High-School Smoking Prevention: 
Results of a Three-Year Longitudinal Study

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This study compared two strategies for preventing cigarette smoking among high-school students. One strategy emphasized social-pressure resistance skills, while the other focused on education about health concerns which are relevant to high-school students. Additionally, the use of same-age peer leaders and the use of familiar models in media presentations were investigated. The results suggest that social-influences resistance training was efficacious in reducing transitions to higher use by those who had previously experimented with cigarettes. Health education was most effective in preventing initial experimentation among those who had not smoked prior to the beginning of the study. Neither program was effective in limiting transitions among those who had gone beyond the experimental stage of smoking, and neither had any effect on encouraging cessation. There were no differences which could be attributed to peer leaders or to familiar media models. During later adolescence, a combined health education and social skills training approach is advocated. It is suggested that while there are some gains by implementing programs during late adolescence, prevention programs targeted at younger students may be more effective generally.

KEY WORDS: adolescence; health education; media; prevention; social skills training.

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INTRODUCTION

There is now ample evidence that a school-based intervention program focusing on social-pressure resistance skills and utilizing same-age peer leaders as program facilitators is an effective mechanism for reducing the onset of cigarette smoking among young adolescents (Flay et al., 1985; Hurd et al., 1980; Johnson, 1983; Luepker et al., 1983; Murray et al., 1986; Flay 1986). Similar approaches applied to older adolescents have yet to achieve such reliable results (Perry et al., 1983). This approach presumes (a) that young adolescents smoke as a result of social pressures to smoke, notably those from peers, and (b) that by teaching skills to resist pressures and influences in a manner that heightens the credibility of the information being conveyed, young people are able to resist these influences successfully.

Programs using a health consequence-focused approach have also been shown to be effective in achieving this goal but less reliably so (Arkin et al., 1981; Hansen and Evans, 1982, Murray et al., 1986). Traditional health education, which has stressed long-term health consequences, has been found in previous research to be unsuccessful in preventing onset (Horn, 1960; Merki et al., 1968), presumably due to the limited time perspective of young people and their heightened concern with social outcomes. Hence a lack of relevance of information and personal denial of the possibility of experiencing likely consequences render such programs ineffective. Short-term health consequence messages may be motivating, however, especially in an older adolescent population.

The importance of peers in the development of smoking in later adolescence (ages 16–18 years) is not well documented, although a correlation between onset of tobacco use and smoking among friends continues to exist (Flay, 1983). On the other hand, advancing through high school brings with it greater maturity, increased cognitive complexity, and perhaps the acceptance of the personal health consequences of smoking. If such is the case, it may well be that a relevant health-oriented smoking prevention program will be at least as effective as a program which features the development of social-pressure resistance skills.

The purpose of the High School Anti-Smoking Project (HASP) was to extend previous research on the prevention of cigarette smoking conducted at the junior high-school level (7th grade) to an older (10th-grade) population in order to examine the possibility of using a social psychological approach to reduce cigarette smoking in that age group as well. This study examined three cross-cutting factors. First, two programs were compared for effectiveness: one focused on teaching social-pressure resistance skills; the other focused on health concerns. Second, within each program, the contribution of same-age peer leaders to program effectiveness was examined. Third, the idea that media materials would be more relevant if they featured