Choosing Effective Youth-Focused Prevention Strategies: A Practical Guide for Applied Family Professionals

Advances in the field of prevention science have resulted in strategies that target various youth outcomes. In recent years, numerous “best practices” lists have been developed to help professionals identify such strategies. Some scholars have questioned the quality of these lists and cautioned that there are flaws in evaluations of many prevention strategies. The purpose of this paper is to review these criticisms and provide applied family scholars with suggestions regarding how to identify effective strategies.

Over the past several decades, applied family professionals have been increasingly involved in developing, implementing, and evaluating strategies aimed at preventing a variety of negative outcomes among youth (Bogenschneider, 2006; Kumpfer, Alvarado, & Whiteside, 2003; Spoth, Kavanagh, & Dishion, 2002). Since the 1980s, significant advances have been made in the field of prevention science with the goal of creating high-quality initiatives aimed at preventing outcomes such as delinquency, substance use, and school failure among youth. Indeed, numerous well-designed and well-evaluated programs have been packaged for widespread dissemination (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Hawkins, Catalano, & Arthur, 2002; Wandersman & Florin, 2003). Furthermore, a variety of “best practices” lists have been developed to help applied professionals identify effective strategies to implement in their own schools, neighborhoods, towns, and cities (Gandhi, Murphy-Graham, Petrosino, Chrismer, & Weiss, 2007; Gorman & Conde, 2007; Small, 2005).

Despite the positive trends mentioned above, several scholars have recently cautioned that the field of prevention science still has much work to do. Specifically, scholars have questioned the quality of some outcome evaluations of popular prevention strategies and have indicated that many suffer from methodological flaws (Gorman, 1998; Gorman & Conde, 2007; Wandersman & Florin, 2003; Weiss, Murphy-Graham, Petrosino, & Gandhi, 2008). In addition, there is a growing concern that although the popular “best practices” lists typically include examples of strategies that have demonstrated effectiveness in high-quality evaluations, they also tend to include some strategies that have not been properly evaluated, are not ready for widespread dissemination, and/or fail to demonstrate long-term effects on youth outcomes (Gandhi et al., 2007; Gorman, 2002; Hallfors, Pankratz, & Hartman, 2007; Wandersman & Florin; Weiss et al.). As a result, users of such lists must be cautious when selecting strategies for their own communities as...
it may be difficult to assess their overall quality from the limited amount of information included in the lists.

In light of the above-mentioned criticisms, the primary purposes of this paper are to highlight current concerns related to popular “best practices” lists and to propose specific criteria that family professionals can use to help guide the selection of effective prevention strategies. In addition, this discussion is meant to stimulate a more general dialogue among applied family scholars regarding how we can best identify and disseminate high-quality strategies. As can be seen in the following sections of this paper, family professionals may be in a unique position that can help move the field of prevention science forward. Indeed, many of the most promising prevention strategies either directly or indirectly target family-level variables. As family professionals, our expertise and understanding of how these variables interact to impact developmental outcomes of individual family members can help facilitate the identification, and ultimately dissemination, of effective strategies.

This paper begins with a brief overview of the history of the field of prevention science and discusses some of the progress as well as problems that have developed within the field. Next is a discussion of six areas of concern that are associated with current practices of evaluating and disseminating prevention strategies. After each area of concern are various implications for family scholars and practitioners that can help push the field toward improved identification and dissemination of high-quality prevention strategies. Throughout this article, prevention strategies are referred to at a general level. In practice, current prevention strategies encompass a wide variety of approaches, which commonly include packaged programs, governmental policies, and various educational initiatives. The examples provided in this paper focus primarily on packaged programs that are included on popular “best practices” lists, although the basic concepts contained within can be applied to policies and educational initiatives as well. Note that the examples used in this paper are for illustrative purposes only—they are not intended as an endorsement of any particular program over another.

**History of the Field of Prevention Science**

During the 1960s, programs and policies designed to address youth outcomes such as substance use and delinquency began to appear in the United States. Such initiatives initially involved responding to existing crises and tended to be treatment-oriented in their approach. For instance, residential programs were designed to promote “character development” among delinquent youth, and social policies were enacted to help substance using youth receive services rather than entering the justice system (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Jenson & Fraser, 2006). In the years that followed, such approaches gradually gave way to more prevention-oriented strategies. By the 1980s, common prevention efforts focused largely on public service announcements designed to raise awareness of issues and to educate the public about how and why to avoid risky behaviors. Examples of such initiatives included the “Just Say No” campaign, the “brain on drugs” commercials, and cartoons featuring characters such as McGruff the Crime Dog. Such early approaches to prevention tended to rely on simple strategies aimed at demonstrating consequences of targeted behaviors and often were based on instilling concern and fear among those tempted to engage in such behaviors (Jenson & Fraser).

By the mid-1980s, more comprehensive school and community-based strategies began to appear (Jenson, 2006). These strategies, including popular programs such as D.A.R.E., tended to target a single problem behavior, although they slowly evolved to become more sophisticated over the next several decades. Despite the popularity of these early initiatives, outcome evaluations suggested that they had limited effectiveness at best (Catalano et al., 2002; Jenson; Weiss et al., 2008). One significant positive effect of early prevention efforts, however, is that they served as a starting point for the evolution of the field of prevention science. Indeed, since the 1980s, efforts to design and evaluate prevention strategies have become increasingly sophisticated, and the number of prevention strategies has increased dramatically (Catalano et al.; Greenberg, 2004; Hawkins et al., 2002; Wandersman & Florin, 2003). Today, professionals from a wide variety of disciplines are active in the field of prevention science, and a variety of stakeholders have a
vested interest in the outcomes of prevention strategies.

Prevention scholars typically classify current prevention strategies by the level of risk within the population they target. Universal prevention strategies are the most general, as they are intended for everyone, regardless of their level of risk. Such strategies tend to be rather broad in nature and are commonly implemented within schools or community settings. An example of a current universal strategy is the Guiding Good Choices Program, which is training program for parents of school-age children. Program activities are designed to teach parents how to set clear family rules related to substance use and to encourage healthy family processes that empower all family members. Evaluations of this program have indicated that participants are less likely than members of a comparison group to use substances or engage in delinquent behaviors (Mason, Kosterman, Hawkins, Haggerty, & Spoth, 2003; Spoth, Redmond, Shin, & Azevedo, 2004).

Selective prevention strategies specifically target participants who are at elevated risk for engaging in problem behaviors. For example, the Nurse-Family Partnership program was designed to help low-income pregnant women experience healthy pregnancy outcomes and to develop positive parenting skills. Trained nurses visit participants’ homes throughout pregnancy and during the first 2 years of their children’s lives. The nurses encourage the women to receive proper prenatal care, teach them about child development, and demonstrate how to effectively parent their children in positive ways. Outcome evaluations have demonstrated a wide variety of positive effects for both mothers and their children, some of which have persisted for at least 15 years (Olds, 1997).

The most intensive prevention strategies typically are referred to as indicated strategies. These strategies target youth who not only experience multiple risk factors for particular outcomes but also have begun to experiment with certain behaviors such as delinquency and substance use. The line between indicated prevention strategies and treatment is blurry. In fact, some scholars do not make a distinction between the two types of intervention (Channing Bete Company, 2004). Regardless, many indicated strategies also have preventive effects, as they may prevent associated problems from developing in both targeted youth and other family members. For example, the Functional Family Therapy (FFT) program is a short-term indicated family therapy program intended to reduce future offences among youth who are currently in the juvenile justice system. Evaluations of this program have demonstrated that it not only reduces recidivism rates among targeted youth but also prevents their siblings from engaging in similar delinquent acts (Alexander, Pugh, Parsons, & Sexton, 2000; Sexton & Alexander, 2000).

In recent years, prevention science scholars have noted that increasing numbers of prevention strategies, such as those described above, have been implemented with fidelity, and have been subject to rigorous evaluations that have demonstrated positive effects on participants (Catalano et al., 2004; Greenberg, 2004; Hawkins et al., 2002; Wandersman & Florin, 2003). In light of these advances, government agencies have begun to take notice of the growing body of evidence in support of the effectiveness of many prevention strategies. Since the 1990s, a variety of “best practices” lists have appeared. Strategies that are included on such lists typically have demonstrated positive effects on common youth problems through outcome evaluations. In recent years, much of the federal grant money that has been made available to support prevention programming has been tied to selecting strategies that appear on one or more of these lists (Gandhi et al., 2007; Hallfors et al., 2007; Weiss et al., 2008). Table 1 includes information about several of the most popular “best practices” lists. As can be seen, there is considerable overlap among them in terms of criteria for inclusion and information provided, although each also has some unique characteristics. As such, they largely complement each other as resources.

In light of the above discussion, there seems to be significant enthusiasm among scholars in the prevention science field regarding how far we have come in such a short time frame. Although most acknowledge that there is still room for improvement, various scholars have noted that in recent years, increasing numbers of prevention strategies have been based on a strong theoretical and empirical foundation (Catalano et al., 2002; Flay et al., 2005; Greenberg, 2004). In addition, there is mounting evidence that current strategies are at least somewhat effective in preventing problem behaviors, and government officials have tied funding to selecting strategies from
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Note: NREPP = National Registry for Evidence-Based Programs and Practices; NIDA = National Institute on Drug Abuse; OJJDP = Office of Juvenile Justice and Delinquency Prevention.

\(^a\)The Campbell Collaboration is not a list per se, but rather provides comprehensive written reviews of evidence-based approaches designed to address-specific outcomes.
“best practices lists,” suggesting that they are actively considering the results of research (Flay et al.; Greenberg; Kellam & Langevin, 2003; Weiss et al., 2008). Such connections between research and practice are no doubt exciting to family scholars who have an interest in strengthening ties among researchers, policymakers, and family practitioners (e.g., Bogenschneider, Olson, Linney, & Mills, 2000; Myers-Walls, 2000; Small, 1995, 2005).

Despite these positive trends, however, some have begun to question if we are celebrating a bit too much, a bit too soon. During the past several years, a handful of scholars have stepped back to critically examine the current state of the field of prevention science (e.g., Gandhi et al., 2007; Gorman, 2008; Gorman & Conde, 2007; Halfors et al., 2007; Sherman, 2003; Weiss et al., 2008). Although most of these scholars agree that examples of high-quality, effective prevention strategies currently exist, there have been rather consistent complaints that too many flawed, under-evaluated, and sometimes ineffective strategies appear on many of the popular “best practices” lists. As a result, some scholars have directly criticized specific characteristics of many current “best practices” lists. In the following sections of this paper, I review six basic concerns that are associated with various aspects of these lists. Three of the concerns are related to evaluations that are used to place strategies on the lists, two are related to characteristics of the strategies appearing on the lists, and one is related to issues associated with the lists themselves. After commenting on how each of the six concerns impacts our attempts to disseminate high-quality prevention programming, I draw out specific implications for family professionals interested in identifying effective prevention strategies.

**Areas of Concern**

**Concern #1: Limited View of What Constitutes a High-Quality Evaluation**

Historically, many social scientists have agreed that random experimental designs are the gold standard for assessing the effectiveness of social policies and programs (Flay et al., 2005; Moskowitz, 1993; G. C. Patton, 2008; M. Q. Patton, 2008; Rossi & Freeman, 1993). In recent years, however, some scholars have begun to suggest that the optimal evaluation design might vary depending on the purposes of the evaluation, the nature of the strategy being evaluated, and the degree to which the strategy will be implemented in unique populations (McCall & Green, 2004; Nathan, 2008).

In an excellent review of these issues, McCall and Green (2004) suggested that while well-designed randomized experiments make a positive contribution to our knowledge about the effectiveness of specific interventions, their status as a “gold standard” may be overstated. More specifically, the authors argued that while randomized experiments have the potential to increase the internal validity of a particular study, they run the risk of decreasing the external validity. That is, although we might be confident that the results are due to the strategy, we would be less confident that similar results can be replicated within “real-world” conditions in which participants are not assigned to groups, but rather choose whether to participate or not. McCall and Green further argued that even randomized designs include a variety of threats to internal validity such as differential attrition, diffusion of treatment effects to the control group, and an inability to find a “no treatment” control group, among others. In sum, the authors argued that although randomized designs are a valuable tool and have taught us much about program effectiveness, they should not be considered the only high-quality evaluation design.

Indeed, other scholars have argued that various evaluation designs may be appropriate when assessing the quality of prevention strategies (Cook, Shadish, & Wong, 2008; Nathan, 2008). For example, a variety of quasi-experimental designs attempt to approximate the effects of random assignment when such an assignment is not possible. In such designs, researchers attempt to statistically control for potential differences across groups. Recent advances in statistical methods have resulted in a wide variety of sophisticated techniques that are intended to minimize threats to both internal and external validity. For example, propensity analyses have been introduced as a way of controlling for factors that influence selection into experimental versus control groups. Hierarchical modeling designs are intended to control biases and systematic similarities that result from the clustering of groups of individuals (such as what happens in classrooms, teams, or clubs). Regression
discontinuity designs enable researchers to control various confounding variables while assigning individuals who need treatment to the treatment groups (Cook et al.; Nathan).

Other scholars have argued that there is a need for alternatives to both experimental and quasi-experimental methodologies when evaluating the effectiveness of social interventions. For example, Shaw (2003) argued that various qualitative designs are particularly good at uncovering unintended program effects and individualized outcomes that may not generalize to the entire population. He suggested that qualitative designs are well poised to help us understand the “micro-processes,” or more subtle aspects of particular interventions that result in particular participant outcomes. In addition, qualitative methods enable evaluators to gain a much deeper understanding of contextual factors that influence outcomes, such as culture, values, and personal meanings that participants attribute to their experiences. Gilgun (2006) echoed many of these ideas as she suggests that the rich contextual background uncovered by well-designed qualitative studies serves as an invaluable resource upon which successful interventions can be tailored to meet the needs of individual participants.

Another general area of evaluation research that has relied on both quantitative and qualitative designs is process evaluation. In process evaluations, researchers typically are interested in gathering information about program implementation (M. Q. Patton, 2008). Such data can complement outcome evaluations by helping evaluators determine not only if a strategy worked, but also why it succeeded or failed. For example, process data may reveal that a strategy was not implemented fully because participants did not enjoy a certain part of the curriculum. Such data can help developers revise the strategy in order to be more effective in the future. Given the strong contextual components of qualitative research, such designs lend themselves well to process evaluation (Gilgun, 2006; Shaw, 2003). In practice, however, a variety of methodologies can furnish such data (M. Q. Patton; Rossi & Freeman, 1993).

Implications related to Concern #1—Consider multiple evaluation designs. Despite the availability of the wide variety of methodologies described above, most of the current “best practices” lists are heavily biased in favor of true experimental designs. As noted in Table 1, some lists are restricted to only strategies that have been subjected to such evaluations. In light of the preceding discussion, this practice may be shortsighted and overlook some high-quality interventions in which random assignment would be unethical or otherwise impossible. Given the strengths and limitations associated with each of the above-mentioned designs, it may be best to choose strategies on the basis of their performance on multiple designs (Gilgun, 2006). Although Shaw (2003) cautioned that this may lead to conflicting data and lack of consensus, such conflict can help guide future research with the goal of gaining a deeper understanding of factors that impact program effectiveness. As a rich trail of data related to a particular strategy begins to accumulate, we can have much more confidence regarding if and why a strategy is effective.

If such an accumulation of evidence is not available for a particular strategy, the best way to assess the effectiveness of a particular intervention may be to consider the degree to which existing evaluation designs are appropriate for their intended use. As outlined in the preceding discussion, a wide variety of methodologies are available. In some cases, a randomized experimental design may be the preferred method to gauge program effectiveness, particularly if the user is interested in making causal conclusions. In cases when randomization is not possible, or not ethical, there are a variety of quasi-experimental designs such as regression discontinuity designs that approximate the effects of true experiments (Cook et al., 2008; Nathan, 2008). Alternately, evaluation users may be interested in implementation issues or want rich contextual data, in which case process evaluations or qualitative designs may be appropriate.

Most of the popular “best practices” lists can serve as a starting point for potential users of evaluations. Indeed, as noted in Table 1, most lists include references to evaluations of each strategy. Such reference lists, however, are not comprehensive generally, and only some include unpublished studies. In addition, some lists, such as the Coalition for Evidence-Based Policy list, reference only randomized trials. As such, family professionals interested in objectively assessing the accumulated evidence of effectiveness for a strategy would be wise to conduct an independent literature review, including
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library research and contacting program developers to seek out unpublished work. Accessing unpublished studies is particularly important, as many professional journals are more focused on publishing evaluations that have demonstrated program effectiveness than those that have not. As a result, reviews of published literature may be biased such that prevention strategies appear more effective than they actually are. In practice, program developers seem to be very receptive to requests for research reports, as I found when working with a team of researchers on a comprehensive review of more than 300 prevention strategies. Indeed, most developers were happy to provide published and unpublished studies that employed a wide variety of research designs (Channing Bete Company, 2004).

Conducting a comprehensive literature review such as the one described above does take time. As such, family professionals who are evaluating the evidence supporting a strategy’s effectiveness will need to weigh the benefits against potential time constraints. If a particular strategy looks like a good fit for a community, but the “best practices” lists provide references to only a limited number of evaluations, such a comprehensive review may be worth the investment. If a preferred strategy already has substantial documentation of effectiveness across multiple types of research designs, then such a review may be unnecessary.

Concern #2: Inconsistent Quality of Evidence Cited on “Best Practices” Lists

When family professionals are interested in selecting a particular intervention from one of the “best practices” lists, it is important to assess not only the type of evaluation design but also the quality of the research that placed it on the list. Unfortunately, there are a fair number of evaluations of strategies that appear on one or more “best practices” lists that suffer from some very basic methodological flaws that threaten both internal and external validity (Gandhi et al., 2007; Gorman, 2008; Moskowitz, 1993). The following flaws relate specifically to quantitative outcome evaluations, because to date, the “best practices” lists have tended not to include qualitative research or process evaluations.

One example of a fundamental flaw in many true- and quasi-experimental designs is that samples oftentimes are not representative of adolescents in general, and differential subject attrition can result in differences across comparison groups (Flay et al., 2005; Moskowitz, 1993). A second common problem associated with all types of quantitative designs is that evaluators sometimes conduct an exceedingly large number of group comparisons without correcting for the increased likelihood of a Type I error (Gandhi et al., 2007; Gorman, 2008; Moskowitz). In such cases, “positive” results could be because of the number of statistical analyses rather than the effects of the program (commonly referred to as family-wise error). Specifically, when evaluators use a common $p < .05$ criterion for statistical significance, we would expect 1 in 20 analyses to be significant as a result of sampling error alone. In some cases, evaluators conduct far more than 20 cross-group comparisons without adjusting their criterion for significance. As such, some significant findings may simply be an artifact of the large number of statistical comparisons in the study (Weiss et al., 2008). A similar problem results when researchers report statistically significant findings that are so small, they are clinically meaningless. This is most common in studies with large samples, in which even very small effects reach conventional levels of statistical significance (McCartney & Rosenthal, 2000; Small, 2005).

In addition to the above-mentioned problems with internal validity, many studies are designed such that their results cannot be readily generalized to the “real world.” Such problems with external validity are oftentimes caused by samples that are not representative of the population to which the evaluators wish to generalize their findings. External validity can also be compromised when evaluators fail to consider the many contextual factors that likely impact how a strategy works for a particular group of individuals (Gilgun, 2006; Shaw, 2003).

Of course, not all strategies appearing on “best practices” lists have been evaluated with flawed evaluations. It is very difficult, however, to have confidence in the effectiveness of strategies that were evaluated with a poorly designed evaluation. Indeed, although it is entirely possible that a poorly evaluated strategy is effective, it is equally possible that positive outcomes uncovered by a poor evaluation are merely artifacts of methodological flaws (Flay et al., 2005; Gorman, 2008; M. Q. Patton, 2008; Rossi & Freeman, 1993; Skager, 2007).
Implications related to Concern #2—Evaluate the evaluations. In light of the impact that poorly designed evaluations can have on internal validity (Flay et al., 2005; Moskowitz, 1993; Rossi & Freeman, 1993; Sherman, 2003), it is essential that family professionals carefully evaluate various aspects of the quality of evaluations. Although a complete discussion of internal validity can be found elsewhere (e.g., Campbell & Stanley, 1963; Cook & Campbell, 1979), some of the more common threats can be uncovered by asking the following questions:

1. Are there attempts to statistically control for existing group differences?
2. Did group differences evolve as a result of differential subject attrition?
3. Was there evidence of family-wise error?
4. Were there events during the study that influenced the results?
5. Were the measures of high quality?
6. Could the results be because of repeated testing of participants?
7. Did the experimental group include only very high-risk children, such that behaviors would appear to improve on their own by “regressing” to the mean?
8. Did treatment effects spill over to any of the members of the comparison group?

In addition to considering these threats to internal validity, family professionals should be aware of issues related to external validity. That is, they need to determine if the effects of the strategy are likely to be replicated in the unique contexts of their own communities, schools, and neighborhoods. Family professionals may be at a unique advantage in terms of understanding some of the factors that commonly impact the external validity of a study. Indeed, in light of the strong ecological focus in the work of many family science professionals, we commonly are aware of how factors such as family structure, socioeconomic status, cultural factors, extended family, and community resources interact to influence family processes. Such processes in turn impact the behavioral, psychological, and emotional outcomes of individual family members. As such, it is important to determine if specific prevention strategies have different effects for families and family members depending on their unique contexts and family processes.

As mentioned earlier, given their attention to contextual factors, qualitative research designs are often characterized by a higher degree of external validity. As so few of these designs are included in “best practices” lists, however, it is important to consider external validity issues as they relate to the commonly used experimental and quasi-experimental designs. The following questions can help make this assessment:

1. Was the sample representative of adolescents in general?
2. Is it representative of the population to which you wish to generalize?
3. Do the researchers take into account contextual or demographic factors or both?
4. Do the results have “real-world” significance?

In light of the common threats to external validity, some professionals may prefer to develop novel approaches that are tailored to the unique characteristics of their local communities. Indeed, program developers may in fact overcome some of the above-mentioned threats by developing a unique strategy that is specifically designed to fit with local demographics. There are problems, however, associated with developing new strategies. For example, such efforts typically are time consuming and expensive. In addition, the effectiveness of new strategies is unknown. It takes a long period of time and significant effort to properly evaluate new strategies to determine long-term effectiveness (Jenson & Fraser, 2006).

Fortunately, family professionals will find that there are a number of currently available strategies whose effectiveness has been documented by high-quality evaluations with low threats to both internal and external validity. For example, each of the three programs reviewed early in this paper have a long record of experimental and quasi-experimental evaluations that support the effectiveness claims. Indeed, the Guiding Good Choices Program, the Nurse-Family Partnership, and FFT are examples of programs that have repeatedly demonstrated positive effects across various types of evaluation methodologies when implemented in a variety of settings (e.g., Alexander et al., 2000; Mason et al., 2003; Olds, 1997). Such results support the conclusions of prevention scholars who have suggested that there are common factors that predict a variety of risky outcomes among youth, and that strategies designed to address such factors can be effective across.
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As suggested in the discussion of Concern #1, family professionals can refer to the “best practices” lists as a starting point when assessing the quality of evaluations. As noted in Table 1, most lists include references to evaluations, and some include links to electronic copies of reports. Of course, the resources on these lists may not be representative of all research conducted on a particular strategy. As such, users of these lists should consider conducting a more extensive literature review as outlined earlier in this paper.

Concern #3: Problems Associated With Going to Scale

A related concern associated with some “best practice” strategies has to do with whether a strategy shown to be effective in a highly controlled setting can be effectively replicated in the “real-world” setting. In recent years, a growing number of strategies have shown positive effects in high-quality efficacy trials, which are initial evaluations of strategies conducted in settings characterized by a high degree of experimenter control (Kellam & Langevin, 2003). Prevention researchers, however, have not had as much success in demonstrating effects in effectiveness trials, in which strategies are implemented in “real-world” settings (Gandhi et al., 2007; Greenberg, 2004; Kellam & Langevin; Skager, 2007).

Prevention scholars have suggested several possible explanations for this trend. First, efficacy trials often are implemented with significant financial and personnel resources. As a result, the strategy can be implemented with high fidelity to the program model, which increases the likelihood of positive effects. Similarly, as efficacy trials oftentimes are implemented by program developers, there is substantial expertise in terms of how to implement the strategy and how to troubleshoot should unexpected problems occur. Again, these factors are likely to increase the chance of positive findings (Gorman & Conde, 2007; Lipsey, 1995; Petrosino & Soydan, 2005; Small, 2005). Some have also argued that positive results in efficacy trials may be encouraged by conflicts of interest and biases that result from program developer participation in the research process. Such potential biases are addressed later under Concern #6.

Implications for Concern #3—Look for effectiveness trials. In light of potential biases associated with preliminary efficacy trials, applied family professionals may be more confident in strategies that have demonstrated positive effects in high-quality effectiveness trials. In the event that such evidence is not available, the following questions may help determine how to maximize the likelihood of success when only preliminary data are available:

1. Has the strategy shown preliminary effects in high-quality efficacy trials?
2. Do the efficacy trials limit the threats to external validity mentioned earlier?
3. Does your community have the resources necessary to implement the strategy?
4. Do program distributors provide implementation support?

Communities may need to assume some risk if they select strategies that have only shown effects in preliminary efficacy trials. The above questions, however, can help determine if the trials are “good enough,” and if there is enough implementation support to put the strategy in place in a way that is true to the underlying program theory. Fortunately, resources are available to help family professionals identify such support. Indeed, as noted in Table 1, most of the “best practices” lists include information about available resources related to individual strategies.

Concern #4: Lack of Comprehensive Prevention Strategies

As described in the beginning of this paper, early prevention strategies were relatively simplistic in their approach. They tended to focus on only one problem behavior, and they typically attempted to address only one or a few of the many factors that place an adolescent at risk for engaging in such behavior (Catalano et al., 2002; Jenson & Fraser, 2006). Given the many advances in our understanding of the etiology of many youth outcomes, we now know that it is important to address a wide variety of factors within multiple ecological contexts. Indeed, various reviews of the literature conclude that the most effective prevention strategies typically target factors within individual, peer, school, family, and community contexts (Bogenschneider, 2006; Catalano et al., 2002, 2004; Jenson & Fraser). Unfortunately, although
many of the “best practices” lists include such comprehensive strategies, some also continue to include simple approaches that target only one or a few risk factors for a single outcome.

One trend that may be of particular interest to family professionals is that many prevention strategies with a strong family focus tend to be particularly effective (Kumpfer et al., 2003; Spoth et al., 2002). This is probably because of two factors. First, many of the most effective family programs, such as FFT, are extremely comprehensive. Indeed, while FFT does emphasize the importance of family relations, it also focuses on the ways in which a particular family interacts with and is affected by other ecological contexts, such as school, work, and peer groups, among others (Alexander et al., 2000).

In addition, the strong effects of family strategies are likely influenced by the fact that the proximal processes associated with the family exert a particularly strong influence on human behavior (Bronfenbrenner, 1986a). Individuals are imbedded within a particular family system from the moment they are born. Family members typically provide the earliest social interactions that an infant experiences, and the primacy of family influences generally continues throughout childhood, despite the introduction of multiple influences such as peers, teachers, and others within the larger community. Given the significant influence of the family context, scholars have noted its importance in influencing, guiding, and supporting social and emotional development. Indeed, as Bronfenbrenner (1986b) noted, “the family is the most powerful, the most humane, and by far the most economical system known for building competence and character.”

Implications for Concern #4—Look for a broad contextual focus. In light of the preceding discussion, family professionals who are interested in selecting highly effective prevention strategies should be sure to look for comprehensive programs that target risk and protective factors within multiple contexts. Most of the current “best practices” lists help facilitate this process by providing rich descriptions of program activities.

Family professionals can take several approaches when considering comprehensive approaches to prevention. First, they can select specific strategies that have a broad focus and target risk or protective factors or both that occur within multiple ecological contexts. Some family therapy programs such as FFT fall into this category (Alexander et al., 2000). Alternatively, they can engage in a community-wide effort in which multiple smaller, more targeted programs are combined to address the underlying causes of problem behaviors. Several strategies have been developed that help guide communities through a needs assessment, selection of effective prevention strategies, and evaluation of the results (Bogenschneider, 2006; Hawkins et al., 2002). One example of such a strategy is the Communities That Care system, which is currently available through the Substance Abuse and Mental Health Services Administration (SAMHSA).

In addition to focusing on such comprehensive strategies, we, as family professionals, should pay close attention to strategies that target family relationships and interactions. Although a family focus certainly does not guarantee that a strategy will be effective, there are many examples of successful family-based prevention strategies. Indeed, each of the effective programs used as examples throughout this paper has a strong family component. The Guiding Good Choices Program specifically encourages parents to develop healthy family processes (Mason et al., 2003; Spoth et al., 2004). The Nurse-Family Partnership intervenes with high-risk mothers before their children are even born (Olds, 1997). Among the most effective indicated prevention strategies are a variety of family therapy models, including the FFT program described above (Alexander et al., 2000).

Concern #5: Few Long-Term Results

Although some high-quality evaluations have identified effective prevention strategies, very few have demonstrated lasting impact. Even the “best” strategies tend to have effects that last only for several months. Typically, program effects wear off unless follow-up, or “booster” sessions are conducted. Many scholars have noted that human behavior is extraordinarily difficult to change. Furthermore, when changes are made, it is equally difficult to maintain such changes (Catalano et al., 2004; Flay et al., 2005; Gandhi et al., 2007; Greenberg, 2004).

Perhaps one of the most significant reasons for such difficulties in maintaining program effects is that program participants typically...
go back to their prior ecological contexts: their same families, peer groups, schools, and workplaces. As discussed earlier, these contexts have a significant influence on an individual’s behavior (Bronfenbrenner, 1986a). Short-term educational sessions that are commonly part of prevention strategies simply cannot be expected to overcome the intense influence of being immersed in one’s typical ecological settings. As described in the preceding section, many prevention strategies are rather simplistic in nature. As described below, however, there are some notable examples of more comprehensive strategies that do show lasting positive effects (Catalano et al., 2002, 2004; Hawkins et al., 2002; Kellam & Langevin, 2003).

**Implications for Concern #5—Do positive effects persist?** Clearly, long-term effectiveness of a prevention strategy is an important consideration for anyone interested in investing resources in a particular strategy. A few basic questions can help guide family professionals as they identify strategies that are likely to result in long-term effects:

1. Did the program evaluations include follow-up assessments?
2. If so, how long were program effects maintained?
3. Does the strategy include follow-up or booster sessions?
4. If so, were they evaluated for effectiveness?
5. Is the strategy comprehensive enough to expect long-term effects?

Most of the popular “best practices” lists can help family professionals find answers to these types of questions. Indeed, most include at least basic descriptions of the findings of evaluations, and these descriptions typically discuss any long-term follow-up evaluations. One of the lists, the Blueprints Program list, actually requires that its “model programs” have demonstrated effectiveness at least 1 year following program termination (see Table 1).

Although there are not many strategies that demonstrate long-term effectiveness, there are some that show effects for at least several years following the end of the program. Indeed, each of the three programs I have used as examples in this paper have demonstrated lasting effects. Both the Guiding Good Choices Program and FFT have demonstrated effects lasting at least several years after program termination (Alexander et al., 2000; Spoth et al., 2004). In addition, the Nurse-Family Partnership program has demonstrated effects on children whose mothers had participated in the program 15 years earlier (Olds, 1997). Such effects are impressive, and are not typical among most prevention strategies.

**Concern #6: Political Influences on “Best Practices” Lists**

As mentioned earlier in this paper, many funding agencies currently tie dollars for prevention programming to selecting strategies from one of the popular “best practices” lists. Although such a practice has increased incentives for communities to use “evidence-based” practices, it also has had an unfortunate side effect of encouraging conflicts of interest among program developers. More specifically, given that schools and community groups are spending money on packaged prevention programs, there is a profit that can be made from developing, packaging, and selling such programs. By tying prevention dollars to appear on “best practices” lists, funders have inadvertently placed immense pressure on program developers and distributors to get their programs on at least one of these lists. This obviously introduces a serious conflict of interest that can result in selective reporting of evaluation results to “best practices” review panels (Borman, Hewes, Overman, & Brown, 2003; Gorman & Conde, 2007; Moskowitz, 1993; Petrosino & Soydan, 2005). Indeed, Gorman and Conde have noted that many program developers have a financial relationship with the distributor of their packaged programs that may encourage them to emphasize positive findings.

Of course, the above-mentioned relationships among program developers and distributors certainly do not guarantee overt unethical behavior among individuals within each group. Such relationships, however, have the potential to influence research findings in subtle ways, especially if the program developers also act as program evaluators or if they have close ties with outside evaluators. For example, while one researcher may focus on two significant positive findings and conclude that a strategy is effective, another may look at the same data, see six nonsignificant findings and deem the strategy ineffective. In this example, two researchers may interpret the same data in very different ways.
depending on their own personal views of criteria for effectiveness. When program evaluators have a vested interest in seeing positive outcomes, they may be more likely to emphasize the two significant findings than the six that did not reach statistical significance.

This discussion does not mean to imply that program developers are purposefully biased or in some other way unethical. Although there may be examples of program developers being influenced by the possibility of increasing program sales, many scholars have noted that true objectivity in research is difficult to maintain in any empirical investigation, regardless of the field of study. Our past experiences, education, and general world views influence everything from the way we phrase our research questions, to the types of statistical analyses we employ, to the types of conclusions we draw from a set of data (Sherman, 2003; Small, 1995). Given the close ties between a program developer and his or her program, it may be inherently difficult for him or her to step back and make a truly unbiased judgment regarding overall program quality.

In addition to biases of program developers, Weiss et al. (2008) have suggested that conflicts of interest might arise from members of review panels. They specifically suggest that decisions made about whether or not to recognize particular programs may be influenced by panel members’ own past histories, biases, and possible misperceptions of specific programs. Taken together with the above discussion on potential conflicts of interest, these points suggest that inclusion on “best practices” lists may be at least partially influenced by multiple biases stemming from the priorities, values, and goals of developers, distributors, and reviewers.

Implications for Concern #6—Can the source be trusted? As mentioned throughout this paper, many of the popular “best practices” lists include valuable information that can help family professionals select effective prevention strategies. In light of potential biases described above, however, it is essential that users of these lists critically and objectively examine the evidence in support of program effectiveness. While some lists include a comprehensive review of the literature (see Table 1), more often the cited research represents only a small portion of the findings related to a particular strategy (Gandhi et al., 2007; Weiss et al., 2008). As such, it is often helpful to use the lists as a preliminary source of information to narrow choices and then conduct a more comprehensive literature review as outlined earlier in this paper. The following questions may help guide this process:

1. Are there articles not cited within the lists that are related to the strategy?
2. Will program developers share unpublished data?
3. Have colleagues had success with the strategy?
4. Are there any unpublished studies available from other sources?
5. Have there been any independent evaluations of the strategy?

CONCLUSION

Taken together, the suggestions outlined in this paper provide a starting point for applied family professionals who are interested in assessing the quality of existing prevention strategies. Of course, following these suggestions does not guarantee success. I hope, however, that the advice contained within will encourage personal reflections and further dialogue that will help family professionals avoid some common missteps when assessing the nature and quality of specific evaluation designs. Ultimately, I hope such a reflection results in the selection of strategies that demonstrate true effectiveness when implemented in the “real world.”

The discussion outlined in this article also encourages family professionals to be cautious when using the popular “best practices” lists. Although such lists may serve as an excellent starting point for identifying effective strategies, it is up to the individual user of the information to obtain objective outside information to help assess the true potential of such strategies. Although collecting outside information may take considerable time and effort, such an investment would increase the likelihood that a chosen strategy is truly effective. As stated throughout this paper, applied family professionals may have unique insights into identifying effective strategies. Because our professional training and work strongly emphasize the important influences of contextual variables on individual outcomes, we may be well positioned to assess the degree to which particular strategies adequately address
factors related to risk and resiliency within multiple ecological contexts.

By examining the history of the field of prevention science, it is easy to see that we have made significant progress over the past several decades. Today, there are examples of well-designed, comprehensive prevention strategies that appear to have lasting positive effects on the developmental trajectories of young people. As suggested in this paper, however, relatively few strategies have convincingly and consistently demonstrated such positive effects. As such, it is up to individuals interested in implementing a specific prevention strategy to gain the skills necessary to assess the quality of evidence supporting its effectiveness. With a critical eye for inferior quality research and program designs, a focus on comprehensive approaches, and realistic expectations regarding potential program effects, we, as family professionals, can help youth within our communities grow and develop into happy, healthy, and productive members of adult society.

REFERENCES


