Exploring Risk and Protective Factors for Alcohol and Tobacco Use Among Youth: An Innovative Approach

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Exploring Risk and Protective Factors for Alcohol and Tobacco Use Among Youth: An Innovative Approach  
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BACKGROUND & PURPOSE

Underage alcohol and smoking are growing public health concerns especially among the youth of the nation. Centers for Disease Control and Prevention (CDC) estimates that youth between 12 to 20 years of age are responsible for 11% of total alcohol consumption in the United States CDC, 2014. Additionally, 90% of this 11% alcohol is consumed in the form of binge drinking (CDC, 2014). Alongside with alcohol, tobacco use is also a concerning health issue among the youth; each day more than 3,800 adolescents smoke their first cigarette and an additional 2,100 youth become daily cigarette smokers (CDC, 2015). Although, cigarette smoking has declined in recent years, other forms of tobacco such as electronic cigarettes, hookahs, and smokeless tobacco have become more popular (CDC, 2015).

Similar to the nationwide trends, underage drinking and tobacco use continues to be a health problem among the youth population in Florida. According to Florida Youth Risk Behavior Survey, in 2013, 34.8% of middle and high school students reported consuming at least one drink of alcohol on one or more days in the past 30 days from the day of the survey (Florida Department of Health (FDOH), 2013). Moreover, 10.8% of middle and high school students reported smoking cigarettes on one or more days in the past 30 days from the day of the survey (FDOH, 2013).

There are several factors that prevent and/or promote the use alcohol and tobacco among the youth. Personal experiences and perceptions, biological makeup, and social environment are some major factors that influence the alcohol and tobacco consuming behaviors. Social environment such as positive media advertisement, peer pressure and personal experiences of childhood abuse and/or dating violence increase the likelihood of substance abuse problem among the youth (Fisher, Miles, Austin, Camargo, & Colditz, 2007; Hearst, Fulkerson, Maldonado-Molina, Perry, & Komro, 2007; Janinski, Williams, & Siegel, 2000; Maldonado-Molina, Reingle, Delcher, & Branchini, 2011; Simantov, Schoen, & Klein, 2000). On the other hand, positive parental involvement and monitoring, and engagement in extracurricular activities have been proven to decrease vulnerability to substance abuse (Chen, Richardson, & Labree, 1994; Simantov, Schoen, & Klein, 2000).

There are multiple emotional, academic, and economic consequences of underage alcohol consumption and tobacco use, it is therefore imperative to understand the risk factors that lead to such behaviors (Office of Juvenile and Delinquency Prevention, 2012). The purpose of this study is to determine unique segments of youth at-risk and protected from underage alcohol consumption and cigarette smoking in Sarasota, Florida.

METHODS

The Youth Risk Behavior Survey (YRBS), a CDC’s Youth Risk Behavior Surveillance System (YRBSS), measures the prevalence of health-risk behaviors among adolescents through representative national, state, and local surveys. The Sarasota County School District has assessed the prevalence of priority health-risk behaviors among high school youth attending Sarasota County public schools by conducting the YRBS. The High School YRBS has been conducted in Sarasota every other year since 1999. This study relied on secondary analysis of YRBS data obtained primarily from 9th and 11th graders across all high schools in the county. A total of 2,613 high school youth were included in this analysis. An exploratory audience segmentation approach, Chi-Squared Automatic Interaction Detection (CHAID), was used to identify unique segments most at-risk for and protected from past 30 day cigarette smoking were those youth who used cigarettes to cope with stress in the past 30 days (CDC, 2014). Although, cigarette smoking has declined in recent years, other forms of tobacco such as electronic cigarettes, hookahs, and smokeless tobacco have become more popular (CDC, 2015).

RESULTS

Demographic Item | Response Options | Valid Percent
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Age | 14 years old | 30%
| 15 years old | 25%
| 16 years old | 27%
| 17 years old | 27%
| 18 years old or older | 2%
Gender | Female | 54%
| Male | 46%
Grade | 9th grade | 36%
| 10th grade | 33%
| 11th grade | 67%
| 12th grade | 67%
Race/Ethnicity | American Indian/Alaska Native | 1%
| Asian | 3%
| Black or African American | 9%
| Native Hawaiian/Pacific Islander | 1%
| Hispanic/Latino | 11%
| White | 75%

CONCLUSIONS

The purpose of the secondary analysis study using YRBS data from 2011 was to use an innovative segmentation approach, CHAID, to identify unique segments at risk for and protected from tobacco and alcohol use to inform future public health efforts. The sample comprised 2,613 youth in high school from racially diverse backgrounds. Results suggest a variety of complex interactions determine past thirty day tobacco and alcohol use. Overall, risk factors for past 30 day cigarette use included coping with stress and not believing youth who say “no” to cigarette smoking feel good about themselves. Thus, school-based prevention programming should focus on providing high school youth with healthier ways to cope with stress and changing social norms to reflect a belief that saying “no” to tobacco makes youth feel good about themselves. Overall, risk factors for past 30 day alcohol consumption were more complex and included the disagreeing with the statement about alcohol making youth do poorly in school and tended to agree that alcohol made people their age less stressed out.

REFERENCES


