22 Drug Resistance Strategies Project
Using Narrative Theory to Enhance Adolescents’ Communication Competence

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According to the 2002 National Survey on Drug Use and Health1 (Substance Abuse and Mental Health Services Administration [SAMHSA], 2003), an estimated 22 million people aged 12 and older were categorized as abusers of alcohol or drugs and required treatment. Data from the 2003 Monitoring the Future study indicated that although the adolescent drug problem in the United States has improved over the past decade, youth alcohol and other drug use still is a significant public health issue (Johnston, O’Malley, Bachman, & Schulenberg, 2004). Use rates, however, have fluctuated up and down since the time that tracking began; the more troubling issue is the harm experienced from substance use and abuse. This harm has been and continues to be a significant social issue at all recorded levels of use.2

Thus, substance use and abuse in the United States is a significant social problem with implications for individual, community, and societal functioning. The goal of prevention is to ultimately minimize the impact of this problem by deterring and decreasing alcohol and other drug usage across all age, gender, racial, and ethnic groups. Although prevention efforts have existed for over a century, federal support for drug prevention efforts was placed on the front of the world stage in the 1980s with the “Just Say No” campaign championed by Nancy Reagan.

The Drug Resistance Strategies (DRS) project is an interdisciplinary, multimethod, funded program of research that we began in 1989 as a response to this problem and currently is funded through 2013. This program includes both action research and intervention research. The action research involves a series of studies describing narrative accounts of adolescent drug offer processes (e.g., who offers, how offers are made, and how they are resisted) with particular emphasis on understanding the role of ethnicity and gender in those processes. This work spanned middle school, high school, and college-aged populations, and involved narrative interviews, as well as survey research with large data sets. Our intervention research involved the development and implementation of drug prevention curriculum for high school and middle school students that was based on this action research. The curriculum, called keepin’ it REAL, is culturally grounded and derived from narrative theory and communication competence theory. In our longitudinal evaluation study, the curriculum has demonstrated positive effects on reducing substance use and changing norms and attitudes.

The DRS project constitutes applied research because it utilizes extant theory and research to understand and intervene into practical, socially relevant problems (i.e., drug use and abuse). Moreover, the project has refined theory and uncovered generalizable knowledge (e.g., the role of ethnicity and ethnic identity in drug offers and refusals), adding to the science of drug prevention as part of “the new social research” or “action inquiry” paradigm (Torbert, 1991) that tests theories through their application. For example, a new theory of social norms was applied to drug norms and was supported
Guiding Theories of the Drug Resistance Strategies Project

The DRS project always has had a strong theoretical basis. Although different aspects of the project have utilized different theories, as explained below, the overall project has been guided by two overarching theoretical approaches: narrative theory and communication competence theory.

Narrative Theory

Narrative theory conceptualizes human thought and behavior as based in narratives or stories, a pervasive, transcultural mode of discourse through which people organize information and experiences of the world (White, 1981). Narratives are not only one of the primary means for making sense of experience (Cook-Gumperz, 1993; Fisher, 1987) and moral choices (Botvin, Schinke, Epstein, & Diaz, 1994) but they also serve as an organizing principle for behavior (Botvin et al., 1994; Howard, 1991). Howard (1991) argued that human thought, itself, may be conceptualized as narrative or storytelling. As McAdams (1993) noted, “We each seek to provide our scattered and often confused experiences with a sense of coherence by arranging the episodes of our lives into stories” (p. 11). More than thoughts, narratives are a meaningful form of communicative behavior through which people express themselves as they form self-images, as well as plan and understand their actions. As McAdams asserted, “Much of what passes for everyday conversation among people is storytelling of one form or another” (p. 28).

Narrative also has a cultural element because it is intimately tied to membership in speech communities. Storytelling draws on socially shared symbol systems that express membership and make stories meaningful to listeners. These narratives provide “good reasons” that justify actions based on the dominant stories within a group (Fisher, 1987). There is ample evidence to suggest that narratives are structured differently in different ethnic groups (Holland & Kirkpatrick, 1993; Howard, 1991), including the narratives in African-American and Mexican-American communities (Botvin et al., 1994; Hecht, Jackson, & Ribeau, 2003).

Narratives are highly salient in adolescents’ lives. Adolescents increasingly understand narratives as their cognitive capabilities mature (Johnson & Ettema, 1982), which allows them to think about the world and themselves in abstract terms, expanding from what is to what ought to be (Inhelder & Piaget, 1958). Even young school children recognize story characters and use them as motivation, as well as the basis for their narratives (McAdams, 1993). The fundamental challenge of adolescence and young adulthood is to create meaningful answers to questions that form the basis for identity (McAdams, 1993). Adolescents often construct personal narratives to affirm their uniqueness, providing them with both a means to understand themselves and the world, as well as a vehicle for expressing that understanding.
Narratives also can provide models for adolescents’ behavior. Social learning theory (Bandura, 1982) suggests that models derived from adolescents’ experiences can transfer identification and learning into behavior change. It is important to model resistance and life skills for situations in which adolescents commonly find themselves (Polich, Ellickson, Reuter, & Kahan, 1984) and include both participatory modeling and observational learning (Bandura, 1982). The overall social learning model, then, is to provide modeling, guided performance, and reinforcement. From a narrative perspective, this means viewing the narratives of others (observational modeling and learning), participating in narratives (participatory modeling), and accepting the new narratives.

Research indicates that people see narrative messages as more realistic (Greene & Brinn, 2003), easier to relate to, and more memorable than statistical evidence (Kopfman, Smith, Ah Yun, & Hodges, 1998), and that narrative messages are evaluated more positively, seen as more causally relevant, and rated as more credible than a real news story (Feeley, Marshall, & Reinhart, 2006), with messages that combine narrative and statistical evidence being more persuasive than those presenting either type of evidence alone (Allen et al., 2000). This research also suggests an alternative to traditional approaches to drug knowledge—narrative knowledge. Narrative knowledge, which supplements other types of information, in this case, means awareness of stories of drugs, drug use, and drug users. Research suggests that the perceived “story” of drug use among adolescents presents a positive picture of drugs with images of users as mature and unconventional, and drug use seen as a way of “killing time” (Alberts, Miller-Rassulo, & Hecht, 1991; Jessor, Chase, & Donovan, 1980; Krizek, Hecht, & Miller, 1993). Krizek et al. (1993) found that those who are at less risk and do not use drugs believe that drug use is a way of losing control of one’s life (i.e., if they use drugs, they will not be able to control how they behave), whereas those at higher risk or who already use drugs talk about using drugs to take control of one’s life (i.e., by using drugs, they escape adult and societal controls). Thus, the narratives about drugs, drug users, and drug use need to be modified to prevent drug use. Pilot tests of narrative-based prevention programs have proven successful in reducing substance use (Hecht, Corman, & Miller-Rassulo, 1993), particularly in minority schools (Botvin et al., 1994; Constantino, Malgady, & Rogler, 1988).

Narrative theory has guided our work from the beginning. Initially, we focused on drug offer narratives (i.e., stories about times when adolescents were offered drugs) to describe the social processes of adolescent substance use. Narrative research then was conducted to explicate adolescents’ experience of drugs, drug use, and drug offers. Narrative also guided our prevention efforts, as our curriculum utilized narratives in which peer models of adolescents refuse drug offers to redefine the story of drug use norms and risk, as well as to develop communication competence and life skills.

**Drug Resistance as Communication Competence**

It should be clear from the discussion of narrative theory that one of the key elements to understanding adolescent drug use and developing effective prevention programs are the social processes through which drugs come to be offered and either refused or accepted and used. Although narratives can describe those processes, we utilized communication competence theory to better understand drug offer–resistance interactions.

Responding to drug offers involves a type of communicative competence in which messages are constructed to resist social influence. If peer pressure is one of the keys to adolescent drug use, as many believe, understanding this pressure and developing communication skills for resisting it involves social competencies. For example, it certainly is difficult for drug prevention programs to invoke a norm of resistance if teens lack the requisite communication skills to manifest normative behavior.
A theoretical model of communication competence argues that competence is a relational phenomenon and identifies four necessary components: knowledge, motivation, skills, and outcomes (Spitzberg & Cupach, 1984). When applied to drug resistance, knowledge includes understanding the effects of drugs, the context, and the other person(s) offering them; motivation entails perceptions of peer drug norms, attitudes toward drugs, perceptions of consequences of drug use, and desire to engage in resistance to offers; skills are the messages used in refusal; and outcomes are the consequences of these messages for self, others, and relationships.

This model conceptualizes competence as a relational phenomenon, which stresses the fact that any conversation has outcomes for both parties and that communication that optimizes these mutual outcomes is maximally effective. When cast into a drug-resistance framework, this means that if Jose offers cocaine to his friend Jim, and Jim's reply both resists the offer and does not offend Jose, continued pressure from Jose is less likely to occur than if the refusal offended Jim, Jim's resistance is successful, and the relationship between Jose and Jim is maintained. Thus, to resist competently offers of drugs, teens need adequate knowledge, appropriate motivation, and skills necessary to produce desirable relational outcomes.

The identification of resistance competencies falls under the general area of research in social influence communication (McLaughlin, Cody, & Robey, 1980), a normative process in which messages are evaluated along a social acceptability dimension (Boster, 1988). Thomas and Seibold (1995), for instance, found that college students utilized a variety of tactics that varied in the degree of assertiveness and invasiveness when attempting to intervene in peers' alcohol use.

Although a great deal of research attention has focused on how people gain the compliance of others, little is known about how people resist influence attempts. What little research on resistance exists applies to general social situations (e.g., buying a new suit or cutting down a tree) and public policy issues (e.g., legalization of heroin) rather than more significant personal and interpersonal issues, such as drug and alcohol use, leaving these more personal and interpersonal issues vulnerable to social influence (McGuire, 1964). We do know that refusal, in general, requires the knowledge component of perspective-taking (understanding the view of the person or persons making the offer) and a large and complex repertoire of refusal skills (Kline & Floyd, 1990). Other aspects of cognitive development, such as egocentrism, await investigation (Greene, Kremar, Rubin, Walters, & Hale, 2002). Studies of tobacco smoking reveal three general strategies of resistance: (1) appropriateness (fear of disapproval), (2) consistency (personal convictions), and (3) effectiveness (fear of effects; Reardon, Sussman, & Flay, 1989). Moreover, Harrington (1995) discovered that alcohol-resistance strategies that saved the face of the persuader maintained a favorable interpersonal relationship between persuader and resister, whereas those interactions where “negative face support” was employed by the resister cultivated a less favorable relationship by decreasing satisfaction and attraction between the interactants. Women also appeared more able than men to employ resistance behavior that did not negatively affect the relationship of persuader and resister. In addition, direct refusals prompted more “simple offer” follow-up strategies and a refusal to a simple offer of alcohol received more follow-up attempts than a refusal to a complex offer (Harrington, 1997).

Communication competence is not only a relational and skills-based phenomenon but it also is a culturally based one as well (Hammer & Vaglum, 1989; Hecht, Jackson, & Ribeau, 2003; LaFromboise, Coleman-Hardin, & Gerton, 1995). Culture shapes worldviews, norms, rules, attitudes, values, and beliefs, and, thereby, influences the perceptual processes by which messages are sent and received (Baldwin, Faulkner, Hecht, & Lind-
As a result, communication that adjusts to and accommodates a person’s culture is likely to be more effective than communication that does not (Hecht, Jackson, & Ribeau, 2003; Shepard, Giles, & Le Poire, 2001), and cultural sensitivity is essential to general communication effectiveness (Hammer & Vaglum, 1989). In a sense, culture provides not only criteria for judging competence (i.e., telling cultural members when something is effective and appropriate) but it also defines knowledge, motivation, and skills, as well as relational dimensions (Spitzberg, 1997). Research has demonstrated that members of various ethnic groups differ in their general communication competencies and norms (Collier, Ribeau, & Hecht, 1986; Hecht & Ribeau, 1984; Hecht, Ribeau, & Alberts, 1989; Hecht, Ribeau, & Sedano, 1990). Cultural competence, thus, introduces a new way of thinking about adolescent substance use and prevention curricula (Cross, Bazron, Dennis, & Isaacs, 1989), leading to a consideration of the role of ethnicity and ethnic identity in drug offers, and to developing culturally grounded interventions from the perspective of group members.

The communication competence model provided a framework for both our research and prevention efforts. We first attempted to describe the competencies involved in the social processes of adolescent drug use and then used this model to develop an intervention designed to decrease adolescent substance use. The following description is the story of our research efforts.

The Story: An Account of the Program’s History

This section reviews the history of our project, by describing the three major studies that we have conducted and a fourth study that currently is in progress.

DRS1: In Reaction to “Just Say No”

In 1980, Nancy Reagan, spouse of U.S. President Ronald Reagan, traveled to 65 cities in 33 states to raise awareness about the dangers of drugs and alcohol, coining the catchphrase heard everywhere, “Just say no.” A plethora of “just say no” prevention messages subsequently surfaced in the media during the 1980s, most containing fear appeals (e.g., the public service announcement sponsored by the Partnership for a Drug-Free America: “This is your brain”—showing an egg—“This is your brain on drugs”—showing the egg frying in a smoldering skillet) or simplistic appeals to adolescents indicating that just a simple “no” should suffice when resisting offers of alcohol or other drugs.

Although this simplistic message proved inadequate (Tobler et al., 2000), it did resonate with a prevention research community that was moving from education, self-esteem, and fear-based campaigns to those focused on social skills. Operating from a peer-pressure model that conceptualized adolescent substance use and abuse as arising largely (perhaps even primarily) from peer influence, this new approach focused on teaching adolescents skills for resisting peer pressure to use drugs. These resistance or refusal skills were seen as central to enabling and empowering adolescents to “say no” to drug offers. Although this model later was expanded to include social norms and a broader range of life skills (e.g., decision making), the central element continued to be resistance skills. It was in this environment that the DRS project was born.

As communication scholars interested in health issues, we believed that drug prevention messages generated by adult educators were neither grounded in the actual experiences of youth nor guided by theory and, thus, were not maximally effective in teaching youth how to communicatively resist offers of drugs or deter their actual drug use. We believed that prevention messages should reflect aspects of adolescents’ experience and
culture. Thus, the first step in our initial endeavor was to adequately identify the communication strategies that youth reported that they *actually used* when resisting offers of alcohol or other drugs. We used this information to assess different ways of presenting prevention messages to youth to enhance their communication competence in refusing drug offers. By listening to the narratives of youth about their drug offer–resistance episodes, we hoped to identify how they understood the resistance strategies they employed and to learn more about how they perceived issues of substance use. Through this process, we learned that resistance, indeed, is not as simple as “just say no.”

Our first project (DRS1, 1989–1992) was a pilot study, formative in nature. Narrative and communication competence theories suggested that we start by understanding the social processes of drug offers from adolescents’ perspective (i.e., who, where, and how offered, and how refused) and that narratives could be used not only to understand these processes but also to alter substance use and abuse. Thus, this first project was conducted with a sample of high school students from Mesa, Arizona to (1) identify drug-resistance strategies youth report using in drug-offer scenarios, and (2) develop and assess the effectiveness of teaching the identified resistance strategies.

Intensive interviews were conducted with high school and college students to gather and analyze their narrative descriptions of drug offer–resistance episodes (Alberts, Hecht, Miller-Rassulo, & Krizek, 1992; Alberts et al., 1991; Hecht, Alberts, & Miller-Rassulo, 1992; Miller, Alberts, Hecht, Trost, & Krizek, 2000). This research resulted in a series of typologies describing the “who, what, where, and how” of drug offers—the narrative knowledge about drugs, drug use, and drug users.

People offering substances ranged from strangers, acquaintances, and coworkers to friends and family. In the older (high school) samples, the most frequent offerers were friends and family members (including siblings, parents, and other relatives), with strangers, the stereotypic offerer in many adult narratives about drugs, the least frequent.

This research also revealed that drugs are offered in a variety of places. We were surprised at the detailed descriptions of the locations that youth provided, including homes (their own, as well as those of friends), social situations, and public places (e.g., parks). By far, most offers to high school students were made in social situations, such as parties, whereas college students were more likely to receive offers in homes (Miller et al., 2000).

Drug offers varied from mere availability to more complex persuasive interpersonal appeals involving a rationale. The range of offers included *mere availability* (e.g., substances were just present and it was implied that the person could use them), *simple verbal* (e.g., “Want some?”) or *nonverbal* (e.g., handing someone a marijuana joint) offers, *minimizing the effects of use* (e.g., “Come on, have a drink, it’s no big deal”), *appealing to group norms* (e.g., “Have a smoke, everyone is doing it”), and *stating benefits of use* (e.g., “It’s fun” or “Getting high is cool”) or *costs of nonuse* (e.g., “Don’t be a nerd”).

We next distinguished between simple offers and those involving pressure. We also found the existence of sequential offers, with an initial offer made, followed by a response, and then a second or follow-up offer. The majority of the offers were simple ones (mere availability and simple offer), although when offers were sequential, the follow-up offers were more likely than the original offer to include pressure to use drugs, a finding that has important implications for prevention implementations, most of which focus only on responding to initial offers.

Central to this work was the identification of four drug-resistance strategies that now have been validated from early adolescents (11-year-olds) to young adults of various ethnicities and regions of the United States. These strategies were identified by the acronym, REAL, which stood for the four resistance strategies: refuse (e.g., direct refusal by saying
“no”), explain (e.g., offering an explanation or giving an excuse), avoid (e.g., avoiding the environment where drugs are present or avoiding the offer), and leave (e.g., leaving the scene). We also identified a variety of explanation strategies (e.g., stating a lack of desire or a fear of consequences, or explaining that the resistor was “not that type of person”). Overall, refusal was the most frequent strategy, with avoidance being the most sophisticated or complex because it required anticipating or planning for the presence of drugs, perspective taking, and other higher order cognitive skills. Avoidance also was more likely to be used by older adolescents than younger ones (Miller et al., 2000).

These studies suggested certain patterns in drug offers. First, resistance is a problematic situation for which there are no easy or clear solutions that must be solved as a puzzle or problem (Hecht, Jackson, & Ribeau, 2003). Adolescents often want to refuse a drug offer but do not wish to alienate the offerer. Drug offer–resistance episodes may involve both implicit and explicit pressure to comply, although, in general, there is less explicit pressure than previous literature suggests, and even implicit pressure tends to decrease with age (Miller et al., 2000). Where pressure exists, it is exerted after an initial offer is refused or when offers are made in larger groups (Miller, 1999). Second, in general, simple, nonverbal offers are the strategy that is most likely to gain compliance, whereas simple refusals or leaving the situation are the most effective overall resistance strategies. Third, we found that a control metaphor emerged in adolescents’ talk about drugs, with this talk differentiating those at risk for use from those who are not (Krizek et al., 1993). Those using substances or at high risk for doing so tended to say that drug use allowed them to take control of their life because they escaped adult influence and asserted independence, whereas nonusers who were at lower risk said they avoided drugs so as not to lose control through the psychological effects of consumption. This control metaphor was built into later prevention campaigns. The groups also differed in their expectations about use, with people in the high-risk/use group having positive expectations about use (e.g., drugs make a party more enjoyable) and those in the low-risk/nonuse group having negative expectations (e.g., they will get sick if they drink).

In the second phase of DRS1, we used the narratives gathered in the first phase to create performance scripts providing active models for adolescent behavior. The narratives were scripted into both live and videotaped performances by a professional writer using transcripts of our narrative interviews and performed by professional actors who were of college age. The videotapes received awards at the New York Film and TV Festival, as well as at the Questar Competition. The impacts of both live and videotaped performance were compared with a control group (i.e., youth who did not receive either performance but, instead, participated in whatever prevention programs were in use at their school at the time), testing for effectiveness in reducing drug use. Both video and live performance interventions reduced self-reported substance use at a posttest 30 days after the intervention (Hecht et al., 1993). The successful completion of this pilot research study led directly to the second DRS study, which was designed to extend our research on communication competence in drug offer–resistance episodes by considering the role of ethnicity and gender among a middle school population.

**DRS2: Ethnicity and Gender in Adolescent Drug Use**

The initial project (DRS1) provided a descriptive base for understanding the social processes of drugs offers, as well as a pilot test of our narrative approach to intervention. However, we were unable to examine ethnic variation due to the homogeneous nature of the student bodies where our work was conducted. Increasingly, it was becoming clear to communication researchers that culture played an important role in communication
competence (Hecht, Jackson, & Ribeau, 2003; Spitzberg, 1997), and that in the drug arena, there were important ethnic differences in use rates (Grunbaum et al., 1999) and, especially, in the efficacy of prevention programs (Castro, Proescholdbell, Abeita, & Rodriguez, 1999).

Culture is important for interventions because, as we documented in DRS1, the norms, attitudes, and behavioral repertoires that adolescents use to make and enact decisions about substance use are derived, at least in part, from cultural background and identity. As a result, cultural sensitivity is essential to the efficacy of interventions (Vargas & Koss-Chioino, 1992). In the most general sense, interventions are communicative events, and research shows that communication that adjusts to and accommodates culture is more effective than that which does not (Hecht, Marsiglia et al., 2003; Shepard et al., 2001). Communication that fails to adjust to culture risks the disaster that befell General Motors when trying to market its car “Nova” in Spanish-speaking countries only to find out that “No Va” in Spanish means “doesn’t go.” Effective messages, therefore, must be based on the underlying worldviews that develop through enculturation, and this is particularly true of interventions that seek to promote change (Vargas & Koss-Chioino, 1992).

DRS2 (1993–1997) contributed conceptually to our program of research on adolescent drug use by focusing on younger, middle school youth rather than high school and college youth, and also by examining the roles of ethnic and gender identities. Our goal was to replicate and extend our previous research to this younger population and to see if we could describe ethnic and gender similarities and differences. Doing so helps to understand the role of culture (ethnicity and gender) in the social processes surrounding drug use (e.g., decision making, offers, and refusals) and provides the basis for culturally grounding the implementation we planned on developing in the next phase (DRS3). As we did in the first project (DRS1), we began with narrative interviews and then conducted a large-scale questionnaire survey.

**Drug-Offer Processes**

Initially, narrative interviews (30 to 45 minutes) were conducted with 158 middle school students from five schools (Hecht, Trost, Bator, & MacKinnon, 1997), who were recruited from their classes and relatively evenly distributed across three major ethnic groups (i.e., Mexican American, European American, and African American). The interviews were conducted in small, private rooms at the schools by trained college students and were tape-recorded with participants’ permission. After a short, warm-up period, the interviewer asked participants to recall a time when they were offered drugs and to describe what happened. Prompts were designed to elicit the “who, what, where, and how” of the situation. Interviews were transcribed verbatim and the narrative accounts were open coded using inductive processes of constant comparison suggested by Strauss and Corbin (1990). The analysis of the interviews were followed up by analyzing questionnaire responses collected from 3,080 seventh-grade students (Moon, Hecht, Jackson, & Spellers, 1999). Recent (last 30 days) and lifetime use of alcohol, tobacco, and marijuana were measured, as was ethnic group membership, ethnic identity, sex, and other demographic variables. The questionnaires also asked respondents to recall a time when they have been offered drugs and to indicate which drug was offered, where the offer was made, their relationship to the offerer, how the offer was made, and how they responded.

Eighty-eight participants (56%) reported that they had been offered drugs, including 51 (53%) males and 37 (47%) females. Marijuana was the most commonly offered drug (60% of the offers), followed by alcohol (16%), inhalants (11%), and tobacco (8%). The results indicated that middle school youth were most likely to receive offers from
acquaintances, which differed from findings for high school (Alberts et al., 1992) and college (Hecht et al., 1992) students, where most offers were from family members or friends. As with the older sample, simple offers were described most frequently (97% in the interview study), with about a quarter of these offers repeated. Although only 4% of those interviewed reported accepting the initial offers of drugs, 9% of the repeated offers were accepted. These different acceptance rates illustrate the impact of implicit and explicit peer pressure, as well as developmental differences, with less explicit pressure in the middle school sample than in the high school and college samples.

The four resistance strategies of refuse, avoid, explain, and leave, again, emerged as the primary strategies. In this age group, avoidance tended to be operationalized through indirect refusals. Two explanations, nonuse identity (e.g., “I’m not that kind of person”) and fear of consequences (e.g., “I’ll get a headache if I drink”), were found, which was in contrast to the four explanations used by older students (stating a lack of desire, claiming the substance is illness inducing, suggesting an alternative activity, and labeling the activity immoral). Thus, there was some overlap between the samples (fear of consequences and illness inducing are similar, and immorality is part of nonuse identity), but younger respondents reported a more restricted range and smaller repertoire, with an average of only 1.5 strategies per youth. The most common response to an initial offer was a simple “no” (90% in the interviews), which included both direct and indirect refusals. The next most-common responses were to leave, followed by some type of explanation, and then avoidance. Of those receiving offers, 26% experienced a repeat or follow-up offer. A simple no also was the most likely response to a repeated offer (70%), followed by leaving (43%), and some type of explanation (30%). Repeated offers provoked threats of turning the offerer in to authority figures (13%). The most common reasons for refusal were the substance’s negative effects on mind or body, and personal preference. The small repertoire of resistance strategies and the lack of more complex strategies, such as avoidance, by this younger group suggest the importance of skills training for this age group. More work is needed, however, on a wider range of developmental issues.

Ethnicity and Gender in Drug-Offer Processes

Ethnic and gender effects then were examined through a separate analysis of the interviews and questionnaires. Although the patterns described previously were common to all groups, reflecting the most common scenario in each group, some ethnic and gender differences did emerge in both studies. Thus, the differences must be interpreted keeping the overarching similarities in mind. Overall, Latino/as were significantly more likely than the other groups to be offered drugs, especially alcohol, marijuana, hard drugs, and inhalants. Latino/as also were more likely than the other groups to receive offers from a peer family member, such as a sibling or cousin, but were least likely to receive offers from a parent, and those offers tended to be extended at parties and in other situations where other people were around. In addition, compared to the other groups, Latino/as were more likely to respond with a simple no than to use the other strategies in the REAL system. European Americans were more likely than Africa Americans to be offered drugs. Compared to both Latino/as and African Americans, European Americans were more likely to be offered cigarettes by a male or female acquaintance through simple offers at friends’ homes or on the street. Finally, compared to the other two groups, African Americans were more likely to receive offers in the park that were extended by dating partners or by their parents, and they were more likely to refuse using the explain strategy.

Although the general pattern described here tended to hold for both males and females, some gender differences also were observed. Males were more likely than females to be
offered all types of drugs in public (i.e., at the park or on the street) and to be offered them by a parent, male acquaintance, brother, male cousin, or male stranger through offers that stated the benefits of use, and they resisted using explanations, especially those involving humor. It perhaps was most significant that males were more likely than females to experience repeat offers. In contrast, compared to males, offers to females were more likely to be simple offers or offers that minimized the effects of use made by a female acquaintance, boyfriend, sister, or female cousin in private locations (i.e., friends’ homes). Females also perceived drug offers as negatively affecting their relationship with offerers (Miller-Day, 2002).

The studies suggested that female Latinas probably were the most unique group. Not only did they receive the greatest number of offers than the other groups but they also differed from other females with respect to which substance was offered (more likely to be offered marijuana), where the offers were made (more likely at school and with a friend present), and to resist with a simple “no.”

We also examined ethnic and gender differences in risk and resiliency factors (Moon, Jackson, & Hecht, 2000). Risk factors are those that increase chances of drug use, such as poverty and single families; resiliency factors are those that protect people from risks, such as family and school bonding. We found that a linear model of these factors (variables are either risk or resiliency factors) was superior to a curvilinear model (e.g., high scores on a factor indicate risk, whereas low scores indicate resiliency). For males, risk had a direct effect on use and an indirect effect through age of first use, but male resiliency affected use only through age of first use. For females, resiliency had a stronger and independent effect, as well as an indirect effect through age of first use, whereas risk had only an indirect effect through first use. These findings suggest that males should be exposed to resiliency factors at a very early age, prior to experimentation, but that early exposure is less important for females because resiliency has an independent effect for this group.

Ethnicity played a similar role as did gender. Among Mexican Americans, both risk and resiliency had independent effects; in addition, their effects were mediated by age of first use. However, among European-American youth, risk had an independent effect that was not mediated by age for first use, whereas the influence of resiliency was only through age of first youth. These results mean that, as with males, in general, European Americans need to be exposed to resiliency factors prior to experimentation.

We also discovered gender differences in heterosexual relational processes (Barnett & Miller, 2001; Trost, Langan, & Kellar-Guenter, 1999), such as males’ susceptibility to a dating partner’s drug offer being influenced by the intimacy of the relationship but not by males’ self-esteem, whereas for females, both factors were important. Although junior high boys typically are not as interested in girls as girls are in them (Peterson, 1988), we found that boys who wanted a partner felt vulnerable to the perceived pressure they received from drug offerers of the opposite sex (Trost et al., 1999). Females also tended to perceive that drug offers negatively affected their relationship with the offerer. When offered a drug by a friend, there was likely to be no explicit pressure but there was an implicit pressure to respond politely to a friendly offer. When the goal was to resist the offer, there was a heightened awareness of self-presentation, especially when the offer was made in groups larger than five, with the refuser rather than the offerer placed in the role of the “bad guy” for being impolite (Miller, 1999).

This work addresses the need for increased understanding of the identity goals of those involved in drug offer–resistance episodes. The next step was to put this research to work in an intervention targeted at middle school students, embarking on a path of action inquiry that was increasingly more participatory.
Botvin (1986) argued that feelings of ownership of programs are crucial to drug prevention effectiveness, because direct involvement with developing a program heightens identification with the content and investment in the success of the program. Therefore, three objectives directed the second level of funding for this program of research: (1) to involve youth in the development of their own prevention programming; (2) to identify culturally grounded, age-appropriate prevention messages in their narratives; and (3) to develop prevention media that reflected these culturally grounded prevention messages.

Our third project (DRS3; 1997–2002) developed, implemented, and evaluated a culturally grounded, middle school keepin’ it REAL curriculum. Expanding to include scholars from other disciplines, such as social work and education, and emphasizing cultural sensitivity in prevention programming, DRS3 emerged as a cross-disciplinary project that employed a “from kids through kids to kids” design using a participatory action approach to create the curriculum, which consisted of 10 lessons promoting antidrug norms and teaching resistance and other social skills, reinforced by booster activities and a media campaign (Gosin, Marsiglia, & Hecht, 2003). This approach was designed to maximize participants’ identification, realism, and interest (Miller, Hecht, & Stiff, 1998).

Most drug prevention programs are created by and for European Americans and tested on this ethnic group. It has been suggested that the failure of some prevention programs can be traced to their lack of cultural sensitivity (Palinkas, Atkins, Jerreira, & Miller, 1995). Minority youth tend to prefer performers of their ethnicity in media portrayals (Dorr, 1982), and African Americans and Latino/as responded more favorably to messages from members of their ethnic group in a federally sponsored billboard campaign (Eigen & Siegel, 1991). These results are not surprising, as ethnic group members tend to differ in how they process media information (Korzenney, McClure, & Rzyttki, 1990) and many minorities experience racial isolation from media portrayals (Johnson & Ettema, 1982).

It is not surprising, then, that prevention specialists have called for a shift to ethnically sensitive content in drug prevention programming (Botvin et al., 1994; Schinke et al., 1985). DRS3 was developed, in part, to heed that call. Culture can be utilized in drug prevention in many ways; the examples above include people’s involvement in their culture and use of indigenous images. However, we believe that culturally grounding drug prevention messages goes beyond mere utilization of cultural imagery and practices to develop interventions from the perspective of the targeted group. Our interventions, therefore, are developed from the narratives or stories that group members tell about their experiences, infused with the cultural values central to their group norms (Gosin, Marsiglia, & Hecht, 2003), and developed through a participatory action research method in which group members collaborate in developing the intervention (Gosin, Dustman, Drapeau, & Harthun, 2003).

In addition to cultural values informing the development of the DRS3 curriculum, communication competence theory also guided its development by focusing on teaching the three components of competence: knowledge, motivation, and skills (see Figure 22.1). Utilizing narrative theory, narrative knowledge was the first component—teaching adolescents stories about drug resistance. Motivation was defined by social norms, as literature suggests that norms motivate people to avoid drugs (Beauvais & Oetting, 1999) by creating standards against which their behaviors are judged, as well as criteria for determining how to behave. We utilized norm focus theory, which expanded the prevailing conceptualization of norms from perceptions of peer drug use prevalence (labeled
descriptive norms by the theory) to include injunctive norms, or what ought to be done (e.g., whether adolescents believe that their peers believe drug use is right or wrong), and personal norms, or how an individual believes that he or she should act (e.g., whether the person believes that drug use is a positive experience; Cialdini, Reno, & Kallgren, 1990). Finally, skills were defined as resistance skills (REAL), decision making, and risk assessment.

Five videotapes taught the resistance skills and formed the core of the program (Hollenan, Dustman, Reeves, & Marsiglia, 2002). The videos were created from the narratives that adolescents provided in DRS2 and from additional formative research. The first video provided an overview of the program and the others taught the four resistance skills. Radio and television public service announcements (PSAs) were created from these classroom videos to reinforce the program’s content. Students at a local performing arts high school produced the videos with guidance from project personnel and were awarded regional Emmys for their efforts. The other lessons contained discussions and role-playing scenarios based on other DRS3 narratives, and all of the content reflected the formative research framed in narrative form. Thus, the content came from adolescents (“from kids”), much of it was created by adolescents (“through kids”), and it was presented to adolescents (“to kids”).

Three versions of the curriculum were developed. One was developed to reflect Mexican-American culture, the numerically largest group in the targeted schools. The second version, labeled the European-American/African-American curriculum, targeted the next two largest groups. These three groups constituted over 95% of the target population. These versions were developed by utilizing the DRS2 and DRS3 ethnicity findings to shape the materials, using the DRS3 and formative research narratives of each group separately. Cultural values were identified for each group based on previous research and

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**Figure 22.1** Conceptual model for prevention curriculum.
infused into each version (Gosin, Marsiglia, & Hecht, 2003). The third version, called the “multicultural curriculum,” was developed by using lessons from each of the other two versions.

The three versions of the curriculum and a control condition were randomly assigned to 35 middle schools that volunteered for the study; control schools continued to implement their preexisting prevention program. Students completed baseline questionnaires and follow-up posttest questionnaires 1 month, 8 months, and 14 months after the intervention (6,035 total respondents). In addition, ethnographic data collection occurred in 12 schools to describe the school cultures (e.g., practices, values, and norms unique to individual schools) and to document the implementation of and youth reactions to the intervention.

Data analyses were conducted to compare the three versions to each other and to the control condition. The results demonstrated significant effects for both the Mexican-American curriculum and the multicultural curriculum. The multicultural intervention influenced a wider range of outcomes at the last follow-up, which occurred 14 months after the end of the intervention. The curriculum had not only a positive influence on norms (i.e., encouraging antidrug norms), drug expectancies (i.e., decreasing expectations of positive effects from drugs), and resistance skills but also, more important, reduced adolescent substance use (Hecht, Marsiglia et al., 2003; see Figure 22.2). This research is one of the earliest empirical assessments of a multicultural approach, and the curriculum was identified in 2004 as a “Model Program” by the Substance Abuse and Mental Health Service Administration’s National Registry of Effective Programs.

**Culture and Adolescent Drug Use**

At the same time, other analyses of the data were conducted to further explore basic questions about culture and adolescents’ drug use. Ethnicity was one focus of these analyses. Previous research had been critiqued for “ethnic glossing”—an overly simplistic,
homogenizing approach to ethnicity in which differences or within-group heterogeneity is ignored and all members of a certain group are considered to be alike (Collins, 1995; Hecht, Marsiglia, & Hecht, 2003). Marsiglia, Kulis, and Hecht (2001) found that ethnic labels (e.g., African American or European American) and ethnic identity (i.e., extent to which individuals identify with attitudes and values of a particular ethnic group) interacted, with the joint effects being more significant that either one alone. Mirroring research on adult samples (Larkey & Hecht, 1995), ethnic identity did not function the same way for all the groups studied. Among Mexican Americans and African Americans, ethnic pride was negatively related to drug use, whereas ethnic typicality (feeling that one's behavior was typical of one's ethnic group) was positively related. Among European Americans, the associations were reversed, with pride positively associated with use and typicality negatively associated.

Other work examined the effects of acculturation, the process of adjusting to a new culture, on substance use. Acculturation level was associated with drug use among Mexican and Mexican-American adolescents, with the less acculturated, Spanish-speaking adolescents the least likely to use substances (Marsiglia, Kulis, Wagstaff, Elek, & Dran, 2005; Marsiglia & Waller, 2002). These analyses suggest a complicated approach to identity and culture reflected in the communication theory of identity (Hecht, Jackson, & Ribeau, 2003).

### Norms and Adolescent Drug Use

This research also focused on the role of norms in drug use (Elek et al., 2006). Previous research had shown that descriptive norms, youth’s beliefs in the prevalence of drug use among their peers, were a significant factor in adolescents’ substance use (Hansen & Graham, 1991). Although other types of norms have been examined, no consistent conceptual framework had been applied in such research. The use of the norm focus theory provided such a framework and enabled us to predict that all three norm types—descriptive, injunctive, and personal norms—play a role in adolescent substance use, and our findings were consistent with this prediction. Personal norms, rarely studied in the drug literature, appeared to be the strongest significant predictor of substance use. Descriptive, parental injunctive, and friend injunctive norms also demonstrated significant, although weaker influences. In other DRS research, it was found that descriptive norms supportive of drug use seemed to be stronger among African-American youth than among European-American youth (Miller-Day & Barnett, 2004). In that study, 59% of all African-American youth reported that their African-American peers, in general, use more drugs than other ethnic groups, whereas only 16% of European-American youth reported this about their group. The findings were even more extreme among the youth who used drugs, as every African American who reported using substances believed that members of his or her ethnic group use more drugs than do members of other ethnic groups. These youth seemed to have internalized media images of ethnicity and drugs, which portray African Americans as using and selling drugs more than any other ethnic group. Overall, these findings support the validity of norm focus theory, expanding and enriching our understanding of substance use norms.

### DRS4: Bigger, Faster, and Longer

Currently, the project is in its fourth phase and focuses on developmental processes, examining age of intervention, risk and resiliency factors, and acculturation using a longitudinal design over 5 years. The curriculum will be enhanced to deal with acculturation
factors and then modified for implementation in the fifth grade. The enhanced multicultural curriculum will be implemented again when these students reach seventh grade, and all students will be tracked through ninth grade. This procedure will allow us to compare control students to students who receive the implementation in fifth grade only, seventh grade only, and both fifth and seventh grades.

The developmental nature of communication competence suggests the importance of examining these processes longitudinally. Early adolescence marks the beginning of a critical period for the development of risky behaviors due to changes in youth characteristics and contextual influences affecting youth adjustment (e.g., Botvin et al., 1994; Greene & Brinn, 2003). Along with the biological changes of puberty, changes in orientation toward adult authority, relative influence of peers, structure of schooling, and goals and values all help to shape a sense of personal identity. Contextually, youth move from self-contained, single-teacher elementary classrooms to large, fluid middle schools or junior high schools. This shift leads to increased levels of stress and distress, as well as to reductions in parent and teacher support and monitoring. As a result, adolescents find themselves with increasing unsupervised time and exposure to peers, factors related to higher levels of drug use and delinquent behavior (Flannery, Williams, & Vazsonyi, 1999). The shift from parental influence to peer influence, which occurs gradually between the sixth and ninth grades, is a critical developmental change that has strong implications for adolescents’ risk for drug initiation (Bailey & Hubbard, 1990). Once this shift occurs, peer influence appears to be the single-most influential risk factor related to adolescents’ drug use (Kandel, 1995). Intervening before children experience an expansion in their peer networks, therefore, may increase the effectiveness of drug prevention efforts. Previous DRS research suggests that due to the developmental nature of risk and resiliency factors, it is important to enhance resiliency factors prior to boys’ experimentation with drugs (Moon et al., 2000). Thus, a substantial body of research supports the view that early adolescence and the transition from elementary to middle/junior high school are critical periods for interventions to prevent initiation and later misuse of drugs. Little, however, is known about the most efficacious age for implementation (Gottfredson & Wilson, 2003).

Developmental issues are important when acculturation is salient. Acculturation has been identified as a risk factor for Mexican immigrant children and for U.S.-born Mexican-American children, in that more acculturation is associated with higher levels of delinquency and substance use, and with lower educational aspirations (Vega & Gil, 1999). Our previous work is consistent with these findings, suggesting that Spanish-speaking Latino/as are less at risk for drug use, implying protective factors from the traditional culture (Marsiglia et al., 2005; Marsiglia & Waller, 2002). This finding may suggest that the shift from primary identification with traditional culture to identification with U.S. culture may either increase risk or reduce resiliencies. Acculturation may introduce and reinforce behaviors of the mainstream culture that may be at odds with the culture of origin (Vega, Zimmerman, Warheit, Apospori, & Gil, 1997) or it may induce stress as individuals attempt to resolve conflicting cultural differences, leading to attempts to reduce stress through a variety of destructive behaviors, such as drug use (Beauvais, 1998). In addition, the resources of the traditional culture that operate as resiliency factors may no longer be accessed as youth become more acculturated.

Based on these findings, we are conducting a longitudinal study of acculturation, ethnic identity, and drug use. We measure level of acculturation by assessing identification with both the U.S. and Mexican cultures, language transition and choice, and acculturation stress, and we will examine how these and ethnic identity develop and transition over time. In addition, we utilize the ecological risk and resiliency approach (Bogensch-
to track other risk and resiliency factors (e.g., family-centeredness/familism and positive cultural integration) as they relate to adolescents’ drug use. It may be, for example, that adolescents are less at risk if they have higher levels of identification with either or both cultures, but are most at risk when they do not identify with either and, as a result, do not have access to either set of cultural protective factors. One might assume that higher levels of identification, particularly the pride dimension, operates in a similar fashion and enhances acculturation effects. Our longitudinal design will allow us to examine these processes.

We started this longitudinal analysis by examining the relationship between communication skills and substance use in young children. This study revealed that youth who make more active decisions, a key component of the curriculum, are less likely than other youth to initiate substance use prior to fifth grade (Hecht, Warren, Wagstaff, & Elek, 2008).

Our other research has continued to examine the role of culture in making decisions about substance use. These studies indicate that ethnic identity is a protective factor for Mexican-heritage youth, with stronger identification associated with more antidrug norms, less positive drug expectations, stronger refusal efficacy, and less intent to use substances (Ndiaye, Hecht, Wagstaff, & Elek, in press). These findings hold for both boys and girls, but play a bigger role in influencing norms for Mexican-born youth. Ongoing analyses are examining the role of biculturalism and show it to be a protective factor (Ndiaye, Hecht, Matsunaga, & Elek, 2008).

Initial evaluation results are less promising, suggesting that the fifth-grade intervention was not particularly effective (Hecht, Elek et al., 2008). Immediate and short-term effects were observed on resistance skills (i.e., students learned them) and norms. However, the effects on norms were iatrogenic (e.g., boomerang), with students believing that more of their peers were using substances as a result of the intervention. Although further analyses are forthcoming, it appears that the fifth grade may be too early for this type of targeted intervention focused on a particular health challenge. We also speculate that a narrative intervention of this type may not be the most efficacious, because it exposes students, the vast majority of whom have never received a drug offer, to situations they have not yet experienced.

Significance of this Applied Communication Research Program

The DRS project (1989–2013) is one of the few programs of its type, reaching out across disciplines and utilizing multiple theories and methods, including both cross-sectional and longitudinal designs. With its roots in the communication discipline, the project has involved academics in psychology, biobehavioral health, social work, sociology, and education, as well as youth in middle schools and high schools of Phoenix, Arizona, and others in these communities. With the Arizona project concluding in 2008 and a new rural version of the project being implemented and examined in Pennsylvania and Ohio through 2013, it has grown and expanded into one of the longest-running applied communication research projects, providing a disciplinary model for a funded line of research and demonstrating the utility of applied communication research to the National Institutes of Health.

Theoretical Contributions

The DRS project also has made a number of theoretical contributions. Although traditional methods of theory development involve tests that allow for falsification, the DRS
project provides theoretical support through its successful application of communication competence theory, narrative theory, and norm focus theory, as well as the principles of cultural grounding, multiculturalism, and performance-based interventions. For example, communication competence theory led us to employ a design that included knowledge, motivation, and skills as components of competently navigating offer–refusal episodes as we considered relational outcomes and cultural issues. Narrative theory guided our approach to the knowledge component, as well as the form of the intervention. We had difficulty locating empirical tests of cultural grounding and multiculturalism within the context of intervention programming and, thus, our studies are among the first to provide support for this approach to education and prevention. Finally, although other research had examined various norm types, this research was largely scattered and atheoretical, with descriptive norms the overriding influence. Our work, thus, expanded the scope of drug norms in prevention interventions.

Second, the DRS project contributes to our understanding of gender difference and ethnic identity. We have demonstrated that identity, indeed, is a layered construct as described by the communication theory of identity. Our work shows the importance of a complex conceptualization that encompasses both labels and identity, and demonstrates that identity does not function the same way for all groups.

Third, the DRS project describes a socially and personally important social influence process—how drugs get offered and refused, and the importance of norms and interpersonal relationships in offer–resistance episodes. It is rare for communication research to demonstrate impact on socially significant behaviors (although, admittedly, self-reported behavior).

Methodological Contributions

These theoretical contributions were achieved by a line of research that has combined qualitative methods, including focus groups, in-depth interviews, and in situ observation, with quantitative methods, including survey questionnaires and experimental research, in isolation and in combination. Across all four research projects, we have used qualitative methods exclusively (i.e., in-depth interviews and focus groups), quantitative methods exclusively (i.e., survey questionnaires and experimental research), qualitative methods to inform quantitative findings (e.g., interviews and postexperiment observations), and, finally, quantitative methods to flesh out qualitative findings (e.g., survey development to discover broader patterns of strategy use and systematic gender and ethnic differences hinted at in earlier qualitative data). In addition, unique analyses were used in this ongoing project, such as longitudinal data collection, missing data analysis called “planned missingness” (Graham, Cumsille, & Elek-Fisk, 2003; Schafer & Graham, 2002), and hierarchical linear modeling (Hecht, Marsiglia et al., 2003). These methodological issues have made this a complex project, but also one that has contributed significantly to the field of applied communication by demonstrating the use of multiple-method designs (see Query et al., this volume).

Practical Importance

On the local level, many of the youth of Phoenix have been exposed to a customized and effective prevention program that not only reduces drug use but also develops risk-assessment, decision-making, and communication skills. With the recent federal mandate for evidence-based prevention (i.e., programs found to have effects on drug use using randomized, controlled designs), keepin’ it REAL provides these schools with a program
that not only fulfills this requirement but also is aligned to their statewide educational standards.

On a larger level, this is one of only a few culturally grounded, effective programs and may be the only evidence-supported multicultural drug prevention program. The program already has been adopted in Monterrey, Mexico and Laredo, Texas, with applications planned for Austin, Texas; northern Delaware; Flint, Michigan; Erie, Pennsylvania; and Tuscaloosa, Alabama. The Substance Abuse Services and Mental Health Administration established the National Registry of Effective Programs to provide guidance to communities and schools seeking evidence-based programs (http://www.modelprograms.samhsa.gov). The keepin’ it REAL curriculum not only meets these standards but, in 2004, also attained model program status. In addition, this applied communication research program demonstrates the significance of action inquiry in the discipline of communication by seeking to advance theoretical knowledge at the same time that it addresses significant social problems in communities.

Conclusion

In this chapter, we described research conducted as part of the Drug Resistance Strategies project. This project exists due to the support of the National Institute on Drug Abuse (National Institutes of Health) and has spanned faculty at three universities and many academic disciplines. The project provides an example of a new direction in applied communication research, one in which theories are tested through multiple methods to solve important social problems. This is a project in which people inside and outside of the academy work together to achieve significant social change, bringing many different theoretical and methodological tools to show how communication principles and practices can transcend disciplinary boundaries and help to solve the problem of drug use and abuse.

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Notes

1. This national survey (formerly called the National Household Survey on Drug Abuse) obtains drug use data from approximately 70,000 persons per year and serves as the primary source of information on the prevalence, patterns, and consequences of drug and alcohol use and abuse in the general U.S. civilian non-institutionalized population, age 12 and older.

2. More controversial are “harm reduction” programs that aim not at drug use reduction but, instead, seek to ameliorate the harm that accrues when substances are used. Also controversial are programs that aim at abuse rather than use in the belief that most harm is associated when substances are used frequently and at high levels. These issues are beyond the scope of this chapter, but our position is one of harm reduction through social skills enhancement.

3. Self-reports were used throughout this phase of the project. Although a recall bias potentially was a problem, it is almost impossible to observe resistance naturally because illegal behaviors are being performed when adolescents are offered drugs. Thus, however desirable, direct observation of resistance, especially in an era of increased scrutiny about research conducted with human participants (see Seeger, Sellnow, Ulmer, & Novak, this volume), is
highly problematic. We were forced, therefore, to rely on narratives and other accounts as our data sources.

4. There were too few African Americans for inclusion in these analyses.

References


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