A Wilderness Therapy Intervention for Violent, Gang-Involved Latino Adolescents

By Andrew Gill

Wilderness programs offer a nontraditional treatment option for adolescents with a variety of problems. Unfortunately, many of these programs appear to be directed at White adolescents from high-income families. This article presents a wilderness intervention that could be appropriate for Latino adolescents from lower- and middle-income families. This wilderness intervention is based on an evidence-based search and literature review as outlined by Leonard Gibbs (2003). This article illustrates Gibbs's techniques for researching and identifying evidence-based practice methods and outlines a possible wilderness therapy intervention for gang-involved Latino adolescents.

Wilderness programs offer an adventurous and challenging alternative to more traditional treatment programs. Outward Bound, a model for many current wilderness programs, was created in the 1940s to instill "self-reliance and spiritual tenacity" in British soldiers (Outward Bound U.S.A., n.d.). Today, wilderness programs serve a variety of clients, including adolescents who have academic problems, low self-esteem, attention-deficit/hyperactivity disorder, depression, and substance abuse problems.

Unfortunately, many wilderness programs do not accommodate violent, gang-involved adolescents. In addition, few programs are tailored to Latinos, who comprise 49 percent of all youth in gangs (Institute for Intergovernmental Research [IIR], n.d.). One wilderness program, Catherine Freer Wilderness Therapy Expeditions (CFWTE), is exceptional at what it does and was used as a basic model for this article's wilderness therapy intervention.[1] However, CFWTE does not easily accommodate violent, gang-involved Latino adolescents. This article describes a wilderness therapy intervention that combines components of CFWTE with findings from the literature review. The literature

review is based on Leonard Gibbs's (2003) techniques for researching and identifying evidence-based practice methods. The result is a possible wilderness therapy intervention for violent, gang-involved Latino adolescents.

THE PROBLEM AND THE PRACTICAL RESEARCH QUESTION

The admissions department at CFWTE screens participants for histories of excessive violence and gang involvement, sometimes granting admission in spite of an adolescent's history of such behavior.[2] One applicant to the program, Carlos, once beat an elderly man and had several fights at school. Carlos said he fought in order to earn respect from his gang. In spite of his history, Carlos was admitted to CFWTE. During the program, he acknowledged to the author that his violent behavior caused distress to and dysfunction within his family. Another participant, Juan, did not have a history of violence but reported strong gang involvement to the author. Juan admitted that his gang involvement encouraged behaviors like running away and disrespecting his parents. Although Carlos and Juan reported a desire to leave their respective gangs, they said they feared that if they did so, other gang members would punish them. In individual therapy sessions, the author observed that the gang involvement of both youths was a strong barrier to behavior change. This observation led the author to question the effectiveness of wilderness therapy for Latino adolescents with gang involvement.

Research on the gang population indicates that there may be many Latino adolescents whose gang loyalty is a strong barrier to changing behaviors (IIR, n.d.). Concern for adolescents like Carlos and Juan led the author to search for a wilderness therapy intervention that might overcome the gang-loyalty barrier. This search was guided by a Client-Oriented, Practical, Evidence-Search (COPES) question.

According to Leonard Gibbs, a COPES question leads to implications for a clinician's practice and it guides the evidence-based literature search (Gibbs, 2003). Given Carlos and Juan's situation, the author formulated the following COPES question: If 2 treatment options, a wilderness treatment program and a nonwilderness treatment program, are available to Latino adolescents involved in violent gang activities, which treatment reduces the client's violent gang activity?

LITERATURE REVIEW

In order to obtain high-quality research that is relevant to addressing the COPES question, this article employs search tools and evaluation methods developed by Gibbs (2003).[3] The search identified 2 distinct bodies of research literature: studies on wilderness programs (5 articles) and intervention strategies for working with Latino populations (9 articles). An answer to the COPES question is extrapolated from these 2 bodies of literature.

Wilderness Programs

The wilderness programs literature (Deschenes and Greenwood, 1998; Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004) describes wilderness programs that share certain common elements:

1. Intensive and time-limited treatment (time varied from 5–90 days).
2. Solution or goal oriented.
3. A setting that was unfamiliar to the program participants (e.g., wilderness).
4. A small staff-to-participant ratio (e.g., 3 staff per 10 participants).
5. Skills training (e.g., social skills, cooperation, fire building, map reading).
6. Treatment focused on improving self-concept, behavior modification, shifting the locus of control from external to internal (e.g., the participant recognizes having control over what happens), and reducing delinquent behaviors after treatment.
7. Physical activity (e.g., canoeing, hiking, climbing).

There was no theoretical framework common to all the programs identified in the research, and the literature did not explicitly indicate which theoretical framework guided a given wilderness program. Most of these programs incorporated elements from behavioral, cognitive, psychodynamic, and family systems theories. Further research is needed because the theoretical framework guiding interventions may affect whether the program is successful.

In general, the literature reported positive findings on the benefits of wilderness programs. All the articles except 1 (Deschenes and Greenwood, 1998) find that youth in these wilderness programs report statistically significant better outcomes than those reported by youth who received no treatment. Specifically, youth in wilderness programs reported higher levels of self-esteem, greater increases in behavior change, and a greater shift in the locus of control from external to internal. However, 2 articles (Larson, 1998; Romi and Kohan, 2000) report that although benefits are found in some measured areas, there is no overall statistically significant difference in outcomes between wilderness

and nonwilderness programs. Elizabeth Deschenes and Peter Greenwood (1998) report that 1 program, the Nokomis Challenge, had higher recidivism but was more cost effective than traditional residential placement.[4] Most of the researchers (Deschenes and Greenwood, 1998; Larson, 1998; Bedard, 2004; Romi and Kohan, 2004) agree that more research is needed to adequately test the ability of wilderness programs to reduce recidivism. These researchers find an association between treatment in wilderness programs and reductions in recidivism for 0–12 months after treatment.

Two studies on wilderness programs merit a more detailed discussion. The first is the meta-analysis by Rachel Bedard (2004). According to Gibbs's (2003) research evaluation scale, Bedard's meta-analysis was the highest quality study of the meta-analyses reviewed by this author.[5] In addition, Bedard's meta-analysis is guided by a question similar to this author's COPES question. "Is wilderness therapy more effective in rehabilitating juvenile delinquents than traditional measures such as incarceration and probation?" (2004, p. 17). Hence, Bedard's study applies almost directly to clients like Carlos and Juan.

Bedard's meta-analysis examines 23 studies that measure behavior change, interpersonal skills, self-esteem, and recidivism (2004, p. 18). She examines these categories because she assumes that they have some relationship to delinquency. For example, if an adolescent's self-esteem is improved, the adolescent may be less likely to seek attention through delinquent behaviors. The assumption that self-esteem (or any of the other categories) has some causal relationship with delinquency is in itself a topic of debate. Unfortunately, such a debate is beyond the scope of this article. In her dissertation, Bedard (2004) examines studies that were experimental in design, included a wilderness component, and focused on adjudicated adolescent delinquents. She presents a useful conclusion about each category she identifies. First, she reports that wilderness programs are most effective at increasing self-esteem.[6] Second, Bedard finds that wilderness programs are moderately effective at improving delinquent behaviors and interpersonal skills.[7] Finally, Bedard notes that wilderness programs are weakest in their ability to reduce long-term recidivism after treatment.

Bedard's (2004) meta-analysis reveals that 1 study (Baer, Jacobs, Carr, 1975, as cited by Bedard, 2004) out of 23 researched recidivism beyond 12 months. That study, by D.J. Baer, P.J. Jacobs, and F.E. Carr (1975, as cited by Bedard, 2004), showed a reduction in recidivism for 60 months. However, based on the literature search and review, this author concludes that it is unclear whether wilderness programs are effective in reducing recidivism. Long-term (over 12 months) research is needed to explore recidivism.

The second study that merits further discussion is Marcos Martinez's dissertation (2002). Martinez's dissertation is of high quality.[8] It is also relevant to clients like Carlos and Juan because it is the only research that emphasizes both Latinos and a wilderness program. Martinez describes a program, the R.M. Pyles Boys Camp, which includes most of the characteristics described earlier as features of a wilderness program. However, Martinez (2002) notes a few distinctions:

1. Participants come from low-income families.
2. Participants have no father present in their home environment.
3. Participants are at-risk but have also demonstrated potential leadership skills.
4. Participants are referred to the program by police, teachers, and agencies.
5. Participants attend short-term follow-up interventions.

Perhaps the most important elements of the Pyles Boys Camp are the short-term follow-up interventions. These follow-up interventions include one-on-one counseling, reunions, and letter campaigns (2002, p. 44). Martinez (2002) concludes that these short-term follow-up interventions significantly maintain the positive benefits attained during the wilderness program. In other words, these interventions reduce recidivism. Specifically, outcome measures of self-esteem and locus of control are unlikely to return to pretreatment levels. Martinez finds that treatment levels of self-esteem continue from program completion until the 12-month follow-up interviews with participants. The internal locus of control is also maintained through the 12-month follow-up interviews.

Therapy Interventions with Latino Populations

The literature on therapy interventions with Latino populations can be organized into subcategories. A study by Ana Navaro (1993) analyzes the effectiveness of psychotherapy with Latinos. Several other studies examine the effectiveness of family therapy among Latinos (Szapocznik et al., 1986; Szapocznik, Rio, et al., 1989; Szapocznik, Santisteban, et al., 1989; Santisteban et al., 2003). The effectiveness of Latino community organizing is examined in 2 articles (Wiist, Jackson, and Jackson, 1996; Cheadle et al., 2001), and 2 other works investigate outcomes associated with culturally sensitive cognitive interventions among Latinos (Malgady, Rogler, and Costantino, 1990; Gil, Wagner, and Tubman, 2004). The quality of the studies is generally high, and they reach several conclusions that pertain to the current article's COPES question.[9] Studies of family therapy show

that it is more effective than no therapy (Szapocznik, Rio, et al., 1989; Santisteban et al., 2003). Although José Szapocznik, Arturo Rio, and colleagues (1989) find that family therapy and psychodynamic therapy are equally effective in reducing behavioral and emotional problems, family therapy is more effective in protecting the integrity of the family. Daniel Santisteban and associates (2003) also demonstrate the effectiveness of family therapy, concluding that Brief Strategic Family Therapy (BSFT) is more effective than group treatment in reducing conduct problems, reducing marijuana use, and increasing family functioning. A handbook (Szapocznik and Kurtines, 1989) clearly outlines techniques and theory for conducting BSFT. In contrast, community organizing does not necessarily reduce violent conduct problems among Latino adolescents. William Wiist and associates (1996) and Allen Cheadle and colleagues (2001) conclude that an inability to measure community organizing contributes to the lack of correlation between community organizing and a reduction of teen violence. Culturally sensitive studies (Malgady et al., 1990; Gil et al., 2004) stress that successful interventions in the Latino community will acknowledge and adapt to acculturation stress, ethnic pride, and perceived discrimination.

THE INTERVENTION

The above literature search and review were conducted to determine which of 2 treatment programs (wilderness treatment and nonwilderness treatment) is the most effective at reducing violent gang activity among Latino youth. This article extrapolates from the literature and concludes that wilderness treatment programs are slightly more effective than nonwilderness treatment programs in reducing violent gang activity among Latino adolescents. However, the literature strongly suggests that this effectiveness depends upon 5 central elements:

1. An effective program includes staff that are culturally competent in dealing with acculturation stress, ethnic pride, and perceived discrimination.
2. An effective program includes family therapy. Specifically, Brief Strategic Family Therapy (BSFT) is recommended because it has the most clearly delineated format and is supported by strong research.
3. An effective program includes several follow-up interventions after treatment.
4. An effective program focuses on raising self-esteem, internalizing the youth's locus of control, and changing behaviors. Effective behavior change strategies focus on addressing conduct disorder and socialized aggression.
5. An effective program limits teen group interactions.

This article will refer to the proposed intervention as the Latino Family Wilderness Therapy Program (LFWTP). The LFWTP targets Latino adolescents between ages 12 and 17 who are involved in violent gang activity. The program focuses on this age group because Santisteban and colleagues (2003) also target this population in BSFT. In addition, Malgady and colleagues (1990) demonstrate that therapeutic effects among youth under 12 differ from those for youth over 12.

The LFWTP consists of 3 parts. Part I of the proposed treatment is conducted in the wilderness with adolescents and staff. Part II of the treatment takes place in the wilderness with the adolescents, 1 or 2 of each youth's family members, and staff. Part III of the treatment parallels traditional BSFT; there are between 4 and 20 sessions, each lasting 1 hour (Santisteban et al., 2003).

During Part I, a small staff-to-client ratio (e.g., 3 to 10) is used. This is in line with all the wilderness treatment studies (Deschenes and Greenwood, 1998; Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004). Part I of the proposed program lasts for 1 week. The literature does not specify time in treatment, although the minimum time appears to be 5 days. It is important that the client is not with the family during Part I. Previous research suggests that the wilderness programs should be in "settings unfamiliar to the participants" (Romi and Kohan, 2004, p. 116). If a youth's family were present during Part I, their presence might ease the therapeutic tension created by the unfamiliar setting. During Part I, clients participate in physical activity and skills training. Examples of physical activity include hiking and rock climbing. Skills training activities include building a fire, cooking, and reading a map. Group and individual sessions focus on raising self-esteem, internalizing the locus of control, and changing behavior. Research indicates that effective wilderness programs have demonstrated the ability to change each of these (Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004).

Two studies demonstrate that nondirective group activities can be detrimental to adolescents; group work with adolescents can act to reinforce behavior problems (Santisteban et al., 2003; Romi and Kohan, 2004). In addition, another study finds that the outcome measure of cooperation did not significantly improve when nondirective group activities were employed, but the outcome measures of self-esteem, locus of control, and behavior change did significantly improve (Larson, 1998). This author's clinical experience also suggests that group cooperation activities should be limited. Reducing group interaction gives staff members more control over the clients, and control helps staff members to maintain a safe environment. Such an environment is especially important for work with violent adolescent gang members. Since there is

evidence that group activities can increase self-esteem and behavior change (Larson, 1998), LFWTP engages participants in a few activities that require total group cooperation. These activities are limited and facilitated closely by staff members.

During Part II of LFWTP, a minimum of 1 or 2 family members join each adolescent client in the wilderness for a second week. Ideally, the entire family will attend. However, it is likely that such concerns as school and work would prevent families from attending for an entire week. During Part II, clients live within their respective families. Upon arrival, family members begin intensive BSFT with on-site wilderness therapists (Szapocznik and Kurtines, 1989). Given its logistical simplicity, BSFT can be applied to the wilderness setting. This therapy includes 3 elements: an initial diagnostic interview, joining or connecting with the families, and restructuring (Szapocznik and Kurtines, 1989). Restructuring, the most specialized aspect of the therapy, is accomplished via such techniques as reframing patterns, reversals of behavior, detriangulation, opening up closed systems, and homework (or tentwork) tasks (Szapocznik and Kurtines, 1989). The 2 primary behaviors that BSFT can change are those associated with conduct disorder and socialized aggression (Santisteban et al., 2003).

When BSFT is not being conducted, youth and their families participate in activities that address the family's experience of ethnic identity, acculturation stress, and perceived discrimination, as research indicates the importance of these factors in working with Latino clients (Malgady et al., 1990; Gil et al., 2004). Although Santisteban and associates (2003) conclude that BSFT is an effective intervention for Latino families, BSFT does not specifically focus on ethnic identity, acculturation stress, or perceived discrimination. For this reason, activities that raise awareness in these 3 areas (ethnic identity, acculturation stress, and perceived discrimination) are conducted outside of BSFT sessions. The inclusion of culturally sensitive awareness activities may give families ways to address the 3 areas and talk about associated issues during BSFT. This seems to be a meaningful way to extrapolate from previous research (Malgady et al., 1990; Santisteban et al., 2003; Gil et al., 2004). Culturally sensitive awareness activities and BSFT occupy approximately one-third of the time during Part II. The other two-thirds of time during Part II is dedicated to physical activity and goal-oriented challenges, 2 elements emphasized in the wilderness program literature (Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004). Part II concludes with a closing ceremony, and the families return home. As a response to the literature's call for stronger after-care (Deschenes and Greenwood, 1998; Bedard, 2004; Romi and Kohan, 2004),

Part III of LFWTP involves office-based BSFT and follow-up visits to the youths' homes. Once the therapist indicates that office-based BSFT is complete, staff members conduct 2 in-home follow-up visits, which are spaced out by 3 to 4 months.

During these visits, a social worker reintroduces the basic principals of the program to the youth and their family. For example, the worker encourages the client to continue to set personal goals. Finally, all participating families are invited to attend a reunion held 1 year after the completion of Part II. Families are strongly encouraged to attend. Although the reunions are to be fun and informal, staff members use the opportunity to reaffirm the positive skills that clients and families learned. This after-care follow-up uses the successful model outlined by Martinez (2002), whose focus and sample population are highly similar to those of this article.

EVALUATION OF THE INTERVENTION

Six reliable tools are used to evaluate the effectiveness of LFWTP.[10] Some of these tools will be administered 3 times: during intake, upon completion of Part II, and at the program reunion, which officially ends Part III. As mentioned above, behaviors associated with conduct disorder and socialized aggression are the focus for change. These behaviors can be measured using the parent-reported Conduct Disorder subscale and Socialized Aggression subscale (Quay and Peterson, 1987, as cited in Santisteban et al., 2003). The abbreviated form of the Nowicki-Strickland Internal-External locus of control scale (Nowicki-Strickland, 1973, as cited in Martinez, 2002) measures locus of control. In order to save time, the abbreviated scale can be administered to the adolescent clients while the parents complete the Conduct Disorder and Socialized Aggression subscales. Two other subscales from the Family Environment Scale measure family functioning: 1 measures family cohesion and the other measures family conflict (Moos and Moos, 1984; as cited in Santisteban, 2003).

Another important evaluation tool is the Rosenberg Self-Esteem Scale (Rosenberg, 1979, as cited in Martinez, 2002). Self-esteem is consistently reported to improve during wilderness programs (Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004) and should be a clear indicator of the effectiveness of the LFWTP. The Rosenberg Self-Esteem Scale is chosen because Martinez, (2002) uses it, and his study's sample population is very similar to this article's target population.

Finally, the wilderness program literature (Larson, 1998; Martinez, 2002; Bedard, 2004; Romi and Kohan, 2004) stresses the need to measure recidivism.

In LFWTP, recidivism will be measured through parent-reported, teacher-reported, and police-reported delinquency. For the sake of simplicity, this measure will focus only on legal and school consequences (e.g., convictions for possession of alcohol and driving under the influence, as well as arrests, detentions, and cutting class). This information will be requested upon intake and 1 year after the completion of Part III, providing recidivism outcome data collected in the interviews 2 years after the residential portion of LFWTP. Most studies only measure recidivism through data from a 1-year follow-up interview.

Conditions for Client Participation

Clients will be assessed for conduct disorder and socialized aggression. This assessment is important because BSFT, which LFWTP parallels and upon which LFWTP relies, is shown to be most effective for clients diagnosed with conduct disorder or socialized aggression (Santisteban et al., 2003). Youth who will not benefit from treatment of either of these disorders will not participate in LFWTP. Since family therapy (BSFT) is important to the success of this program, the families of enrolling adolescents must be willing to participate in both Part II and Part III of the program. Several family members may participate, but at least 1 must be present for all family activities in Part II and Part III. Also, families will be informed that the program focuses on Latino identity and associated cultural factors. For reasons discussed earlier, it is important to value these cultural factors (Malgady et al., 1990; Gil et al., 2004). Finally, due to the literature's emphasis on reducing recidivism, families will only be allowed to participate if they commit to participating in the follow-up visits and the reunion.

CONCLUSION AND LIMITATIONS

The proposed wilderness intervention, LFWTP, is created from the best available evidence in 2 bodies of literature: that on wilderness programs and that on intervention strategies with Latino populations. Since little research combines wilderness programs and Latino populations, it is necessary to extrapolate from these 2 bodies of literature to construct an intervention. This lack of related research is a clear limitation to LFWTP. Fortunately, several studies examine sample populations similar to the one targeted in the COPES question. Another major limitation of LFWTP is the time needed to evaluate it. The 6 proposed measurement tools occupy about 2 hours of the client's time. This will be especially difficult to incorporate during the follow-up reunion

(Part III), which is only 1 day long. However, the wilderness treatment field lacks a history of good evaluation methods. For this reason, comprehensive evaluation of LFWTP is especially important.

A final program limitation is cost. Although Deschenes and Greenwood (1998) deemed the Nokomis wilderness program more cost effective than alternative programs, wilderness programs are expensive, and LFWTP's intended population has limited income. In order to compensate for LFWTP's projected cost, the program must be devised in such a way that private health insurance and Medicaid will cover its expense. Further research should examine the requirements of private insurers and Medicaid in order to determine what changes to the proposed program structure would facilitate funding from those sources. Unfortunately, such an inquiry falls outside the scope of the current article. If the program's effectiveness is demonstrated, it might also provide juvenile justice courts with an alternative to mandating residential rehabilitation for youth. Overall, LFWTP is relevant to clients like Carlos and Juan, their families, and their values. The Latino Family Wilderness Therapy Program is based upon the best available evidence and, as such, has the potential to be an effective program for reducing violence among Latino adolescents involved in violent gang activities.

REFERENCES

Bedard, Rachel Marie (2004). Wilderness therapy programs for juvenile delinquents: A meta-analysis. PhD diss. Colorado State University, Department of Psychology, Fort Collins.

Cheadle, Allen, Edward Wagner, Mary Walls, Paula Diehr, Michelle Bell, Carolyn Anderman, Colleen McBride, et al. (2001). The effect of neighborhood-based community organizing: Results from the Seattle Minority Youth Health project. *Health Services Research,* 36 (4): 671–87.

Deschenes, Elizabeth Piper, and Peter W. Greenwood (1998). Alternative placements for juvenile offenders: Results from the evaluation of the Nokomis challenge program. *Journal of Research in Crime and Delinquency,* 35 (3): 267–94.

Gibbs, Leonard E. (2003). *Evidence-based practice for the helping professions: A practical guide with integrated multimedia.* Pacific Grove, CA: Brooks/Cole-Thomson Learning.

Gil, Andrés, Eric F. Wagner, and Jonathan G. Tubman (2004). Culturally sensitive substance abuse intervention for Hispanic and African American adolescents: empirical examples from the Alcohol Treatment Targeting Adolescents in Need (ATTAIN) project. *Addiction,* 99 (Suppl. 2): 140–50.

IIR (Institute for Intergovernmental Research, National Youth Gang Center) (n.d.). Frequently asked questions. Retrieved on Jan. 17, 2006 from http://www.iir.com/nygc/faq.htm.

Larson, Bruce Arthur (1998). An examination of the effects of participation in an adventure camp program on the self-concept of adolescents with behavior problems. EdD diss. University of Kentucky, Graduate School, Lexington.

Malgady, Robert G., Lloyd H. Rogler, and Giuseppe Costantino (1990). Culturally sensitive psychotherapy for Puerto Rican children and adolescents: A program of treatment outcome research. *Journal of Consulting and Clinical Psychology,* 58 (6): 704–12.

Martinez, Marcos C. (2002). A wilderness therapy program for a diverse group of at risk adolescent boys: Changes in self-esteem and locus of control and their relationship to group affiliation. PsyD diss. California School of Professional Psychology, San Francisco.

Navarro, Ana (1993). Efectividad de las psicoterapias con latinos en los estados unidos: Una revisíon meta-analitíca. *Revista Interamericana de psicología,* 27 (2): 131–46.

Outward Bound U.S.A. (n.d.). Outward Bound then & now. Outward Bound U.S.A., Garrison, NY. Retrieved on April 3, 2006 from http://www.outwardbound.org/about.html.

Romi, Shlomo, and Ezequiel Kohan (2004). Wilderness programs: Principals, possibilities and opportunities for intervention with dropout adolescents. *Child & Youth Care Forum,* 33 (2): 115–36.

Santisteban, Daniel A., J. Douglas Coatsworth, Angel Perez-Vidal, William M. Kurtines, Seth J. Schwartz, Arthur LaPierre, and José Szapocznik (2003). Efficacy of brief strategic family therapy in modifying Hispanic adolescent behavior problems and substance use. *Journal of Family Psychology,* 17 (1): 121–33.

Szapocznik, José, David Santisteban, Arturo Rio, Angel Perez-Vidal, Daniel A. Santisteban, and William M. Kurtines (1989). Family effectiveness training: An intervention to prevent drug abuse and problem behaviors in Hispanic adolescents. *Hispanic Journal of Behavioral Sciences,* 11 (1): 4–27.

Szapocznik, José, Arturo Rio, Edward Murray, Raquel Cohen, Mercedes Scopetta, Ana Rivas-Vazquez, Olga Hervis, Vivian Posada, and William M. Kurtines (1989). Structural family versus psychodynamic child therapy for problematic Hispanic boys. *Journal of Consulting and Clinical Psychology,* 57 (5): 571–78.

Szapocznik, José, and William M. Kurtines (1989). *Breakthroughs in family therapy with drug-abusing and problem youth.* New York: Springer Publishing Company.

Szapocznik, José, William M. Kurtines, Franklin Foote, Angel Perez-Vidal, and Olga Hervis (1986). Conjoint versus one-person family therapy: Further evidence for the effectiveness of conducting family therapy through one person with drug-abusing adolescents. *Journal of Consulting and Clinical Psychology,* 54 (3): 395–97.

Wiist, William H., Russell H. Jackson, and Kenneth W. Jackson (1996). Peer and community leader education to prevent youth violence. *American Journal of Preventive Medicine,* 12 (5): 56–62.

NOTES

[1] More information about Catherine Freer Wilderness Therapy Expeditions can be found at http://www.cfreer.com.

[2] This information was obtained through a conversation with the author's internship supervisor at CFWTE. Please note that all names have been changed to protect the confidentiality of the subjects in this paper's case studies. Concerns for confidentiality similarly prevent this author from disclosing the date or location of conversations with the subjects.

[3] A complete list of search terms used and quality-ratings assigned to various articles may be obtained from the author. The initial search yielded 204 articles. This number was reduced to 14, based on relevancy. Six of the 10 articles are level-1 research, four are level-2, and four are level-3 or level-4. According to Gibbs (2003), level-1 research is the highest quality and level-4 is the lowest quality of evidence-based articles. The author also conducted a search for harmful effects of wilderness therapy. No results were found.

[4] Recidivism is discussed, but not clearly defined by the literature reviewed for this article. The author defines it as delinquent behaviors, low self-esteem, and an external locus of control by the youth participant after the treatment program has been completed. See Gibbs (2003, Chapter 5) for more information on rating research quality.

[5] Bedard scored a 52 on Gibbs's Multiple Evaluations for Treatment Assessment (2003, p. 188).

[6] The terms "most," "moderate," and "weakest" are this author's. Bedard (2004) actually scored these outcome measures using "the number needed to change." Her numbers are 27 (most), 12 (moderate), and 5 (weakest). A more complete discussion about "the number needed to change" can be found in Bedard's dissertation (2004, p. 22).

[7] See note 4.

[8] Martinez scored a 62 on Gibbs's rating scale. This score is considered an "average high score" (Gibbs, 2003, p. 164). In addition, most of Martinez's measurement tools have a reliability rating of 0.8 or above, where 0.7 is considered acceptable (Martinez, 2002).

[9] Seven of these 9 studies qualified as level-1 studies according to Gibbs's criteria (2003). Seven of the studies included random subject assignments into well-defined treatment and control groups. Except for Wiist (1996) and Cheadle (2001), the studies specifically answered the research question they posed.

[10] Most of the tools have an internal consistency reliability estimates had alpha coefficients of 0.7 or above. Each author describes the internal consistency reliability estimate for their measurement tool.

ABOUT THE AUTHOR

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