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Adolescent Behavior and Substance Use

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Abstract

Many studies endeavor to understand substance use in teens because it has been linked to both short and long term negative health outcomes. Research has linked both parent and peer factors to alcohol use, less is known about how these associations may play out across different developmental time periods. Our research question endeavors to fill that gap by investigating the patterns of relationships across middle school and high school students. Do the relationships between peer influence and parental influence on alcohol use differ across these two groups? Correlational analyses revealed significant relationships between alcohol and both parental monitoring ($r = .215$) and peer behavior ($r = .412$) were both significant at the $p < .01$ level. Two separate hierarchical multiple regression models were analyzed predicting alcohol use using gender, parental monitoring, and peer behaviors. Both the middle school ($R^2 = .157$, $F(4,4024) = 186.50$, $p < .01$) and high school model ($R^2 = .155$, $F(4,4852) = 222.11$, $p < .01$) were significant. Patterns of associations followed the same trends. For both middle and high school students, alcohol use, parental monitoring, and peer behavior were significantly correlated. For future studies within associations for substance use, peer influence and parental influence further research can be conducted regarding other substance abuse like cigarettes, pain medications and marijuana. This research study provides information aimed at assisting parents and providing them with the data to show how their restrictions and monitoring are correlated with their adolescents behavior.

ADOLESCENT BEHAVIOR AND SUBSTANCE USE

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INTRODUCTION

Adolescents are a big part of today's society, and a big part of adolescents is derived from how they were raised. Past studies have linked adolescent substance abuse with long and short term health outcomes. We are trying to provide more information on how peer influence and parental influence impact substance abuse in young adults overtime.

BACKGROUND

There is a lot of research about different types of parental monitoring, whether that's knowledge about their kids' behavior or inquiring about their child's actions. It was noted that parental monitoring did in fact correspond with lower adolescent misbehavior by indirectly motioning their child towards appropriate activities (Stewart, K. E., Sitney, M. H., Kaufman, K. L., DeStefano, J., & Bui, T. 2018). Parental monitoring has been explored in several different aspects to determine if there is some correlation between levels of monitoring and the behavior of their children. Some studies explore how parental knowledge affects youth's behavior overtime (Kerr, Stattin & Burk, 2010). Other studies focus on how parental monitoring and family relationships affect youth's delinquent behavior (Fosco, Storemshak, Dishion & Winter 2012).

How Do Peer Influence and Parental Influence Impact Substance Abuse in Adolescents?

METHODS

Data for this study were collected as part of the Integrated Community Engagement (ICE) Collaborative in West Virginia. ICE is an ongoing health promotion effort that uses school-survey data to inform stakeholders about parental monitoring and peer behavior and its impact on substance abuse over time.

SAMPLE

The sample included 9,046 adolescents (aged 11-18) attending public school in a Mid-Atlantic state.

SURVEY MEASURES

Parental Monitoring

- 7 Items, sum scored
 - Mid $\alpha=.87$, High $\alpha=.89$
- Sample Item: "How many of your friends smoke cigarettes?"

Peer Behavior

Peer behavior was assessed with the following question: 1) "How many of your friends smoke cigarettes?", responses were from 1=none to 5=all.

Substance Abuse

Alcohol consumption was assessed with the following item: "During the last 12 months, how often have you had a drink of alcohol (including; beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey) other than a few sips?" Response options ranged from 1= "Never" to 7= "40 or more times).

RESULTS

Bivariate Correlation

Bivariate correlations were run on each of the key study variables with alcohol use. Parental monitoring ($r = .215$) and Peer Behavior ($r = .412$) were both significant at the $p<.01$ level.

Examples of parental monitoring/peer influence and alcohol use were significantly correlated.

Multiple Regression

Middle School Model

The results of the regression indicated the middle school model accounted for 15.7% of the variance in alcohol use ($R^2 = .157$, $F(4,4024)= 186.50$, $p<.01$). It was found that peer behavior significantly predicted alcohol use ($\beta = .36$, $p<.001$), followed by parental monitoring ($\beta = .10$, $p<.01$), age ($\beta = -.06$, $p<.01$), female gender ($\beta = .03$, $p<.01$).

High School Model

The results of the regression indicated the high school model accounted for 15.5% of the variance ($R^2 = .16$, $F(4,4852)= 222.11$, $p<.01$). It was found that peer behavior significantly predicted alcohol use ($\beta = .33$, $p<.001$), followed by parental monitoring ($\beta = .12$, $p<.01$), age ($\beta = -.09$, $p<.01$), female gender ($\beta = .03$, $p<.01$).



CONCLUSION

Adolescence is a critical developmental stage with many repercussions for lifetime health. Our study investigated the patterns of association across age, gender, peer behavior, and parental monitoring on substance use in teens. We were particularly curious about whether or not there were differences between middle and high school student patterns. Correlation and Multiple Regression analyses showed relationships between the key study variables. Findings also showed that patterns of association were very similar across middle and high school students. This research has provided more information on peer and parental influence and how substance abuse plays a role with young adults at critical times in their development.