

fifteen

chapter fifteen

Going Places: A Multilevel Problem Behavior Prevention Program

Human life is a continuous thread which each of us spins to his own pattern, rich and complex in meaning. There are no natural knots in it. Yet knots form, nearly always in adolescence.

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—*Henri Estienne*

OUTLINE

- Precis
- Objectives
- Introduction
 - Needs Assessments and Pilot Testing
 - Conceptualization and Hypothesized Relationships
- Discussion
- Take Home Messages
- References

PRECIS

The Going Places Program employed a multilevel approach to prevent adolescent substance use and improve school engagement among middle school students.

OBJECTIVES

The reader will be able to

1. Describe the rationale for school-based substance use interventions like Going Places.
2. Describe the components of the Going Places Program.
3. Explain the ways in which the Going Places Program is multilevel.
4. Explain how needs assessments were used to develop the Going Places Program components.
5. Describe how each of intervention components was designed.
6. Identify personal health behaviors and protective health behaviors targeted in the Going Places Program.
7. Explain the Going Places study design.
8. Describe and explain the effects of the program on mediators and outcomes.

INTRODUCTION

Substance use, aggression, and antisocial behavior increase rapidly during early adolescence (Johnston, O'Malley, & Bachman, 2003). While much of this increase can be attributed to “harmless” experimentation, these “problem behaviors” can represent a troubling deflection from positive and healthful development, leading to long-term negative health and social consequences (Gruber, DiClemente, Anderson, & Lodico, 1996; Simons-Morton & Haynie, 2002). Antisocial behavior is a particular problem for schools because much of this behavior occurs at school (Kingery, Coggeshall, & Alford, 1998), disrupting school routines, preoccupying teachers and administrators, and contributing to underachievement and dropping out. Most schools provide programmatic attention to substance abuse, but multiple problem prevention programs are relatively rare (Wenter, Ennett, & Ribisl, 2002).

The effects of the Going Places Program on adolescent substance use and antisocial behavior were evaluated in a school-randomized trial. The seven middle schools in one Maryland school district were randomized three to the treatment and four to the comparison condition. Two successive cohorts of sixth-grade students were recruited and surveyed twice in the sixth grade and once yearly in the seventh to ninth grades. Students in the treatment schools were exposed to the Going Places Program, while those in the comparison schools received media posted in the school environment designed to increase school commitment. Because all the students in the participating grades were included in the intervention components, in addition to student assent, passive parental consent was employed in which parents were informed about the study, allowed to examine the questionnaires, and could agreed to disallow their childrens' participation.

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In addition to individual-level goals, the program used multi-level programming to increase parent and school support for positive youth behavior. (Kumpfer & Turner, 1991; Flay, 2000). The Going Places Program included components addressing middle school students, teachers, school environment, and

Table 15-1 MATCH Phases

Phase I: Goals Selection
Phase II: Intervention Planning
Phase III: Program Development
Phase IV: Implementation Planning
Phase V: Evaluation

parents. The goals of the program were to prevent substance use and antisocial behavior and to increase school engagement by changing adolescents' cognitions regarding the target behaviors and altering environmental conditions to motivate and enable students to engage in prosocial rather than antisocial problem behaviors.

This chapter describes the Going Places Program according to the Multiple Approaches to Community Health (MATCH) Planning Model, shown in **Table 15-1**. (It may be useful for the reader to review the detailed discussion in Chapter 13 of the MATCH Planning Model.)

Needs Assessments and Pilot Testing

Program planning benefits from **needs assessment** and literature reviews. Extensive needs assessments were conducted with the stakeholders in the school district participating in the Going Places Program. The needs assessments were designed to facilitate understanding of the problem and the utility of solution options. Specifically, we wanted to

We wanted to know whether the ideas we developed about the problem and its solution based on past experience and our understanding of the literature were consistent with perceptions and experience of the participants.

know whether the ideas we developed about the problem and its solution based on past experience and our understanding of the literature were consistent with perceptions and experience of the participants. Initially, we interviewed administrators, team leaders, teachers, and parents to learn how concerned they were about adolescent substance use, school misconduct, and other problem behavior, their perceptions of

why it occurred, and what could be done about it. The first year of the study involved one school that served as the pilot in which we tested intervention components and measures. However, we continued to conduct needs assessment throughout the program development period to obtain information about the participants' perceptions and experiences and reactions to the intervention activities and materials.

Program staff interviewed students who had been identified by teachers as opinion leaders and others who were available and willing (and whose parents provided consent). One or two staff met with students individually or in small groups, using an open-ended interview guide and format that allowed the interviewer to cover specific topics, but also to allow the students to share freely. Each week staff discussed the information collected from these anonymous interviews and adjusted the interview guide to focus on identified areas of interest. Later, we used entire classrooms to pilot test the measures, dividing up the questionnaire into four parts that could be completed in about 10 minutes and

giving each part to a quarter of the students. Each part had some common and some unique questions. Then we interviewed students about what they thought the questions and response options meant. Meanwhile, another staff met with the full group and processed the questionnaire in similar fashion. Ultimately, the questionnaire was modified based on this process.

Students and teachers were involved in qualitative aspects of intervention development. We tested curriculum lessons and materials in the pilot school and made changes based on the information we obtained. We pilot tested the “trigger” DVDs we developed by showing them to entire classes of students and then met with them in small groups to find out what they thought happened in the video and what the main points were; we revised the DVDs based on this information. After the participating teachers had been trained, the master teacher demonstrated at least one of the lessons in each unit prior to the regular classroom teachers assuming responsibility for conducting the lessons. The master teacher then made changes to the lesson based on feedback from the classroom teacher.

The information gathered from the needs assessments were useful for developing and revising the study materials and for convincing the other study schools to participate. The information collected on the acceptability and quality of program activities and materials were assembled in a document and in presentations we made to stakeholders that the program was a good idea, of high quality, and would not unduly interfere with other school programs and goals. These extensive needs assessments were designed to enable and improve program development and to ensure that the program and materials matched the needs of the participants and were user friendly.

Conceptualization and Hypothesized Relationships

Based on a thorough review of the literature and the extensive needs assessments conducted, we developed the conceptualization shown in **Figure 15-1**, describing the hypothesized relationships between the planned intervention components, the intervention goals and objectives, and the targeted student behavioral outcomes. As shown, the idea was to develop four separate program components, each targeting those groups with control over the target outcomes, leading to changes in the intervention goals and objectives, and ultimately increasing student prosocial and decreasing antisocial or problem behaviors. A more systematic description of the program according to the MATCH planning model is described in the following pages.

Phase I: Goals Selection

The Going Places Program was developed according to MATCH phases and steps. Goals selection for Going Places is shown in **Table 15-2** and described in the following paragraphs.

Step 1.1. At-Risk Population Adolescent health behavior is a priority area for the organization to which the research team belongs. Having conducted previous school-based research and having worked extensively with adolescents, our team was interested in conducting a study that would test our ideas about adolescent problem behavior prevention. After considerable evaluation of the literature, we decided see whether we could

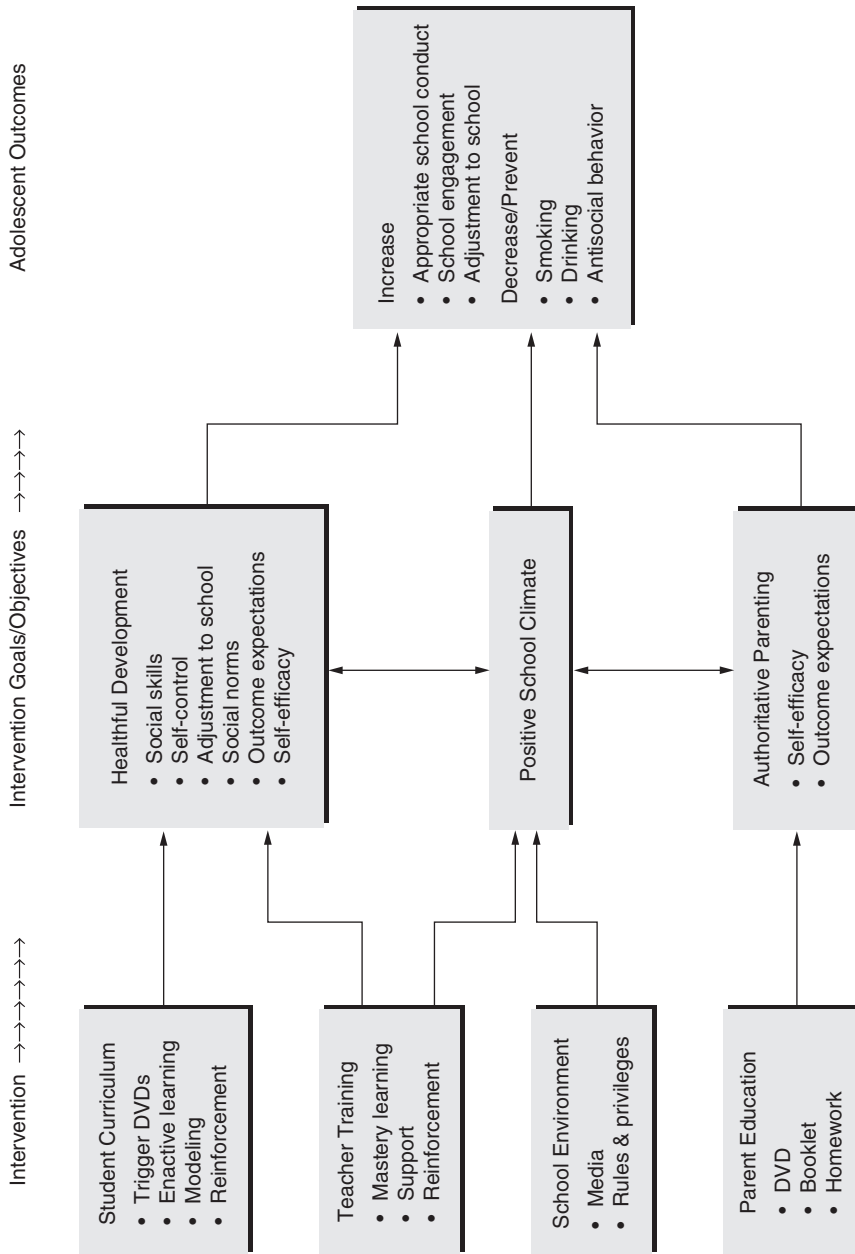


Figure 15-1 Going places: hypothesized relationships among variables of interest.

Table 15-2 Going Places Program Goals

Phase I. Program Goals

Step 1: At-Risk Population: Middle school students

Step 2: Health Status Goals: Normal developmental trajectory

Step 3: Health Behavior Goals: Substance use, misconduct, school engagement

Step 4: Environmental Goals: Supportive parents and school environment

<p>intervene to prevent early adolescent problem behavior during middle school. There is substantial literature on the poor fit between middle school and early adolescent needs.</p>	<p>(Simons-Morton, Crump, Saylor, & Haynie, 1999; Barber, 2003), which made middle school an interesting setting for this work. Therefore, the <i>at-risk</i> population for this study was early adolescents.</p>
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Step 1.2. Health Status Goals The health status goal for the study was normal and healthful adolescent development. While adolescent problem behavior is a serious concern, for the most part it does not result in many immediate, profound, and measureable health and social outcomes. Mostly, these behaviors, for all of their immediate attractions, end up making life difficult for the adolescent, their parents, friends, and school. The primary concern was that early adolescent problem behavior would affect negative developmental trajectories, leading to social alienation and more serious problem behavior, and ultimately, substance use and involvement in the criminal justice system.

Step 1.3. Health Behavior Goals The health behavior goals were to prevent substance use, particularly smoking and drinking, and reduce school misconduct and antisocial behavior.

Step 1.4. Environmental Goals The environmental goals were to promote a positive school climate and alter protective health behaviors of school personnel and parents that would: (1) increase school bonding and commitment; and (2) facilitate authoritative parenting practices and establish parental expectations for pro-social behavior.

Phase II: Intervention Planning

MATCH phases and steps for Phase II, Intervention Planning, and Phase III, Program Development, are shown in **Table 15-3** for the Going Places Program. Described in the following paragraphs are the Phase II steps, which include the following: (1) select intervention goals, (2) identify the target(s) of the intervention, and (3) selection intervention approach and theory.

Steps II.1 and II.2: Intervention Goals and Targets of the Intervention Because the selection of the intervention goals is highly associated with the target of the intervention (those who can control or influence the intervention goal), these two planning steps are discussed collectively.

Table 15.3 Going Places/MATCH Phases II and III with Steps

<i>Societal Level</i>	<i>III.1: Program Component</i>			
	<i>Individual</i>	<i>Organizational</i>		<i>Interpersonal</i>
II.1:	Students	Teachers	School administrators	Parents
Target of the Tx*				
II.2	Substance nonuse	Implement the Going	Adoption of Going	Authoritative parenting
Tx Goals	Antisocial, misconduct	fidelity	Places school	practices: support, knowl-
	School engagement		commitment program	edge, expectations
II.3:				
Tx Approach; Theory	Teaching,	Training;	Organizational change;	Media; persuasion;
	social cognitive theory	social cognitive theory	Social cognitive theory	social cognitive theory;
	(1) Curriculum	(2) Teacher Training	(3) School Environment	authoritative parenting
III.1:				
Program Components				No. 4 Parent Education
III.2A:				Authoritative parenting
Tx Objectives	<i>Nonuse</i>	Curriculum implement	Create positive school	(AP) practices
Perceptions	—Risk perceptions	—Utility	—Program acceptability	—Parent–teen relations
Behavioral capability/skill	—Social skills	—Learning activities		—Using AP practices
Expectancies:		—Implementation		
—Outcome	—Peer and parent expectations	—Fidelity	—Program adoption	—AP practices result in
—Efficacy		—Student learning, behavior	easy and effective	positive outcomes
Norms Reinforcement	—Prevalence, acceptability	—Learning activities		—Most parents use AP
	—Participation	—Teaching practices	—Prosocial norms	—Recognize parents
		—Implementation	—Acceptable practices	

(continues)

Table 15-3 Going Places/MATCH Phases II and III with Steps (Continued)

III.1: Program Component				
Societal Level	Individual	Organizational		
III.2B: Tx methods and activities	—Trigger DVDs	—Enactive learning	—Formal proposal	—Persuasive communications
	—Problem solving	—Skills training	—Letters of support	
	—Skills training	—Feedback	—Survey data	
	—Reinforcement	—Reinforcement	—Persuasion	
III.3: User Manual & Materials	—Modeling	—Modeling		
	—Normative reeducation	—Support		
	Curriculum	Curriculum	Going Places School Environment Guide	Parent Intervention Guide
	—Passport	—Teacher manual	—Posters	—Attentive Parenting Book
	—Trip tips	—Lesson materials	—Photographs	—Attentive Parenting DVD
			—Good behavior chits	

TX = intervention; AP = Authoritative/Attentive Parenting

A thorough review of the literature suggested that adolescent problem behavior was a multilevel problem (Simons-Morton & Haynie, 2002). Therefore, we adopted a general theory of the problem that adolescent substance use and other problem behaviors were due to the interactive effects of individual cognitions, peer and parent influences, and the school environment. Our solution was to provide direct education at the individual level to change student cognitions, and parent and school-level intervention to support the target behaviors during the critical period of early adolescent development. The idea was to create program components at several levels, including student, teacher, school, and parent. As indicated in Table 15-3, at the student level, we identified substance use, school misconduct, and antisocial behavior as outcomes. At the level of the teacher, the intervention goal was quality implementation of the Going Places curriculum. At the level of the school, the goal was implementing the Going Places school-wide activities, including school bonding activities and improvements in school lunch. At the parent level, the goal was adopting sustained authoritative (attentive) parenting practices presented in the Going Places parent education component.

Step II.3: Intervention Approach and Theory Because adolescents are most easily and regularly found at school, we developed a school-based intervention, with interventions at each of four levels, as shown in Table 15-3. Here, we describe the intervention approach and theory.

Adolescent. Given the school location, a classroom teaching approach was selected. The development of the Going Places classroom curriculum was based on social cognitive theory, which guided the theory of the problem and solution (Bandura, 1986). Accordingly, norms, expectations, and social skills would be expected to affect problem behavior, and these cognitions would be important intervention targets (Trudeau, Spoth, Lillehoj, & Redmond, 2003). Efficacy expectations reflect confidence in one's ability to perform certain tasks or behaviors. Outcome expectations are the expected social and

Outcome and efficacy expectations are influenced by perceptions about the behavior, normative expectations, actual experience, and relevant skills.

personal consequences of anticipated behavior. Outcome and efficacy expectations are influenced by perceptions about the behavior, normative expectations, actual experience, and relevant skills. Adolescents with well-developed social skills may be better able to select friends, negotiate difficult social situations, balance social demands with social responsibilities,

and maintain control over their behavior. Interventions that increase early adolescent social skills can also improve school engagement and commitment, increase the potential for prosocial friendship development, alter attitudes and perceptions about problem behavior, prevent substance abuse, and reduce adjustment problems (Vazsonyi & Flannery, 1997; Simons-Morton & Haynie, 2002; Morrison, Robertson, Laurie, & Kelly, 2002; Weisberg, Kumpfer, & Seligman, 2003). Accordingly, the intervention approach selected and developed in Going Places is a curriculum designed to influence adolescent perceptions, attitudes, and expectations, and improve skills and competence regarding substance use and antisocial behavior.

Teacher. At the teacher level, the intervention approach was training, the development of which was guided by social cognitive theory. The theory of the problem was

that teachers would be reluctant to change their usual style of teaching, which tended to emphasize lectures, to a more interactive and participatory enactive learning style. Our hope was that teachers would adopt and implement the curriculum to the extent they believed it would be good for the students (positive outcome expectations), they had confidence in their ability (self-efficacy), their involvement would be perceived as a positive and normative (social norms) by other teachers, and they received reinforcement. Accordingly, a recently retired master teacher with a great reputation in the school district was hired as the trainer, giving the program credibility with teachers and administrators. Social cognitive theory guided the development of the training, including emphasizing methods such as enactive learning, feedback, modeling, and reinforcement.

At the school level, where the goal was to change the school environment.

School Environment. At the school level, where the goal was to change the school environment, the intervention approach was organizational change and social cognitive theory. The theory of the problem was based on social devel-

opment and social bonding theory, which suggest that positive affiliation with and commitment to school would protect against problem behavior (Simons-Morton & Haynie, 2002). The general theory of the solution was that improvements in school climate would increase school bonding and commitment and protect against adolescent problem behavior. Accordingly, the program sought to create a school environment that would reinforce positive and responsible behavior and discourage aggressive behavior, conduct problems, and substance use. Organizational change processes were employed to achieve adoption of the program. Methods included developing a short proposal, identifying an internal advocate, meeting with key change agents within the participating school district and school, presenting to various stakeholders, including the school board, school advisory group, and grade-level teams, and dealing with all concerns raised. Ultimately, we developed school teams at each school to guide the school-level intervention. These activities were guided by social cognitive theory and at every step of the way we sought to foster among decision makers favorable outcome and efficacy expectations.

During the adolescent transition from pre-adolescence to early adolescence, parents tend not to maintain authoritative parenting practices.

Parent. At the parent level, the approach was persuasive communications, guided by authoritative parenting and social cognitive theory. The theory of the problem was that during the adolescent transition from pre-adolescence to early adolescence, parents tend not to maintain authoritative parenting practices, even if they used these practices previously with success (Darling & Steinberg, 1993; Simons-Morton & Haynie, 2002). The authoritative parenting conceptualization

suggests that lifetime parenting practices socialize children. Authoritative parents are those who are consistently demanding and responsive with their children, setting limits, establishing expectations for behavior, remaining knowledgeable about their activities, allowing increases in autonomy as children demonstrate capacity, and providing support and respect without relinquishing parental responsibility. The pattern of lifetime parenting greatly influences children's socialization in terms of their ability to get along with others, deal with school requirements, and control their own behavior. Children who grow up with demanding and responsive parents should be better adjusted to the

demands of school and less likely to engage in problem behavior. However, authoritative practices are most effective when sustained, particularly through the adolescent transition (Simons-Morton & Haynie, 2002). The theory of the solution, therefore, was to facilitate the sustainment throughout middle school of demanding and responsive parenting behaviors. To reach parents, we developed persuasive communications using brief newsletters and a booklet and DVD entitled *Attentive Parenting* (needs assessments determined that the term “authoritative parenting” was confusing to many parents). The development of the DVD was based on social cognitive theory and designed to increase efficacy and outcome expectations for demanding and responsive parenting. It also sought to increase perceptions that these practices are normative among parents like those participating in the study and to model the application of authoritative parenting practices in specific situations.

Phase III: Program Development

The MATCH model includes three program development steps: (1) create components; (2) develop objectives and learning activities; and (3) develop user manual, curriculum, and/or guide. Each of these steps is described below with respect to Going Places.

Step III.1. Program Components Four separate program components were developed for Going Places: (1) classroom curriculum directed at students at the individual level; (2) teacher training, (3) school environment at the organization level, and (4) parent education at the interpersonal level, as shown in Table 15-3.

Classroom Curriculum. The Going Places curriculum consists of 18 class lessons offered in the sixth grade, 12 lessons in the seventh grade, and 6 lessons in the eighth grade. The curriculum addressed the following types of objectives regarding pro-social and antisocial behavior: problem-solving skills, outcome and efficacy expectations, and perceptions about normative expectations. Enactive learning was emphasized, which is a social cognitive method in which the students learn through engagement in stimulating learning activities. Trigger DVD’s were developed using local acting talent, each devoted to the major topic of a particular curriculum unit. Each DVD presented common problems and modeled problem-solving approaches. Each DVD was designed to be provocative, without telling the students the right solution. For example, one DVD deals with a social situation in which cigarettes are available to teens, and one teenager has to figure out whether to try smoking. Another DVD focused on students considering vandalizing something at school. Another DVD one dealt with fighting. A number of learning activities were designed for each trigger DVD and provided opportunities for skills training in problem solving, self-management, self-control, communication, and conflict resolution. The curriculum calls for teacher-led discussions about the relevant skills and facilitated interactive group and role-play activities, allowing the students to put the situations into their own words and providing them with practice applying the skills to personally relevant situations. Meanwhile, the teachers and group leaders (students) offered constructive feedback following a script prepared for that session. Several sessions were clustered around specific problem-solving skills, including communication, resolution, and self-control, each session dealing with the same skill but with application to a different behavior—school

Homework required the students to involve a parent or guardian in discussions about the topics dealt with in class.

engagement, smoking, drinking, aggression. Homework required the students to involve a parent or guardian in discussions about the topics dealt with in class, including fighting, substance use, cheating, and vandalism. The idea was for

the students and parents to discuss these issues and for parents to clarify their expectations for their children.

Participating students were provided with a Going Places Passport. On the passport was a list of the Going Places lessons. Students needed to have their teacher check that each lesson was completed satisfactorily to be eligible for a Going Places field trip (a river cruise).

Teacher Training. The curriculum was delivered by classroom teachers who received three days of training in sixth and seventh grades and one day of training in eighth grade, plus six hours of training for each curriculum unit. The training was based on social cognitive theory and emphasized the following: (1) the Going Places curriculum, including how it works, its relative advantages, and normative, outcome, and efficacy expectations for correct and complete implementation; (2) interactive and cooperative learning methods; (3) practice with feedback to performance mastery; (4) modeling of and reinforcement for correct performance and for actual and correct implementation; and (5) classroom management techniques in which teachers were encouraged to be demanding but responsive. Post-training support was provided to teachers by the master teacher in the form of individual instruction and feedback and assistance with lesson preparation. Teachers were eligible for incentives based on their implementation of the curriculum. The teachers' manual included all the materials the teachers would need, including learning activities and homework assignments.

Enhanced School Environment. The enhanced school environment component included social marketing strategies to improve school climate, establish realistic, pro-social norms, establish a positive image for the school, reinforce student achievement, and extend Going Places curriculum concepts to the larger school environment. Activities designed to extend the classroom lessons included informational "roll-outs" preceding each unit; posters and short video segments presented in the cafeteria and display areas; travelers' checks awarded to students by a teacher for applying skills learned in a Going Places lesson; and special activities, such as assemblies and a year-end field trip, which students could earn the right to attend by participating in class activities and demonstrating skills outside the classroom, which were systematically rewarded. Going Places staff developed the materials and worked with teachers and staff to place them appropriately. Teachers were provided with chits with the words "Caught being good!" and trained how to use them while they served as hall monitors. The chits could be redeemed for small prizes at the school store.

Parent Education. The parent education component was designed to increase parental outcome and efficacy expectations regarding their role in encouraging their children's academic engagement and behavior. Sixth-grade parents received in the mail a 20-minute instructional video entitled *Attentive Parenting* (we were concerned that parents would not understand the term "authoritative"), and a 20-page booklet entitled *Attentive Parenting: The Going Places Guide for Parents of Middle School Students*. Periodically,

Students were assigned homework that required the involvement of a parent or guardian.

in the sixth and seventh grades, students were assigned homework that required the involvement of a parent or guardian. Participating families received intermittent newsletters about the Going Places Program that included information about

what the students were learning in the curriculum and provided quotes from students and teachers about the norms, importance, and skills related to school engagement and avoiding antisocial behavior.

Step III.2: Intervention Objectives and Methods The intervention objectives and methods for each of the components were similar because they were based on social cognitive theory, although the target behaviors varied for each component. As shown in Table 15-3, in each program component, the intervention was designed to alter perceptions about risks and benefits of adopting the target behaviors and increase behavioral capability (how to knowledge and skills), expectations, norms, and potential reinforcement. In general, the methods included enactive learning, practice with feedback to mastery, modeling, persuasion, norm setting, and reinforcement. The application of these methods was previously discussed with respect to the instruction of students and training of teachers. Because parents were contacted mainly through the mail, these methods were employed within the newsletters, homework, booklet, and DVD. For the school environment intervention, these methods guided the proposal, letters of support, survey response data, and persuasive communications.

Step III.3: User Manuals At the student level, the curriculum was the users' manual and it came complete with lesson instructions, homework, and materials. A special teacher manual was also prepared that included instructions for each lesson, optional activities, possible problems and solutions, and instructor materials. For the school environment and parent intervention components, intervention guides were developed that included the schedule for the delivery of the materials, instructions, and the actual materials.

Phase IV: Implementation Planning

Adoption and quality implementation cannot be assumed but must be encouraged and facilitated. In the case of Going Places, we worked with various stakeholders to gain approval to adopt and then worked with teachers and other stakeholders to assure that implementation was done well. Specifically, we asked teachers to learn how to deliver a new curriculum and to change their methods of teaching to involve the students in enactive learning. We asked the school to adopt practices designed to encourage school engagement, to alter the physical environment, and to reinforce students for behaving well.

Step IV.1: Facilitate Adoption, Implementation, and Maintenance At the school level, primarily we had to convince the school administrators that the teachers, staff, students, parents, and other administrators would not complain about the program concepts and activities. We used ideas from social cognitive and diffusion theories. We anticipated many of the concerns and criticism of decision makers and provide evidence that would facilitate adoption of the program. Initially, we recruited and convinced a few key opinion

leaders of the merits of the program by presenting to them the results of surveys with stakeholders. Then, after initiating Going Places in a pilot school we were able to demonstrate that students, parents, teachers, and administrators liked it, which facilitated implementation in other schools. Teachers were initially reluctant to adopt the program because it meant decidedly more work for them. We softened concerns about the amount of time required for teachers to get trained by providing training stipends and occasional part-time teaching substitutes. We deflected concerns about the amount of curriculum time by “integrating” the curriculum into the existing social studies and language arts curriculum and including activities that met state requirements. The remaining reluctance was overcome by attention from the master teacher and by providing teachers with points for completing training and for achieving specific markers of implementation. The points allowed the teachers to purchase materials at a local store that carried a wide range of classroom and teaching materials. Ultimately, teachers and administrators became convinced that the program was a good idea and was likely to improve student outcomes. Basically, they developed favorable outcome and efficacy expectations for adoption.

Phase V: Evaluation

Process, impact, and outcome evaluation were obtained on the Going Places Program.

Step V.1. Process evaluation Information on implementation was obtained from teacher reports and observations, student knowledge tests, and student reports of participation

The extent and quality of program implementation was good.

collected at the end of each unit. The extent and quality of program implementation was good, with most curriculum sessions completed with high fidelity and good student partic-

ipation and satisfaction. Teachers reported completing 95% of the lessons in sixth grade and 84% in seventh grade. During scheduled observations, teachers completed all core lessons. Teacher ratings of the percentage of students fully participating in the lessons, including attention to the videos, participation in discussions and group activities, staying on task and enthusiasm, were 90% in the sixth grade and 88% in the seventh grade. On average 77% of sixth-grade students and 65% of seventh-grade students indicated usually or always paying attention to the Going Places classes. Overall, 71% of students indicated they liked the classroom activities, and 70% considered the program helpful to their lives, with 54% reporting they used the skills from the program at school and 41% indicating they used program skills outside school. On knowledge tests, 80.9% of students scored $\geq 90\%$, 90.2% scored $>80\%$, and 4.4% scored $\leq 70\%$. Of 45 volunteer parents interviewed, 40 indicated that they or their spouse viewed the video and parenting booklet, of which 80% reported liking these materials. School environmental enhancement activities were implemented according to the protocol without exception.

Step V.2. Impact Evaluation The goal of the impact evaluation was to determine whether the program had effects on the targeted mediators. Differences in selected variables between those in the Going Places schools and those in the comparison schools are shown in line graphs in **Figure 15-2**. Differences over time favoring Going Places were

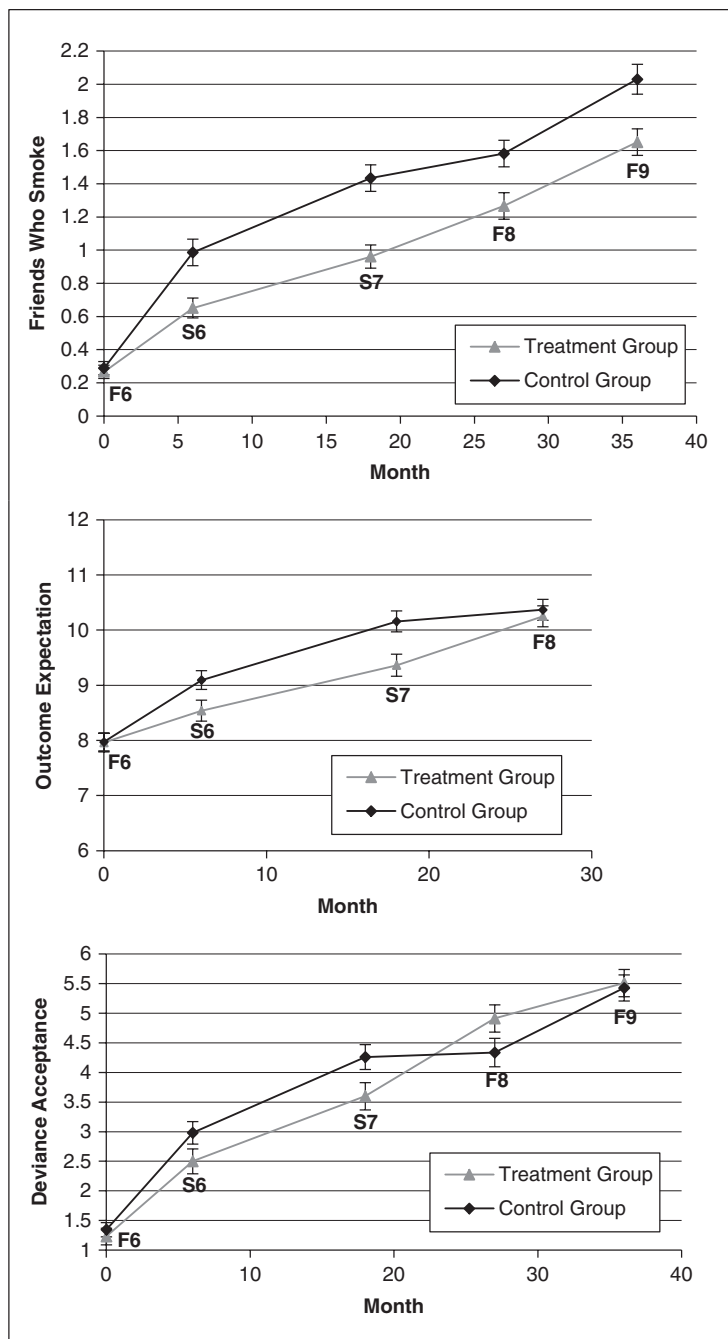


Figure 15-2 Going places program: trajectories of friends who smoke, outcome expectations and deviance acceptance for treatment (n = 384) and control (n = 366) groups.

Source: Simons-Morton et al. (2005).

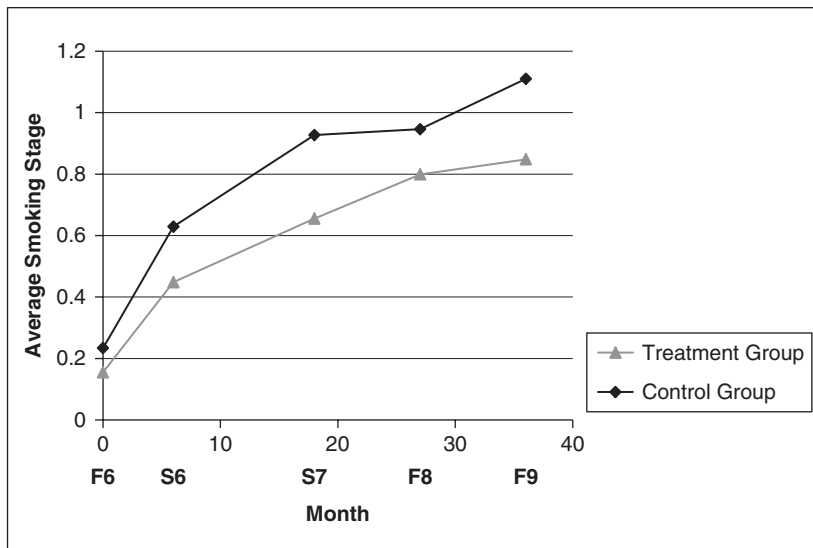


Figure 15-3 Going places program: Adolescents' average smoking stages from sixth-grade fall semester to ninth-grade fall semester for treatment ($n = 692$) and control groups ($n = 628$).

Source: Simons-Morton et al. (2004).

found for outcome expectations for smoking, deviance acceptance, the number of friends who smoke, and the number of problem-behaving friends (Simons-Morton, Haynie, Saylor, Davis, & Chen, 2005). Communication efficacy and social competence did not differ over time by group. Over time, measures of parent involvement and parent expectation favored the treatment group but not significantly.

Outcome Evaluation Average increases in smoking stage were found to be significantly lower for students exposed to Going Places compared with students in the control group, as shown in the line graph in **Figure 15-3**, which shows a significant ($p < 0.05$) decrease in the rate of smoking progression for the treatment group relative to the control group (Simons-Morton, Haynie, Saylor, Crump, & Chen, 2004). Negligible treatment group differences were found for drinking and antisocial behavior. Subsequent analyses showed that the number of friends who smoke was a mediator between the intervention and adolescents smoking, indicating that the intervention effects were relatively greater among those who had fewer friends who smoke (Simons-Morton et al., 2005).

The analyses of the Going Places Program indicated that the program improved students' outcome expectations and deviance acceptance and reduced the number of friends who smoke, number of problem-behaving friends, and smoking progression.

DISCUSSION

The analyses of the Going Places Program indicated that the program improved students' outcome expectations and deviance acceptance and reduced the number of friends who smoke, number of problem-behaving friends, and smoking progression

(Simons-Morton et al., 2004). There were program effects on several key variables (outcome expectations, deviance acceptance, and number of friends who smoke) that were found to mediate program effects on smoking progression (Simons-Morton et al., 2005). That is, treatment group differences in these variables were associated with reduced smoking progression. Therefore, the protective effects on smoking progression of the Going Places Program can be attributed in part to changes in these mediators. It was not possible to determine what parts of the Going Places Program had the greatest effects. However, the program provides strong support for the importance of peer influence and the need to alter actual and perceived smoking among peers. The findings are consistent with a social cognitive theory understanding of smoking behavior, suggesting that peers influence adolescent behavior through perceptions of norms and outcome expectations.

It was regrettable that the Going Places Program showed no effects on problem behaviors other than smoking. In general, it has proved difficult to prevent adolescent problem behavior and only about 50% of the best-designed studies reported significant treatment-group effects. Smoking has been somewhat less difficult to prevent than drinking or antisocial behavior, as was the case with Going Places. However, even small reductions in adolescent smoking may be important, given the health and social costs of early experimentation.

TAKE HOME MESSAGES

The Going Places Program provides a useful illustration of a multilevel program developed according to MATCH and designed to prevent an increase in substance use and to facilitate improvements in school engagement. The conceptualization of the study was that students, teachers, parents, and the school environment were interactive. Accordingly, four intervention components were developed that addressed (1) students, (2) teachers, (3) the school environment, and (4) parents. The intervention was well implemented. A significant prevention effect was found for smoking, but not for other targeted outcomes. Three mediators were identified—outcome expectations, deviance acceptance, and friends who smoke. These variables were affected by the intervention, and these effects mediated the relationship between program and smoking. That is, the program

The program had an effect on smoking through these variables. It can be concluded that the program identified important intervention objectives, impacted them, and through this impact moderated smoking uptake.

had an effect on smoking through these variables. It can be concluded that the program identified important intervention objectives, impacted them, and through this impact moderated smoking uptake.

1. These results are consistent with theory and literature that indicate that peer smoking is an important influence on ado-

lescent smoking and that outcome expectations and other adolescent cognitions are associated with smoking progression (Monge, Chou, & Valente, 2007). Because the prevalence of problem behavior, particularly smoking and drinking, increase during adolescence, and friendship development is dynamic during this period, it makes sense for interventions to target pro-social friendship development. The results indicate that

it is possible for school-based prevention programs to alter the growth in friends who smoke during early adolescence and that such alteration can prevent smoking progression.

2. Which parts of the Going Places Program may have been most important could not be determined, but the program effects on cognitive mediators suggest that the curriculum was one important program component. It may be that the school and parent interventions contributed in small ways to the effects on the cognitive mediators.
3. There was evidence of a trend toward program effects on parenting behavior. This was gratifying because the parent intervention, while cleverly designed, was delivered passively (not in person), the intensity was not great, and the extent to which parents read the materials, participated in the homework, and viewed the DVD could not be determined.
4. The program failed to demonstrate effects on problem behaviors other than smoking. This is disappointing but consistent with most other multiple problem behavior prevention approaches. One notable exception is the Seattle Social Development Project that has shown program effects on a number of problem behaviors (Brown et al., 2005). The Seattle Social Development Project is an intensive and long-term intervention with a unique focus on classroom management and prosocial school policies administered for many years, starting in the earliest elementary school grades.
5. The internal consistency and utility of the program components benefited greatly from the needs assessment. In particular, the curriculum benefited from the pilot work in one school during the pilot year. Also, we could not have developed effective trigger DVDs, the parent DVD, the parent booklet, or other materials without testing draft versions with participants.
6. We believe the systematic program development procedures employed made the project better than it would have been otherwise. Developing the project conceptualization (Figure 15-1) enabled us to present this multilevel program to the school district stakeholders, all of whom were positioned prominently. This overall perspective enabled us to persuade stakeholders of the program's value. It also helped us, as program developers, to maintain careful links between the various program components and guided the evaluation.
7. Multilevel programs are complicated and expensive. Most programs include only an individual level intervention that targets the at-risk population, ignoring other important targets of intervention and the environment.

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