



Annotated Bibliography Substance Misuse and Mental Health Indicators: Risk and Protective Factors

This document is an annotated bibliography of the research used to compile the table of shared risk and protective factors included in the document [Demystifying Data: Gathering and Using Local Risk and Protective Factor Data for Prevention](#).

1. Anda RF, Brown DW, Felitti VJ, Bremner JD, Dube SR, Giles WH. (2007). Adverse childhood experiences and prescribed psychotropic medications in adults. *Am J Prev Med*, 32(5):389–94.

Abstract: Prescription drugs are one of the fastest growing healthcare costs in the United States. However, the long-term influence of child abuse and related traumatic stressors on prescriptions for psychotropic medications in adults has not been described. This study assessed the relationship of eight adverse childhood experiences (ACEs) to rates of prescriptions for psychotropic medications throughout adulthood. These ACEs included: abuse (emotional, physical, or sexual), witnessing domestic violence, growing up with substance abusing, mentally ill, or criminal household members, and parental separation/ divorce. Data about ACEs were collected between 1995 and 1997 from adult health maintenance organization patients; prescription data were available from 1997 to 2004. The number of ACEs (ACE Score: maximum 8) was used as a measure of cumulative traumatic stress during childhood. The relationship of the score to rates of prescribed psychotropic drugs was prospectively assessed among 15,033 adult patients eligible for the follow-up phase of the study (mean follow-up: 6.1 years). Data were analyzed in 2006. Multivariate models were adjusted for age, race, gender, and education. Prescription rates increased yearly during the follow-up and in a graded fashion as the ACE Score increased (p for trend <0.001). After adjusting compared with persons with an ACE Score of 0, persons with a score of equal to or more than 5 had a nearly threefold increase in rates of psychotropic prescriptions. Graded relationships were observed between the score and prescription rates for antidepressant, anxiolytic, antipsychotic, and mood-stabilizing/bipolar medications; rates for persons with a score of equal to or more than 5 for these classes of drugs increased 3-, 2-, 10-, and 17-fold, respectively. The strong relationship of the ACE Score to increased utilization of psychotropic medications underscores the contribution of childhood experience to the burden of adult mental illness. Moreover, the huge economic costs associated with the use of psychotropic medications provide additional incentive to address the high prevalence and consequences of childhood traumatic stressors.

2. Andersen, S.L. & Teicher, M.H. (2008). Desperately driven and no brakes: Developmental stress exposure and subsequent risk for substance abuse. *Neuroscience & Biobehavioral Reviews*, 33(4), 516-524.

Abstract: Adverse life events are associated with a wide range of psychopathology, including an increased risk for substance abuse. In this review, we focus on the inter-relationship between exposure to adversity and brain development, and relate this to enhanced windows of vulnerability. This review encompasses clinical and preclinical data, drawing evidence from

epidemiological studies, morphometric and functional imaging studies, and molecular biology and genetics. The interaction of exposure during a sensitive period and maturational events produces a cascade that leads to the initiation of substance use at younger ages, and increases the likelihood of addiction by adolescence or early adulthood. A stress-incubation/corticolimbic dysfunction model is proposed based on the interplay of stress exposure, development stage, and neuromaturational events that may explain the seeking of specific classes of drugs later in life. Three main factors contribute to this age-based progression of increased drug use: (1) a sensitized stress response system; (2) sensitive periods of vulnerability; and (3) maturational processes during adolescence. Together, these factors may explain why exposure to early adversity increases risk to abuse substances during adolescence.

3. Arthur, M. W., Hawkins, J. D., Pollard, J., Catalano, R. F., & Baglioni, J., A. J. (2002). *Measuring Risk and Protective Factors for Substance Use, Delinquency, and Other Adolescent Problem Behaviors: The Communities That Care Youth Survey. Evaluation Review. 26(6), 575-601.*

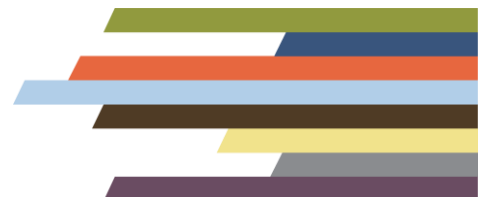
Abstract: Risk and protective factors predictive of adolescent problem behaviors such as substance abuse and delinquency are promising targets for preventive intervention. Community planners should assess and target risk and protective factors when designing prevention programs. This study describes the development, reliability, and validity of a self-report survey instrument for adolescents ages 11 to 18 that measures an array of risk and protective factors across multiple ecological domains as well as adolescent problem behaviors. The instrument can be used to assess the epidemiology of risk and protection in youth populations and to prioritize specific risk and protective factors in specific populations as targets for preventive intervention.

4. Avant, E.M., Swopes, R.M., Davis, J.L., & Elhai, J.D. (2011). *Psychological abuse and posttraumatic stress symptoms in college students. Journal of Interpersonal Violence, 26, 3080-3097.*

Abstract: Research suggests that among college students, physical and sexual abuse in intimate relationships are associated with posttraumatic stress. Psychological abuse occurs in intimate relationships among college students, and though there is evidence that such abuse has a negative emotional impact, posttraumatic stress has not been extensively researched as an outcome in this population. The purpose of this study is to determine the associations of past-year psychological abuse with posttraumatic stress symptoms while controlling for other types of past-year relationship abuse and lifetime trauma history. The sample consists of 191 college men and women (81.7% women and 89.5% White). Linear regression analyses demonstrate that trauma history, but not past year relationship violence, is a significant predictor of PTSD symptom severity for women, and neither set of variables significantly predicts PTSD symptom severity for men. Implications for future research are discussed.

5. Bachman, J.G., Safron, D.J., Sy, S.R., & Schulenberg, J.E. (2003). *Wishing to work: New perspectives on how adolescents' part-time work intensity is linked to educational disengagement, substance use, and other problem behaviours. International Journal of Behavioral Development, 27(4): 301-15.*

Abstract: This study examines interrelations among students' educational engagement, desired and actual school-year employment, substance use, and other problem behaviours. Cross-sectional findings from representative samples of 8th-, 10th-, and 12th-grade students in the United States, totaling over 300,000 respondents surveyed during the years 1992–1998, include the following: Large majorities of adolescents wish to work part-time during the school year,



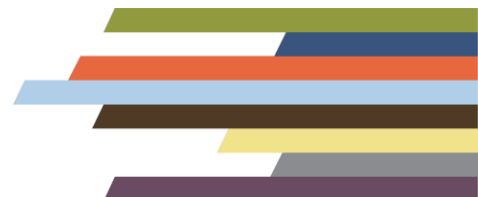
although most in earlier grades are not actually employed. Those who desire to work long hours tend to have low grades and low college aspirations; they are also more likely than average to use cigarettes, alcohol, and marijuana. Students' preferences for part-time work emerge at younger ages (i.e., earlier grades) than actual work, and the preferences show equal or stronger correlations with educational disengagement and problem behaviours.

6. Bartels, S.J., Blow, F.C., Brockman, L.M., & Van Critters, A.D. (2005). *Substance Abuse and Mental Health among Older Americans: The State of the Knowledge and Future Directions. Prepared by Westat for Older American Substance Abuse and Mental Health Technical Assistance Center, Substance Abuse and Mental Health Services Administration; Rockville, Maryland.*

Abstract: A substantial and growing percentage of older adults misuse alcohol, prescription drugs, or other substances. The number of older adults in need of substance abuse treatment is estimated to more than double from 1.7 million in 2000 and 2001 to 4.4 million in 2020. One in four older adults has a significant mental disorder. Among the most common mental health problems in older persons are depression, anxiety disorders, and dementia. Over the next 25 years, the number of older adults with major psychiatric illnesses will more than double from an estimated 7 to 15 million individuals. Substance abuse and mental health problems among older adults are associated with poor health outcomes, higher health care utilization, increased complexity of the course and prognosis of many mental and physical illnesses, increased disability and impairment, compromised quality of life, increased caregiver stress, increased mortality, and higher risk of suicide. Demographic projections indicate that the aging percent of the "baby boom" generation will increase the proportion of persons over age 65 from 13 percent currently to 20 percent by the year 2030. By the year 2030, the number of persons with psychiatric disorders, including substance abuse disorders, in this older group will equal or exceed the number with mental illness in younger age groups (ages 18 to 29, 30 to 44, or 45 to 65). The majority of older adults with substance abuse or mental health problems do not receive the treatment they need. An emerging evidence base supports the efficacy of a variety of pharmacological and psychotherapeutic interventions for substance abuse problems and major psychiatric disorders in older persons. Current prevention services for this population are extremely limited from both a substance abuse and a mental health perspective.

7. Beebe, L.A., Vesely, S.K., Oman, R.F., Tolma, E., Aspy, C.E., & Rodine, S. (2008). *Protective assets for non-use of alcohol, tobacco, and other drugs among urban American Indian youth in Oklahoma. Maternal and Child Health Journal, 12, S82-S90.*

Abstract: This study explored associations between nine youth assets and tobacco, alcohol and other drug non-use among participating American Indian adolescents. Data from 134 American Indians, ages 13-19 years, participating in an inner-city youth asset study, were analyzed. Individual logistic regression analyses were conducted, controlling for demographic variables, with nine youth assets as the independent variables and alcohol, tobacco and other drug non-use as the dependent variables. Among American Indian youth, nearly 79% reported not using alcohol in the past 30 days. The prevalence of tobacco non-use was somewhat lower than that of alcohol, with 71% reporting not using tobacco in the past 30 days. For other drug non-use, 87% reported not using other drugs in the past 30 days. The non-parental adult role models asset was significantly associated with non-use of alcohol (OR = 4.4, 95% CI 1.5-13.3), tobacco (OR = 7.5, 95% CI 2.2-25.6), and other drugs (OR = 5.0, 95% CI 1.5-16.8). The use of time (religion) asset was also significantly associated with alcohol non-use (OR = 2.8, 95% CI 1.1-7.2). The family communication asset was associated only with other drug non-use (OR = 3.1, 95% CI 1.02-9.4). For tobacco non-use, an interaction was observed between family structure



and the good health practices (exercise/nutrition) asset. Among youth in single-parent households, the odds of tobacco non-use were 4.4 times greater among those who possessed the good health practices (exercise/nutrition) asset. Despite the relatively small sample size of American Indian youth, these results suggest an important role for specific youth assets in the prevention of substance abuse among American Indian youth.

8. Bjork, J.M. & Grant, S.J. (2009). Does traumatic brain injury increase risk for substance abuse? *J Neurotrauma*, 26(7): 1077-82.

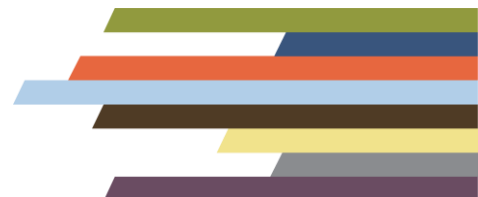
Abstract: Wars in Afghanistan and Iraq have resulted in thousands of military personnel suffering traumatic brain injury (TBI), including closed-head injuries. Of interest is whether these individuals and other TBI survivors are at increased risk for substance use disorder (SUD). While it has been well established that drug or alcohol intoxication itself increases probability of suffering a TBI in accidents or acts of violence, little is known about whether the brain insult itself increases the likelihood that a previously non-drug-abusing individual would develop SUD. Might TBI survivors be unusually vulnerable to addiction to opiate analgesics compared to other pain patients? Similarly, it is not known if TBI increases the likelihood of relapse among persons with SUD in remission. We highlight challenges in answering these questions, and review neurochemical and behavioral evidence that supports a causal relationship between TBI and SUD. In this review, we conclude that little is known regarding the directionality of TBI increasing drug abuse, and that collaborative research in this area is critically needed.

9. Bogels, S. M., & Brechman-Toussaint, M.L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*. 26(7), 834-856.

Abstract: Family studies have found a large overlap between anxiety disorders in family members. In addition to genetic heritability, a range of family factors may also be involved in the intergenerational transmission of anxiety. Evidence for a relationship between family factors and childhood as well as parental anxiety is reviewed. Four groups of family variables are considered: (I) attachment; (II), aspects of family functioning, such as marital conflict, co-parenting, functioning of the family as a whole, and sibling relationships; (III) parental rearing strategies; and (IV) beliefs that parents hold about their child. The reviewed literature provides evidence for an association between each of these family factors and child anxiety. However, there is little evidence as yet that identified family factors are specific to child anxiety, rather than to child psychopathology in general. Moreover, evidence for a relationship between child anxiety and family factors is predominantly cross-sectional. Therefore, whether the identified family factors cause childhood anxiety still needs to be investigated. Further research that investigates mechanisms mediating the relationship between family factors and child anxiety is also called for. Finally, parental beliefs are identified as important predictors of parental behaviour that have largely not been investigated in relation to child anxiety disorders.

10. Bonin, M.F., McCreary, D.R., & Sadava, S.W. (2000). Problem drinking behavior in two community-based samples of adults: influence of gender, coping, loneliness, and depression. *Psychology of Addictive Behavior*. 14(2), 151-161. [rape/assault]

Abstract: The authors examined the extent to which the relationships among coping, loneliness, depression, and 3 problematic drinking behaviors varied as a function of gender in 2 community-based samples of young adults (19-39 years old). Regression analyses revealed that (a) after controlling for the quantity and frequency of alcohol typically consumed, the 3 psychosocial variables were significantly related to frequency of intoxication, binge drinking, and drink tossing behaviors; (b) not all predictors were related to all problem drinking behaviors; (c)



the predictors that were significant varied as a function of the 2 cohorts; and (d) with the exception of frequency of intoxication in the younger cohort, the associations between the predictors and problematic drinking behaviors tended to be similar for men and women. Future directions for research are discussed.

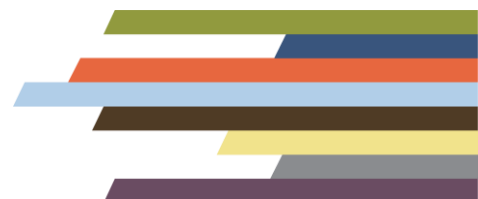
11. Borowsky, I.W., Resnick, M.D., Ireland, M., & Blum, R.W. (1999). *Suicide attempts among American Indian and Alaska Native youth: Risk and protective factors. Archives of Pediatric & Adolescent Medicine, 153, 573-580.*

Abstract: American Indians and Alaska Natives have the highest suicide rates of all ethnic groups in the United States, and suicide is the second leading cause of death for American Indian and Alaska Native youth. To identify risk and protective factors associated with suicide attempts among native male and female adolescents. The 1990 National American Indian Adolescent Health Survey. Schools of reservation communities in 8 Indian Health Service areas. Eleven thousand six hundred sixty-six 7th- through 12th-grade American Indian and Alaska native youth. Responses were compared among adolescents with and without a self-reported history of attempted suicide. Independent variables included measures of community, family, and individual characteristics. Separate analyses were conducted for boys and girls. Ever attempting suicide was reported by 21.8% of girls and 11.8% of boys. By logistic regression done on boys and girls separately, suicide attempts were associated with friends or family members attempting or completing suicide; somatic symptoms; physical or sexual abuse; health concerns; using alcohol, marijuana, or other drugs; a history of being in a special education class; treatment for emotional problems; gang involvement; and gun availability. For male and female youth, discussing problems with friends or family, emotional health, and connectedness to family were protective against suicide attempts. The estimated probability of attempting suicide increased dramatically as the number of risk factors to which an adolescent was exposed increased; however, increasing protective factors was more effective at reducing the probability of a suicide attempt than was decreasing risk factors. A history of attempted suicide was associated with several risk and protective factors. In addition to targeting youth at increased risk, preventive efforts should include promotion of protective factors in the lives of all youth in this population.

12. Brave Heart, M.Y.H. (2003). *The Historical Trauma Response Among Natives and Its Relationship With Substance Abuse: A Lakota Illustration. J Psychoactive Drugs, 35(1): 7-13.*

Abstract: Historical trauma (HT) is cumulative emotional and psychological wounding over the lifespan and across generations, emanating from massive group trauma experiences; the historical trauma response (HTR) is the constellation of features in reaction to this trauma. The HTR often includes depression, self-destructive behavior, suicidal thoughts and gestures, anxiety, low self-esteem, anger, and difficulty recognizing and expressing emotions. It may include substance abuse, often an attempt to avoid painful feelings through self-medication. Historical unresolved grief is the associated affect that accompanies HTR; this grief may be considered fixated, impaired, delayed, and/or disenfranchised. This article will explain HT theory and the HTR, delineate the features of the HTR and its grounding in the literature, offer specific Native examples of HT and HTR, and will suggest ways to incorporate HT theory in treatment, research and evaluation. The article will conclude with implications for all massively traumatized populations.

13. Brown, T. N., Schulenberg, J., Bachman, J. G., O'Malley, P. M., & Johnston, L. D. (2001). *Are risk and protective factors for substance use consistent across historical*



time?: National data from high school classes of 1976-1997. Prevention Science, 2, 29-43.

Abstract: Researchers have seldom examined whether risk and protective factors are consistently linked to substance use across historical time. Using nationally representative data collected from 22 consecutive cohorts of high school seniors (approximate N = 188,000) from the Monitoring the Future (MTF) project, we investigated whether correlates of substance use changed across historical time. We found a high degree of consistency across historical time in predictors of past month cigarette use, past month alcohol use, past year marijuana use, and past year cocaine use. Some predictors such as religiosity, political beliefs, truancy, and frequent evenings out were consistently linked to substance use. The consistency of other predictors such as region, parental education, and college plans was contingent in part upon historical time period, the particular substance, and its level of use.

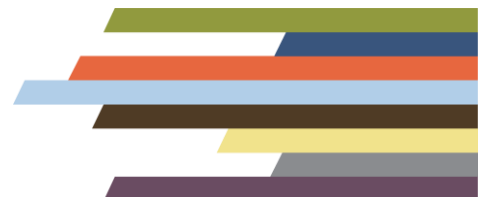
14. Buckner, J. D., Bonn-Miller, M. O., Zvolensky, M. J., & Schmidt, N. B. (2007). Marijuana use motives and social anxiety among marijuana-using young adults. Addictive Behaviors, 32(10), 2238-2252.

Abstract: Given the high rates of co-occurring marijuana use and social anxiety, the present investigation examined the relations among marijuana use motives, marijuana use and problems, and social anxiety in 159 (54.7% female) young adults (Mage = 18.74, SD = 1.20). As expected, after covarying for a number of variables related to both marijuana use and social anxiety (e.g. gender, alcohol use problems, anxiety sensitivity), social anxiety predicted greater numbers of marijuana use problems. Interestingly, social anxiety was not related to marijuana use frequency. Also consistent with prediction, social anxiety was a significant predictor of coping and conformity motives for marijuana use above and beyond relevant variables. Finally, coping motives for marijuana use mediated the relation between social anxiety and marijuana use problems. These data provide novel evidence for the unique effects of coping-motivated marijuana use in the link between marijuana-related impairment and social anxiety.

15. Burris JL, Brechting EH, Salsman J, & Carlson CR. (2009). Factors associated with the psychological well-being and distress of university students. J Am Coll Health, 57(5):536-43.

Abstract: Because of the serious nature of psychiatric illness and related problems, the authors attempted to identify demographic, individual, and behavioral factors linked to university students' psychological health. They surveyed 353 (60.9% female) predominantly Caucasian (88.7%) university students attending a large public university. The authors used a self-report questionnaire including valid and reliable psychometric instruments for all study variables. They conducted multiple regression analyses to examine associations among study variables using a cross-sectional design. More favorable health states (ie, greater psychological well-being and less distress) were positively associated with optimism, health values, and religiousness and were negatively associated with spirituality and number of sexual partners. Results demonstrated that multiple protective and risk factors contribute to the psychological well-being and distress of university students. Health promotion practitioners should adopt strategies that strengthen the personality characteristics and values associated with university students' psychological health.

16. Butler, A.B., Dodge, K.D., & Faurote, E.J. (2010). College student employment and drinking: a daily study of work stressors, alcohol expectancies, and alcohol consumption. Journal of Occupational Health Psychology, 15(3), 291-303.



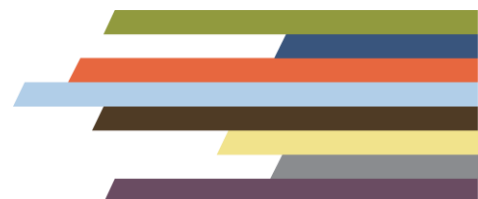
Abstract: We examined the within-person relationships between daily work stressors and alcohol consumption over 14 consecutive days in a sample of 106 employed college students. Using a tension reduction theoretical framework, we predicted that exposure to work stressors would increase alcohol consumption by employed college students, particularly for men and those with stronger daily expectancies about the tension reducing properties of alcohol. After controlling for day of the week, we found that hours worked were positively related to number of drinks consumed. Workload was unrelated to alcohol consumption, and work-school conflict was negatively related to consumption, particularly when students expressed strong beliefs in the tension reducing properties of alcohol. There was no evidence that the effects of work stressors were moderated by gender. The results illustrate that employment during the academic year plays a significant role in college student drinking and suggest that the employment context may be an appropriate intervention site to address the problem of student drinking.

17. Campos, M.D., Podus, D., Anglin, M.D., & Warda, U. (2008). Mental health need and substance abuse problem risk: acculturation among Latinas as a protective factor among CalWORKs applicants and recipients. *Journal of Ethnicity in Substance Abuse, 7*(3): 268-91.

Abstract: Recipients of welfare benefits have elevated rates of mental health and substance-related problems relative to the general public; however, low acculturation among Latinos may be a protective factor for both conditions. Lower acculturation among Latinos is associated with lower levels of mental health and substance-related problems relative to highly acculturated individuals. To our knowledge, there are few published studies examining the potential protective effects of low acculturation, defined herein as Spanish language preference, among Latina participants in welfare programs. Screening and treatment of mental health and substance-related problems in this population are important because work requirements for benefits receipt have been implemented and mental health or substance-related problems may be barriers to meeting these requirements. This analysis assesses the prevalence of mental health and substance-related problems among female participants in California's response to 1990s federal welfare reform legislation—the California Work Opportunity and Responsibility to Kids (CalWORKs). Although mental health needs may be similar among CalWORKs recipients regardless of acculturation, substance-related problems may be less frequent among Spanish-speaking Latinas participating in the CalWORKs program. Low acculturation was not a significant predictor of mental health need but had a protective effect with regard to substance-problem risk after controlling for several other substance-problem risk variables.

18. Centers for Disease Control and Prevention and National Association of Chronic Disease Directors. (2008). *The State of Mental Health and Aging in America Issue Brief 1: What Do the Data Tell Us?* Atlanta, GA: National Association of Chronic Disease Directors.

Abstract: In recognition of the essential role mental health plays in overall health, the Healthy Aging Program at the Centers for Disease Control and Prevention (CDC) and the National Association of Chronic Disease Directors (NACDD) are releasing two issue briefs focused on the mental health of older adults in the United States. This first issue brief reviews existing data and lays the foundation for understanding key issues related to mental health in adults over 50. The second brief will focus on depression, an important and emerging public health issue. Recent public health efforts to develop, test, and disseminate programs that address depression in older adults have led to practical information on this topic; the second issue brief will examine



interventions to address depression that communities can use to improve the mental health and quality of life of older Americans.

19. Chapman DP, Anda RF, Felitti VJ, Dube SR, Edwards VJ, Whitfield CL. (2004). *Adverse childhood experiences and the risk of depressive disorders in adulthood. Journal of Affective Disorders, 82:217–225.*

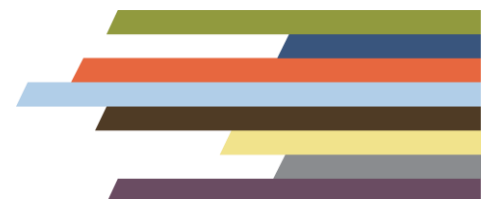
Abstract: Research examining the association between childhood abuse and depressive disorders has frequently assessed abuse categorically, thus not permitting discernment of the cumulative impact of multiple types of abuse. As previous research has documented that adverse childhood experiences (ACEs) are highly interrelated, we examined the association between the number of such experiences (ACE score) and the risk of depressive disorders. Retrospective cohort study of 9460 adult health maintenance organization members in a primary care clinic in San Diego, CA who completed a survey addressing a variety of health-related concerns, which included standardized assessments of lifetime and recent depressive disorders, childhood abuse and household dysfunction. Lifetime prevalence of depressive disorders was 23%. Childhood emotional abuse increased risk for lifetime depressive disorders, with adjusted odds ratios (ORs) of 2.7 [95% confidence interval (CI), 2.3 – 3.2] in women and 2.5 (95% CI, 1.9 – 3.2) in men. We found a strong, dose – response relationship between the ACE score and the probability of lifetime and recent depressive disorders ($P < 0.0001$). This relationship was attenuated slightly when a history of growing up with a mentally ill household member was included in the model, but remained significant ($P < 0.001$). The number of ACEs has a graded relationship to both lifetime and recent depressive disorders. These results suggest that exposure to ACEs is associated with increased risk of depressive disorders up to decades after their occurrence. Early recognition of childhood abuse and appropriate intervention may thus play an important role in the prevention of depressive disorders throughout the life span.

20. Chassin, L., Flora, D. B., & King, K. M. (2004). *Trajectories of alcohol and drug use and dependence from adolescence to adulthood: The effects of parent alcoholism and personality. Journal of Abnormal Psychology, 113(4), 483-498.*

Abstract: This study describes trajectories of substance use and dependence from adolescence to adulthood. Identified consumption groups include heavy drinking/heavy drug use, moderate drinking/experimental drug use, and light drinking/rare drug use. Dependence groups include alcohol only, drug only, and comorbid groups. The heavy drinking/heavy drug use group was at risk for alcohol and drug dependence and persistent dependence and showed more familial alcoholism, negative emotionality, and low constraint. The moderate drinking/experimental drug use group was at risk for alcohol dependence but not comorbid or persistent dependence and showed less negative emotionality and higher constraint. Familial alcoholism raised risk for alcohol and drug use and dependence in part because children from alcoholic families were more impulsive and lower in agreeableness.

21. Chassin, L., Pitts, S. C., & Prost, J. (2002). *Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: Predictors and substance abuse outcomes. Journal of Consulting and Clinical Psychology, 70(1), 67-78.*

Abstract: This study describes binge drinking trajectories from adolescence to emerging adulthood in 238 children of alcoholics and 208 controls. Mixture modeling identified three trajectory groups: early-heavy (early onset, high frequency), late moderate (later onset, moderate frequency), and infrequent (early onset, low frequency). Nonbingers were defined a priori. The early-heavy group was characterized by parental alcoholism and antisociality, peer



drinking, drug use, and (for boys) high levels of externalizing behavior, but low depression. The infrequent group was elevated in parent alcoholism and (for girls) adolescent depression, whereas the nonbinger and late-moderate groups showed the most favorable adolescent psychosocial variables. All 3 drinking trajectory groups raised risk for later substance abuse or dependence compared with the nonbingers, with the early-heavy group at highest risk.

22. Chino, M. & Fullerton-Gleason, L. (2006). *Understanding suicide attempts among American Indian adolescents in New Mexico: Modifiable factors related to risk and resiliency. Ethnicity and Disease, 16, 435-442.*

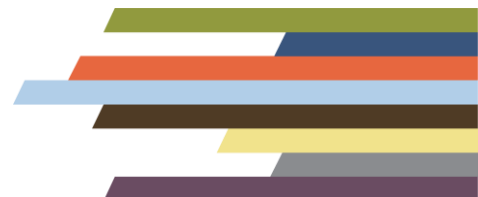
Abstract: To examine correlates of suicide attempts among American Indian adolescents living on reservations in New Mexico. Cross-sectional. American Indian adolescents attending school in New Mexico, grades 6 to 12. Data from the Search Institute Profiles of Student Life Attitudes and Behaviors survey related to suicide attempts and student assets and risk behaviors. Hypothesized predictor variables derived from 39 survey questions were tested against one outcome variable relating to prior suicide attempts. Of 690 American Indian students included in the study, 24.2% indicated having attempted suicide one or more times in their lives. Salient assets included having neighbors who cared about them, adults who made them feel important, and having friends who did well in school. Notable risk factors were feeling depressed, drug and alcohol use, and having been the victim of violence.

Conclusions: Adolescent suicide continues to be a major concern for American Indians. A focus on strengthening parent-child relationships and community support for families may increase resiliency among youth at risk.

23. Cleveland, M.J., Feinberg, M.E., Bontempo, D.E., and Greenberg, M.T. (2008). *The Role of Risk and Protective Factors in Substance Use Across Adolescence. Journal of Adolescent Health, 43(2), 157-164.*

Abstract: To compare the relative influence of risk and protective factors across several domains on adolescent substance use in a large sample of youth. Cross-sectional survey data were collected from 6th, 8th, 10th, and 12th grade students in Pennsylvania (N = 91,778). Generalized linear mixed models were estimated for each grade level to examine associations among indices of 3 risk (individual, peer, and family) and 3 protective (family, school, and community) factors and (a) lifetime substance use and (b) recent substance use. The risk factors were stronger predictors of substance use outcomes compared to the protective factors, regardless of grade level or substance use type. In particular, the individual and peer risk factors were strongly related to lifetime and recent use of cigarettes, alcohol, and marijuana. Among the protective factors, the strongest associations with substance use were found in the community domain. Several age-related differences in the associations were also found, suggesting that family and community factors were more salient among younger grades whereas peer and school factors were stronger among older adolescents. These findings provide support for the Social Development Model (SDM), which proposes that adolescent substance use is associated with factors across multiple spheres of influence. Age-related differences in these associations suggest that effective interventions to reduce adolescent substance use may need to emphasize different domains of risk and protective factors at different stages of adolescent development.

24. Cook, P.J., MacCoun, R., Muschkin, C. & Vigdor, J. (2008). *The Negative Impacts of Starting Middle School in Sixth Grade. Journal of Policy Analysis and Management, 27(1), 104-121.*



Abstract: Using administrative data on public school students in North Carolina, we find that sixth grade students attending middle schools are much more likely to be cited for discipline problems than those attending elementary school. That difference remains after adjusting for the socioeconomic and demographic characteristics of the students and their schools. Furthermore, the higher infraction rates recorded by sixth graders who are placed in middle school persist at least through ninth grade. An analysis of end-of-grade test scores provides complementary findings. A plausible explanation is that sixth graders are at an especially impressionable age; in middle school, the exposure to older peers and the relative freedom from supervision have deleterious consequences. These findings are relevant to the current debate over the best school configuration for incorporating the middle grades. Based on our results, we suggest that there is a strong argument for separating sixth graders from older adolescents. © 2008 by the Association for Public Policy Analysis and Management.

25. Courtney, K. E. & Polich, J. (2009). *Binge drinking in young adults: Data, definitions, and determinants. Psychological Bulletin, 135(1), 142-156.*

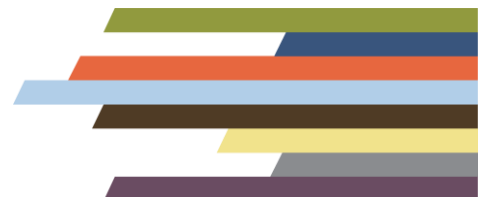
Abstract: Binge drinking is an increasingly important topic in alcohol research, but the field lacks empirical cohesion and definitional precision. The present review summarizes findings and viewpoints from the scientific binge-drinking literature. Epidemiological studies quantify the seriousness of alcohol-related problems arising from binge drinking, with a growing incidence reported in college-age men over the last 2 years. Experimental studies have found neurocognitive deficits for frontal lobe processing and working memory operations in binge-drinking compared with nonbinge alcohol drinkers. The findings are organized with the goals of providing a useful binge-drinking definition in the context of the empirical results. Theoretical implications are discussed on how binge drinking may alter neurophysiological and neurocognitive function.

26. Danielson, C.K. & Amstadter, A.B. (2009). *Trauma-related risk factors for substance abuse among male versus female young adults. Addictive Behaviors, 34(4), 395-399.*

Abstract: Clinical efforts to reduce risk for Substance Use Disorders (SUDs) among young adults rely on the empirical identification of risk factors for addictive behaviors in this population. Exposure to traumatic events and Posttraumatic Stress Disorder (PTSD) have been linked with SUDs in various populations. Emerging data, particularly from adolescent samples, suggest that traumatic event exposure increases risk for SUDs for young women, but not young men. The purpose of the current study was to examine trauma-related risk factors for alcohol and drug abuse among a national sample of young adults and compare such risk factors between men and women. Participants were 1,753 young adults who participated in the 7–8 year follow-up telephone-based survey to the original National Survey of Adolescents. In the full sample, 29.1% met criteria for substance abuse. Trauma-related risk factors for alcohol and drug abuse differed for men and women. Clinical implications of these results are discussed.

27. Dick, R.W., Manson, S.M., & Beals, J. (1993). *Alcohol use among male and female Native American adolescents: Patterns and correlates of student drinking in a boarding school. Journal of Studies on Alcohol and Drugs, 54: 172-177.*

Abstract: This study examined the patterns and correlates of alcohol use in a Native American boarding school. Specifically, stressful life events, social support and emotional distress were associated with quantity as well as frequency of alcohol use in this population. A sample of 188 students (52% female) in grades 9-12 attending a boarding school in the midwest were administered self-report measures of these above constructs as part of a larger battery. Family



support, and to some degree stressful life events and emotional distress, correlated significantly with alcohol use. The implications of these findings for Native American adolescents in general, and in a boarding school population specifically, are discussed. The need for longitudinal research to explore further the temporal sequence of depression, stressful life events and social support in relation to alcohol use is addressed.

28. Donovan, C. L., & Spence, S.H. (2000). Prevention of childhood anxiety disorders. *Clinical Psychology Review*. 20(4), 509-531.

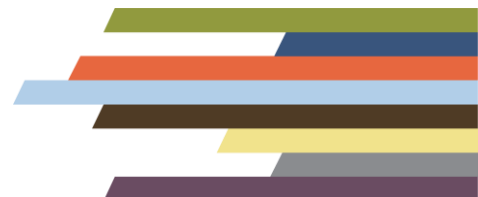
Abstract: Anxiety disorders represent one of the most common and debilitating forms of psychopathology in children. While empirical research, mental health funding, and mental health professionals continue to focus on the treatment rather than prevention of anxiety disorders in children, preliminary research presents an optimistic picture for preventative strategies in the future. Knowledge of the risk factors, protective factors, and treatment strategies associated with childhood anxiety disorders, in conjunction with theories regarding the methods, timing, levels, and targets of prevention, equip us well for effectively preventing childhood anxiety disorders in the future.

29. Dooley, D., Prause, J., & Ham-Rowbottom, K.A. (2000). Underemployment and Depression: Longitudinal Relationships. *Journal of Health and Social Behavior*, 41(4): 421-436.

Abstract: Conceptualizes employment status not as a dichotomy of working vs not working but as a continuum ranging from adequate employment to inadequate employment to unemployment. Will shifts from adequate to inadequate employment increase depression as do shifts from employment to unemployment, and to what extent does prior depression select workers into such adverse employment change? This study analyzed panel data from the National Longitudinal Survey of Youth for 5,113 respondents (aged 14–22 yrs) who were adequately employed in 1992. Controlling for prior depression, both types of adverse employment change resulted in similar, significant increases in depression. These direct effects persisted despite inclusion of such potential mediators as changes in income, job satisfaction, and marital status. Marital status buffered the depressive effect of both types of adverse change, but education and job dissatisfaction amplified the effect of unemployment on depression. These results confirm that both unemployment and inadequate employment affect mental health, and they invite greater efforts to monitor the extent and impact of underemployment.

30. Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Weiss, R. D., Brady, K., Poling, J., Farrer, L., & Kranzler, H. R. (2010). Adverse childhood events as risk factors for substance dependence: Partial mediation by mood and anxiety disorders. *Addictive Behaviors*, 35(1): 7-13.

Abstract: Adverse childhood events (ACEs) are associated with negative health outcomes. We examined ACEs as risk factors for substance dependence (SD) and the mediating effects of mood and anxiety disorders on the relations between ACEs and SD risk. We compared early life experiences in 2061 individuals with a lifetime diagnosis of alcohol, cocaine, or opioid dependence and 449 controls. Diagnostic and ACE data were obtained using the Semi-Structured Assessment for Drug Dependence and Alcoholism. Childhood abuse or exposure to violent crime was positively related to the number of lifetime mood and anxiety disorders and to SD risk. Mood and anxiety disorders had their first onset a mean of nearly 3 years before the first SD diagnosis and partially mediated the effect of ACEs on SD risk. ACEs appear to contribute additively to the risk of SD, with mood and anxiety disorders in the causal path for a



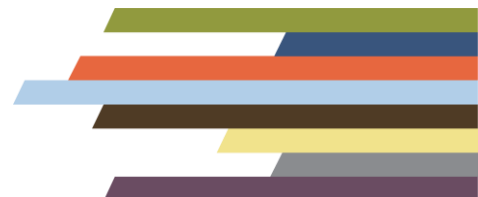
portion of this risk. The identification and effective treatment of mood and anxiety disorders associated with ACEs could reduce the risk of developing SD.

31. Dube SR, Miller JW, Brown DW, Giles WH, Felitti VJ, Dong M, Anda RF. (2006). Adverse childhood experiences and the association with ever using alcohol and initiative alcohol use during adolescence. *Journal of Adolescent Health, 38(4):444.e1-444.e10.*

Abstract: Alcohol is the most common and frequently used drug and has the potential to cause multiple deleterious effects throughout the lifespan. Because early age at initiation of alcohol use increases this potential and programs and laws are in place to attempt to delay the onset of alcohol use, we studied the relationship between multiple adverse childhood experiences (ACEs) and both the likelihood of ever drinking and the age at initiating alcohol use. This was a retrospective cohort study of 8417 adult health maintenance organization (HMO) members in California who completed a survey about ACEs, which included childhood abuse and neglect, growing up with various forms of household dysfunction and alcohol use in adolescence and adulthood. The main outcomes measured were ever drinking and age at initiating alcohol use among ever-drinkers for four age categories: ≤ 14 years (early adolescence), 15 to 17 years (mid adolescence), and 18 to 20 years (late adolescence); age ≥ 21 years was the referent. The relationship between the total number of adverse childhood experiences (ACE score) and early initiation of alcohol use (≤ 14 years) among four birth cohorts dating back to 1900 was also examined. Eighty-nine percent of the cohort reported ever drinking; all individual ACEs except physical neglect increased the risk of ever using alcohol ($p < .05$). Among ever drinkers, initiating alcohol use by age 14 years was increased two- to threefold by individual ACEs ($p < .05$). ACEs also accounted for a 20% to 70% increased likelihood of alcohol use initiated during mid adolescence (15–17 years). The total number of ACEs (ACE score) had a very strong graded relationship to initiating alcohol use during early adolescence and a robust but somewhat less strong relationship to initiation during mid adolescence. For each of the four birth cohorts, the ACE score had a strong, graded relationship to initiating alcohol use by age 14 years ($p < .05$). Adverse childhood experiences are strongly related to ever drinking alcohol and to alcohol initiation in early and mid adolescence, and the ACE score had a graded or “dose-response” relationship to these alcohol use behaviors. The persistent graded relationship between the ACE score and initiation of alcohol use by age 14 for four successive birth cohorts dating back to 1900 suggests that the stressful effects of ACEs transcend secular changes, including the increased availability of alcohol, alcohol advertising, and the recent campaigns and health education programs to prevent alcohol use. These findings strongly suggest that efforts to delay the age of onset of drinking must recognize the contribution of multiple traumatic and stressful events to alcohol-seeking behavior among children and adolescents.

32. Dumont, M. & Provost, M.A. (1999). Resilience in adolescents: Protective role of social support, coping strategies, self-esteem, and social activities on experiences of stress and depression. *Journal of Youth and Adolescence, 28: 343-63.*

Abstract: In this study, 297 adolescents (141 eighth graders and 156 eleventh graders) were classified into 3 groups created from crossing scores of depressive symptoms and frequency of daily hassles: well adjusted, resilient, and vulnerable. A discriminant function analysis was performed to investigate group differences on self-esteem, social support, different strategies of coping, and different aspects of social life. The analysis revealed that self-esteem, problem-solving coping strategies, and antisocial and illegal activities with peers helped to discriminate groups: Well-adjusted adolescents had higher self-esteem than adolescents in the 2 other groups; in addition, resilient adolescents had higher self-esteem than vulnerable adolescents.



For the second significant discriminating variables, antisocial and illegal activities with peers, both resilient and vulnerable adolescents had higher scores than well-adjusted adolescents. Finally, resilient adolescents had higher scores on problem-solving coping strategies than adolescents in the 2 other groups.

33. Dunn, M.S. (2005). *The relationship between religiosity, employment, and political beliefs on substance use among high school seniors. Journal of Drug Education, 49(1): 73-88.*

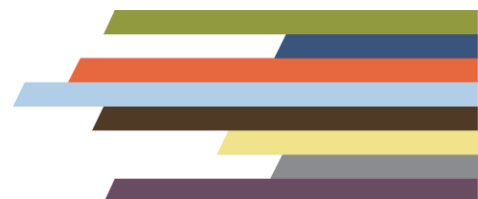
Abstract: The purpose of this study was to provide a descriptive profile of the alcohol, cigarette, marijuana and cocaine use practices among adolescents and to examine the relationship between employment, political beliefs, religious beliefs and substance use behaviors among high school seniors participating in the Monitoring the Future Study during the 2002 academic school year. Data from the Monitoring the Future (MTF) study (2002 12th grade core data) was used for this study. Logistic regression models were used to examine the relationship between substance use behaviors and employment, political beliefs, and religiosity. Analysis showed that males and females who believed religion was very important were less likely to have initiated alcohol use, to be a current user, and to have binge drank. A significant association was found for all alcohol use variables for those individuals who worked moderate amounts at an after school job. Political beliefs were found to be associated for initiation and current alcohol use but not for binge drinking. Political beliefs, religion, and employment were all significantly associated with cigarette use and cocaine use. Conceptualization of substance use behavior and its prevention and treatment should include consideration of such key cultural and social factors as religiosity, employment and political beliefs of adolescents.

34. Frone, M.R. (2008). *Are workplace stressors related to employee substance use? The importance of temporal context in assessments of alcohol and illicit drug use. Journal of Applied Psychology, 93(1): 199-206. [workplace stressors]*

Abstract: In this study, the author explored the relations of 2 work stressors (work overload and job insecurity) to employee alcohol use and illicit drug use. The primary goal was to explore the importance of temporal context (before work, during the workday, and after work) in the assessment of substance use compared with context-free (overall) assessments. Data were collected from a national sample of U.S. workers (N = 2,790) who took part in a broad cross-sectional survey on workplace health and safety. Consistent with past research, the results fail to support a relation between work stressors and overall measures of alcohol and illicit drug use. However, the results support the relation of work stressors to alcohol and illicit drug use before work, during the workday, and after work. These results provide support for both the stress-induced substance use and stress response dampening propositions of the tension-reduction hypothesis. When exploring the work environment as a potential cause of employee substance use, these results underscore the importance of measures that assess alcohol and illicit drug use in terms of their temporal relation to the workday.

35. Garrouette, E.M., Goldberg, J., Beals, J., Herrell, R., Manson, S.P. (2003). *Spirituality and attempted suicide among American Indians. Social Science and Medicine, 56: 1571-1579.*

Abstract: American Indians exhibit suicide-related behaviors at rates much higher than the general population. This study examines the relation of spirituality to the lifetime prevalence of attempted suicide in a probability sample of American Indians. Data were derived from a cross-sectional sample of 1456 American Indian tribal members (age range 15–57 yr) who were living on or near their Northern Plains reservations between 1997 and 1999. Data were collected by



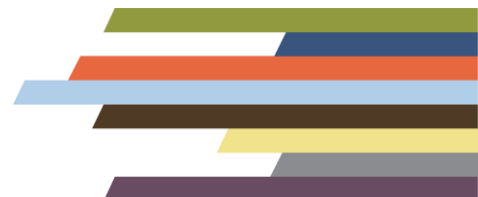
personal interviews. Commitment to Christianity was assessed using a measure of beliefs. Commitment to tribal cultural spirituality (or forms of spirituality deriving from traditions that predate European contact) was assessed using separate measures for beliefs and spiritual orientations. Results indicated that neither commitment to Christianity nor to cultural spirituality, as measured by beliefs, was significantly associated with suicide attempts (ptrend for Christianity=0.22 and ptrend for cultural spirituality=0.85). Conversely, commitment to cultural spirituality, as measured by an index of spiritual orientations, was significantly associated with a reduction in attempted suicide (ptrend=0.01). Those with a high level of cultural spiritual orientation had a reduced prevalence of suicide compared with those with low level of cultural spiritual orientation. (OR=0.5, 95% CI=0.3, 0.9). This result persisted after simultaneous adjustment for age, gender, education, heavy alcohol use, substance abuse and psychological distress. These results are consistent with anecdotal reports suggesting the effectiveness of American Indian suicide-prevention programs emphasizing orientations related to cultural spirituality.

36. Glantz, M.D., Anthony, J.C., Berglund, P.A., Degendardt, L., Dierker, K., Kalaydjian, A., Marikandas, K.R., Ruscio, A.M., Swendsen, J., & Kessler, R.C. (2009) *Mental disorders as risk factors for later substance dependence: Estimates of optimal prevention and treatment benefits. Psychological Medicine, 39(8), 1365-1377.*

Abstract: Although mental disorders have been shown to predict subsequent substance disorders, it is not known whether substance disorders could be cost-effectively prevented by large-scale interventions aimed at prior mental disorders. Although experimental intervention is the only way to resolve this uncertainty, a logically prior question is whether the associations of mental disorders with subsequent substance disorders are strong enough to justify mounting such an intervention. We investigated this question in this study using simulations to estimate the number of substance disorders that might be prevented under several hypothetical intervention scenarios focused on mental disorders. Data came from the National Comorbidity Survey Replication (NCS-R), a nationally representative US household survey that retrospectively assessed lifetime history and age of onset of DSM-IV mental and substance disorders. Survival analysis using retrospective age-of-onset reports was used to estimate associations of mental disorders with subsequent substance dependence. Simulations based on the models estimated effect sizes in several hypothetical intervention scenarios. Although successful intervention aimed at mental disorders might prevent some proportion of substance dependence, the number of cases of mental disorder that would have to be treated to prevent a single case of substance dependence is estimated to be so high that this would not be a cost-effective way to prevent substance dependence (in the range 76–177 for anxiety-mood disorders and 40–47 for externalizing disorders). Treatment of prior mental disorders would not be a cost-effective way to prevent substance dependence. However, prevention of substance dependence might be considered an important secondary outcome of interventions for early-onset mental disorders.

37. González-Guarda RM, Florum-Smith AL, & Thomas T. (2011). *A syndemic model of substance abuse, intimate partner violence, HIV infection, and mental health among Hispanics. Public Health Nurs, 28(4):366-78.*

Abstract: Hispanics are disproportionately affected by substance abuse, HIV infection, intimate partner violence, and mental health conditions. To address health disparities among Hispanics and other vulnerable groups, it is necessary to understand the complex interactions between health conditions clustering together (e.g., substance abuse, intimate partner violence, and HIV) and the social ecology in which these conditions exist. A syndemic orientation, a consideration



of clustering epidemics and common individual, relationship, cultural, and socioenvironmental factors linking these conditions, may be helpful in developing comprehensive models that expand our ability to understand and address health disparities. The purpose of this paper is to introduce a Syndemic Model of Substance Abuse, Intimate Partner Violence, HIV Infection, and Mental Health among Hispanics, and provide evidence from the research literature to support the central relationships and risk and protective factors (i.e., potential links between conditions) depicted by the model. The development and evaluation of interventions aimed at the prevention of substance abuse, intimate partner violence, HIV/AIDS, and mental health problems as a syndemic affecting Hispanics is urgently needed. Public health nurses can initiate this endeavor with the guidance of a Syndemic Model.

38. Grant, T.M., Jack, D.C., Fitzpatrick, A.L., & Ernst, C.C. (2009). *Carrying the burdens of poverty, parenting and addiction: Depression symptoms and self-silencing among ethnically diverse women. Community Mental Health Journal, 47(1), 90-98.*

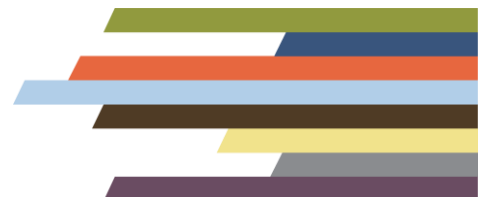
Abstract: Depression among women commonly co-occurs with substance abuse. We explore the association between women's depressive symptoms and self-silencing accounting for the effects of known childhood and adult risk indicators. Participants are 233 ethnically diverse, low-income women who abused alcohol/drugs prenatally. Depressive symptomatology was assessed using the Addiction Severity Index. Multivariate logistic regression models examined the association between self-silencing and the dependent depression variable. The full model indicated a 3% increased risk for depressive distress for each point increase in self-silencing score (OR = 1.03; P = .001). Differences in depressive symptomatology by ethnic groups were accounted for by their differences in self-silencing.

39. Gunter, W.D., & Bakken, N.W. (2010). *Transitioning to Middle School in the Sixth Grade: A Hierarchical Linear Modeling (HLM) Analysis of Substance Use, Violence, and Suicidal Thoughts. Journal of Early Adolescence, 30(6): 895-915.*

Abstract: In recent years, public schools have moved away from traditional grade configurations with junior high schools and have shifted toward integrating sixth-grade students into middle schools. It has been argued that the effect this will have on students is to allow for additional freedom and earlier social growth. However, the counterargument to this debate is that these sixth-grade students would then be exposed to an older cohort sooner and, therefore, would be exposed to negative peer influences. This study investigates the behavioral differences between sixth-grade students in elementary schools and their counterparts in middle schools, including suicidal thoughts, violence, and substance abuse. The data used come from the 2007 middle school Delaware Youth Risk Behavior Survey. Results indicate significant differences in suicidal thoughts or actions based on the grade configuration of school they attend, though not in violence or substance use.

40. Harris Abadi, M., Shamblen, S. R., Thompson, K., Collins, D. A., & Johnson, K. (2011). *Influence of risk and protective factors on substance use outcomes across developmental periods: A comparison of youth and young adults. Substance Use & Misuse. 46(13), 1604-1612.*

Abstract: Data were collected from samples of youth (ages 11-18; N = 38,268) and young 10 adults (ages 18-24; N = 602) across 30 Tennessee counties using surveys and telephone interviews conducted in 2006-2008. Data were analyzed using hierarchical nonlinear modeling to determine: (1) which risk and protective factors predicted alcohol and marijuana use, and (2) whether predictors differed as a function of developmental period. Findings provide preliminary



evidence that prevention efforts need to take into consideration the changing environment and related influences as youth age, especially as they move from a more protected community environment to one where they live somewhat independently. Implications and limitations are discussed.

41. Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112(1), 64-105.

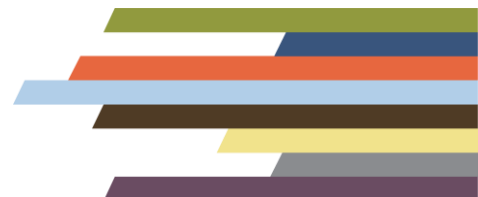
Abstract: Suggests that the most promising route to effective strategies for the prevention of adolescent alcohol and other drug problems is through a risk-focused approach. This approach requires the identification of risk factors for drug abuse, identification of methods by which risk factors have been effectively addressed, and application of these methods to appropriate high-risk and general population samples in controlled studies. The authors review risk and protective factors for drug abuse, assess a number of approaches for drug abuse prevention potential with high-risk groups, and make recommendations for research and practice.

42. HeavyRunner-Rioux, A.R. & Hollist, D.R. (2010). Community, family, and peer influence on alcohol, marijuana, and illicit drug use among a sample of Native American youth: An analysis of predictive factors. *Journal of Ethnicity in Substance Abuse*, 9:, 260-283.

Abstract: Using a cross-sectional sample of 8th, 10th, and 12th grade Native American public school children, this study examines hypotheses pertaining to the ability and influence of measures drawn from social bonding, social learning, and social disorganization theories to account for variations in self-reported lifetime and 30 day use of alcohol, marijuana, and illicit drugs. Results derived from ordinary least squares regression equations show significant associations, most notably with variables from the social learning tradition. In addition, comparisons across equations show significant differences in the impact of the theoretical indicators on substance use between respondents in the sub-samples of those residing on and off reservations. The findings suggest that existing theories offer a promising framework for understanding the process of Native American substance use, and that the role of these in some cases differ for adolescents who reside on and off reservations. Contributions to the literature along with suggestions for future research are discussed.

43. Hicks BM, Iacono WG, McGue M. (2010). Consequences of an adolescent onset and persistent course of alcohol dependence in men: adolescent risk factors and adult outcomes. *Alcohol Clin Exp Res*, 34(5):819-33.

Abstract: While there is an extensive literature on the correlates of alcohol use disorders (AUD; alcohol abuse and dependence), there are relatively few prospective studies of representative birth cohorts that have examined the unique effects of an adolescent onset and persistent course of AUD on a wide range of psychosocial variables. A longitudinal, community-based sample of 530 men was used to examine the impact of an adolescent onset (AUD+ at age 17) and persistent course (AUD+ at age 29) of AUD on adolescent and adult functioning including substance use, antisocial behavior, mental health problems, overall psychosocial functioning, environmental risk and protective factors, and social outcomes such as peer and romantic relationships, marriage, educational and occupational attainment, and parenthood. An adolescent onset of AUD (n = 57) was associated with severe deficits across multiple domains of psychosocial functioning in adolescence. Measures of behavioral disinhibition in adolescence were strong predictors of a persistent course of AUD (n = 93). Nearly 40% of men with an adolescent onset were able to desist by age 29, and were similar, but not identical to men who



never experienced an AUD in terms of adult functioning. Men with an adolescent onset and persistent course of AUD exhibited the most severe deficits in functioning. Results emphasize the importance of examining developmental course to understand the etiology of AUD. Our findings are optimistic in that individuals who desist from AUD are able to achieve high levels of psychosocial functioning. Our findings suggest that future research on the persistence of AUD into adulthood should focus on the contributions of behavioral disinhibition and social environment variables including peer and romantic relationships.

44. Hill, K. G., White, H. R., Ick-Joong, C., Hawkins, J. D., & Catalano, R. F. (2000). *Early adult outcomes of adolescent binge drinking: Person-and variable-centered analyses of binge drinking trajectories. Alcoholism, Clinical and Experimental Research, 24(6), 892-901.*

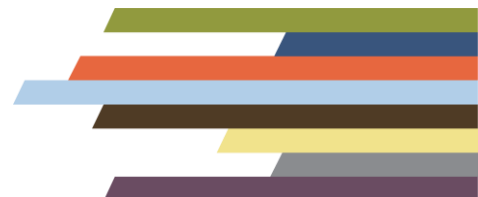
Abstract: Many studies of the consequences of binge drinking take a variable-centered approach that may mask developmentally different trajectories. Recent studies have reported qualitatively different binge drinking trajectories in young adulthood. However, analyses of developmental trajectories of binge drinking have not been examined for an important period of drinking development: adolescence. The purpose of this study was to examine young adult outcomes of adolescent binge drinking using an approach that combines person-centered and variable-centered methods.

45. Institute of Medicine. 2009. *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities. Edited by M. E. O'Connell, T. Boat and K. E. Warner. Board on Children, Youth, and Families. Washington, DC: The National Academies Press.*

Abstract: Mental health and substance use disorders among children, youth, and young adults are major threats to the health and well-being of younger populations which often carryover into adulthood. The costs of treatment for mental health and addictive disorders, which create an enormous burden on the affected individuals, their families, and society, have stimulated increasing interest in prevention practices that can impede the onset or reduce the severity of the disorders. Prevention practices have emerged in a variety of settings, including programs for selected at-risk populations (such as children and youth in the child welfare system), school-based interventions, interventions in primary care settings, and community services designed to address a broad array of mental health needs and populations. Preventing Mental, Emotional, and Behavioral Disorders among Young People updates a 1994 Institute of Medicine book, Reducing Risks for Mental Disorders, focusing special attention on the research base and program experience with younger populations that have emerged since that time. Researchers, such as those involved in prevention science, mental health, education, substance abuse, juvenile justice, health, child and youth development, as well as policy makers involved in state and local mental health, substance abuse, welfare, education, and justice will depend on this updated information on the status of research and suggested directions for the field of mental health and prevention of disorders.

46. Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). *Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. Journal of Consulting and Clinical Psychology, 71(4): 692-700.*

Abstract: With a national household probability sample of 4,023 telephone-interviewed adolescents ages 12–17, this study provides prevalence, comorbidity, and risk-factor data for posttraumatic stress disorder (PTSD), major depressive episode (MDE), and substance



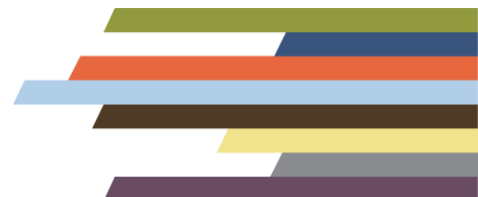
abuse/dependence (SA/D). Roughly 16% of boys and 19% of girls met criteria for at least 1 diagnosis. Six-month PTSD prevalence was 3.7% for boys and 6.3% for girls, 6-month MDE prevalence was 7.4% for boys and 13.9% for girls, and 12-month SA/D prevalence was 8.2% for boys and 6.2% for girls. PTSD was more likely to be comorbid than were MDE and SA/D. Results generally support the hypothesis that exposure to interpersonal violence (i.e., physical assault, sexual assault, or witnessed violence) increases the risk of these disorders and of diagnostic comorbidity.

47. Leamon, M.H., Gibson, D.R., Canning, R.D., & Benjamin, L. (2002). Hospitalization of patients with cocaine and amphetamine use disorders from a psychiatric emergency service. *Psychiatric Services, 53*(11), 1461-1466.

Objectives: Among the illicit stimulants, cocaine and amphetamines are the most widely abused. Although these drugs have similar psychoactive properties and routes of administration, their duration of action and mechanism of action are different, as are the psychiatric problems that accompany their use. The authors explored whether these differences and results of urine drug testing were associated with differences in use of psychiatric inpatient services. *Methods:* The records of 2,357 patients admitted to a large county psychiatric emergency service were examined to determine whether patients admitted for amphetamine-related or cocaine-related disorders differed in rates of transfer to an inpatient psychiatric ward or in length of stay on the ward after transfer. The authors also examined whether positive or negative results of urine drug screens predicted transfer or length of stay. *Results:* Patients with amphetamine-related disorders were more than a third more likely than patients with cocaine-related disorders to be transferred to the inpatient ward. Patients with negative urine screens were a third more likely than those with positive screens to be transferred and stayed slightly longer on the ward after transfer. Patients with cocaine-related disorders stayed slightly longer on the ward than patients with amphetamine-related disorders. *Conclusions:* Patients with amphetamine-related disorders have higher rates of psychiatric hospitalization than patients with cocaine-related disorders. Diagnostic uncertainty and other factors may also influence transfer rates and subsequent length of stay.

48. LeMaster, P.M., Connell, C.M., Mitchell, C.M., & Manson, S.M. (2002). Tobacco use among American Indian Adolescents: Protective and risk factors. *Journal of Adolescent Health, 30*: 426-432.

Abstract: To determine the prevalence of, and identify protective and risk factors for, current tobacco use among American Indian adolescents. Data from the Voices of Indian Teens Project were used to determine the prevalence of cigarette and smokeless tobacco (ST) use among a sample of 2390 American Indian adolescents, aged 13 to 20 years. Approximately 49% of the sample were female. Data were collected in Fall 1993 among participants from 10 high schools located in five western American Indian communities. The instrument consisted of scales that assessed psychosocial beliefs, attitudes, and behaviors as well as tobacco use. Logistic regression was used to identify protective and risk factors for tobacco use. A replication subsample was used to test the final models. Approximately 50% of American Indian adolescents in this sample reported some type of cigarette use, and approximately 21% reported using smokeless tobacco. Academic orientation was the only protective factor for cigarette use that replicated in both subsamples. Death/loss and other stressful life events were the risk factors for cigarette and/or ST use that replicated in both subsamples. The prevalence of tobacco use was high in this sample of American Indian adolescents. Several risk and protective factors were identified, the knowledge of which may inform preventive interventions in this population.



49. Maguire, E.R., Wells, W., & Katz, C.M. (2011). *Measuring community risk and protective factors for adolescent problem behaviors: Evidence from a developing nation. Journal of Research in Crime and Delinquency, 48(4): 594-620.*

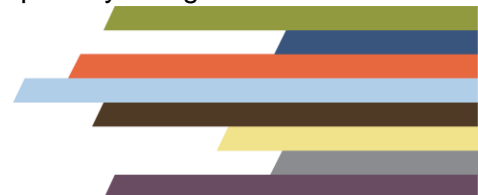
Abstract: Most published research on community risk and protective factors for adolescent problem behaviors has been carried out in developed nations. This article examines community risk and protective factors in a sample of more than 2,500 adolescents in Trinidad and Tobago, a developing Caribbean nation. The authors examine the construct and concurrent validity of five community risk factors and two community protective factors. The findings of this study suggest that existing measures of risk and protective factors have weak construct validity when applied to a sample of youth from Trinidad and Tobago. The revised model specifications this study developed fit the data better than the original models developed in the United States. However, the concurrent validity of both sets of measures is weak. Our findings suggest the need for caution when transplanting measures of risk and protective factors from developed to developing nations.

50. Marmot, M.G., Ryff, C.D., Bumpass, L.L., Shipley, M. & Marks, N.F. (1997). *Social inequalities in health: Next questions and converging evidence. Social Science and Medicine, 44(6):901-910.*

Mortality studies show that social inequalities in health include, but are not confined to, worse health among the poor. There is a social gradient: mortality rises with decreasing socio-economic status. Three large sample studies, one British and two American, brought together for their complementarity in samples, measures, and design, all show similar social gradients for adult men and women in physical and mental morbidity and in psychological well-being. These gradients are observed both with educational and occupational status and are not explained by parents' social status or lack of an intact family during childhood. They are also not accounted for by intelligence measured in school. This suggests that indirect selection cannot account for inequalities in health. Possible mediators that link social position to physical and mental health include smoking and features of psycho-social environment at work and outside.

51. Mason, A. (2011). *Thrill Seeking and Religiosity in relation to adolescent substance tests joint influences. Psycholog of Addictive Behaviors, 25 (4): 683.*

Abstract: Thrill seeking is a robust positive predictor of adolescent substance use. Religiosity is negatively associated with substance use among teens, although findings are mixed. Few studies have examined the interplay between these two prominent risk and protective factors. The current study addresses this gap by examining the joint, interactive, and indirect influences of thrill seeking and each of two dimensions of religiosity, religious salience and religious attendance, in relation to adolescent substance use. Participants were 667 rural youths (345 girls and 322 boys) and their families participating in a longitudinal family-focused prevention trial. Data were collected via self-report surveys at six time points across seven years, spanning ages 11 through 18. Results from latent growth curve analyses showed that both religious salience and religious attendance growth factors were associated negatively with late adolescent substance use, while adjusting for thrill seeking and selected covariates. Although the link between thrill seeking and substance use was not moderated by religiosity, there was a statistically significant indirect effect of thrill seeking on the outcome through a faster rate of downturn in religious attendance. Family intervention also predicted a slower rate of downturn in religious attendance and was associated negatively with substance use in late adolescence. Early adolescent substance use predicted a faster rate of decrease in religious salience throughout the teen years. The pattern of associations was similar for boys and girls. Findings suggest that teens who are elevated on thrill seeking could be targeted for specially-designed



substance use prevention programs and provide additional evidence for the efficacy of family interventions.

52. Mayes, L. C. and Suchman, N. E. (2006). In D. Cicchetti and D. J. Cohen (Eds.), *Developmental Psychopathology: Vol. 3. Risk, Disorder, and Adaptation (2nd ed., pp. 599-619)*. Hoboken, NY: John Wiley & Sons.

Developmental Psychopathology, Volume 3, Risk, Disorder, and Adaptation provides a life span developmental perspective on "high-risk" conditions and mental disorders. Moreover, it examines developmental pathways to resilient adaptation in the face of adversity.

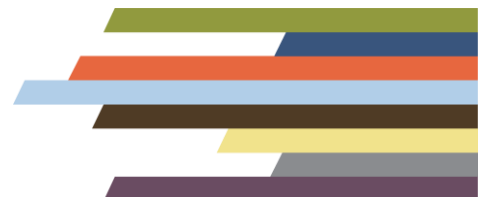
53. Mayo Clinic Staff. (n.d.) *Mental Health – Risk Factors*. Retrieved from: <http://www.mayoclinic.com/health/mental-illness/DS01104/DSECTION=risk-factors>

Abstract: Although the precise cause of mental illness isn't known, certain factors may increase your risk of developing mental health problems, including: having a biological relative, such as a parent or sibling, with a mental illness; experiences in the womb — for example, having a mother who was exposed to viruses or who had poor nutrition may be linked to schizophrenia; undergoing stressful life situations, such as financial problems, a loved one's death or a divorce; having a chronic medical condition, such as cancer; undergoing traumatic experiences, such as military combat or being assaulted; use of illegal drugs; being abused or neglected as a child; and/or having few friends or few healthy relationships. Mental illness is common. About 1 in 4 adults has a mental illness in any given year. And nearly half of them have more than one mental illness at the same time. Mental illness can begin at any age, from childhood through later adult years.

54. McCarty, C.A., Rhew, I.C., Murowchick, E., McCauley, E., & Vander Stoep, A. (2012). *Emotional health predictors of substance use initiation during middle school*. *Psychol Addict Behav*, 26(2): 351-7.

Abstract: This study aimed to evaluate whether emotional health factors, including anxiety and depression, stress, and social support, are associated with earlier youth initiation of alcohol and illicit substances during middle school (from the sixth to the eighth grade). Data for this study were from the Developmental Pathways Project, a longitudinal study of 521 youth sampled from the Seattle Public Schools. Discrete time survival analyses were used to assess the effects of depression, anxiety, stress, and support on initiation of substance use, measured every 6 months at five time points between sixth and eighth grade. Youth who had initiated prior to sixth grade had significantly higher levels of depressive symptoms. In multivariate survival analyses controlling for child race/ethnicity, gender, and socioeconomic status, and accounting for conduct problems, youth who reported higher levels of separation anxiety/panic symptoms were at decreased risk for early alcohol initiation. Children with higher levels of perceived teacher support had a significantly lower risk of alcohol initiation during early follow-up periods. Recent stressful life events in Grade 6 were associated with significantly greater risk of initiating an illicit substance by Grade 8. The current findings highlight the role of stress in the initiation of illicit substance use and suggest that teacher support is associated with lower risk for very early alcohol use. Future research examining anxiety as a predictor of substance use should distinguish between subtypes of anxiety.

55. McLaughlin, K.A., Green, J.G., Gruber, M.J., Sampson, N.A., Zaslavsky, A.M., & Kessler, R.C. (2009). *Childhood adversities and adult psychopathology in the National Comorbidity Survey Replication (NCS-R) II: Associations with persistence of DSM-IV disorders*. *Archives of General Psychiatry*, 67(2): 113-123.



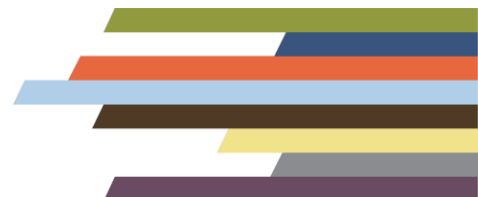
Context: Although significant associations of childhood adversities (CAs) with adult mental disorders have been documented consistently in epidemiological surveys, these studies generally have examined only 1 CA per study. Because CAs are highly clustered, this approach results in overestimating the importance of individual CAs. Multivariate CA studies have been based on insufficiently complex models. *Objective:* To examine the joint associations of 12 retrospectively reported CAs with the first onset of DSM-IV disorders in the National Comorbidity Survey Replication using substantively complex multivariate models. *Design:* Cross-sectional community survey with retrospective reports of CAs and lifetime DSM-IV disorders. *Setting:* Household population in the United States. *Participants:* Nationally representative sample of 9,282 adults. *Main Outcome Measures:* Lifetime prevalences of 20 DSM-IV anxiety, mood, disruptive behavior, and substance use disorders assessed using the Composite International Diagnostic Interview. *Results:* The CAs studied were highly prevalent and intercorrelated. The CAs in a maladaptive family functioning (MFF) cluster (parental mental illness, substance abuse disorder, and criminality; family violence; physical abuse; sexual abuse; and neglect) were the strongest correlates of disorder onset. The best-fitting model included terms for each type of CA, number of MFF CAs, and number of other CAs. Multiple MFF CAs had significant subadditive associations with disorder onset. Little specificity was found for particular CAs with particular disorders. Associations declined in magnitude with life course stage and number of previous lifetime disorders but increased with length of recall. Simulations suggest that CAs are associated with 44.6% of all childhood-onset disorders and with 25.9% to 32.0% of later-onset disorders. *Conclusions:* The fact that associations increased with length of recall raises the possibility of recall bias inflating estimates. Even considering this, the results suggest that CAs have powerful and often subadditive associations with the onset of many types of largely primary mental disorders throughout the life course.

56. Miller, L., Warner, V., Wickramaratne, P., & Weissman, M. (1997). *Religiosity & depression: ten-year follow-up of depressed mothers and offspring. J Am Acad Child Adolesc Psychiatry, 36:1416–1425.*

Abstract: This study examines maternal religiosity as a protective factor against depression in offspring. Sixty mothers and 151 offspring were independently assessed over the course of a 10-year follow-up. Maternal and offspring religiosity were assessed on the basis of self-report of the importance of religion, the frequency of attendance of religious services, and religious denomination. Depression was assessed using the Schedule for Affective Disorders-Lifetime version. Maternal bonding style was assessed through offspring report on the Parental Bonding Instrument. A series of logistic regressions were run to predict offspring depression status, taking into account maternal religiosity, offspring religiosity, and mother-offspring concordance of religiosity. Maternal religiosity and mother-offspring concordance of religiosity were shown to be protective against offspring depression, independent of maternal parental bonding, maternal social functioning, and maternal demographics. Maternal religiosity and offspring concordance with it may protect against depression in offspring.

57. Nonnemaker, J. M., McNeely, C. A., & Blum, R. W. (2003). *Public and private domains of religiosity and adolescent health risk behavior: Evidence from the National Longitudinal Study of Adolescent Health. Social Science and Medicine, 57: 2049-2054.*

Abstract: The purpose of this study was to examine the association of public and private domains of religiosity and adolescent health-related outcomes using data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative sample of American adolescents in grades 7-12. The public religiosity variable combines two items



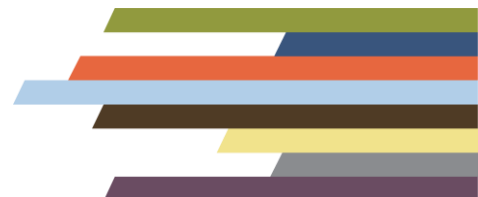
measuring frequency of attendance at religious services and frequency of participation in religious youth group activities. The private religiosity variable combines two items measuring frequency of prayer and importance of religion. Our results support previous evidence that religiosity is protective for a number of adolescent health-related outcomes. In general, both public and private religiosity was protective against cigarettes, alcohol, and marijuana use. On closer examination it appeared that private religiosity was more protective against experimental substance use, while public religiosity had a larger association with regular use, and in particular with regular cigarette use. Both public and private religiosity was associated with a lower probability of having ever had sexual intercourse. Only public religiosity had a significant effect on effective birth control at first sexual intercourse and, for females, for having ever been pregnant. However, neither dimension of religiosity was associated with birth control use at first or most recent sex. Public religiosity was associated with lower emotional distress while private religiosity was not. Only private religiosity was significantly associated with a lower probability of having had suicidal thoughts or having attempted suicide. Both public and private religiosity was associated with a lower probability of having engaged in violence in the last year. Our results suggest that further work is warranted to explore the causal mechanisms by which religiosity is protective for adolescents. Needed is both theoretical work that identifies mechanisms that could explain the different patterns of empirical results and surveys that collect data specific to the hypothesized mechanisms.

58. O'Connell, M.E., Boat, T., & Warner, K.E., ed. (2009) Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults: Research Advances and Promising Interventions; Institute of Medicine; National Research Council.

Abstract: Mental health and substance use disorders among children, youth, and young adults are major threats which often carryover into adulthood. The costs of treatment for these disorders, which create an enormous burden on the affected individuals, their families, and society, have stimulated increasing interest in prevention practices that can impede the onset or reduce the severity of the disorders. Prevention practices have emerged in a variety of settings, including programs for selected at-risk populations, school-based interventions, interventions in primary care settings, and community services designed to address a broad array of mental health needs and populations. Researchers and policy makers in prevention science, mental health, education, substance abuse, juvenile justice, health, and child and youth development will depend on this updated information and suggested directions for the field of mental health and prevention of disorders.

59. Palmer, R.H.C., Young, S.E., Hopfer, C.J., Corley, R.P., Stallings, M.C., Crowley, T.J., & Hewitt, J.K. (2009). Developmental epidemiology of drug use and abuse in adolescence and young adulthood: Evidence of generalized risk. *Drug and Alcohol Dependence*, 102(1-3), 78-87.

Abstract: Past studies highlight a narrowing gender gap and the existence of a shared etiology across substances of abuse; however, few have tested developmental models using longitudinal data. We present data on developmental trends of alcohol, tobacco, and marijuana use, abuse and dependence assessed during adolescence and young adulthood in a community-based Colorado twin sample of 1733 respondents through self-report questionnaires and structured psychiatric interviews. Additionally, we report on the rates of multiple substance use and disorders at each developmental stage, and the likelihood of a substance use disorder (SUD; i.e., abuse or dependence) diagnosis in young adulthood based on adolescent drug



involvement. Most notably, we evaluate whether the pattern of multiple substance use and disorders and likelihood ratios across substances support a model of generalized risk. Lastly, we evaluate whether the ranked magnitudes of substance-specific risk match the addiction liability ranking. Substance use and SUDs are developmental phenomena, which increase from adolescence to young adulthood with few and inconsistent gender differences. Adolescents and young adults are not specialized users, but rather tend to use or abuse multiple substances increasingly with age. Risk analyses indicated that progression toward a SUD for any substance was increased with prior involvement with any of the three substances during adolescence. Despite the high prevalence of alcohol use, tobacco posed the greatest substance-specific risk for developing subsequent problems. Our data also confirm either a generalized risk or correlated risk factors for early onset substance use and subsequent development of SUDs.

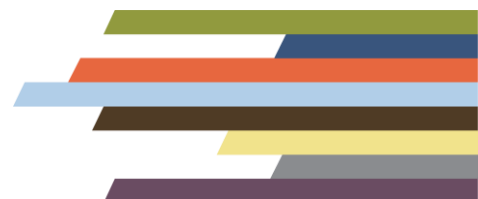
60. Pettingell, S.L., Bearinger, L.H., Skay, C.L., Resnick, M.D., Potthoff, S.J., & Eichhorn, J. (2008). *Protecting Urban American Indian Young People From Suicide. American Journal of Health Behavior, 32(5): 465-476.*

Abstract: To examine the likelihood of a past suicide attempt for urban American Indian boys and girls, given salient risk and protective factors. Survey data from 569 urban American Indian, ages 9-15, in-school youths. Logistic regression determined probabilities of past suicide attempts. For girls, suicidal histories were associated with substance use (risk) and positive mood (protective); probabilities ranged from 6.0% to 57.0%. For boys, probabilities for models with violence perpetration (risk), parent prosocial behavior norms (protective), and positive mood (protective) ranged from 1.0% to 38.0%. Highlights the value of assessing both risk and protective factors for suicidal vulnerability and prioritizing prevention strategies.

61. Pharris, M.D., Resnick, M.D. & Blum, R.W. (1997). *Protecting against hopelessness and suicidality in sexually abused American Indian adolescents. Journal of Adolescent Health, 21: 400-406*

Abstract: The purpose of this study was to identify factors protective against the adverse health correlates of sexual abuse in reservation-based American Indian and Alaskan Native adolescents. Data were taken from the National American Indian Adolescent Health Survey administered in 1988-1990 to 13,923 youths. Included in this analysis were 991 females and 166 males who reported a history of sexual abuse. Chi-square analysis was used to identify significant protective factors in sexually abused youths who did not report suicidality or hopelessness. Discriminant function analysis was used to determine which factors distinguished this group from those who experienced adverse health correlates. Separate multivariate analyses for boys and girls demonstrated that for girls, family attention, positive feelings toward school, parental expectations, and caring exhibited by family, adults, and tribal leaders were associated with absence of suicidality and hopelessness. For suicidality in boys, significant protective factors were enjoyment of school, involvement in traditional activities, strong academic performance, and caring exhibited by family, adults, school people, and tribal leaders. No significant protective factors against hopelessness were identified for boys. To minimize hopelessness and suicidal involvement among youth who have been sexually abused, strategies should be planned, implemented, and evaluated that support family caring and connectedness, strengthen school attachment and performance, and improve tribal connectedness.

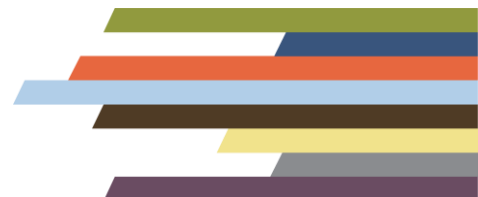
62. Resnick, M.D., Bearman, P.S., Blum, R.W., et al. (1997). *Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. JAMA, 278(10): 823-32.*



Abstract: The main threats to adolescents' health are the risk behaviors they choose. How their social context shapes their behaviors is poorly understood. To identify risk and protective factors at the family, school, and individual levels as they relate to 4 domains of adolescent health and morbidity: emotional health, violence, substance use, and sexuality. Cross-sectional analysis of interview data from the National Longitudinal Study of Adolescent Health. A total of 12118 adolescents in grades 7 through 12 drawn from an initial national school survey of 90118 adolescents from 80 high schools plus their feeder middle schools. The interview was completed in the subject's home. Eight areas were assessed: emotional distress; suicidal thoughts and behaviors; violence; use of 3 substances (cigarettes, alcohol, marijuana); and 2 types of sexual behaviors (age of sexual debut and pregnancy history). Independent variables included measures of family context, school context, and individual characteristics. Parent-family connectedness and perceived school connectedness were protective against every health risk behavior measure except history of pregnancy. Conversely, ease of access to guns at home was associated with suicidality (grades 9-12: $P < .001$) and violence (grades 7-8: $P < .001$; grades 9-12: $P < .001$). Access to substances in the home was associated with use of cigarettes ($P < .001$), alcohol ($P < .001$), and marijuana ($P < .001$) among all students. Working 20 or more hours a week was associated with emotional distress of high school students ($P < .01$), cigarette use ($P < .001$), alcohol use ($P < .001$), and marijuana use ($P < .001$). Appearing "older than most" in class was associated with emotional distress and suicidal thoughts and behaviors among high school students ($P < .001$); it was also associated with substance use and an earlier age of sexual debut among both junior and senior high students. Repeating a grade in school was associated with emotional distress among students in junior high ($P < .001$) and high school ($P < .01$) and with tobacco use among junior high students ($P < .001$). On the other hand, parental expectations regarding school achievement were associated with lower levels of health risk behaviors; parental disapproval of early sexual debut was associated with a later age of onset of intercourse ($P < .001$). Family and school contexts as well as individual characteristics are associated with health and risky behaviors in adolescents. The results should assist health and social service providers, educators, and others in taking the first steps to diminish risk factors and enhance protective factors for our young people.

63. Reynolds, G.L., Fisher, D.G., Estrada, A.L., & Trotter, R. (2000). Unemployment, drug use, and HIV risk among American Indian and Alaska Native drug users. *American Indian and Alaska Native Mental Health Research, 9(1): 17-32.*

Abstract: American Indians and Alaska Natives have had low employment in recent history. Drug users also have low employment due to cycles of drug use and relapse, and the impact of the type of drug abused on levels of functioning. Drug use is associated with increased HIV risk through injection drug use, frequency of injection, and needle sharing. Data from three sites of the NIDA Cooperative Agreement for Community Based-Outreach/Intervention Research were analyzed to determine the relationship among race/ethnicity, age, and level of educational attainment on employment and unemployment at intake interview and six-month follow-up. HIV risk for those employed and unemployed was then assessed. American Indian and Alaska Native drug users were younger, less educated, and less likely to have a paid job at both intake and follow-up than non-Native drug users. Those participants who were unemployed at baseline interview who were American Indian/Alaska Native were less likely to transition to employment at six-month follow-up than other race/ethnicity groups in the cohort. However, all participants showed low levels of employment at follow-up. Individuals who were employed at baseline and those who transitioned to employment had lower levels of injection drug use and needle sharing than those who were unemployed at both baseline and follow-up. American Indian and Alaska



Native drug users may be at risk for acquisition of HIV due to drug risk behaviors that appear to be associated with unemployment.

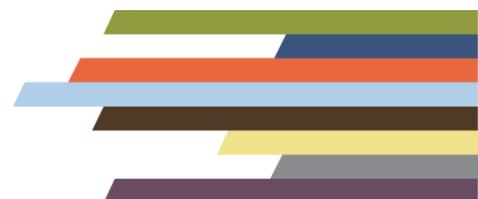
64. Richards, J.R., Bretz, S.W., Johnson, E.B., Turnipseed, S.D., Brofeldt, B.T., & Derlet, R.W. (1999). *Methamphetamine abuse and emergency department utilization. Western Journal of Medicine, 170(4): 198-202.*

Abstract: Methamphetamine (MAP) abuse continues to increase worldwide, based on morbidity, mortality, drug treatment, and epidemiologic studies and surveys. MAP abuse has become a significant health care, environmental, and law enforcement problem. Acute intoxication often results in agitation, violence, and death. Chronic use may lead to infection, heart failure, malnutrition, and permanent psychiatric illness. MAP users frequently use the emergency department (ED) for their medical care. Over a 6-month period we studied the demographics, type, and frequency of medical and traumatic problems in 461 MAP patients presenting to our ED, which serves an area noted for high levels of MAP production and consumption. Comparison was made to the general ED population to assess use patterns. MAP patients were most commonly Caucasian males who lacked health insurance. Compared to other ED patients during this time, MAP patients used ambulance transport more and were more likely to be admitted to the hospital. There was a significant association between trauma and MAP use in this patient population. Our data suggest MAP users utilize prehospital and hospital resources at levels higher than the average ED population. Based on current trends, we can expect more ED visits by MAP users in the future.

65. Rosenquist, J.N., Murabito, J., Fowler, J. H., & Christakis, N.A. (2010). *The spread of alcohol consumption behavior in a large social network. Annals of Internal Medicine, 152(7): 1-36.*

Abstract: Alcohol consumption has important health-related consequences and numerous biological and social determinants. To explore quantitatively whether alcohol consumption behavior spreads from person to person in a large social network of friends, coworkers, siblings, spouses, and neighbors, followed for 32 years. Longitudinal network cohort study. Setting: The Framingham Heart Study. Participants: 12,067 persons assessed at several time points between 1971 and 2003. Measurements: Self-reported alcohol consumption (number of drinks per week on average over the past year and number of days drinking within the past week) and social network ties, measured at each time point. Clusters of drinkers and abstainers were present in the network at all time points, and the clusters extended to 3 degrees of separation. These clusters were not only due to selective formation of social ties among drinkers but also seem to reflect interpersonal influence. Changes in the alcohol consumption behavior of a person's social network had a statistically significant effect on that person's subsequent alcohol consumption behavior. The behaviors of immediate neighbors and coworkers were not significantly associated with a person's drinking behavior, but the behavior of relatives and friends was. Limitations: A nonclinical measure of alcohol consumption was used. Also, it is unclear whether the effects on long-term health are positive or negative, because alcohol has been shown to be both harmful and protective. Finally, not all network ties were observed. Network phenomena seem to influence alcohol consumption behavior. This has implications for clinical and public health interventions and further supports group-level interventions to reduce problematic drinking.

66. Russell D, Turner RJ, Joiner TE. (2009). *Physical disability and suicidal ideation: a community-based study of risk/protective factors for suicidal thoughts. Suicide Life Threat Behav, 39(4): 440-51.*



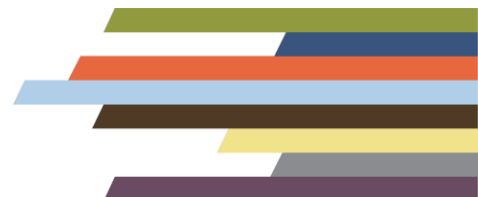
Abstract: Although the significance of poor physical health for suicide risk is well established, the potential relevance of physical disability, as distinct from diseases and traumas that give rise to disability, has received little attention. Prior evidence suggests the possible utility of the stress process theoretical model for understanding variations in risk for suicide ideation and the contribution of physical disability to such risk. In this article, we examine the independent and joint explanatory significance of physical disability and components of the stress process model for risk of suicide ideation. Data from an ethnically diverse and representative sample of disabled and nondisabled adults (n = 1,768) reveal that physical disability is associated with a greater risk of lifetime suicidal ideation.

67. Schulenberg, J., & Maggs, J. (2001). A developmental perspective on alcohol and other drug use during adolescence and the transition to young adulthood. *J Stud Alcohol Suppl*, 14: 54-70.

Abstract: This paper offers a developmental perspective on college drinking by focusing on broad developmental themes during adolescence and the transition to young adulthood. Heavy drinking increases during the transition to college, with significant interindividual variation in the course and consequences. The majority of young people make it through these years with, on balance, more positive than negative experiences with alcohol, but some experience tragic consequences and others develop chronic problems of abuse and dependence. The transition to college is a critical developmental transition, with major individual and contextual change in every domain of life leading to the potential for discontinuity and change in functioning and adjustment. A developmental perspective encourages the examination of alcohol use and heavy drinking in relation to normative developmental tasks and transitions and in the context of students' changing lives, focusing on a wide range of proximal and distal influences. Links between developmental transitions and health risks are discussed in light of five alternative models: Overload, Developmental Mismatch, Increased Heterogeneity, Transition Catalyst, and Heightened Vulnerability to Chance Events models. We review normative developmental transitions of adolescence and young adulthood, focusing specifically on fundamental biological and cognitive changes; transitions of identity; changes in affiliations with the family of origin, peers, and romantic partners; and achievement transitions related to school and work. These transitions offer important vantage points for examining increasing (and decreasing) substance use and other health risks during adolescence and young adulthood. Final sections review research and policy implications, including broad implications for developmental interventions and more specific recommendations for alcohol-specific programming.

68. Scales, P.C., Benson, P.L., & Mannes, M. (2006). The contribution to adolescent well-being made by nonfamily adults: An examination of developmental assets as contexts and processes. *Community Psychology*, 34(4): 401-13.

Abstract: The contribution of nonfamily adults to young people's well-being was explored using both a cross-sectional national sample of 614 12- to 17-year-olds and a longitudinal sample of 370 students followed from 6th–8th grades through 10th–12th grades. Both variable- and person-centered analyses were employed. Young people's involvement in volunteering, youth programs, and religious organizations was hypothesized to increase the frequency as well as the quality of their relationships with nonfamily adults. Greater community involvement was related to (a) greater and qualitatively different kinds of engagement with nonfamily adults; (b) higher levels of positive developmental processes of support, empowerment, and boundary setting; (c) lower levels of risk behaviors; and (d) higher levels of thriving. The results suggest the utility of positive youth development theory, research, and applications for predicting and enhancing young people's concurrent and longer-term well-being.



69. Sher, K. J., Grekin, E. R., & Williams, N. A. (2005). *The development of alcohol use disorders. Annual Review of Clinical Psychology, 1: 493-523.*

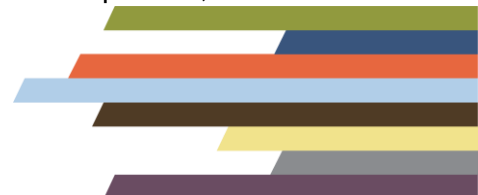
Abstract: Pathological alcohol use is a complex and costly problem. This chapter focuses on recent developments in the etiology of alcohol use disorders. Literature is reviewed from the fields of epidemiology, genetics, personality, neuropsychology, parenting, and social influences. In addition, theoretical models that describe pathways to the development of alcohol use disorders are presented. Particular emphasis is given to ways in which genetic, environmental, psychopharmacological, and personological literatures can inform one another.

70. Slopen, N, Williams, D.R., Fitzmaurice, G.M., & Gilman, S.E. (2011). *Sex, stressful life events, and adult onset depression and alcohol dependence: Are men and women equally vulnerable? Social Science & Medicine, 73(4):615-22.*

Abstract: Higher rates of major depression (MD) among females, and of alcohol dependence (AD) among males, are among the most routinely reported findings in psychiatric epidemiology. One of the most often pursued explanations for sex differences in both disorders suggests that males and females have a differential vulnerability to stressors, which is manifested in sex-specific ways (MD for females, AD for males). However, existing evidence in support of this explanation is mixed. In the present study, we investigated sex differences in the association between stressful life events and MD and AD in a large national sample of adults in the United States (n = 32,744) using a prospective design. Logistic regression was used to estimate associations between stressful life events and both MD and AD; sex-specific effects of stress on MD and AD were evaluated by testing interaction terms between sex and stressors in the prediction of both outcomes. The number of stressful life events was predictive of first onset MD and AD. This was true for both males and females, and sex-by-stress interaction terms did not support the hypothesis that sex-specific responses to stressful life events lead to sex differences in first onset of MD and AD among adults. These results indicate the resistance of sex differences in MD and AD to simple explanations, and suggest the need for more nuanced models that incorporate both physiological and social aspects of vulnerability.

71. Smith Fawzi, M.C., Betancourt, T.S., Marcelin, L., Klopner, M., Munir, K., Muriel, A.C., Oswald, C., & Mukherjee, J.S. (2009). *Depression and post-traumatic stress disorder among Haitian immigrant students: implications for access to mental health services and educational programming. BMC Public Health, 9(482).*

Abstract: Previous studies of Haitian immigrant and refugee youth have emphasized "externalizing" behaviors, such as substance use, high risk sexual behavior, and delinquency, with very little information available on "internalizing" symptoms, such as depression and anxiety. Analyzing stressors and "internalizing" symptoms offers a more balanced picture of the type of social and mental health services that may be needed for this population. The present study aims to: 1) estimate the prevalence of depression and post-traumatic stress disorder (PTSD) among Haitian immigrant students; and 2) examine factors associated with depression and PTSD to identify potential areas of intervention that may enhance psychosocial health outcomes among immigrant youth from Haiti in the U.S. A stratified random sample of Haitian immigrant students enrolled in Boston public high schools was selected for participation; 84% agreed to be interviewed with a standardized questionnaire. Diagnosis of depression and PTSD was ascertained using the best estimate diagnosis method. The prevalence estimates of depression and PTSD were 14.0% and 11.6%; 7.9% suffered from comorbid PTSD and depression. Multivariate logistic regression demonstrated factors most strongly associated with depression (history of father's death, self-report of schoolwork not going well, not spending time with friends) and PTSD (concern for physical safety, having many arguments with parents,



history of physical abuse, and lack of safety of neighborhood). A significant level of depression and PTSD was observed. Stressors subsequent to immigration, such as living in an unsafe neighborhood and concern for physical safety, were associated with an increased risk of PTSD and should be considered when developing programs to assist this population. Reducing exposure to these stressors and enhancing access to social support and appropriate school-based and mental health services may improve educational attainment and psychosocial health outcomes among Haitian immigrant youth.

72. Smokowski, P.R., & Bacallao, M.L. (2007). *Acculturation, internalizing mental health symptoms, and self-esteem: Cultural experiences of Latino adolescents in North Carolina. Child Psychiatry and Human Development, 37: 273-92.*

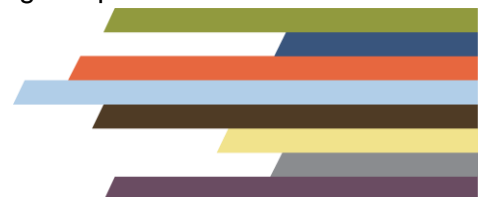
Abstract: This investigation examined acculturation risk factors and cultural assets, internalizing behavioral problems, and self-esteem in 323 Latino adolescents living in North Carolina. Multiple regression analyses revealed two risk factors—perceived discrimination and parent–adolescent conflict—as highly significant predictors of adolescent internalizing problems and low self-esteem. Adolescents who were highly involved in Latino culture and who experienced high parent–adolescent conflict were found particularly at risk for internalizing problems. Biculturalism and familism were cultural assets found associated with fewer internalizing problems and higher self-esteem. For internalizing problems, familism's protective effect was mediated by parent–adolescent conflict. Implications were discussed.

73. Strawbridge WJ, Deleger S, Roberts RE, Kaplan GA. (2002). *Physical activity reduces the risk of subsequent depression for older adults. Am J Epidemiol, 156(4):328-34.*

Abstract: Previous studies assessing protective effects of physical activity on depression have had conflicting results; one recent study argued that excluding disabled subjects attenuated any observed effects. The authors' objective was to compare the effects of higher levels of physical activity on prevalent and incident depression with and without exclusion of disabled subjects. Participants were 1,947 community-dwelling adults from the Alameda County Study aged 50-94 years at baseline in 1994 with 5 years of follow-up. Depression was measured using criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (Washington, DC: American Psychiatric Association, 1994). Physical activity was measured with an eight-point scale; odds ratios are based upon a one-point increase on the scale. Even with adjustments for age, sex, ethnicity, financial strain, chronic conditions, disability, body mass index, alcohol consumption, smoking, and social relations, greater physical activity was protective for both prevalent depression (adjusted odds ratio (OR) = 0.90, 95% confidence interval (CI): 0.79, 1.01) and incident depression (adjusted OR = 0.83, 95% CI: 0.73, 0.96) over 5 years. Exclusion of disabled subjects did not attenuate the incidence results (adjusted OR = 0.79, 95% CI: 0.67, 0.92). Findings support the protective effects of physical activity on depression for older adults and argue against excluding disabled subjects from similar studies.

74. *Substance Abuse and Mental Health Services Administration (2011). Addressing the needs of women and girls: Developing core competencies for mental health and substance abuse service professionals. HHS Pub. No. (SMA) 11-4657, Rockville, MD: Substance Abuse and Mental Health Services Administration.*

Abstract: At the foundation of the Nation's mental health and substance abuse policy is recovery — the promise that people with mental health and/or substance use conditions/ disorders can recover to lead full and productive lives. Research demonstrates that fulfilling this promise for



women and girls involves addressing their special prevention, intervention, and treatment needs. Over the years, the Substance Abuse and Mental Health Services Administration (SAMHSA) has implemented numerous programs and policies to develop and fund effective programming for women and girls, including the Substance Abuse Prevention and Treatment (SAPT) Block Grant Women's Set Aside, a range of discretionary grant programs, and the Women, Co-Occurring Disorders and Violence Study. Addressing the needs of women and girls requires not only program models but also a workforce with sufficient competencies to meet their unique prevention, treatment, and recovery service needs. Thus, SAMHSA created this report, *Addressing the Needs of Women and Girls: Developing Core Competencies for Mental Health and Substance Abuse Service Professionals* ("Core Competency Report"), as a tool for the field. SAMHSA brought together a 16-member Expert Panel on Core Competencies for Women and Girls in Behavioral Health (hereafter referred to as the "Expert Panel") to identify and document competencies and to develop this report. Individuals working with women and girls, as well as developing women's programs and providing workforce training on women's needs, comprised the group. The Expert Panel included professionals and consumers representing diverse cultural and geographic backgrounds and with combined expertise in prevention, substance use disorder treatment, and mental health services for women and girls.

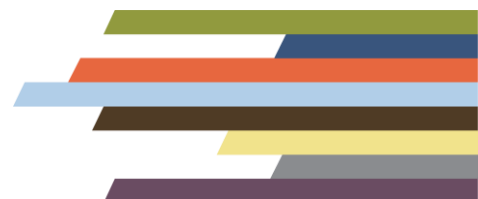
75. Substance Abuse and Mental Health Services Administration (2004). *Adults with co-occurring serious mental illness and a substance use disorder*. Rockville, MD.

Abstract: This is a short report based on results from the 2002 National Survey on Drug Use and Health. The report summarizes the prevalence of co-occurring disorders among adults and reviews which persons are more likely to receive mental health treatment and specialty substance use treatment. In addition, the report reviews the perceived unmet treatment need among those adults with a co-occurring disorder who did not receive treatment.

76. Tenorio, K.A., & Lo, C.C. (2011). *Social location, social integration, and the co-occurrence of substance abuse and psychological distress*. *Am J Drug Alcohol Abuse*, 37(4):218-23.

Abstract: In the United States, social stratification has generally led individuals occupying lower social locations to have more health problems than other individuals, even acknowledging that social groups are distinguished by their particular manifestations of health problems. This study examined whether two social integration factors, marriage and religiosity, mediate the relationship between social location and co-occurrence of substance abuse and psychological distress and the nature of this relationship. Multinomial logistic regression was conducted on data from a national sample of 34,650 adults mostly between the ages of 18 to 35, collected through the 2007 National Survey on Drug Use and Health. White males who were lesser educated and living in poverty were more likely to exhibit co-occurring substance abuse and psychological distress than their demographically similar counterparts. Additionally, being married and religious appeared to be protective factors within the overall study cohort with fewer co-occurring behaviors reported. The data generally confirm the hypothesis concerning mediating roles for religiosity and marriage. Confirmation that marriage and religiosity can protect adults against co-occurring substance abuse and psychological distress potentially provides the information necessary to better target health policy and interventions that serve to further enhance the population's mental health.

77. U.S. Department of Health & Human Services (HHS), Office of the Surgeon General, *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, DC: HHS, November 2016.



78. Weissman, M.M., Warner, V., Wickramaratne, P., Moreau, D., & Olfson, M. (1997). *Offspring of depressed parents: Ten years later. Arch Gen Psychiatry, 54:932–40.*

Abstract: There have been numerous studies that have shown that offspring of depressed parents are at a high risk for major depressive disorder (MDD) and impairment. None have followed up the offspring into adulthood to obtain more precise estimates of risk. One hundred eighty-two offspring from 91 families, in which 1 or more parents had MDD (high risk) or in which neither parent was depressed (low risk), were blindly reassessed in the third follow-up, using a structured diagnostic instrument 10 years after their initial identification. Compared with the offspring for whom neither parent was depressed, the offspring of depressed parents had increased rates of MDD, particularly before puberty, and phobias (both at approximately a 3-fold risk), panic disorder, alcohol dependence (at a 5-fold risk), and greater social impairment. The peak age at onset for MDD in both high- and low-risk offspring ranged from 15 to 20 years. The peak age at onset for anxiety disorder was considerably earlier, especially in female offspring in the high-risk group. The onset of alcohol dependence in the offspring in the high-risk group peaked in adolescence and then after the age of 25 years. The depressed offspring of depressed parents, compared with nondepressed parents, had more serious and impairing depressions during the follow-up period but were less likely to go for treatment. The offspring of depressed parents are a high-risk group for onset of anxiety disorder and MDD in childhood, MDD in adolescence, and alcohol dependence in adolescence and early adulthood. The findings support the potential value of early detection in the offspring of depressed parents.

79. Weitzman, M., Rosenthal, D.G., & Liu, Y.H. (2011). *Paternal depressive symptoms and child behavioral or emotional problems in the United States. Pediatrics, 128(6).*

Abstract: The negative effects of maternal mental health problems on child health are well documented. In contrast, there is a profound paucity of information about paternal mental health's association with child health. Objective: To investigate the association of paternal mental health problems and depressive symptoms and children's emotional or behavioral problems. We analyzed Medical Expenditure Panel Survey data, which included a representative sample of US children (N = 21,993) aged 5 to 17 years and their mothers and fathers. The main outcome measure was child emotional or behavioral problems assessed by using the Columbia Impairment Scale. Paternal depressive symptoms, as assessed using the Patient Health Questionnaire–2, and mental health problems, more generally, assessed by using the Short-Form 12 Scale, were independently associated with increased rates of child emotional or behavioral problems even after controlling for numerous potential confounders including maternal depressive symptoms and other mental health problems. The adjusted odds ratio (aOR) for emotional or behavioral problems among children of fathers with depressive symptoms was 1.72 (95% confidence interval [CI]: 1.33–2.23) and the aOR associated with abnormal paternal scores on the mental component scale of the Short-Form 12 was 1.33 (95% CI: 1.10–1.62) for those within 1 SD below average and 1.48 (95% CI: 1.20–1.84) for those >1 SD below average. To the best of our knowledge, this is the first study to use a representative US sample to demonstrate that living with fathers with depressive symptoms and other mental health problems is independently associated with increased rates of emotional or behavioral problems of children.

80. Whitbeck, L.B., Walls, M.L., Johnson, K.D., Morrisseau, A.D., McDougall, C.M. (2009). *Depressed affect and historical loss among North American indigenous adolescents. American Indian and Alaska Mental Health Research, 16(3): 16-49.*

Abstract: This study reports on the prevalence and correlates of perceived historical loss among 459 North American Indigenous adolescents aged 11-13 years from the northern Midwest of the



United States and central Canada. The adolescents reported daily or more thoughts of historical loss at rates similar to their female caretakers. Confirmatory factor analysis indicated that our measure of perceived historical loss and the Center for Epidemiologic Studies Depression scale were separate but related constructs. Regression analysis indicated that, even when controlling for family factors, perceived discrimination, and proximal negative life events, perceived historical loss had independent effects on adolescents' depressive symptoms. The construct of historical loss is discussed in terms of Indigenous ethnic cleansing and life course theory.

81. Wright, D., & Pemberton, M. (2004). *Risk and Protective Factors for Adolescent Drug Use: Findings from the 1999 National Household Survey on Drug Abuse (DHHS Publication No. SMA 04-3874, Analytic Series A-19)*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

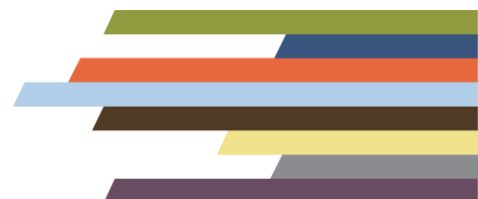
Summary: Risk and protective factors refer to variables in youths' neighborhoods, families, school, and peer groups, as well as to factors within the individual, that increase or decrease the likelihood of problem behaviors (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002). Risk factors for substance use (e.g., high rates of substance use among peers) typically are associated with an increased likelihood of substance use, whereas protective factors for substance use (e.g., communication with parents about the dangers of substance use) are related to a decreased likelihood of substance use. Addressing both risk and protective factors in substance use prevention programs is believed to be an important determinant of program success (Center for Substance Abuse Prevention [CSAP], 2001). This report presents data from the 1999 National Household Survey on Drug Abuse (NHSDA) relating to several aspects of risk and protective factors for substance use among youths aged 12 to 17. These include the following:

- distribution of risk and protective factors among youths;
- associations between individual risk and protective factors and youth substance use;
- relative predictive power of different categories (or "domains") of risk and protective factors in predicting youth substance use;
- examination of the effect of family and neighborhood characteristics on youth substance use based on the hierarchical nature of these data; and
- changes in risk and protective factors over time, and the relation of this change to observed changes over time in the prevalence of youth substance use.

82. Yoder, K.A., Whitbeck, L.B., Hoyt, D.R., & LaFromboise, T. (2006). *Suicidal ideation among American Indian youths*. *Archives of Suicide Research*, 10: 177-190.

Abstract: This study examined correlates of suicidal ideation among 212 American Indian youth who lived on or near three reservations in the upper Midwestern United States. The youths were, on average, 12 years old, and 9.5% reported current thoughts about killing themselves. Females were over 2 times more likely than males to think about suicide. Multivariate logistic regression results indicated that gender, enculturation, negative life events, perceived discrimination, self-esteem, and drug use were related to the likelihood of thinking about suicide. Drug use was the strongest correlate of suicidal ideation, and both enculturation and perceived discrimination emerged as important culturally specific variables. It was suggested that suicide prevention programs should draw on the strengths of American Indian culture.

83. Yu, M. & Stiffman, A.R. (2007). *Culture and environment as predictors of alcohol abuse/dependence symptoms in American Indian youths*. *Addictive Behaviors*, 32: 2253-2259.



Abstract: This study utilizes Bronfenbrenner's ecological model (1979) to examine multiple and interactive environmental (familial, social, and cultural) predictors of adolescent alcohol abuse/dependence symptoms. A stratified random sample of 401 American Indian youths was interviewed in 2001. The findings showed that family members' substance problems, peer misbehaviors, and participation in generic cultural activities positively predicted adolescent alcohol symptoms. Conversely, cultural pride/spirituality predicted fewer alcohol symptoms, and, importantly, religious affiliation moderated the effects of problematic peers and family members on adolescent alcohol symptoms. The findings suggest further study of intervention and prevention efforts regarding the benefits from consideration of the complex relationships among multiple environmental variables.

84. Zimmerman, F.J., Christakis, D.A., & Vander Stoep, A. (2004). *Tinker, tailor, soldier, patient: work attributes and depression disparities among young adults. Soc Sci Med, 58(10):1889-901.*

Abstract: Prior studies have consistently found the occurrence of depression to be higher among persons with lower socio-economic status (SES), but causal mechanisms for this relationship are often not well understood. For example, while depression has been shown to increase during spells of unemployment, little work has been done on job attributes that may be related to depression among employed people early in their careers. This study links the 1992 wave of the National Longitudinal Survey of Youth 1979 cohort-which included Depression symptom scores on the Center for Epidemiologic Studies Depression (CES-D) instrument-to the US Department of Labor's new occupational characteristics O*Net dataset. The resulting dataset includes information regarding depression, SES, and specific attributes of jobs held by the young adult respondents. Job attributes included measures of social status, interpersonal stressors, and physical conditions. Multivariate analysis revealed that for young men, higher job status is associated with lower CES-D scores. Higher scores on the opposition scale, which measures the extent to which employees are obliged to take a position opposed to others, is associated with higher CES-D scores. For young women, physically uncomfortable or dangerous jobs are associated with more depressive symptoms. Results are stratified by race/ethnicity. For Black men, unlike for White men or Latinos, job security is associated with fewer depressive symptoms; and for Latino men, but not for Black or White men, physically uncomfortable or dangerous jobs are associated with more depressive symptoms. For Black women, job status is associated with fewer depressive symptoms. We conclude that part of the SES-depression relationship may arise from the psychosocial aspects of jobs, which we have found to be significantly and meaningfully associated with depressive symptoms among employed young adults.

