted to adjust for sampling probabilities. The overall response rate for the study was 81%. The research protocol, including informed consent procedures, received institutional review board approval from the U.S. Census Bureau and U.S. Office of Management and Budget.

Of the overall sample, 47.9% were male. In terms of ethnicity, 70.9% were White, 11.1% were Black, 2.1% were Native Americans, 4.4% were Asians, and 11.6% were Hispanic. In terms of age, 21.8% were 18 to 29 years, 30.9% were 30 to 44 years, 31.1% were 45 to 64 years, and 16.3% were 65 years or older. In terms of marital status, 61.6% were married or cohabiting; 17.5% were widowed, separated, or divorced; and 20.9% were never married. In terms of education, 15.7% had less than a high school education, 29.3% had a high school education, and 55.0% had at least some college. In terms of personal income, 47.3% had \$0 to \$19,999; 22.7% had \$20,000 to \$34,999; 22.0% had \$35,000 to \$69,999; and 8.1% had \$70,000 or more.

Measures

The Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS; Grant et al., 2003), a state-of-the-art structured diagnostic interview, was administered to the NESARC participants. This instrument was specifically designed for experienced lay interviewers, and was developed to advance measurement of substance use and mental disorders in large-scale surveys.

Offspring lifetime suicide attempt. Lifetime suicide attempt was assessed among those respondents who screened into the major depression section of the survey (reported feeling low mood or loss of interest for at least 2 weeks ever in their lifetime; $N = 13,753$), regardless of whether or not they met full criteria for major depression. All respondents reporting such were then asked, “During that time when your mood was at its lowest and you enjoyed or cared the least about things, did you attempt suicide?” A total of 1,073 respondents who screened into the major depression section of the interview reported a lifetime suicide attempt.

Parental divorce. Parental divorce during childhood was assessed with one question: “Did your [biological/adoptive] parents get divorced or permanently stop living together before you were 18?” This experience is referred to as parental divorce, for the purposes of this study. A follow-up question determined the age of the respondent at the time the parental divorce occurred.

Parental alcohol abuse. Parental histories of alcohol abuse were ascertained in a separate module of the AUDADIS. Interviewers read definitions to respondents that included examples of the diagnostic criteria for alcohol abuse. Rather than including full diagnostic criteria, the definitions included readily observable manifestations of the disorder, as these are more likely to be known to family informants, increasing the sensitivity of the measure (Andreasen, Endicott, Spitzer, & Winokur, 1977; Slutske et al., 1996; Zimmerman & Martinez-Pons, 1988). Following the reading of the definition, interviewers then asked whether respondent’s biological mother and father experienced the condition as defined. From this information, a variable was generated representing whether or not either parent had a history of alcohol abuse. Although formal *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000) diagnoses for alcohol abuse was not ascertained, AUDADIS family history variables have very good to excellent test–retest reliability (Grant et al., 2003; Grant, Harford, Dawson, Chou, & Pickering 1995; Hasin, Carpenter, McCloud, Smith, & Grant, 1997).

Parental depression. Parental history of depression was examined in a separate module of the AUDADIS. In assessing parental history of depression, the same procedure described for alcohol abuse was utilized. Interviewers read definitions to respondents that included examples of the diagnostic criteria for depression. Interviewers then asked separately whether the respondent’s biological mother and father experienced the condition as defined. From this information, a variable was created representing whether or not either parent had a history of depression.

Offspring alcohol use disorders. Computer diagnostic programs implemented the *DSM-IV-TR* criteria for diagnosing alcohol abuse and dependence using AUDADIS data. AUDADIS questions extensively covered *DSM-IV-TR* criteria for abuse and dependence. Test–retest reliability of AUDADIS alcohol abuse and dependence diagnoses ranges from good to excellent ($\kappa = 0.70$ to 0.84). Several types of validation studies, including psychiatrist reappraisal of AUDADIS alcohol abuse and dependence diagnoses (Canino et al., 1999), have demonstrated its validity to be good to excellent (i.e., Grant et al., 2004; Hasin, Stinson, Ogburn, & Grant, 2007).

Offspring depression. Offspring depression was assessed using a separate module of the AUDADIS focused on questions regarding low mood (see Heiman, Ogburn, Gorroochurn, Keyes, & Hasin, 2008, for full details). Subjects were asked whether they had ever experienced a time in their lives when, for most of the time, for at least 2 weeks, (a) they felt sad, blue, depressed or down; and (b) when they did not care about the things that they usually cared about, or did not enjoy the things they usually enjoyed. If respondents answered affirmatively to either of

these questions, they were then asked follow-up questions regarding the details of their experience during the time when their mood was low, targeting duration, frequency, timing, and severity of symptoms. Follow-up questions also focused on *DSM-IV-TR* criteria such as anhedonia, sleep, appetite, and concentration.

Offspring sociodemographic characteristics. Six sociodemographic variables were used as controls in multivariate regressions, including gender, age (18 to 29, 30 to 45, 46 to 64, 65+), race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, Other), marital status (currently married or living as married, not currently married), education (less than high school, high school, some college or higher), and past-year personal income (\$0 to \$19,999, \$20,000 to \$34,999, \$35,000 to \$69,999, \$70,000+).

Statistical Analysis

Descriptive proportions of parental divorce, parental alcohol abuse, and controls were summarized by lifetime suicide attempt. The proportion of individuals experiencing lifetime suicide attempt was calculated with 95% confidence intervals (CIs) for subgroups formed by crossing parental divorce with parental alcohol abuse. Bivariate associations between each predictor and lifetime suicide attempt were estimated using odds ratios obtained from separate logistic regressions. Multivariable logistic regression was used to obtain adjusted odds ratios (AORs), representing the unique effects of parental divorce and parental alcohol abuse on offspring lifetime suicide attempt, adjusted for all control variables.

To investigate whether the relationship between parental divorce and lifetime suicide attempt was different among those with parental alcohol abuse versus those without parental alcohol abuse, the interaction effect between parental divorce and parental alcohol abuse on offspring lifetime suicide attempt was calculated using a logistic regression model with an interaction term, first unadjusted and then adjusted for demographics. *F* tests were used to estimate the statistical significance of the inclusion of the interaction term in the model. To adjust for the complex sample characteristics of the NESARC, all analyses were conducted using SUDAAN-v. 11.0. This software adopts Taylor series linearization to take into account the design effects of the NESARC.

Results

Of the overall sample, 2.4% reported lifetime suicide attempts, 16.0% experienced parental divorce, 21.3% reported a parental history of alcohol abuse, and 6.0% experienced both parental divorce and parental alcohol abuse. Of those reporting lifetime suicide attempt (*n* = 1,073), 25.4% experienced parental divorce and 46.0% reported parental history of alcohol abuse. Additional characteristics for those with lifetime suicide attempt are presented in Table 1.

Adjusted for age, gender, race/ethnicity, marital status, education, past-year family income, lifetime alcohol use disorders, lifetime depression, and parental depressive symptoms, both parental divorce (AOR = 1.14, 95% CI [1.04, 1.25]) and parental alcohol abuse (AOR = 1.85, 95% CI = [1.69, 2.02]) remained indepen-

Table 1. Characteristics of Participants Reporting Lifetime Suicide Attempt (*N* = 1,073)

	<i>n</i>	%
Parental divorce		
Yes	273	25.4
No	800	74.6
Parental alcoholism		
Yes	494	46.0
No	579	54.0
Age		
18–29	297	28.6
30–39	259	24.2
40–49	233	21.7
50+	284	26.5
Gender		
Male	319	29.7
Female	754	70.3
Race		
White	623	58.0
Black	172	16.0
Native American	36	3.4
Asian	34	3.2
Hispanic	208	19.4
Marriage		
Married or living as married	398	37.1
Not currently married	675	62.9
Education		
Less than high school grad	229	21.4
High school graduate	305	28.4
Some college or higher	539	50.2
Family income		
\$1–\$19,999	472	44.0
\$20,000–\$35,999	230	21.4
\$35,000–\$69,999	258	24.0
\$70,000 or more	113	10.6
Lifetime alcohol use disorder		
Yes	558	52.0
No	515	48.0
Lifetime depression		
Yes	523	48.7
No	550	51.3
Parental depression		
Yes	589	52.1
No	484	47.9

dent predictors of increased odds of lifetime suicide attempt (see Table 2). Interaction analyses indicated that the overall effect of parental divorce was not significantly moderated by parental alcohol abuse (*p* = .816).

Discussion

Study findings indicated that parental divorce and parental alcohol abuse independently increased the likelihood of offspring lifetime suicide attempt by 14% and 85%, respectively, after adjusting for a variety of confounding sociodemographic and clinical variables. However, parental divorce and parental alcohol abuse did not interact to differentially increase risk for lifetime suicide attempt.

Table 2. Prevalence and Odds Ratios (With 95% Confidence Intervals) of Offspring Lifetime Suicide Attempt by Parental Divorce and Alcohol Abuse

	Lifetime suicide attempt				
	% (SE)	OR	95% CI	AOR ^a	95% CI
Parental divorce					
Yes (<i>n</i> = 273)	3.83 (0.28)	1.88	[1.74, 2.04]	1.14	[1.04, 1.25]
No (<i>n</i> = 800)	2.07 (0.10)	1.00	1.00	1.00	1.00
Parental alcohol abuse					
Yes (<i>n</i> = 494)	5.22 (0.29)	3.44	[3.24, 3.71]	1.85	[1.69, 2.02]
No (<i>n</i> = 579)	1.57 (0.09)	1.00	1.00	1.00	1.00

Note. SE = standard error; OR = odds ratio; AOR = adjusted odds ratio; CI = confidence interval. Bold indicates the finding is significant.

^a Adjusted for age, gender, race/ethnicity, marital status, education, past-year family income, lifetime alcohol use disorders, lifetime depression, and parental depressive symptoms.

Perhaps because families in which parents abuse alcohol are often characterized by marital conflict, parent-child conflict, and poor adaptive functioning on the part of the parents, it might be that parental divorce serves to attenuate some of this conflict by separating parents from one another, and therefore does not serve as an additional negative factor for offspring that leads to increased risk for adult maladjustment, such as suicidal behavior. Or it may be that the parental divorce is more anticipated or expected by offspring in these families, given the high level of conflict resulting from the parental alcohol abuse, and therefore it does not lead to as much confusion and resentment as in families in which the degree of parental discord is not as pronounced.

To have a greater impact on reducing the overall number of suicide attempts that occur yearly in the United States, prevention and treatment efforts need to target groups that have been accurately identified as at risk. Therefore, prevention and treatment professionals should recognize that children who experience parental divorce or parental alcohol abuse might be more vulnerable for suicide attempt than those from intact or nonalcoholic households. This underscores the need for comprehensive client and family assessment by clinicians to identify those individuals in particular need of early intervention. Establishment of developmentally appropriate support groups for children of alcohol-abusing parents, perhaps similar to those existing for older adult children and family members (i.e., Al-Anon), may potentially be one mechanism for minimizing the risk of future suicidal behavior, by providing a network of supportive concerned others to offset the negative impact of having an alcohol-abusing parent. Similar efforts could target children of divorced parents.

The study has several strengths and limitations. First, the NESARC is based on self-report, which can be affected by recall bias and social desirability. However, the measures used in the NESARC are of the type commonly employed in large epidemiological studies, and the NESARC utilized a carefully structured interview to assess aspects of clinical history that had high agreement with psychiatrist evaluations (Canino et al., 1999). Second, *DSM-IV-TR* diagnoses for parental alcohol and depression, and specific historical criteria (e.g., age of onset and remission), were not obtained. However, the AUDADIS structured interview has been used in many health-related studies (McLaughlin et al., 2012), and has shown good to excellent reliability and validity for parental history measures (Grant et al., 1995, 2003;

Hasin et al., 1997). In addition, although this measure reflects the participant's *perception* of their parents' alcohol history, and thus may be biased by the participant's individual experiences (Kendler et al., 1991), a recent study comparing the prevalence of child's perception of family alcohol problems with true prevalence indicates that this is an acceptable proxy (Kendler et al., 2012). Third, only subjects who screened into the major depression section of the interview were asked about suicidality. However, prior analyses of the effects of limiting inquiries on suicide attempts to only those respondents reporting at least 2 weeks of low mood (Grant, 1997; see Lizardi et al., 2010, for full details) indicated that NESARC coverage of suicide attempts at most missed 1% of respondents.

This is the first study to examine whether parental divorce and parental alcohol abuse affect the likelihood of offspring lifetime suicide attempt in a large nationally representative U.S. sample. Further research is needed to examine whether additional parental and offspring psychiatric and substance use covariates attenuate this association, and to better identify the specific factors, both environmental and genetic, that increase the risk for lifetime suicide attempt among those who experience parental divorce or alcohol abuse.

Keywords: parental divorce; adult suicide attempt; parental alcohol abuse

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.; text rev.). Washington, DC: Author.
- Andreasen, N. C., Endicott, J., Spitzer, R. L., & Winokur, G. (1977). The family history method using diagnostic criteria. Reliability and validity. *Archives of General Psychiatry, 34*, 1229-1235. doi:10.1001/archpsyc.1977.01770220111013
- Canino, G., Bravo, M., Ramirez, R., Febo, V. E., Rubio-Stipec, M., Fernandez, R. L., & Hasin, D. (1999). The Spanish Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS): Reliability and concordance with clinical diagnoses in a Hispanic population. *Journal of Studies on Alcohol, 60*, 790-799.
- Center for Substance Abuse Treatment. (2008). *Substance abuse and suicide prevention: Evidence and implications—A white paper*. DHHS Pub. No. SMA-08-4352. Rockville, MD: Substance Abuse and Mental Health Services Administration.

- Glowinski, A. L., Jacob, T., Bucholz, K. K., Scherrer, J. F., True, W., & Heath, A. C. (2004). Paternal alcohol dependence and offspring suicidal behaviors in a children-of-twins study. *Drug and Alcohol Dependence, 76*, S69–S77. doi:10.1016/j.drugalcdep.2004.08.008
- Goldsmith, S. K., Pellmar, T. C., Kleinman, A. M., & Bunny, W. E. (Eds.). (2002). *Reducing suicide: A national imperative*. Washington, DC: National Academies Press.
- Goodwin, R. D., Beautrais, A. L., & Fergusson, D. M. (2004). Familial transmission of suicidal ideation and suicide attempts: Evidence from a general population sample. *Psychiatry Research, 126*, 159–165. doi:10.1016/j.psychres.2004.02.010
- Grant, B. F. (1997). Prevalence and correlates of alcohol use and DSM-IV alcohol dependence in the United States: Results of the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Studies on Alcohol, 58*, 464–473.
- Grant, B. F., Dawson, D. A., Stinson, F. S., Chou, S. P., Kay, W., & Pickering, R. P. (2003). The Alcohol Use Disorder and Associated Disabilities Interview Schedule-IV (AUDADIS-IV): Reliability of alcohol consumption, tobacco use, family history of depression and psychiatric diagnostic modules in a general population sample. *Drug and Alcohol Dependence, 71*, 7–16. doi:10.1016/S0376-8716(03)00070-X
- Grant, B. F., Harford, T. C., Dawson, D. A., Chou, P. S., & Pickering, R. (1995). The Alcohol Use Disorder and Associated Disabilities Schedule (AUDADIS): Reliability of alcohol and drug modules in a general population sample. *Drug and Alcohol Dependence, 39*, 37–44. doi:10.1016/0376-8716(95)01134-K
- Grant, B. F., Stinson, F. S., Dawson, D. A., Chou, S. P., Dufour, M. C., Compton, W., . . . Kaplan, K. (2004). Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry, 61*, 807–816. doi:10.1001/archpsyc.61.8.807
- Hasin, D., Carpenter, K. M., McCloud, S., Smith, M., & Grant, B. F. (1997). The Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS): Reliability of alcohol and drug modules in a clinical sample. *Drug and Alcohol Dependence, 44*, 133–141. doi:10.1016/S0376-8716(97)01332-X
- Hasin, D. S., Stinson, F. S., Ogburn, E., & Grant, B. F. (2007). Prevalence, correlates, disability, and comorbidity of DSM-IV alcohol abuse and dependence in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry, 64*, 830–842. doi:10.1001/archpsyc.64.7.830
- Heiman, G. A., Ogburn, E., Gorroochurn, P., Keyes, K. M., & Hasin, D. (2008). Evidence for a two-stage model of dependence using the NESARC and its implications for genetic association studies. *Drug and Alcohol Dependence, 92*, 258–266. doi:10.1016/j.drugalcdep.2007.08.007
- Kelly, J. B. (2000). Children's adjustment in conflicted marriage and divorce: A decade review of research. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*, 963–973. doi:10.1097/00004583-200008000-00007
- Kendler, K. S., Prescott, C. A., Myers, J., & Neale, M. C. (2003). The structure of genetic and environmental risk factors for common psychiatric and substance use disorders in men and women. *Archives of General Psychiatry, 60*, 929–937. doi:10.1001/archpsyc.60.9.929
- Kendler, K. S., Silberg, J. L., Neale, M. C., Kessler, R. C., Heath, A. C., & Eaves, L. J. (1991). The family history method: Whose psychiatric history is measured? *American Journal of Psychiatry, 148*, 1501–1504.
- Kendler, K. S., Sundquist, K., Ohlsson, H., Palmér, K., Maes, H., Winkleby, M. A., & Sundquist, J. (2012). Genetic and familial environmental influences on the risk for drug abuse: A national Swedish adoption study. *Archives of General Psychiatry, 69*, 690–697.
- Keyes, K. M., Hatzenbuehler, M. L., & Hasin, D. S. (2011). Stressful life experiences, alcohol consumption, and alcohol use disorders: The epidemiological evidence for four main types of stressors. *Psychopharmacology, 218*, 1–17. doi:10.1007/s00213-011-2236-1
- Larson, K., & Halfon, N. (2013). Parental divorce and adult longevity. *International Journal of Public Health, 58*, 89–97. doi:10.1007/s00038-012-0373-x
- Lizardi, D., Thompson, R. G., & Hasin, D. (2010). The role of depression in the differential effect of childhood parental divorce on male and female adult offspring suicide attempt. *Journal of Nervous and Mental Disease, 198*, 687–690.
- Lizardi, D., Thompson, R., Keyes, K., & Hasin, D. (2009). Parental divorce, parental depression, and gender differences in adult offspring suicide attempt. *Journal of Nervous and Mental Disease, 197*, 899–904. doi:10.1097/NMD.0b013e3181c299ac
- McLaughlin, K. A., Gadermann, A. M., Hwang, I., Sampson, N. A., Al-Hamzawi, A., & Andrade, L. H. (2012). Parent psychopathology and offspring mental disorders: Results from the WHO World Mental Health Surveys. *The British Journal of Psychiatry, 200*, 290–299. doi:10.1192/bjp.bp.111.101253
- National Center for Health Statistics. (2007). *Health, United States, 2007, with charts on trends in health of Americans*. Hyattsville, MD: Centers for Disease Control and Prevention.
- Slutske, W. S., Heath, A. C., Madden, P. A. F., Bucholz, K. K., Dinwiddie, S. H., Dunne, M. P., . . . Martin, N. G. (1996). Reliability and reporting biases for perceived parental history of alcohol-related problems: Agreement between twins and differences between discordant pairs. *Journal of Studies on Alcohol, 57*, 387–395.
- Størksen, I., Roysamb, E., Holmen, T. L., & Tambs, K. (2006). Adolescent adjustment and well-being: Effects of parental divorce and distress. *Scandinavian Journal of Psychology, 47*, 75–84. doi:10.1111/j.1467-9450.2006.00494.x
- Summers, P., Forehand, R., Armistead, L., & Tannenbaum, L. (1998). Parental divorce during early adolescence in Caucasian families: The role of family process variables in predicting the long-term consequences for early adult psychosocial adjustment. *Journal of Consulting and Clinical Psychology, 66*, 327–336. doi:10.1037/0022-006X.66.2.327
- Wolfinger, N. H. (1998). The effects of parental divorce on adult tobacco and alcohol consumption. *Journal of Health and Social Behavior, 39*, 254–269. doi:10.2307/2676316
- Zimmerman, B. J., & Martinez-Pons, M. (1988). Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology, 80*, 284–290. doi:10.1037/0022-0663.80.3.284