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The purpose of the Mercyhurst Civic Institute:

• Enhance and facilitate citizen participation in decision-making.
• Provide high-quality, objective information to assist local decision-making.
• Convene community forums that encourage reasoned reflection and free and open discussion of regional issues.
• Educate the Erie community and Commonwealth of Pennsylvania about various issues through Institute reports and publications.
• Foster human networks that enhance communication, link resources, strengthen community participation and build social capital.
• Promote research, learning, teaching and service opportunities for the Mercyhurst community.

Family Ties: How Parents Influence Adolescent Substance Use

Adolescent substance use is a widely researched topic as well as the focus of various prevention programs. Alcohol and drug use is considered a risky behavior for teens due to its potential for negative consequences. Substance use puts teens at an increased risk for suicide, homicide, car crashes, and other unintentional injuries (National Institute on Alcohol Abuse and Alcoholism, 2005). Substance use can also lead to academic problems or risky sexual behavior and has even shown to have negative effects on brain development. Furthermore, early initiation of drinking is shown to increase the risk of alcoholism later in life (McGue & Iacono, 2008). Factors leading to a youth's decision to engage in underage drinking or other substance use are complex and likely include influences from multiple domains. While social environment and peer influences are often recognized as contributing factors to an individual's decision to engage in underage drinking or illegal drug usage, the effect of family factors should not be ignored.

Support and control have been identified by researchers as two complementary components of parenting (Barnes and Farrell, 1992). The construct of support includes areas such as nurturance, attachment, acceptance, and love, whereas the construct of control includes discipline, supervision, and monitoring. Monitoring has further been defined as parental knowledge of their child's companions, whereabouts, and activities. Another dichotomy that has been used to conceptualize parenting is parental attitudes or values, which includes perceived permissiveness, and parental behaviors, which includes perceived monitoring.

In general, parental support, monitoring, and strict rules and attitudes about drug use were typically related with less adolescent substance use.
Each of these areas can be examined in relation to adolescent alcohol, tobacco, and other drug (ATOD) use (e.g., does the degree of closeness an adolescent feels within the family impact their alcohol or drug use?; do strict family rules prevent adolescents from drinking?). In addition to relating these general constructs to adolescent ATOD use, recent research has investigated how alcohol-specific socialization by the family impacts adolescents’ substance use. Alcohol-specific socialization refers to any activities that parents undertake specifically to manage their children’s drinking behaviors and may include things such as making alcohol-specific rules, showing disapproval of drinking, and talking about alcohol use (Van der Vorst, Engels, Dekovic, Meeus, & Vermulst, 2007).

Research by Kuntsche and Kuendy (2006) focused on the support construct of parenting as it relates to ATOD use. They found that a lack of family bonding was a predictor of alcohol use by adolescents. Family bonding is defined as a feeling of closeness and intimacy toward one’s parents and included behaviors such as listening to a child’s worries, spending free time with the child, and providing help to the child when needed. Mothers and fathers may not have the same impact on children’s substance use as illustrated by Zhang, Welte, & Wieczorek (1999); their research showed that the closeness to mothers but not fathers predicted adolescent drinking. On the other hand, Barnes and Farrell (1992) showed that high levels of support by both mothers and fathers were associated with lower levels of regular drinking and illicit drug use. Also, mother’s support had a stronger effect on deviance for girls than for boys. Other research has found that family bonds influence substance use indirectly through peers (Bahr, Marcos, & Maughan, 1995). Youth with stronger family bonds are less likely to have friends involved with substance use. It is suggested that spending time with parents helps the children to adopt their values and thus abstain from alcohol use. Another possible explanation for this effect is that spending more time with the family means that adolescents spend less time with their peers, and thus experience less peer pressure and limited opportunities to access substances apart from supervision.
Key Findings

- There is a strong association between rules about alcohol use and actual consumption. Alcohol-specific rules lower the likelihood of drinking initiation (Van der Vorst, Engels, Meeus, & Dekovic, 2006; Van der Vorst et al., 2007).
- High levels of parental monitoring are associated with low frequencies of drinking and illicit drug use (Barnes & Farrell, 1992).
- Parents are stricter toward younger adolescents than older; parents become more permissive of alcohol use as the adolescents get older (Van der Vorst et al., 2007).
- Parents feel more confident about influencing their younger child rather than their older child, which coincides with a belief that parents have less control over their children as they get older; however, data showed that parents were equally effective for adolescents at all ages (Van der Vorst, Engels, Meeus, Dekovic, & Leeuwe, 2005).
- Alcohol-specific rules by parents are less effective once an adolescent’s drinking pattern has been established, meaning that parents can impact their children's alcohol use during the initiation phase of drinking (Van der Vorst et al., 2007).
- Parental influences on drinking behavior moderate the peer influences; when parents are more involved, peer influences on drinking are not as influential (Wood, Read, Mitchell, & Brand, 2004).
- When mothers reported on family rules, there was no relationship with adolescent drinking or drug use; however, when the adolescents reported on parental rules, there were significant relationships. Along with the finding that adolescents identified fewer parental rules for their behavior than the parents identified, this indicates that it is the adolescents’ perception of having rules that is critical. A distinction must be made between verbally provided rules and an assumption by parents that their children know the rules (Barnes & Farrell, 1992; Van der Vorst et al., 2006).
- Adolescents imitate the consumption of their parents, especially their father (Van der Vorst et al., 2005).
- Parents that drink are more permissive about their children drinking and parents that are strict about their children drinking are less likely to drink themselves. It is possible that parents who drink feel less credible in providing rules about the behaviors or are more accepting of drinking in general (Van der Vorst et al., 2006)

**Alcohol-specific rules lower the likelihood of drinking initiation**

Similar to the findings with alcohol-specific rules, Jackson & Henrikson (1997) found that children whose parents engage in antismoking socialization (setting rules to eliminate cigarettes smoking in the home, awareness of children’s smoking behaviors, and making disciplinary consequences of smoking clear) are less likely to begin smoking. This study also found that children are more likely to begin smoking if they see the parents modeling the behavior.

In summary, though pathways to adolescent alcohol and drug use are complex, parents are an important influence on their children's decision-making about substance use. Nurturing and supportive relationships between parents and their children as well as strict parental monitoring and clearly communicated parental rules specific about substance use can prevent adolescents from engaging in this illegal and dangerous behavior. Various studies have indicated that it is not the adolescent’s age that matters as much as whether or not the adolescent has an established pattern of behavior; older children can still be impacted if they have not yet established a drinking pattern. Parents should clearly communicate their rules and expectations regarding the child’s behavior, and parents should continue to set and enforce alcohol-specific rules and to monitor their children’s whereabouts and activities. As the adolescent ages, parents should not assume that they lose credibility or that ATOD use by their teenager is inevitable. In addition to findings of direct effects between parenting and adolescent substance use, family influences can also impact how peer relationships impact the adolescents. Finally, parental substance use is an important factor both directly through modeling and indirectly through parent’s willingness to set rules about ATOD use.
The Pennsylvania Youth Survey (PAYS) is a self-report measure administered every other year to 6th, 8th, 10th, and 12th grade students in Pennsylvania’s public schools. The questions focus on attitudes and behaviors regarding alcohol, tobacco, and other drug use as well as antisocial behaviors and other special topics. The survey also examines a number of risk and protective factors that increase or decrease the likelihood that an individual would engage in problem behaviors. The data can be utilized to gauge the prevalence of the various problem behaviors and to plan for prevention and treatment programs in the community. The following data comes from the 2007 administration of the PAYS.

A number of questions on the PAYS ask about alcohol, tobacco, and other drug use. Students report on their lifetime use as well as their past 30 day use. Table 1 indicates the percentage of students using alcohol, cigarettes, and marijuana in the specified time period in Erie County as well as throughout Pennsylvania.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Erie County</th>
<th>State of Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes-30</td>
<td>11.5</td>
<td>10.2</td>
</tr>
<tr>
<td>Cigarettes-Lifetime</td>
<td>26.7</td>
<td>23.9</td>
</tr>
<tr>
<td>Alcohol-30</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Alcohol-Lifetime</td>
<td>55.9</td>
<td>55.4</td>
</tr>
<tr>
<td>Marijuana-30</td>
<td>9.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Marijuana-Lifetime</td>
<td>18.9</td>
<td>16.4</td>
</tr>
</tbody>
</table>

County-level data can be compared to national data on a grade level basis for 8th, 10th, and 12th grades. While lifetime cigarette use by Erie County respondents was similar to the national data, 10th and 12th graders had a higher rate of past 30-day cigarette use. Lifetime alcohol use by Erie County youth was higher than the national use for 8th, 10th, and 12th grades, and past 30-day alcohol use was higher than the national for 10th and 12th grades. Marijuana use was generally lower than nationwide use for 8th graders but higher than nationwide use for 12th graders.

Using a one-way ANOVA statistical procedure, the local PAYS data was analyzed to explore the relationships between family factors and alcohol, cigarette, and marijuana use. The following sections summarize the findings.

Students are more likely to drink alcohol if a family member has a drinking problem.
Parental permissiveness about alcohol use impacts actual use. Analysis indicated that the more wrong respondents think their parents feel it is for them to drink alcohol, the less likely they are to have had alcohol in their lifetime and in the past 30 days. Students also responded to questions “The rules in my family are clear” and “My family has clear rules about alcohol and drug use.” Analyses indicated that unless the respondents indicated the highest level of rule clarity, having clear rules in the family did not impact lifetime alcohol use. When asked about alcohol use in the past 30 days, however, students who indicated clearer rules also indicated less frequency of alcohol use. Unless the rules are very clear, it seems as though the students may be willing to try alcohol in their lifetime but not use it regularly.

Parental monitoring was also significantly related to reported alcohol use. If students felt their parents would catch them if they drank alcohol, then they were less likely to drink than if the students felt their parents would not catch them. When considering whether students felt their parents know who they are with and whether they are home on time, only the strongest parental monitoring was associated with lower lifetime alcohol use by respondents; however, any recognition of parental monitoring impacted 30-day alcohol use in the expected direction.

Statements related to parental support and family relationships were also analyzed. If students reported feeling close to their mother and father (asked separately), they were less likely to drink alcohol in their lifetime and in the past 30 days. Also, the more likely an adolescent reports sharing feelings with his/her mother and father, the less likely he/she was to drink alcohol in his/her lifetime. There was a slight variation in the findings for 30-day use, but those that share their feelings with parents the most were least likely to drink alcohol and those that share their feelings with parents the least were most likely to drink alcohol in the past 30 days. Students who enjoy spending time with their mother and father reported a decreased tendency to drink alcohol in their lifetime and in the past 30 days. The more comfortable respondents were with asking their parents for help, the less likely they were to drink alcohol in their lifetime and in the past 30 days. Taken together, these results indicate the students who feel close to their parents are generally less likely to drink alcohol.

Finally, students are more likely to drink alcohol if they indicated a family member having a drug or alcohol problem as well as more likely to drink alcohol if they noted that a sibling has drunk alcohol. These findings could be a result of modeling the family member’s behavior or could be further evidence of parental attitudes and monitoring.

Comparable analyses were conducted for lifetime and past 30-day cigarette use as were conducted for alcohol use. The results were similar and included the following:

- The more wrong students think their parents feel it is for them to use cigarettes, the less likely they are to use them in their lifetime and in the past 30 days.
- The clearer the family rules are, the less likely students are to smoke cigarettes in their lifetime and in the past 30 days.
- If family rules about tobacco use are clear, students are less likely to smoke cigarettes in their lifetime and in the past 30 days.
- If parents are monitoring their children’s whereabouts, students report being less likely to smoke cigarettes in their lifetime and in the past 30 days.
- If students feel supported by their mother and father, they are less likely to smoke cigarettes in their lifetime and in the past 30 days.
- Students who share their feelings with their mother are less likely to smoke cigarettes throughout their lifetime. Willingness to share feeling with one’s mother did not impact cigarette use unless the student felt very strongly against sharing feelings (which led to increased use).
- Students who share their feelings with their father are less likely to smoke cigarettes in their lifetime and in the past 30 days.

**State & Local Information continued**

**Alcohol**

Parental monitoring was also significantly related to reported alcohol use.

**Cigarettes**
• Students who enjoy spending time with their father are less likely to smoke cigarettes in their lifetime and in the past 30 days.
• If students feel they can ask their parents for help with problems, they are less likely to smoke cigarettes in their lifetime and in the past 30 days.
• Students who have siblings who smoke, they are more likely to smoke as well.
• Students who have a family member with an ATOD problem are more likely to smoke.

In general, the results were in the expected direction in that parental support, monitoring, and strict rules and attitudes about drug use were typically related with less cigarette use.

Marijuana

In general, the results were in the expected direction in that parental support, monitoring, and strict rules and attitudes about drug use were typically related with less marijuana use.

Comparable analyses were conducted for lifetime and past 30-day marijuana use as were conducted for alcohol and cigarette use. The results were similar and included the following:

• The more wrong students think their parents feel it is for them to use marijuana, the less likely they are to use it in their lifetime and in the past 30 days.
• Families with clear family rules have children that are less likely to use marijuana in their lifetime and in the past 30 days.
• If family rules about drug use are clear, students are less likely to use marijuana in their lifetime and in the past 30 days.
• Children whose parents monitor their whereabouts report being less likely to use marijuana in their lifetime and in the past 30 days.
• If students feel supported by their mother and father, the less likely they are to use marijuana in their lifetime and in the past 30 days.
• Students who share their feelings with their mother and father are less likely to use marijuana in their lifetime and in the past 30 days.
• Students who enjoy spending time with their mother and father are less likely to use marijuana in their lifetime and in the past 30 days.
• If students feel they can ask their parents for help with problems, they are less likely to use marijuana in their lifetime and in the past 30 days.
• If students have siblings who smoke, they are more likely to use marijuana as well.
• Students who have a family member with an ATOD problem are more likely to use marijuana.

In general, the results were in the expected direction in that parental support, monitoring, and strict rules and attitudes about drug use were typically related with less marijuana use.

Local information taken from analysis of the PAYS data tended to coincide with the findings from published research. Though there were slight variations in the detailed levels of analysis, the local findings generally supported the belief that parents are in a position to impact their children's alcohol, tobacco, and other drug use. In many cases, the degree of substance use behaviors were incremental in relation to the level of parental involvement and attitude; in fact, in the case of alcohol use, it was only the clearest rules and most consistent parental monitoring that made a positive impact on ATOD use. Based on these findings, it can be concluded that prevention efforts should not be exclusively aimed at adolescents and their peer relationships nor should they occur only in an educational setting. Adolescent alcohol and drug use can theoretically be prevented by working with parents on rule-setting, monitoring, and modeling behaviors as well as through interventions that promote strong family relationships.