Journal of Abnonnal Child Psychology, Vol. 23, No. 1, 1995

Ecological Validity and Cultural Sensitivity for Outcome Research: Issues for the Cultural Adaptation and Development of Psychosocial Treatments with Hispanics

Guillermo Bernal,1,2 **Janet Bonilla,1 and Carmen Bellido[1]**

This article has two objectives. The first is to pro vide a culturally sensitive perspective to treatment outcome research as a resource to augment the ecological validity of treatment research. The relationships between external validity, ecological validity, and culturally sensitive research are reviewed. The second objective is to present a preliminary framew<Jrk for culturally sensitive interventions that strengthen ecological validity for treatment outcome research. The framework, consisting of eight dimensions oj treatment interventions (language, persons, metaphors, content, concepts, gOLlls, methods, and context) can serve as a guide for developing culturally sensitive treatments and adapting existing psychosocial treatments to specific ethnic minority groups. Examples of culturally sensitive elements for each dimensio n of the intervention are offered. Although the focus of the article is on Hispanic populations, the framework may be valuable to other ethnic and minority groups.

As a result of recent demographic changes coupled with the demands by ethnic minority groups for fair treatment and eqaal participation in all aspects of a pluralisitic society, a great deal of attention has centered on the problem of developing adequate and appropriate clinical services for ethnic minority populations. The role of culture and e thnicity has been an increasingly common consideration by clinicians froln diverse theoretical orientations (Tharp, 1991). Treatment models tl1 at consider the role of ethnicity, culture, and minority issues have been :formulated (McGoldrick, Pierce & Giordano, 1982). Indeed, some authors have presented frame-

Manuscript received in final form March 5, 1994.
1University of Puerto Rico, Rio Piedras, Puerto Rico.
2Address all correspondence, including requests for reprints, "0 Guillermo Bernal, P.O. Box 23174, University of Puerto Rico Station, San Juan, Puerto Rico 00931.

0091-{)627/95/0200-0067$07.50/D

works for culturally sensitive psychotherapists (LOpez et aI., 1989). Others have presented a spectrum of culturally sensitive research in mental health (Rogler, 1989).

However, treatment research has not kept up with these clinical developments. Most treatment research with adults and children does not permit generalization to ethnic minority populations. The fundamental question of generalizability undergirds treatment research and needs to be considered from the early phases of conceptualization of the problem, design, sample selection, measurement, and data collection, as well as in the development and delivery of the treatment. Further, little work is currently being conducted in the development and testing of culturally informed interventions. Clearly, there is a need for ecologically valid treatments in research.

This article has two aims: (1) to provide a culturally sensitive perspective to treatment outcome research as a resource for augmenting the ecological validity of treatment research and (2) to present a preliminary framework for developing culturally sensitive interventions that contribute to strengthen ecological validity for treatment outcome research with Latinos. While the focus of our discussion will be with a particular ethnic group, Hispanics or Latinos, the issues raised and the framework proposed have relevance to other ethnic and cultural groups.

CULTURAL SENSITMTY AND ECOLOGICAL VALIDITY IN TREATMENT OUTCOME RESEARCH

One of the objectives of treatment outcome research with Hispanics is the evaluation of the efficacy of treatments and the comparison of the effectiveness of treatments across cultural boundaries. According to the cultural universalist hypothesis, treatment should follow the same course for all cultures. Alternatively, the hypothesis of cultural compatibility suggests that treatment is more effective when it is compatible with client cultural patterns (Tharp, 1991). The second approach considers the cultural context in the design of the treatment. Research interventions that take into account the cultural context in which the treatment is evaluated and delivered are referred to as culturally sensitive.

The clinical literature on ethnic minorities in general and Latinos in particular points toward a combined approach integrating the universalist and the compatibility hypotheses (Tharp, 1991). Also, an integration of "emic" (within the culture or particularist) and "-etic" (outside the culture or universalist) perspectives has been proposed (Bravo, Canino, Rubio-Stipec & Woodbury-Farina, 1991; Washington & McLoyd, 1982). The emic

perspective involves the evaluation of the studied phenomena from within the culture and their context (within the culture) aiming to understand their significance and their interrelationship with other intracultural elements. The etic perspective involves the evaluation of the phenomena outside the culture that aims to identify and compare similar phenomena across different cultural contexts. The integration of -emic and etic perspectives recognizes the presence of a unique cultural phenomenon and strives to explore equivalence in comparisons across cultures (Bravo et al., 1991). Such an integrative effort could transcend the dichotomous controversy of universalist versus particularist and focus the discipline in examining how both emic and etic aspects manifest themselves in a given psychological phenomenon, as well as how they may be interrelated.

According to LOpez and colleagues (1989), the integration of emic and etic perspectives is a central aspect in their culturally sensitive research framework. Specifically, a culturally sensitive intervention is related to the "clinician's ability to balance a consideration of universals norms, specific groups norms, and individual norms in (a) differentiating between normal and abnormal behavior, (b) considering etiology factors, and (c) implementation of appropriate interventions" (LOpez et al., 1989, p. 370).

Cultural sensitive research was linked to the issues of *ecological validity* as early as 1977 with the seminal work of Urie Bronfenbrenner (1977). Later, Washington and McLoyd (1982) proposed the need to consider procedures to augment external validity in research involving minorities. Specifically, external validity is thought to be ensured to the extent that cultural, interpretative, population, ecological, and construct validity are considered.

According to Washington and McLoyd (1982) *cultural validity* refers to the methods needed to identify "rules" governing the behaviors of individuals, groups, arid larger systems. *Interpretative validity* is rooted in the notion that the motivations, backgrounds, goals, and procedures for achieving goals of the person or persons under study conditions their actions and thus need to be considered in research. *Ecological validity* is defined as the degree to which there is congruence between the environment as experienced by the subject and the properties of the environment the investigator assumes it has (Bronfenbrenner, 1977). In turn, *population validity* is concerned with the issue of generalization. Can generalizations from the sample be made to the population? Further, can generalizations from the original population contemplated in the study be made to other target populations? Finally, *construct validity* is an integration of ecological, population, interpretative, and cultural validities since the logic of research assumes that the construct in question means what it is supposed to signify.

Ecological validity as used by Bronfenbrenner (1977) is an overarching concept used to describe an ecological approach in research on human development. Washington and McLoyd's (1982) notion of ecological validity is part of the broader concept of external validity and is focused on the problem of research with minorities. These approaches to ecological validity are not limited to the measurement procedures employed in a research study to increase external validity. They go beyond the traditional notion of external validity as a process that allows generalization of assumptions derived from the research situation to other environments. On the one hand, procedures derived from an ecological validity perspective should work to increase external validity. On the other hand, such procedures should contribute to increase the internal validity of a study. Clearly, if ecological validity implies that the research environment is experienced by the client as the investigator assumes it is experienced in the treatment condition, then the process of research entails the integration of subject (client) and investigator (therapist) categories or dimensions about the ecological environment and consequently about the experimental or treatment situation. Therefore, research is a process in which the categories by subjects and investigators are part of the scientific process. The inclusion Qf this shared experience of the research environment is possible when researchers take into consideration the cultural context of a particular group with which the research is conducted. Since culture determines meaning, the cultural context would be the starting point for conceptualizing, developing, and designing treatment studies. Development and adaptation of treatments and data interpretations would stem from such a context.

In treatment research, ecological validity refers to the degree to which the treatment or intervention experienced by the participants in a randomized clinical trial, for example, "has the properties it is supposed or assumed to have by the investigator" (Bronfenbrenner, 1977, p. 516). The movement toward culturally sensitive treatments (Rogler, Malgady, Constantino, & Blumenthal, 1987), psychotherapists (LOpez et al., 1989), culturally compatible interventions (Tharp, 1991), and ethnicity in therapy (McGoldrick et al., 1982) are all attempts to increase the congruence between the client's experience (of his or her cultural or ethnic world into a particular treatment program) and the properties of that treatment assumed by the clinician or investigator. Thus, the ecological validity of a psychotherapy treatment is related to culturally sensitive interventions. Nevertheless, while culturally sensitive procedures are likely to increase the ecological validity of a treatment, such an outcome is not always guaranteed.

There is an important relationship between external validity, ecological validity, and culturally sensitive research. A study that considers the five components of external validity proposed by Washington and McLoyd

(1982) is, in a sense, considering multiple aspects of the cultural context (as experienced by participants and assumed by the researchers). Most treatment outcome research conducted by, for, and with persons of the same cultural group implicitly considers these components of external validity and the study could be considered as ecologically valid. However, in a pluralistic context, what is implicit for one group needs to be made explicit for another. With ethnic minorities, a study that has sound external validity (including interpretative, population, ecological, construct, and cultural validities) will be culturally sensitive.

While the clinical and theoretical literature reviewed (e.g., LOpez et aI., 1989; Rogler, 1989; Sue & Zane, 1987; Tharp, 1991; Tyler, Brome, & Williams, 1991) suggest important cultural differences between ethnic minorities and nonminorities and among minority groups, these differences are seldom considered in the conceptualization, design, sample selection, treatment development, and evaluation of psychotherapy research. Few researchers have outlined specific methods to achieve cultural sensitivity or ecologically valid research. Recently, Rogler (1989) addressed the problem of culturally sensitive research in mental health. Below, we review his suggestions.

Rogler (1989) viewed culturally sensitive research as an ongoing process where the researchers consider the culture of the group throughout the complete research enterprise. First, he proposed that culturally sensitive research in mental health requires an expansion of the pretesting objectives to include a period of direct immersion in the culture of the group being studied. This should occur by means of the traditional ethnographic methods of participant observation, and interviews with knowledgeable informants. The pretesting process may contribute to the investigator's ability to incorporate concepts that are cultural into the study's theoretical formulations.

Second, culturally sensitive research requires that in the collection of field data the investigator make adaptations to the respondent's cultural context. Such adaptations are necessary since cultural factors may influence the psychometric properties of instruments. Therefore, instruments should be revised in order to determine their adequacy for the populations studied. Adaptations and translations of the instruments need to be conducted to achieve or approximate equivalence of meaning between the languages involved in the research. The procedures of adaptation and translation of research instruments should help to integrate cultural meanings with scientific categories. Studies on the reliability of the instruments used in the investigations should contribute to enhancing the cultural sensitivity of the research.

Another aspect of culturally sensitive research implies the analysis of data when differences between cultural groups are being considered. For example, researchers should examine the influence of demographic variables on the dimension of mental health under study for the entire sample and for the specific cultural groups. Specifically, Rogler (1989) suggested the need to control for demographic variables when making intergroup comparisons.

Marin (1990) defined culturally appropriate interventions as strategies for behavioral change meeting three basic criteria: first, that the intervention or treatment be based on cultural values of the group or groups of interest; second, that the strategies that comprise the treatment be consonant with the subjective culture of the particular ethnic group; and third, that the components that are part of the strategies be based on the expectations and behavioral preferences of the ethnic or minority groups.

In sum, culturally sensitive research (Malgady, Rogler, & Constantino, 1990; Rogler, 1989) entails the consideration of the cultural context across several phases of the scientific process. These research phases include pretesting and planning the investigation, translation of instruments, collection of data, and analysis and interpretation of the data.

TOWARD A FRAMEWORK FOR CULTURALLY SENSITIVE INTERVENTIONS WITH HISPANICS

When considering culturally sensitive elements in treatment research, there are several problems that need to be identified at the outset. Among these is the tension between cultural knowledge and stereotyping. At times, in response to limited information by therapists on the cultural background of clients, the problem may be one of either not contemplating cultural information when in fact this may apply (a type II cultural error) or assuming there is a cultural process at work when in fact that is not the case (a type I cultural error, which may lead to stereotyping).

Second, an overemphasis on cultural issues may mask important underlying processes more closely related to treatment outcome. Sue and Zane (1987) offered "credibility" and "giving" as two processes at work with ethnic minorities. In their view, accurate cultural knowledge by the therapist works to increase his or her credibility with a client; this, in turn, is related to treatment effectiveness. These authors noted that, while cultural information is certainly important in treatment, we should not lose sight of process variables. They suggested a balance between process and content.

However, cultural sensitivity itself may be viewed as a continuing process that changes in relation to time and context. In this regard, as previously noted, LOpez et al. (1989) defined cultural sensitivity as a process whereby cultural hypotheses are constantly tested against alternative ones. In their developmental framework, cultural sensitivity entails the therapists' ability to consider (a) -emic versus etic conflicts, (b) normative versus adaptive behaviors, (c) etiological factors, and (d) the appropriateness of specific interventions.

With these caveats in mind, we turn to our preliminary framework designed to achieve cultural sensitivity in treatment research. We approached the problem of cultural sensitivity from a clinical and research perspective. We reviewed the relevant clinical literature during the past 20 years on the treatment of Hispanics (including theoretical articles, case studies, clinical reports, and clinical trials). An analysis of the literature with a focus on cultural sensitivity and ecological valid interventions suggested the basis of the dimensions for the framework. Second, we approached the problem of culturally sensitive treatments having in mind the adaptation or development of treatment manuals. Our interest here is in developing a framework of cultural sensitivity that could be of use to clinical researchers in either developing new or adapting existing treatment manuals to Hispanic populations. Also, as noted earlier, to the extent that culturally sensitive elements are incorporated into a specific treatment of a study, the ecological validity, as well as the overall external validity of the study is strengthened.

Table I presents the dimensions of an intervention and the corresponding culturally sensitive elements necessary for cultural adaptation (or development) of a psychosocial treatment. The left-hand column of the table lists eight major dimensions of treatment interventions. The dimensions are not discrete and in some cases there is considerable overlap. The righthand column presents some of the corresponding culturally sensitive elements for each of the dimensions.

The first dimension considers the *language* of the intervention. Language is often the carrier of the culture. If the interventions are not available in the appropriate language, the treatment may be difficult if not impossible to deliver (Bernal & Flores-Ortiz, 1982). A number of authors have called for language-appropriate interventions (e.g., Dolgin, Salazar, & Cruz, 1987; Laval, Gomez, & Ruiz, 1983) and have considered that knowledge of the language presumes greater familiarity with cultural knowledge (Sue & Zane, 1987). Language is also related to the expression of emotional experiences (Guttfreund, 1990; Marcos, 1976) and needs to be considered in the treatment process. However, language-appropriate interventions are more than the mechanical translation of an intervention or

Table I. Culturally Sensitive Elements and the Dimensions of Treatment for Clinical Research Interventions with Hispanics

Intervention	Culturally sensitive elements
1. Language	Culturally appropriate; culturally syntonic language
2. Persons	Role of ethnic/racial similarities and differences between client and therapist in shaping therapy relationship
3. Metaphors	Symbols and concepts shared with the population; sayings or "dichos" in treatment
4. Content	Cultural knowledge: values, costumes and traditions; uniqueness of groups (social, economic, historical, political)
5. Concepts	Treatment concepts consonant with culture and context: dependence vs. interdependence vs. independence; emic (within culture, particular) over etic (outside culture, universal)
6. Goals	Transmission of positive and adaptive cultural values; support adaptive values from the culture of origin
7. Methods	Development and/or cultural adaptation of treatment methods. Examples: "modeling" to include culturally consonant traditions (e.g., cuento therapy (therapy based on folk tales)); "cultural reframing" of drug abuse as intergenerational cultural conflicts; use of language (formal and informal); cultural hypothesis testing; use of genograms, "cultural migration dialogue"
8. Context	Consideration of changing contexts in assessment during treatment or intervention: acculturative stress, phase of migration; developmental stage; social supports and relationship to country of origin; economic and social context of intervention

the availability of the intervention in the relevant language. Special efforts need to be directed toward ensuring the use of cultural syntonic language of certain treatments, particularly with inner-city, regional, or subcultural groups. Culturally sensitive language may be instrumental in ensuring that the intervention was received as intended.

The dimension of the *persons* of the intervention refers to client and therapist variables, as well as to the relationship between these individuals (we are considering developing a separate relationship dimension). Culturally sensitive elements in this dimension have centered on the role of ethnic and racial similarities and differences between client and therapist. Most of the research in this area has been conducted with African-American and Anglo psychotherapy dyads (e.g., Tyler, Brome, & Williams, 1991). However, beyond the consideration of match between therapists and clients

on race, Jones (1978) has suggested that the direct discussion of race issues (in nonthreatening ways) is basic to effective outcomes. Recently, Tyler, Brome, and Williams (1991) proposed an ethnic validity model for psychotherapy rooted in the need for a model that "permits acceptance in the therapeutic process of different ways of living as valid ... and addresses how to understand and work with similarities and differences in the therapeutic relationship" (p. 24). While many have written about how cultural factors (usually the client's) influence relationships, these authors consider the role of the therapist's own culture. The suggestion of Tyler, Brome, and Williams is for models to consider the therapist's world views as a product of a cultural environment and its relationship to the therapy relationship. From the point of view of developing psychosocial treatment manuals, a question to consider is whether or not the treatment program has the flexibility to consider ethnic and racial similarities and differences in shaping the therapy relationship.

The next dimension in Table I consists of the *metaphors* of the intervention. By metaphors, we refer to the use of symbols and concepts shared by the population in question. In reference to the Latino family, Munoz (1982) highlighted the importance of welcoming clients in such a way that they may feel understood, comfortable, and in familiar surroundings with objects and symbols of their culture in the office or waiting room. Additionally, the intervention itself could include culturally consonant ideas, refrains, and images such as the cuento therapy (Constantino, Malgady, & Rogler, 1986) developed at the Hispanic Research Mental Health Center in the Bronx, New York. "Dichos," that is, sayings or idioms, have been described as a useful means of introducing methapors in the therapy with Latinos. Use of language methaphors were found to reduce resistance, increase motivation, and strengthen the cultural environment for treatment (Zuniga, 1992).

The fourth dimension refers to *content,* which is defined as cultural knowledge. This is, perhaps, the most often cited issue in the field and represents an important challenge for treatment researchers in a multicultural society. How to handle cultural information about values, customs, and traditions in a way that reflects an appreciation of generational differences coupled with a commitment to clinical change is a key question in this dimension of treatment. Some authors (e.g., Bernal, 1982; Bernal & Flores-Ortiz, 1982; Falicov, 1982; Garda-Prieto, 1982; Incl£ln & Hernandez, 1992; Marin & Marin, 1991; & Szapocznik, Santisteban, Kurtines, Hervis, & Spencer, 1982) have suggested a familiarization with basic Hispanic values as a starting point (e.g., collaterality or allocentrism, "simpatia," familialism, "respeto," personal space, time orientation, gender roles, etc.). Others consider that the ethnic and cultural uniqueness of the group needs

to be an integral part of the assessment and treatment planning. Among Latinos there are unique differences as to social, economic, historical, and political fact()rs (Bernal & Enchautegui, in press). Existing treatment manuals can be adapted to incorporate cultural values and validate the uniqueness of the particular ethnic group. As an example, in a family context the task of completing a genogram can be a vehicle to consider changing values and the uniqueness of the group. The discussion of the genogram in a treatment setting can be used to elicit information about the history, social context, and culture of a family (Flores-Ortlz & Bernal, 1989).

The dimension of cultural content, while found extensively in the literature, generally has been approached as an additive process to the problem of appropriate and acceptable treatments. An additive approach misses the fact that psychosocial treatments are themselves a cultural adjustment between the client and society. Therapists are thus mediators in this process of cultural adaptation, although with nonminority persons this issue is seldom directly addressed. The process of cultural adaptation and change is ongoing. The discussion of these issues may seem less important when both therapist and client share the same culture. Cultural content becomes critical when working with ethnic minorities, as a common starting point of shared experiences in a therapeutic context is usually desirable.

The dimension of *concepts* refers to the constructs used within a theoretical psychosocial model. Treatment research is usually embedded in a particular theoretical modeP from which the methods of evaluation and hypothesis testing are an integral part. How the problem is conceptualized within the treatment model and communicated to the client is central to this dimension. The degree to which treatment concepts are consonant with the culture and context are critical. Sue and Zane (1987) suggested that, if the presenting problems are conceptualized in a way inconsistent with the belief system of the clients, the credibility of the therapist will be reduced and thus treatment efficacy may be threatened. Consonance in the concepts of treatment employed by the intervention need to be carefully evaluated in terms of cultural sensitivity. Furthermore, underlying notions of pathology need to be evaluated in relation to emic versus etic tensions. For example, dependence is a negative value in most developed cultures. Thus, symbiosis, fusion, attachment, enmeshment all refer to the same underlying concept, which may take a very different form in cultures that value dependence or interdependence.

Yroo often the underlying notions of concepts employed with ethnic minorities are based on a deficit model. Alternatively, concepts can be based on the assumption that different cultural groups construct their traditions, norms, values, etc., with the objective of facilitating the development of competent and productive members of that cultural group.

The *goals* of treatment represent a sixth dimension of the framework. Clearly, congruence between therapist and client as to the goals of treatment is desirable in most treatment settings. If there are discrepancies between the goals set for treatment in the therapeutic dyad, the credibility of the therapist is likely to diminish (Sue & Zane, 1987). In addition, the dimension of goals dovetails with that of cultural knowledge. It is often desirable to frame goals of treatment within the values, customs, and traditions of the group in question. For example, a number of presenting problems involving the discipline of the children such as hyperactivity or conduct disorders (within a family framework) can be defined as involving issues of respect and disrespect (Bernal & Flores-Ortlz, 1982). "Respeto" is a notion consonant with Latino values. One of the goals of therapy may be to increase "respeto" for everyone in the family. Beyond these considerations, the literature suggests the transmission of positive and adaptive cultural values (Rogler, 1989) and support for the adaptive values from the culture of origin (Bernal, 1982) as important considerations in establishing treatment goals.

Methods or procedures for achieving goals defined in treatment constitutes the next dimension. There are a wide range of suggestions from the literature as to how to incorporate cultural knowledge into treatment procedures (e.g., Acosta, Yamamoto & Evans, 1982; Comas-Dras & Griffith, 1988; McGoldrick et al., 1982). Here we will highlight procedures used in treatment outcome studies with Hispanic children and adolescents.

If the methods, tasks, and procedures for problem solving to be employed by therapists require responses that are not compatible or acceptable to the client's culture (Sue & Zane, 1987), the likelihood of success in treatment will be reduced. A means to ensure cultural compatibility is the inclusion of other family members in treatment, given the importance of the family in Latino cultures. Not surprisingly, family therapy is considered to be a treatment modality compatible with Latino values and is often recommended as the modality of choice for Hispanics (Bernal, 1982; Flores-Ortlz & Bernal, 1989; Falicov, 1982; Garda-Prieto, 1982).

In a study of structural family therapy, Szapocznik and RIO et al. (1989) examined the efficacy of structural family therapy, psychodynamic child therapy, and a recreational control condition with Hispanic children 6 to 12 years of age. Based on prior work, Szapocznik and colleagues reasoned that structural family therapy is well suited for this population because of the match between the values of the structural approach and the value orientations and interpersonal style of preference by Hispanics (Szapocznik et al., 1978; Szapocznik et al., 1990; Szapocznik & Kurtines, 1989). In other words, the values inherent to the approach itself was thought to be congruent with the population in question, and thus culturally sensitive.

However, while the treatment package as a whole in the structural therapy modality may be culturally sensitive, there are specific techniques that utilize culture as a means to engage and treat the specific problems of the Hispanic family. Spiegel (1971) proposed the notion of the therapist as a cultural "broker," a liaison for the family between the two cultures. As an intermediary, the therapist makes a cultural reinterpretation of family conflicts in light of the pressures to acculturate, the crisis of migration, and the loyalty conflicts between the new culture versus the culture of origin.

The structural family treatment modality as designed by Szapocznik and colleagues (Szapocznik & Kurtines, 1989) makes extensive use of the technique of "cultural reframing" (Falicov & Karrer, 1984; Inclan & Heron, 1985). For example, a problem of drug abuse or discipline with one of the children is typically reframed as a conflict between the more traditional Latino values and expectations of the parents' culture versus the more contemporary values and expectations of the children (the host culture). In this manner, intergenerational conflicts are recast as cultural conflicts and the presenting problem is reinterpreted as congruent with the stress of migration and acculturation. The structural therapist, similar to Spiegel's (1971) cultural broker, helps both groups in negotiating new ground rules to support greater system differentiation.

As mentioned earlier, genograms can be a tool to incorporate cultural content in treatment. The use of genograms as a prescribed task for families was incorporated into a treatment manual in an intergenerational family therapy treatment outcome study for drug abuse (Bernal et al., 1987). The genogram was discussed with the family and used as a tool to learn about social, historical, and cultural backgrounds (Flores-Ortiz & Bernal, 1989), as well as for the more conventional family assessment purposes (McGoldrick & Gersen, 1985). Similarly, the technique of "culture-migration dialogue" (Inclan & Hernandez, 1992) is another way of introducing a discussion of migration, acculturation, and the cultural clash experienced by many Hispanics. With either the use of the genogram or the culture migration dialogue, the therapist shifts attention from a discussion of problems to one of history, values, migration, culture, and context.

A different approach to cultural sensitivity was pursued by Constantino, Malgady, and Rogler (1986). These authors examined the effectiveness of a modeling therapy designed to be sensitive to Latino culture. High-risk children were assigned to receive cuento therapy, traditional therapy, or no treatment. The experimental treatment modality consisted of "cuentos" or folktales. The stories were extracted directly from Puerto Rican culture and the treatm~nt was administered by bilingual and bicultural staff members. The results indicated that cuento therapy significantly reduced children's trait anxiety relative to traditional therapy and to the no

treatment group. The findings were found to be stable over a I-year followup. In this treatment outcome study, a modeling procedure was adapted to include culturally consonant traditions, values, metaphors, and images.

The use of language can be an important methodological tool in treatment. With families that have members with differing degrees of fluidity with either Spanish or English, the therapist can choose to speak in one language or another as a means to a particular goal. Similarly, when speaking in Spanish, the use of the familiar or the formal forms of the language can support shaping generational boundaries (Bernal & Flores-Ortiz, 1982). Also, the use of the diminutive form of nouns can serve to encourage discussion of difficult subjects.

Finally, another method to be considered is a variant of the procedures suggested by LOpez et al. (1989), with which we have incorporated steps from the scientific method itself. Thus, a culturally sensitive hypothesis testing method would consist of the following: (a) formulation of a hypothesis as to how the symptom or problem is related to a cultural phenomena; (b) formulation of an alternative hypothesis; (c) developing a specific intervention based on the cultural hypothesis; (d) testing of the intervention in a clinical situation; (e) evaluating the hypothesis vis-a-vis the clinical data; and (d) confirming, disconfirming, or revising the original hypothesis.

Context is the last dimension of the framework. The culturally sensitive element of the context dimension considers such processes as acculturative stress, phases of migration, developmental stages, availability of social supports, and the person's relationship to the country or culture of origin. The social, economic, and political contexts of the intervention need to be considered as well. Similarly to the hypothesis-testing method suggested above, the same procedure can be employed to develop hypotheses that link the symptom or problem to social processes such as acculturative stress, migration, or economic conditions (Bernal, 1988).

Tharp's (1991) review of the literature concerning the contextual nature of treatments for children suggested a departure from individual based treatment models. He noted that "for a therapist facing a client across a cultural chasm, the treatment of first consideration should be community intervention; that of second consideration, network therapy; that of third, family treatment; fourth, group treatment; and last of all, individual treatment" (Tharp, 1991, p. 809).

SUMMARY AND CONCLUSION

We have presented some of the key aspects of ecological validity and cultural sensitivity relevant to treatment outcome research. A culturally sen-

sitive perspective to treatment outcome research serves as a resource for augmenting the ecological validity of treatment research. A preliminary framework consisting of eight dimensions of treatment interventions was presented with the objective of developing culturally sensitive elements for each dimension. The framework can serve as a guide for either developing culturally sensitive treatments or adapting existing psychosocial treatments to specific ethnic minority groups.

However, the framework remains a preliminary one. As such, there are several limitations that need to be considered. For example, the framework does not attempt to clarify differences between psychosocial treatments for Hispanics in their country of origin and Hispanics facing the stressors of migration, refugee status, and acculturation. Thus the migration and acculturation process would appear to contaminate the cultural process. But can the ethnic minority experience of a group, such as Hispanics, be separated from its cultural context? Another limitation is the problem of equivalence between a culturally adapted or sensitized treatment and a conventional intervention. Can the two treatments be considered equivalent in terms of content? The answer, in part, to both of these limitations may be found in an ecological and cultural validity orientation to research. To the extent that there is agreement between the ecology as experienced by the subject and the properties of the environment assumed by the investigator, the criteria for ecological validity have been met.

REFERENCES

Acosta, F. X., Yamamoto, J., & Evans, L. A. (1982). *Effective psychotherapy for low-income and minority patients.* New York: Plenum Press.

Bernal, G. (1982). Cuban families. In M. McGoldrick, J. K. Pearce, & J. Giordano (Eds.), *Ethnicity and family therapy* (pp. 187-207). New York: Guildford Press.

Bernal, G., (1988). Latino families: Toward a progressive family therapy framework. *The Community Psychologist,* 21, 29-31.

Bernal, G. & Enchautegui, N. (in press). Hispanics in community psychology: A review of the literature. *American Journal of Community Psychology.*

Bernal, G., & Flores-Ortiz, Y. (1982). Latino families in therapy: Engagement and evaluation. *Journal of Marital and Family Therapy,* 8, 357-365.

Bernal, G., Flores-Ortiz, Y., Sorensen, J., Miranda, J., Diamond, G., & Alvarez, M. A. (1987). *Intergenerational family therapy for methadone maintenance patients: A treatment outcome study.* Paper presented at the annual meeting of the Society for Psychotherapy Research, VIm, West Germany.

Bravo, M., Canino, G. J., Rubio-Stipec, M., & Woobury-Fariiia, M. (1991). A cross-cultural adaptation of a psychiatric epidemiology instrument: The Diagnostic Interview Schedule Adaptation in Puerto Rico. *Culture, Medicine and Psychiatry,* 15, 1-18.

Bronfenbrenner, *V.* (1977). Toward an experimental ecology of human development. *American Psychologist,* 32, 513-531.

Comas-Dias, L., & Griffith, E. E. H. (1988). *Clinical guidelines in cross-cultural mental health.* New York: Wiley.

Constantino, G., Malgady, R. G., & Rogler, L. H. (1986). Cuento therapy: A culturally sensitive modality for Puerto Rican children. *Journal of Consulting and Clinical Psychology,* 54, 639-645.

Dolgin, D. L., Salazar, A., & Cruz, S. (1987). The Hispanic treatment program: Principles of effective psychotherapy. *Journal of Contemporary Psychotherapy,* 17, 285-299.

Falicov, C. (1982). Mexican American families. In M. McGoldrick, J. K Pearce, & J. Giordano (Eds.), *Ethnicity and family therapy* (pp. 134-163). New York: Guildford Press.

Falicov, C., & Karrer, B. M. (1984). Cultural variations in the family life cycle: The Mexican American family. *International Journal of Family Therapy,* 6, 18-30.

Flores-Ortiz, Y., & Bernal, G. (1989). Contextual family therapy of addiction with Latinos. *Journal of Psychotherapy and the Family,* 6, 123-142.

Garcia-Prieto, N. (1982). Puerto Rican families. In M. McGoldrick, J. K Pearce, & J. Giordano (Eds.), *Ethnicity and family therapy* (pp. 164-186). New York: Guildford Press.

Guttfreund, D. G. (1990). Effects of language usage on the emotional experience of Spanish-English and English-Spanish bilinguals. *Journal of Consulting and Clinical Psychology,* 58, 604-607.

Inclan, J., & Hernandez, M. (1992). Cross-cultural perspectives and codependence: The case of poor Hispanics. *American Journal of Orthopsychiatry,* 62, 245-255.

Inclan, J., & Heron, G. (1985). Ecologically-oriented therapy with Puerto Rican adolescents and their families. In J. T. Gibbs & L. N. Hung (Eds.), *Psychological treatment of minority children and adolescents* (pp. 251-277). San Francisco: Jossey-Bass.

Jones, E. E. (1978). Effects of race on psychotherapy process and outcome: An exploratory investigation. *Psychotherapy: Theory, Research, and Practice,* 15, 226-236.

Laval, R. A, Gomez, E. A, & RÜlz, P. (1983). A language minority: Hispanic Americans and mental health care. *American Journal of Social Psychiatry,* 3, 42-49.

Lopez, S. R., Grover, K P., Holland, D., Johnson, M. J., Kain, C. D., Kanel, K, Mellins, C. A, & Culkin, M. (1989). Development of culturally sensitive psychotherapists. *Professional Psychology: Research and Practice, 20, 369-376.*

Malgady, R. G., Rogler, L. H., & Costantino, G. (1990). Culturally sensitive psychotherapy for Puerto Rican children and adolescents: A program of treatment outcome research. *Journal of Consulting and Clinical Psychology,* 58, 704-712.

Marcos, L. R. (1976). Bilinguals in psychotherapy: Language as an emotional barrier. *American Journal of Psychotherapy, 30, 552-559.*

Marin, G. (1990). *Culturally appropriate interventions in health promotion: Why and how* (Tech. Rep. No.4). San Francisco: University of San Francisco, Social Psychology Laboratory.

Marin, G., & Marin, B. V. (1991). *Research with Hispanic populations.* Newbury Park, CA: Sage.

McGoldrick, M., & Gerson, R. (1985). *Genograms in family assessment.* New York: Norton.

McGoldrick, M., Pierce, J., & Giordano, J. (1982). *Ethnicity and family therapy.* New York: Guildford Press.

Munoz, R. F. (1982). The Spanish speaking consumer and the community mental health center. In E. E. Jones & S. Korchin (Eds.), *Minority mental health* (pp. 362-398). New York: Praeger.

Rogler, L. H. (1989). The meaning of culturally sensitive research in mental health. *American Journal of Psychiatry,* 146, 296-303.

Rogler, L. H., Malgady, R. G., Constantino, G., & Blumenthal, R. (1987). What do culturally sensitive mental health services mean? The case of Hispanics. *American Psychologist, 42,* 565-570.

Sue, S., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy: A critique and reformulation. *American Psychologist,* 42, 37-45.

Spiegel, J. (1971). *Transactions: The interplay between individual, family, and society.* New York: Science House.

Szapocznik, J., Kurtines, W., Santistebar, D. A, & RIO, A T. (1990). Interplay of advances between theory, research, and application in treatment interventions aimed at behavior problem children and adolescents. *Journal of Consulting and Clinical Psychology, 58,* 696-703.

Szapocznik, J., & Kurtines, W. (1989). *Breakthrough in Family Treatment.* New York: Springer.

Szapocznik, J., RIo, A., Murray, E., Cohen, R., Scopetta, M., Rivas-Vasquez, A., Hervis, *a.*, Posada, V., & Kurtines, W. (1989). Structural family versus psychodynamic child therapy for problematic Hispanic boys. *Journal of Consulting and Clinical Psychology,* 57, 169-174.

Szapocznik, J., Santisteban, D., Kurtines, W. M., Hervis, a. E., & Spencer, F. (1982). Life enhancement counseling: A psychosocial model of services for Cuban elders. In E. E. Jones & S. Kovchin (Eds.), *Minority mental health* (pp. 296-330). New York: Praeger.

Szapocznik, J., Scopetta, M. A., Aranalde, M., & Kurtines, W. (1978). Cuban value structure: Treatment implications. *Journal of Consulting and Clinical Psychology,* 46, 961-970.

Tharp, R. G. (1 ~91). Cultural diversity and treatment of children. *Journal of Consulting and Clinical Psychology,* 59, 799-812.

Tyler, F. B., Brame, D. R., & Williams, J. E. (1991). *Ethnic validity, ecology, and psychotherapy: A psychosocial competence model.* New York: Plenum.

Washington, E. D., & McLoyd, V. (1982). The external validity of research involving American minorities. *Human Development,* 25, 324-339.

Zuniga, M. E. (1992). Using metaphors in therapy: Dichos and Latino clients. *Social Work,* 37, 55-60.