



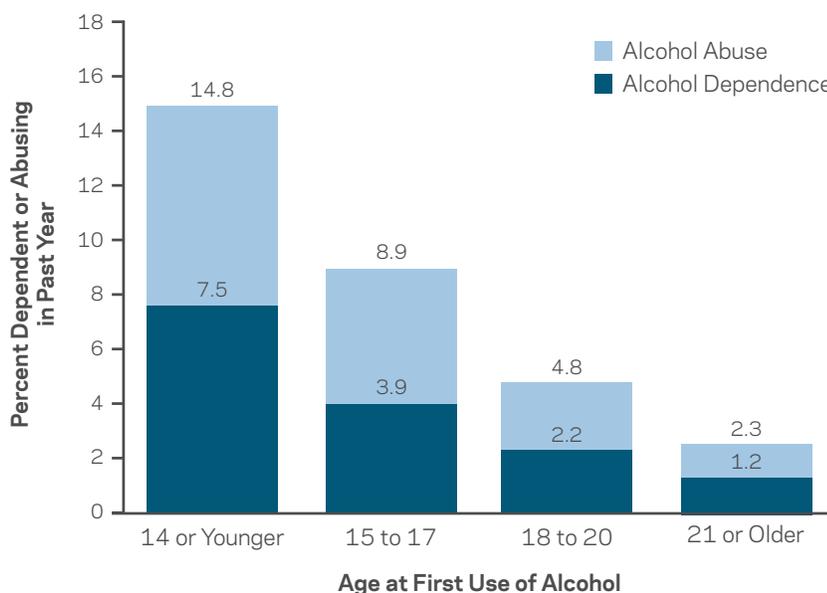
Research Update is published by the Butler Center for Research to share significant scientific findings from the field of addiction treatment research.

Factors Impacting Early Alcohol and Drug Use Among Youths

It is well documented that, for individuals suffering from substance use disorder, the brain's dopamine-regulated reward system creates a self-reinforcing chemical and behavioral cycle of craving, substance use, and withdrawal that makes addiction a pervasive and chronic condition over time (for more information on this process, see the *Research Updates* entitled "Drug Abuse, Dopamine, and the Brain's Reward System" and "The Brain Disease Model of Addiction"). However, this cycle of addiction must first be initiated through the progressive problematic use of alcohol and other drugs, which often begins in adolescence and early adulthood. Researchers have attempted to understand what factors contribute to these early drinking and drug use behaviors and how these factors put individuals at risk for dependence later in life.

Jessor's Problem-Behavior Theory

The prevailing theory on what factors drive a young person to consume alcohol or use drugs early on is known as the problem-behavior theory (PBT). PBT, published by Richard Jessor in 1987, balances the effects of psychological, social, and behavioral characteristics of an individual with environmental and situational elements of certain behaviors or lifestyles.^{1,2} Jessor describes all of these effects in terms of whether they are "instigations" (factors that increase risk of the behavior) or "controls" (factors that decrease the risk of the behavior), and whether they are "proximal" (closely related to the behavior) or "distal" (indirectly related to the behavior). Overall, PBT suggests that a great deal of behavior is tied to personally valued goals. Goals that are inconsistent with conventional social values are tied to what Jessor calls "problem behaviors"—things such as lack of academic achievement, aggression/violence, risky sexual behavior, and substance use. The tendency of an adolescent to prefer unconventional personal goals, his or her perceived and actual social support for achieving these goals, perceived and actual social norms and behavior modeling, and the environmental availability of goal-oriented resources can all significantly increase or decrease the likelihood of problem behaviors.¹ Empirical support for PBT has held up strongly over the years, as the theory was successfully revised and tested to account for biological/genetic factors in the 1990s,² has been supported among multicultural and multiethnic samples,^{3,4} and has become a popular foundation for research specific to early substance misuse among children and adolescents.^{4,5}



SOURCE: SAMHSA National Survey on Drug Use and Health (2013).

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THE HAZELDEN BETTY FORD FOUNDATION EXPERIENCE

In addition to inpatient and outpatient treatment services developed specifically for adolescents and young adults who are suffering from substance use disorders, the Hazelden Betty Ford Foundation offers a number of prevention resources aimed at educating children and adolescents across various stages of their development. Our innovative Children's Program (offered in our Rancho Mirage, California, Aurora, Colorado, and Irving, Texas locations) was developed to reach children aged 7–12 whose parents have been diagnosed with a substance use disorder. The Children's Program is highly unique and brings together the entire family in order to address questions, fears, and hurt related to addiction. The program is presented through child-centered activities that include artwork, games, role playing, and opportunities to interact with other children who have been impacted by addiction. The Children's Program is a phenomenal approach for parents struggling with substance use disorders to begin re-establishing a home environment where disapproval of substance use is clearly communicated and provides training and opportunities for parents to engage in healthy interaction with their children. Our publishing department offers educational curricula, including *Project Northland* (for grades 6–12) and *Class Action* (for high school students), that provide children and adolescents with the information they need to form healthy perceptions of the risks associated with drinking and drug use.

CONTROVERSIES & QUESTIONS

Question: *Kids will be kids. Isn't it better that I make my teenager feel safe drinking here in the house so he doesn't go out drinking somewhere else?*

Response: The misconception that it is safer to allow teens to drink with their friends at home is one that many parents believe, and one that can critically upset the development of adolescents' perceived norms for substance misuse. By allowing underage drinking in the house, or by demonstrating actual or perceived approval for other substance misuse behaviors (drinking or smoking cigarettes around children or adolescents, turning a blind eye to adolescent drinking or marijuana use, letting children sip or taste beer or other alcohol, etc.), parents and other supportive adults are minimizing the perceived risk of substance misuse and modeling social norms that support substance misuse. Unhealthy social norms and low perceived risk of harm significantly increase problematic substance use behaviors by adolescents, which can lead to substance use disorder later on.

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PBT and Substance Misuse

One of the most common problem behaviors examined with PBT is adolescent substance misuse, which was the primary focus of Jessor's initial article.¹ It is unsurprising that researchers would be concerned about drug and alcohol use at an early age. In addition to significant health and safety concerns tied to drinking and drug use, evidence has consistently demonstrated that the earlier an individual begins using drugs or alcohol, the higher the risk of developing dependence later on.^{7, 8, 9} By taking a broad view of the network of interrelated elements that impact substance use behavior, scientists have been able to identify a number of significant patterns that predict substance misuse among adolescents. One of the most interesting discoveries is the shift in how factors impact behavior differently over the span of an adolescent's development. For younger adolescents (eighth graders through 10th graders), the predictive power of external social elements (parent involvement and peers' social norms and drinking behaviors) was stronger than with older adolescents (12th graders), whose substance use behavior was more strongly linked to personal factors (substance risk perception and approval/disapproval of use).⁵ Since the development of personal attitudes is largely driven by the influence of family and peer beliefs, these findings have demonstrated that early intervention with young adolescents is critical to establishing healthy norms about substance use.

Studies have also found that adolescents with high levels of self-esteem/low levels of self-derogation are more likely to develop healthy beliefs about drugs and alcohol and are therefore less likely to engage in substance misuse.^{4, 5} Adolescent self-derogation and an increased need for peer approval have been significantly tied to an increased risk for the development of substance use disorder later on in life.⁴ These critical personality variables are strongly shaped by parental involvement in childhood and early adolescence: Greater parental involvement is associated with higher self-esteem and a subsequent reduced likelihood of substance misuse, whereas lower parental involvement is associated with higher self-derogation and a subsequently increased risk for substance misuse.⁵ Increased parental involvement is also significantly associated with lower levels of substance use among adolescents' peers, which is the strongest overall predictor of adolescent substance use behavior.^{4, 5}

Parental influence is also very significant in children's initial experiences with alcohol. Childhood sipping or tasting of alcohol is strongly associated with underage drinking; of adolescents who reported drinking behavior, 91 percent said that they had sipped or tasted alcohol as a child.⁶ Children who sip or taste alcohol before the age of 10 are almost twice as likely to engage in more serious drinking behaviors before the age of 15.⁶ Unlike adolescents and young adults, childhood sipping or tasting of alcohol has little to do with personal beliefs or social/peer influence but instead is highly dependent on parents' behavioral norms and attitudes. Children whose parents were regular drinkers were 3 times more likely to sip or taste alcohol before the age of 12 than children whose parents did not drink.⁶

Summary

Starting in childhood, it is critical for parents and other supportive adults to clearly communicate the risks of alcohol and drug use in order to establish an environment where substance misuse is met with clear disapproval.⁶ This includes protecting children from exposure to alcohol and/or drug consumption among adults and speaking to children about the negative consequences of substance misuse.⁴ Additionally, regular healthy parental involvement in the lives of children and young adolescents can establish high levels of self-esteem and reduce adolescents' reliance on peer approval, factors that have been empirically tied to the reduced risk of both early substance misuse and substance use disorder in late adolescence and early adulthood.^{3, 4, 5} When paired with well-established knowledge of the risks of substance misuse and a home environment that disapproves of alcohol and other drug use, high self-esteem increases the chances that adolescents will associate with fewer peers who use or approve of the use of alcohol or other drugs and/or will rely less on the approval of peers who do promote substance use, which in turn facilitates the development of healthy personal attitudes and behaviors in relation to substance misuse in later adolescent stages.⁵

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HOW TO USE THIS INFORMATION

Parents: Healthy adolescent and adult behaviors are established early on, beginning with environmental norms created at home, which impact later peer socialization and finally lead to the development of adolescents' personal attitudes and beliefs. By creating a home environment where substance use is clearly not approved of and by engaging in regular, healthy interaction with children and young adolescents, you are setting the foundation for high self-esteem and healthy norms that will protect adolescents from developing the behaviors that can lead to substance misuse and dependence.

Counselors: Older adolescents' perceived risk and personal approval/disapproval of substance misuse play a significant role in their decisions to drink or use drugs. These factors are strongly impacted by peers' behaviors and attitudes, but compelling psychoeducational resources that communicate the serious risks of drinking and drug use, especially when paired with counseling and training aimed at improving self-esteem, can be valuable in disrupting unhealthy social norms established by friends and/or family.

References

- Jessor, R. (1987). Problem-behavior theory, psychosocial development, and adolescent problem drinking. *British Journal of Addiction*, 82, 331-342.
- Jessor, R. (1991). Risk behavior in adolescence: A psychosocial framework for understanding and action. *Journal of Adolescent Health*, 12(8), 597-605.
- Mobley, M. & Chun, H. (2013). Testing Jessor's problem behavior theory and syndrome: A nationally representative comparative sample of Latino and African American adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 19(2), 190-199.
- Taylor, J., Lloyd, D. A., & Warheit, G. J. (2005). Self-derogation, peer factors, and drug dependence among a multiethnic sample of young adults. *Journal of Child & Adolescent Substance Abuse*, 15(2), 39-51.
- Handren, L. M., Donaldson, C. D., & Crano, W. D. (2016). Adolescent alcohol use: Protective and predictive parent, peer, and self-related factors. *Prevention Science*, 17, 862-871.
- Donovan, J. E. & Molina, B. S. G. (2014). Antecedent predictors of children's initiation of sipping/tasting alcohol. *Alcoholism: Clinical and Experimental Research*, 38(9), 2488-2495.
- DeWit, D. J., Adlaf, E. M., Offord, D. R., & Ogborne, A. C. (2000). Age at first alcohol use: A risk factor for the development of alcohol disorders. *The American Journal of Psychiatry*, 157(5), 745-750.
- Von Diemen, L., Bassani, D. G., Fuchs, S. C., Szobot, C. M., & Pechansky, F. (2008). Impulsivity, age of first alcohol use and substance use disorders among male adolescents: A population based case-control study. *Addiction*, 103(7), 1198-1205.
- Robins, L. N. & Przybeck, T. R. (1985). Age of onset of drug use as a factor in drug and other disorders. *NIDA Research Monograph Series*, 56, 178-192.

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