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## Adolescent Initiation and Maintenance: An Analysis of the Roles of Self-Efficacy, Sensation Seeking, Parents, and Peers

Benjamin Bullock

*University of New Hampshire, Durham*

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# Adolescent Initiation and Maintenance: An Analysis of the Roles of Self-Efficacy, Sensation Seeking, Parents and Peers

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**Benjamin Bullock**

## **ABSTRACT**

*Alcohol use among adolescents is a public health concern. Research of the predictors of adolescent alcohol initiation and use are necessary to better combat the negative impacts associated with alcohol use by youth. Due to social influences, adolescents develop a sense of self-efficacy and sensation seeking, which can guide them to get involved in early alcohol use. Both parents and peers have a great deal of authority to push one to have certain beliefs about drinking alcohol. The goal of this literature review is to better understand how the personality characteristics of self-efficacy and sensation seeking influence alcohol initiation and use by youths, and to identify how parents and peers influence one's self-efficacy and sensation seeking characteristics in relation to alcohol use.*

Adolescence is a time of high conformity to social norms in order to provoke acceptance into society (Simons-Marten *et al.* 2001), and there is great risk present in alcohol expectations. Adolescents perceive participation in alcohol consumption as being normative, cool, and a form of personal enhancement (Gerrard *et al.* 2002; Lyons, Dalton and Hoy 2006), as well as a necessary function in the socialization into adulthood (Pape and Hammer 1996). There are consistent findings that approximately 60% of high school seniors have participated in the use of alcohol (Primack *et al.* 2009), and they consume, on average, four drinks per occasion (Bekman, Cummins, and Brown 2011). Similarly, 41% of college students participate in binge drinking, or heavy episodic use, which is defined as five or more drinks within a two hour period, and is associated with greater social consequences than drinking at a lesser rate (Johnston *et al.* 2009; Kunz and Graham 1998). Between the years of 1995-2001, the frequency of binge drinking has increased by 35% in people ages 18-25 (Naimi *et al.* 2003). Females are closing the gap in participation with males, which suggests that binge drinking is becoming a more acceptable behavior (Motluk 2004). With such high rates of consumption, there must be some outstanding attraction for adolescents and young adults to participate in drinking alcohol.

The American Medical Association has stated that alcohol use is a public health concern with negative effects in adolescents, schools, and communities (Mokdad *et al.* 2004). Alcohol has been discussed as being the leading cause of death in adolescents due to its association with motor vehicle accidents, violence, and other accidents (Columbia University Center 2002; Smith, Branas, and Miller 1999). Alcohol abuse has been linked with health problems, such as premature death, impaired work performance, difficulties with financial costs, and crime (Harford, Grant, and Hasin 1991), as well as significant associations with depression and anxiety (Rodgers *et al.* 2000) and poor school performance (Presley, Meilman, and Cashin 1996). Since depression has been found to affect 15% to 20% of university students, and the rate has increased over the past two decades (Benton *et al.* 2003), it may be significant that alcohol use has consistently been increasing among college students (Naimi *et al.* 2003). However, there exists little research suggesting whether alcohol consumption causes depression or depression causes alcohol consumption as a way to self-medicate. Given the extent of negative consequences of alcohol abuse, my research asks, "for what reasons has alcohol abuse become a norm among adolescents and young adults?"

Studies have consistently found supporting data that suggests that there are at least four factors, among several others, that perpetuate the use of alcohol in adolescence. The first is self-efficacy (Aas *et al.* 1995; Bandura 1986), which is defined as the confidence people have to achieve a goal, perform difficult tasks, the amount of effort expended on tasks, and their perseverance in difficult situations (Bandura 1986; 1997). The second is sensation seeking, which is a trait that represents decreased inhibition of risky behavior, higher boredom susceptibility, and the pursuit of thrill and adventure (Zuckerman 2007). The third factor is parenting styles. Certain parenting styles have been found to influence earlier alcohol abuse in children (Menaghan and Parcel 1990, 1995; Whitbeck *et al.* 1997). Lastly, peers have consistently shown to be the strongest influence towards the induction and persistence of alcohol use in adolescents and young adults (Petraitis, Flay, and Miller 1995; Urberg, Değirmencioğlu, and Pilgrim 1997). Because self-efficacy and sensation seeking are traits, and parents and peers are agents of socialization, my hypothesis predicts that one's risk of alcohol use increases with low self-efficacy and high sensation seeking, and that unsupportive parenting styles and delinquent peer groups influence alcohol use as being more acceptable.

### **SELF-EFFICACY**

Adolescents create a belief in efficacy in relation with their personal outcomes from familial, peer, educational, and socioeconomic influences (Bandura *et al.* 1996, 2001). The period of adolescence is an especially challenging phase (Eccles and Midgley 1989) when youth have to adapt to biological (e.g., puberty), educational (e.g., passing into high school), and social (e.g., broadened peer network, partnerships, sexuality) transitions. Adolescence is also a time of growth in independence, which can result in decision making that leads to involvement in risky behaviors (Bandura 1997). Therefore, there is an emphasis on the role of self-efficacy and opportunities to use alcohol during adolescence.

Research has consistently shown that adults, students, and adolescents with low self-efficacy confidence have higher consumption rates than those with high self-efficacy expectations (Aas *et al.* 1995). Bandura (1986) found that people with low self-efficacy are less likely to resist alcoholic drinks, whereas people with high self-efficacy are more likely to resist the pressures. This suggests that, aside from parental and peer influences, self-efficacy plays a strong role in determining the choices that an individual makes regarding alcohol. Adolescents with lower self-efficacy are at a greater risk of consumption than those with higher self-efficacy; however, low self-efficacy is not the direct problem, rather that it is the low alcohol-refusal efficacy that is associated with low general self-efficacy.

### **SENSATION SEEKING**

During adolescence there is a natural increase in sensation seeking due to neurobiological development, and it tends to decrease into adulthood (Arnett 1995; Chambers, Taylor, and Potenza 2003). The importance of this is the escalated stimulation of sensation seeking may elevate the cognitive rewards channel that is triggered by alcohol (Romer and Hennessy 2007), which may help explain why adolescence is a time of increased risk of use alcohol.

Sensation seeking has shown to positively correlate with drinking frequency and negatively correlates with resistance to peer pressure to drink. Adolescents with high sensation seeking tend to perceive greater positive alcohol expectations and enjoy their first alcohol-related experience more (Romer and Hennessy 2007). It was also shown that people with high sensation seeking perceive their peers as having greater drinking rates in comparison to their actual drinking frequency. This is important because perceived drinking of peers is highly correlated with an individual's frequency of consumption (Cicognani and Zani 2011). As sensation seeking increases, alcohol consumption increases; also, the perceived use of alcohol among peers increases, resulting in greater alcohol use.

## RELATIONSHIPS BETWEEN SELF-EFFICACY AND SENSATION SEEKING

There are multiple similarities that may suggest associations between sensation seeking and self-efficacy. Adolescents with high sensation seeking feel less capable to resist drinks (Cicognani and Zani 2011). This may show a relationship between sensation seeking and self-efficacy, because it has also been shown that people with low self-efficacy are less likely to reject alcoholic drinks (Bandura 1986). Alcohol use is more frequent among males, and males tend to have higher sensation seeking and lower self-efficacy than females (Cicognani and Zani 2011; Romer and Hennessy 2007). Adolescents with higher alcohol use have elevated sensation seeking and lower school achievement (Primack *et al.* 2009). Since lower academic performance is also associated with lower self-efficacy (Alivernini and Lucidi 2011), it may be possible that there is a relationship between sensation seeking and self-efficacy. There exists little research that tried to find a direct relationship between the two factors, but, because they have very similar affects, it may be possible that a relationship exists.

## PARENTING STYLES ON SELF-EFFICACY DEVELOPMENT

Parents play an important role in the process of developing self-efficacy in their children. Flexible parenting styles allow for positive communication of ideas and opinions, resulting in a sense of control and mastery of the adolescent's own life events (Whitbeck *et al.* 1997). It is important that adolescents develop the ability to control their behavior, because mastery experiences—performing and succeeding at tasks on your own—are the most powerful sources of developing self-efficacy (Bandura 1986; 1997). Traditionally, fathers and mothers employ different parenting methods and each play an important role in building a child's self-efficacy (Whitbeck *et al.* 1997).

Working conditions and economic stress have shown to be strong factors in fathers' parenting style choices. Fathers that are employed in positions that allow them to be more flexible with their work will tend to be more flexible in their parenting styles. When a father is able to be free in his choices, he allows his children to make their own choices as well, which is beneficial for their development of self-efficacy (Whitbeck *et al.* 1997). As opposed to flexibility, it is the complexity of mothers' work that influences the family environment. Mothers that are employed in low-complexity jobs offer less opportunity to children for abstract cognitive incitement. Mothers that are employed in high-complexity jobs tend to challenge and better develop children's values and beliefs, which results in greater self-efficacy (Menaghan and Parcel 1990; 1995).

Research demonstrates that in American society, fathers' parenting styles are more negatively affected by economic strain than mothers' parenting approach (Whitbeck *et al.* 1997). Economic pressures have shown to generate negative impacts on the family through tension and conflict, therefore resulting in decreased parental warmth, pronounced irritability, and greater aggression (Elder 1974; Elder and Caspi 1988). Economic burdens can induce psychological stress; in turn, parents may become less nurturing and less involved in positive parenting behaviors (Conger *et al.* 1992). Such effects on parenting can affect a child's predisposition to adopt alienated behaviors (Patterson, DeBaryshe and Ramsey 1989), depression-related symptoms (Whitbeck *et al.* 1992), and low self-esteem (Conger *et al.* 1992) which can have a long-term effect on their self-efficacy.

As previously discussed, low self-efficacy is related with increased alcohol use, largely due to low alcohol-refusal efficacy. Because parental socialization is essential in developing children's perception of self-efficacy, then parenting styles also have an influential role in predicting the degree of risk to which children have in using alcohol. Behaviorism theory could offer a possible explanation of this parent-child relationship insofar as children develop greater self-efficacy through reinforcement associated with positive parenting styles (Randolph and Radey 2011). Negative parenting styles may not offer the proper support for a child's behavior to allow them to produce high self-efficacy.

## PEER INFLUENCE

As youth mature, they tend to spend an increasing amount of time outside the home, resulting in greater influential experiences with peers and less interaction with parents (Cook *et al.* 2002), which can result in a diminished influence of the caregiver's behavior (Brenner, Bauermeister and Zimmerman 2011). For a person to be an effective model of behavior on an individual, they must be a person that is liked or valued (Bandura and Walters 1963). A close positive friendship has shown to be a protective barrier to alcohol-related risks (Criss *et al.* 2002); contrariwise, a close peer relationship can also allow a person to act as a successful model for risky behavior; therefore, peer groups can provide a context for adolescents that can produce delinquency (Dishion, McCord, and Poulin 1999).

Several sources of data have suggested that a best friend's use of alcohol is the best predictor of an individual youth's own drinking levels when context and crowd of peers is controlled for (Andrews *et al.* 2002; Overbeek *et al.* 2010). When offered a drink for the first time by their best friend, people with high sensation seeking and low self-efficacy are less likely to resist (Bandura 1986; Cicognani and Zani 2011) and are more likely to enjoy the behavior (Romer and Hennessy 2007). Bekman *et al.* (2011) performed a longitudinal study on high school students and found that, between Time 1 and Time 2 (a 12-month period), those who were introduced to alcohol by peers had increased their frequency and quantity of alcohol use, had more peers that drink than before, and had more peers that drink than those from the nondrinking sample. In many social situations, people like to befriend others with similar interests and desires. McCabe *et al.* (2005) found that students who like to drink are attracted to peers that also like to drink. In doing so, the peer group serves as a socialization factor that contributes to drinking alcohol as a social norm; in turn, the individual's drinking frequency increases (Perkins 2002).

Caudill and Marlatt (1975) found that people adjust to the drinking rate to those in their proximity. When an individual enters a peer context where alcohol consumption is normal, group conformity and social facilitation take over, resulting in that person adapting to the drinking habits of those around them (Knibbe, Van de Goor, and Drop 1993). In the context of the larger peer group and drinking as a norm, an individual is much more likely to conform to the drinking rate of the entire peer group instead of the rate of their best friend (Overbeek *et al.* 2010). This evidence supports that best friends influence the initiation of alcohol use, but larger peer groups serve to instigate persistence of use (Urberg, Değirmencioğlu, and Pilgrim 1997).

## CONCLUSION

Many bodies of research have identified a wide array of possible factors that influence alcohol use, so it is difficult to know what exactly causes consumption. Of all possible factors, self-efficacy, sensation seeking, parents, and peers have each been established as possibly having an important role in predicting the risk of alcohol use bestowed on adolescents. In determining major variables influencing use, preventative interventions can be distinguished and applied.

As discussed previously, research has suggested that low self-efficacy is associated with low alcohol-refusal efficacy, which may influence a person to have greater alcohol consumption. Programs that develop positive self-efficacy skills have a high likelihood of producing effective long-term alcohol-prevention strategies (Botvin *et al.* 1995; Toumbourou *et al.* 2007). Research by Black *et al.* (2012) found that programs directed towards increasing drink-refusal efficacy have had significant impacts on problem drinkers, and that it boosted their self-efficacy in other social situations. Although Scott-Sheldon *et al.* (2009) found that a similar intervention did not have the same results, Black *et al.* (2012) notes that the difference may be due to diverse focuses.

Further research in the development of self-efficacy is necessary in order to create an intervention program that reliably succeeds at altering low self-efficacy and low drink-refusal efficacy. One possibility

would be to do a longitudinal study that targets a diverse selection of young individuals and compares their perception of self-efficacy through life-course events and experiences.

With the knowledge of the roles of parents in creating self-efficacy, there may be intervention programs to guide parents to best allow the growth of self-efficacy in children through positive parenting styles. Further research should be performed to understand what interventions may be the most successful. Also, because the studies reviewed here looked at traditional two-parent—one mother and one father—families, it may add insight to research nontraditional families.

Sensation seeking was explained as having a positive relationship with alcohol use. Because sensation seeking influences an individual's selected peer group, if sensation seeking can be reduced, it may decrease their likelihood of having delinquent peers. Similarly with self-efficacy, additional research should be employed to better understand how adolescents develop sensation seeking. Notwithstanding that biological development naturally increases sensation seeking during adolescence, it could be that people are socialized to their level of sensation seeking. By studying youth and life events over time, it may be possible to predict what experiences produce anywhere from high to low levels of sensation seeking. Discerning the growth of sensation seeking may allow programs that could be used to lower sensation seeking levels.

Peer roles are dividable into two categories: best friends in the initiation of use, and the larger peer group in the normality and persistence of use. Because alcohol use is associated with positive outcomes (e.g., popularity, social acceptance, adulthood), peers put a lot of pressure on consuming alcohol to be normal. The most effective strategy in reducing the pressure might be to change the perceived normality and benefits of alcohol use.

In conclusion, with the application of many scholarly journals, I have found evidence to support my hypothesis. Each of the four factors discussed has a significant role in predicting adolescents' risk in using alcohol. Self-efficacy is negatively correlated with alcohol use; sensation seeking is positively correlated with alcohol use; supportive parents allow positive self-efficacy development; and peers lead others, depending on their levels of self-efficacy and sensation seeking, to participate in the initial and long-term use of alcohol. Further research could determine if self-efficacy and sensation seeking are related, that, if an intervention boosts self-efficacy, then sensation seeking declines. Programs directed at parents and peers may be able to reduce the risk of alcohol use, which, overall, may reduce the adolescent death rate, increase school performance, decrease alcohol-related depression, improve finances, and reduce adolescent crime rates. With so many harms associated with alcohol use, it is important to diminish the risk for adolescents to be affected by such harms.

## LIMITATIONS

There are a variety of limitations that prevented a better understanding of the four factors discussed. No research has been performed to try to find a relationship among each of them in understanding adolescent alcohol use. The process of developing self-efficacy and sensation seeking requires further data gathering. Studies about parental roles looked at traditional families and primarily the influences of work conditions and the economy in predicting parenting styles; it may be beneficial to understand what other factors affect methods of parenting as well as how else parents develop their children's personal traits. This topic looks at a social problem from a complex perspective, so there are multiple correlation-causation difficulties that act as barriers from currently knowing the exact relationships to explain adolescent alcohol use.

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