

# **ASHES, Vol. 1(9) - Nico-teens: Do adolescent smokers differ from non-smokers in their estimates of smoking-related consequences?**

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The vast majority of adult smokers began smoking as adolescents. Thus, many researchers and health specialists argue that intervention efforts to reduce the prevalence of smoking and smoking-related health problems should emphasize preventing adolescents from starting to smoke. Identifying the factors that put adolescents at higher risk to smoke is critical to the development of effective prevention programs. This ASHES reviews a study designed to identify potential risk factors by studying differences between adolescent smokers and non-smokers in their beliefs about the likelihood of smoking-related consequences.

Halpern-Felsher and colleagues (2004) surveyed 395 ninth-grade 12- to 15-year-old adolescents (average = 14 years; 53% female) in two high schools. Respondents estimated the chances that various events would occur as a consequence of certain smoking levels (e.g., 4 cigarettes per day). The events included long-term negative health outcomes such as heart disease and cancer, social outcomes (e.g., getting caught or having bad breath) and shorter-term outcomes (e.g., getting frequent colds). In addition, respondents rated the perceived benefits of smoking, both social and physical, such as looking “cool” or staying thin.

Respondents who smoked judged most of the risks to be lower and the benefits to be higher than did those who never smoked. For example, smokers thought it was less likely that smoking would lead to getting into trouble ( $t = 2.02, p = .045$ ), smelling like an ashtray ( $t = 2.19, p = .03$ ), and getting lung cancer ( $t = 3.22, p = .002$ ). They also thought smoking was more likely to lead to looking cool ( $t = 2.83, p = .005$ ) and feeling relaxed after smoking ( $t = 2.54, p = .011$ ). These findings corroborate previous studies that found the perceptions of the long-term health risks of smoking distinguished smokers from non-smokers. The Halpern-Felsher study found that the two groups also differed in perceptions of benefits, social

consequences, and short-term consequences.

Question ("If you smoke 3-4 cigarettes per day, what are the chances that...")	Non-Smokers (%)	Smokers (%)
Social risk: Your friends will be upset with you?	84	69
Short-term risk: You will have many really bad colds?	59	51
Long-term risk: You will get lung cancer?	81	72
Social benefit: You will look more grown up?	25	38
Physical benefit: You will feel relaxed after smoking?	39	49

Figure. Adolescent estimates of smoking-related risks and benefits by smoking experience. Click image to enlarge.

Halpern-Felsher and colleagues (2004) make a few fundamental assumptions about people's thinking and behavior that are worthy of discussion. For example, they write, "It is unclear whether perceptions of risks and benefits motivate smoking or instead are reflective of [smoking] experiences" (p. 565). This statement is meant to protect readers from concluding that their results show a causal relationship; however, the statement also implies that there are only two, mutually exclusive, possibilities, A causes B and B causes A. It is important to consider the possibility that the relationship can be reciprocal. In fact, an earlier longitudinal study (Gerrard et al., 1996) showed that adolescents' health beliefs predicted engagement in risky behavior and risky behavior predicted subsequent changes in health beliefs.

A further implicit assumption in this research is that perceptions of the negative and/or positive consequences of behaviors play a large role in intentions to engage in them. However, there is little evidence that actions are the result of such rational reasoning. In the present study, if smokers had based their decision to smoke on perceived costs and benefits the rational choice would have been to avoid smoking. Smokers greatly overestimated the chances of some of the worst consequences, such as getting lung cancer; their estimate that 72% of smokers got lung cancer was much higher than the actual rate of 20% (Wood et al., 2000). They also considered it to be fairly unlikely that they would experience any of the benefits. Clearly factors in addition to perceived costs and benefits contributed to the decision to smoke. The cost-benefit model also assumes that people are motivated to maximize benefits and minimize costs, but many people enjoy activities with significant potential costs, such as gambling or rock climbing. Often the possibility of a cost is a benefit.

The study reviewed here (Halpern-Felsher et al., 2004) demonstrates that beliefs about smoking-related consequences are among the factors that distinguish

adolescent smokers from non-smokers. At the same time, it illustrates the inherent difficulty of fully accounting for adolescents' decisions to smoke.

-Cheryl Browne.

## **References**

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