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ABSTRACT

Applied psychologists who provide services to nations composed of multiple and widely varied cultural groups face certain ethical dilemmas that would not arise in more homogeneous societies. These ethical dilemmas revolve around the concept of population generalizability, which refers to the applicability of research findings across different populations. In the realm of basic research, population generalizability remains a scientific concern, but in applied psychology it becomes an ethical issue. It is an ethical issue because the effects of a particular service, intervention, or policy cannot be predicted for populations different from the samples that yielded the research findings. Population sensitivity refers to an orientation that seeks to make services, institutions, or policies harmonious with the characteristics and values of diverse populations. Ethical dilemmas related to population sensitivity generally have to do with whether participation in the population-sensitive service entails separation from the mainstream group. A framework is needed to deal with these ethical dilemmas. Such a framework should include: (1) scrutiny of the evidence that justifies application to members of a specific population; (2) an examination of plausible rational justifications; and (3) the design of experimental applications intended to test the hypothesis of population generalizability. (Contains 64 references.) (SLD)

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POPULATION GENERALIZABILITY, CULTURAL SENSITIVITY, AND ETHICAL DILEMMAS

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**Population Generalizability, Cultural Sensitivity,
and Ethical Dilemmas***

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Applied psychologists who provide services in nations composed of multiple and widely varied cultural groups, such as the United States, face certain ethical dilemmas that would not arise in more homogeneous societies. These ethical dilemmas, the focus of this chapter, revolve around the concept of population validity.¹

Population validity refers to the generalizability of research findings across different populations. In this regard it is important to keep in mind that a research finding is an interpretation of data obtained from a sample representing a particular population (Messick, 1975). A measure of a psychological construct may or may not have the same or even similar psychometric properties or patterns of relationship with other variables in different populations (Laosa, 1981b). Thus, an inference may be valid for one population and not for another; an inference is valid for a particular population to the extent that it leads to correct judgments about members of that population (Breland, 1979).

Operationally, the concept has been variously labeled population validity, population generalizability, ecological validity, differential

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validity, population transportability, and population transferability.

Granted that generalizability is an aspect of validity, the term validity conveys additional meanings in the measurement literature; for this reason and because the issue is clearly one of generalizability, Messick (1980, 1987) recommends use of the term population generalizability in preference to the others. The latter term is used generally in this chapter.

Emphasis on generalizability was stimulated in the behavioral and measurement sciences by Campbell and Stanley's (1966) discussion of what they called external validity. Their point was one of methodological rigor: In conducting an experiment, the researcher hopes that the results are broadly representative of different time periods, settings, and groups of people. Attention should be given, therefore, to uncontrolled variables that may pose threats to the representativeness, or generalizability, of the findings.

Fundamentally, population generalizability is a special case of the broader concern in science for replicability--the canon that one investigator's results should be again obtainable independently by another investigator or by the same investigator using a different sample from the same presumed population. Population generalizability is also a special case of construct validity, as noted above, because evidence of generalizability always contributes either to firming up or undercutting construct interpretation (APA, AERA, & NCME, 1985; Messick, 1987).

Statistically, the concept is embodied in moderator variables and person-by-treatment interactions.² Findings involving moderator or interaction effects, or their absence, are important in current practice, policy, theory, and metatheory because often such statistical effects are viewed as the most representative models of reality (Cronbach, 1987; Laosa,

1982a, in press).³ Rooted in a different methodological approach, ethnographic studies (e.g., Cole & Griffin, 1987) yield rich descriptive data that also contribute to our understanding of how populations and contexts interact.

Regardless of discipline or methodology, however, once we accept as plausible a hypothetical model of reality in which interactions may occur between population-specific characteristics and particular stimuli, then the generalizability of treatment effects can never be taken for granted. Neither can it ever be assumed, therefore, in the absence of proper evidence, that the outcome of a particular service, intervention, or policy will be the same in different populations. Before turning to the ethical issues involved, let us examine recent research evidence bearing on the tenability of the model.

RESEARCH EVIDENCE

To illustrate the issues just raised, consider recent examples from the research literature. Specifically, let us look at selected studies based respectively on four different types of research methodology, each addressing a different facet of the problem.

Research on Classroom Processes

The research literature concerning the effects of classroom processes on students' development is not only of interest to applied developmental psychologists, but recently it also has attracted the close attention of policymakers. Roused by the educational excellence movement, policymakers are turning to this literature in their search for ways to improve the U.S.

educational system in relation to those of ascending nations (see, e.g., U.S. Department of Education, 1986).

Research during the past 15 years on the linkages between teachers' behaviors in the classroom and their students' development of academic skills in the elementary grades has produced a small knowledge base concerning the dynamics of classroom processes and how such processes may affect children's learning and development. In their recent review of this literature, Brophy and Good (1986) concluded that even the most widely replicated findings on the relationships between classroom processes and students' educational development must be qualified by references to statistical interactions. Usually, these interactions involve minor elaborations of main trends, but occasionally interactions are more powerful than main effects. Such interactions, some of which appear repeatedly and thus constitute well-established findings, suggest that the effects on children of particular instructional environments vary as a function of the child's characteristics. Some of these characteristics stem from the child's sociocultural background.

A recent study by Wong Fillmore and her colleagues (1985) illustrates the nature of such interactions. It is one of several studies commissioned by the then National Institute of Education to determine, through research, how best to meet the educational needs of children in the United States with limited English-language proficiency. Specifically, the study was designed to discover what aspects of classroom structure, teaching practices, and patterns of language use in the classroom had the strongest impact on the child's English-language development over the course of the school year. The analyses examined the oral English-language development of elementary school children from two different ethnic groups--Chinese and Hispanic.

A main effect in the data showed that children with initially low proficiency in English made large gains in oral language development if they were placed in classrooms in which they had numerous opportunities to interact with native English-speaking peers; such peer interactions appeared to be less influential once the children were further along in their learning of English. Further analyses revealed, however, that these results were true to a much greater extent for Hispanic than for Chinese children. Chinese children whose initial knowledge of English was limited and who were in classes in which there were many opportunities to interact with native English-speaking classmates did not show the kind of improvement in English-language skills found among the Hispanic children in such situations. Chinese children developed better in classrooms where teachers closely supervised the learning activities and kept students on task. Wong Fillmore et al. concluded that "the Chinese children seemed much more directly dependent on their interactions with the teacher than was the case for the Hispanic children" (p. 331). It is as if the Chinese children viewed the adult authority figure as the source of knowledge, whereas the Hispanic children profited from the chance to interact with peers who were good language models. Thus it seems that different kinds of instructional approaches work best with different cultural groups. Had the researchers included only a single ethnic group in their study, or had they aggregated the groups in their analyses, the important statistical interaction--and thus the helpful finding bearing on population generalizability--would have been masked.

Consistent with our concern with generalizability, it should be recalled that broad sociodemographic classifications such as Hispanic or Asian may

each contain various ethnocultural groups (Laosa, 1988) and thus mask significant population diversity. Those familiar with the Hispanic population, for example, know that it is composed of several different ethnic groups, including Mexican Americans (Chicanos), Cuban Americans, Puerto Ricans, and other Spanish-speaking national-origin groups. Although these groups share many characteristics in common, there are also important cultural, historical, and sociodemographic differences, and these may limit the generalizability of research findings. It is therefore disappointing that a detailed ethnic breakdown of the study sample was not reported. This omission does not detract, however, from the study's value in illustrating the concept of population-by-treatment interaction, since cultural differences between Hispanics and Chinese are doubtless much greater on the average than those between detailed ethnic groups within these two broad populations.

Experimental Laboratory Research

Further evidence bearing on the question of population-by-treatment interactions comes from a recent experiment by Tuck (1985) comparing Black and White children's performance under varied task conditions. The study was designed to test the general proposition that an ethnic group's culturally rooted behavior patterns and traditions foster the development of particular response styles in its members, and that such Black-White differences as we observe nationally in scholastic attainment levels (see, e.g., Laosa, 1985) can be explained partly on the basis of differences in the response styles characteristic of the two groups.

Tuck's hypotheses stem from a conceptual framework suggested by Boykin (1983). This conception holds that while the beliefs and values of many Black Americans are shaped primarily by the dominant society, some of their beliefs, values, and behaviors are rooted in a traditional African ethos cultivated among Black Americans. Cultural styles inherent in this ethos are seen as clashing with those of the dominant Euro-American system (see also Shade, 1982). Analogous conceptions have been advanced for other ethnic groups (e.g., Cárdenas & Cárdenas, 1977; Heath, 1983; Laosa, 1977b, 1982b; Philips, 1974).

Tuck's study centered on one of the Black cultural styles discussed by Boykin: psychological verve, defined as "the tendency to attend to several concerns at once and to shift focus among them rather than focus on a single concern or a series of concerns in a sequential fashion; the inclination towards the energetic, the intense, the stimulating and the lively" (Tuck, 1985, p. 20; see also Boykin, 1983). Tuck hypothesized that Black-White differences in performance are a function of task format. She predicted that Blacks, because of their presumed higher psychological verve, would perform better in tasks with a varied format. To test this hypothesis, Tuck evaluated Black and White children's performance in cognitive-perceptual tasks under varied- and nonvaried-format conditions. The tasks were of four types--color matching, schema reproduction, listening, and scanning. Each child was administered 10 exemplars of each task type. Half of the 40 exemplars were presented in a nonvaried format, and the other half in a varied format, as follows. In the nonvaried format condition 5 exemplars of one task type were presented first and were then followed by 5 exemplars of a second type, and so on. In the varied format condition the remaining 20

exemplars were presented in a random sequential order without regard for type. Each child participated in both conditions, in a counterbalanced-order design. Performance level was the number of exemplars performed correctly.

All the children were of low socioeconomic status because, as Tuck reasoned, low-income Blacks, more than those in the middle class, have experienced isolation from mainstream Euro-American society and thus are more likely to maintain "Afrocentric orientations and cultural styles" (p. 44); also, such children are at particularly high risk for school failure. The sample consisted of 120 Black and White fourth and sixth graders.

Of particular interest to us here are the results of an analysis of variance in which Tuck used ethnic group, grade, sex, and format condition as independent factors and performance level as the dependent variable. The ethnic group, grade, and condition main effects were significant, favoring Whites, the higher grade, and the varied format condition. Also significant, however, was the interaction between ethnic group and condition. This interaction revealed that under the nonvaried format condition, Whites outperformed Blacks, whereas under the varied format condition, the two ethnic groups performed at the same level. Confirming Tuck's hypothesis, the results suggest that a varied format facilitates the performance of Blacks, so that in tasks presented in this type of format, Blacks and Whites perform at the same level. The broader significance of Tuck's finding lies in the support it provides for the view that under conditions consistent with their cultural styles, Blacks demonstrate performance levels equal to Whites; and that the lower academic performance of Blacks stems from an incompatibility between Black cultural styles and those styles inherent in the Euro-American schooling system.

The implications of Tuck's finding for the design of instructional methods and curricula are clear. Less obvious perhaps are the implications for assessment. Standardized achievement tests, as Tuck points out, are usually presented under a relatively nonvaried format condition. It therefore seems reasonable to hypothesize, on the basis of Tuck's finding, that under a more varied format condition test scores might reflect with greater accuracy the true ability of higher-verve children.

Research on Families' Ideologies

Complementing the studies demonstrating culture-by-treatment interaction effects, such as those just described, are findings from research focusing on the naturally occurring characteristics of diverse cultural groups. The latter type of research provides additional evidence bearing on population generalizability.

One such study, conducted in Israel by Frankel and Roer-Bornstein (1982), compared the modernization of infant-rearing ideologies of two ethnic communities--Yemenite and Kurdish Jews--by interviewing the grandmother and granddaughter generations. Both communities immigrated to Israel about 30 years ago. In Israel, the families selected for study lived in ethnically homogeneous semicommunal farming villages, which were similar in socioeconomic level and located in a single political district. It was thus possible to compare the changes in two very different cultural traditions that had experienced very similar modern influences.

The results of Frankel and Roer-Bornstein's study showed that tradition interacted with modern influences in promoting a differential receptivity to such influences. This finding demonstrates that different traditional

ideologies may differentially facilitate the assimilation of modern values. The study suggests that parental behaviors reflecting a "modern" psychological image of the child do not seem equally reasonable or comprehensible to different ethnic groups. In the communities studied by Frankel and Roer-Bornstein, many of those child-rearing practices stressed by contemporary developmental psychology (e.g., certain forms of mother-child interaction, approaches to infant cognitive stimulation) appeared more acceptable to Yemenite than to Kurdish mothers. Women of the Yemenite granddaughter generation appeared to have a tradition "that meshes with the behavioral demands of many constructs of modern intervention" (p. 38). In discussing the implications of their findings for policies aimed at "making nontraditional perspectives or ideologies accessible to traditional communities" (p. 37), Frankel and Roer-Bornstein concluded that the design of intervention programs should not necessarily be uniform across different ethnic cultures--that a population's "cultural readiness" to assimilate an extraneous ideology would have to be accommodated by corresponding variations in the design of interventions.

Observational Research on Mother-Child Interactions

Further evidence relevant to population generalizability comes from studies based on direct observations of behaviors within the family, including some of my own research on mother-child interactions. In a series of analyses (Laosa, 1980a, 1981a, 1982b), I compared the teaching strategies of mothers in two distinct U.S. ethnic groups: Chicano (Mexican-American) and non-Hispanic White (Euro-American). These two broad populations are known to differ markedly from one another in average academic achievement and

schooling attainment level, a longstanding and serious problem facing the U.S. educational system (Brown, Rosen, Hill, & Olivas, 1980; Laosa, 1985). A principal aim of this study was to contribute empirical data explaining the nationally observed ethnic-group difference in school performance. In particular, a research objective was to ascertain whether differences exist in the strategies that Chicano and non-Hispanic White mothers use in teaching their own children. In the context of the continuity-discontinuity view of school performance, each sociocultural population is seen as having evolved its own--relatively unique--ways of teaching and learning. To the extent that the teaching or learning processes characteristic of a particular population differ from those of the school classroom, children from that population will experience discontinuity between the home and school environments. From this conceptual perspective, the wider or more abrupt the discontinuity, the greater will be the child's difficulty with school functioning.

Chicano and non-Hispanic White mothers were observed in their respective homes teaching cognitive-perceptual tasks to their own 5-year-old children (Laosa, 1980a, 1981a, 1982b). The families in the samples were selected to represent as closely as possible these two U.S. populations with regard to the distributions of parental schooling level and socioeconomic status. Using the Maternal Teaching Observation Technique (Laosa, 1980b), trained observers recorded the frequency of occurrence of specific categories of teaching behavior.

The data revealed significant ethnic-group differences for several teaching behavior categories. Some teaching strategies occurred much more frequently in one ethnic group than in the other, while the reverse was true

of other teaching strategies. The direction of the differences was in accord with the hypothesis: Compared to the Chicano mothers the non-Hispanic White mothers taught in a style resembling more closely the academic teaching mode one would expect to find in a school classroom. Further, the ethnic-group differences in maternal teaching strategies became nonsignificant when statistically controlled for the mothers' schooling levels (Laosa, 1980a). These findings are harmonious with a continuity-discontinuity explanation of school performance (see Laosa, 1982b).

Two related mechanisms may account for the hypothesized influence of maternal teaching strategies on children's school performance--both may operate concurrently. One mechanism bears on the child's learning strategies; the other involves more broadly communicative traditions or relational styles. Consider that, at least hypothetically, a mother's habitual choice of teaching strategies will influence her child's development of learning strategies--the child's characteristic approaches to learning; that is, the student's preferred or most proficient way of approaching a learning or problem-solving task (Laosa, 1977a, 1982b). As such, the child who experiences greater home-school continuity in teaching strategies is likely to have a decided advantage over children with less continuity--that child may well have learned to master in the home the form and dynamics of teaching and learning processes that have adaptive value in the classroom (Laosa, 1977b, 1979, 1982b).

More broadly, one may speak of differences in communicative traditions. Mastery of the phonological, syntactic, and semantic rules of a language is not sufficient to guarantee appropriate use of language. In order to operate acceptably to others in society, children and adults must know what forms of

verbal and nonverbal behavior are appropriate in which social context. In this view, people in face-to-face interaction become environments for each other--environments that change from moment to moment. With each change, "the role relationships among participants are redistributed to produce differing configurations of concerted action" (Erickson & Schultz, 1977, p. 6). Sociolinguists studying such configurations have found them to be marked by ways of speaking, listening, getting the floor, holding it, and leading and following. Postural and proxemic patterns, too, are instances of culturally conventional signals that show how messages are to be interpreted. Considering that schools are places where students and teachers come together without sharing the same body of implicit assumptions, one wonders about students who are labeled as "inattentive," "unmotivated," "uncooperative," "immature," and perhaps even "academically slow." Do ethnic minority children who "misbehave" repeatedly in school do so mainly out of disrespect for teachers, lack of motivation, low intelligence? Are they often simply confused by the classroom as a social milieu? Are there features of the cognitive and social environment--as that environment is enacted interactionally--that are difficult for children to make sense of when they come from a communicative tradition that differs from that of the teacher (Erickson & Schultz, 1977; Florio, 1976)? A growing body of research (for a recent review see Farr, 1986) suggests that the communicative systems with which people unconsciously operate may conflict with and thus interfere with all teaching and learning processes in the classroom. Put in terms of population generalizability, the teaching strategies that "work" when applied to students from a particular family background may not do as well for other learners.

RESEARCH, APPLICATION, AND ETHICS

As the empirical and theoretical work reviewed in the preceding sections show, important issues are presently being illuminated concerning the intricate linkages among sociocultural, developmental, and intervention variables. Inquiry into these challenging questions is still in its infancy, however, and the area is fertile for further advances.

In the realm of basic psychological research, population generalizability remains a scientific concern. In applied psychology, by contrast, population generalizability emerges as an ethical issue. It is an ethical issue because in the absence of evidence regarding population generalizability, we cannot predict the outcome of a research application to a population different from the one that yielded the research finding, as indeed the studies reviewed above suggest. The outcome of the application might differ from the intended one--it might be ineffective and harmless or possibly harmful in a different population. Thus, an ethical question centers on whether--or under what circumstances--it is within the bounds of professional ethics to devise, recommend, or implement a service or intervention when the scientific basis lending validity to the practical application arises from research on a sociocultural population different from the one of the intended service recipients.

What is the applied psychologist to do in the absence of research evidence on the adequacy or effectiveness that a standard mainstream service may have for members of the client's sociocultural group? Further, what is one to do when such evidence exists, but it suggests that the service of choice for the mainstream might be inappropriate or ineffective if applied to the nonmainstream population? How can one meet the latter population's need

for professional services? Ethically, what should one do in each of these situations? Various solutions, discussed below, have been proposed.

POPULATION SENSITIVITY

The concept of population sensitivity embodies several approaches that have been proposed toward the solution of the aforementioned issues. Population sensitivity refers to an orientation that seeks to make policies, services, or institutions harmonious with the basic values and characteristics of diverse populations.

Emphasis on population sensitivity was stimulated by two historical trends that converged in the 1960s. Together these developments focused public attention on the need for population-sensitive policies and services (Rogler, Malgady, Costantino, & Blumenthal, 1987). First was the civil rights movement, which sought to make the institutional structure of U.S. society more responsive to the needs of Blacks and other minority groups and to increase their participation in a pluralistic democracy. Second were the policies and programs of the War on Poverty, which aimed at reducing social, educational, and economic inequalities and at improving the circumstances of the poor and of the disadvantaged minorities (Laosa, 1984). Services thus began to be extended to formerly ignored groups. These attempts brought in relief deficiencies in the traditional service approaches, as it became increasingly apparent that there were unexpected difficulties in applying such services to these groups. Based largely on the needs and characteristics of the mainstream Euro-American (i.e., White) middle class, the newly extended services often proved to be of questionable effectiveness when applied to persons of other sociocultural backgrounds. Pleas for

population-sensitive services ensued (Laosa, 1983; Rogler et al., 1987). More recently, the rapid growth of ethnocultural diversity in our society has brought a renewed sense of urgency to the concept of population sensitivity.

The operational counterpart of population sensitivity is the concept of matching services to populations. No consensus exists regarding the proper approach for such matching on the basis of social or cultural variables. There are those, on the one hand, who argue that the services for the mainstream can be effectively extended to special populations via techniques designed to facilitate cross-group application. A contrasting view advocates the development of alternative services designed especially to match a particular population's characteristics and problems. Still others take various positions between these two views (cf., Au & Jordan, 1981; Heitler, 1976; Rogler et al., 1987; Szapocznik, Scopetta, & King, 1978). The issue is further complicated by the fact that individuals may shift their respective positions as a function of focal population and type of policy, service, or institution.

In conceptualizing population-sensitive endeavors, it is helpful to use Rogler and associates' (1987) lucid classification of mental health services for Hispanics and think of four different levels of sensitivity, each of which is reflected in a particular type of approach. On the first level of population sensitivity are approaches that aim at increasing a special population's access to a mainstream service or institution. On the next level are approaches that intend to identify those individuals from the special population who are sufficiently acculturated into the mainstream population to be appropriately and effectively served as members of the mainstream. On the third level are approaches that seek to adapt a

mainstream service or institution to fit the characteristics of the special population. Finally, on the fourth level are those approaches that aspire to design a policy, service, or institution specifically tailored to fit a particular population and meet its special needs. Let us illustrate with examples each level of population sensitivity.

Increasing Access

A good example of the first level of population sensitivity comes from the field of mental health. On the basis of both research and clinical practice, mental health practitioners have been aware for some time that persons from the lower socioeconomic strata face various problems of access to conventional psychotherapeutic methods. After reviewing the literature on the problems encountered in providing traditional psychotherapy to this special population, Heitler (1976) concluded that these clients "are the most likely . . . to bring to therapy an array of values, life styles, and expectations of therapy which clash sharply with the working orientation of traditional psychotherapists There is now a substantial body of theory and research evidence to suggest that some mutuality of patient-therapist role expectations . . . is crucial" (p. 340). Some mental health professionals have attempted to bring about this mutuality by socializing the client into the role expectations held for them by the therapist through preparatory interviews or role induction procedures.

Ethnolinguistic minorities constitute another set of populations encountering serious barriers to conventional mental health services. For these populations, too, a variety of attempts have been made in recent years to develop more accessible treatment programs. Many treatment innovators

have focused their primary efforts on hiring bilingual and bicultural staff (Rogler et al., 1987), thus overcoming the most obvious communication barrier that exists between these clients and staff. One of these efforts has been described by Acosta and Cristo (1981). Assuming that Hispanics' needs for mental health services would likely continue to exceed the availability of Spanish-speaking therapists, Acosta and Cristo developed a bilingual interpreter program in a psychiatric clinic located in a large Mexican-American community in Los Angeles. Interpreters were recruited from the same neighborhoods as the clients and trained in language-translation skills, basic concepts of psychotherapy, and the terminology used in clinical settings. Another role created for the interpreters was that of cultural consultants, explaining to English-speaking therapists the meanings conveyed by patients during therapy. Acknowledging the awkwardness and risks inherent in introducing a third party into a psychotherapeutic relationship, Acosta and Cristo (1981) reported that the percentage of Spanish-speaking clients admitted to the clinic more than doubled, evidence of the success of this population-sensitive program in increasing accessibility of services.

A final example of an effort aimed at increasing a special population's access to mainstream resources is the computer education program of the Center for the Development of Non-formal Education in Austin, Texas. This innovative intervention was designed by Vargas-Adams and associates to provide bilingual computer education for children and families in a low-income Mexican-American community (Cole & Griffin, 1987). Situated in a barrio-based "Computer House," it makes available to the children and their parents a series of teaching and learning resources, including Atari 800 and 400 computers, thus helping members of this special population become better

acquainted with technological resources that otherwise would remain largely out of their reach (see Martinez & Mead, 1988).

All such forms of increasing accessibility represent the first level of population sensitivity.

Selecting Services to Fit the Population

Once access is gained, yet another level of concern calls for population sensitivity. The concern now is with the fundamental characteristics of the service or institution, specifically its appropriateness for the service recipient. As Rogler and colleagues (1987) aptly put it, without this level of concern a population could be in the incongruous situation of having greater access to inappropriate services or institutions. Because the goal of population sensitivity is services and institutions that accord with the needs of the individual, on this level the distinctions between group and individual differences may become blurred (cf. Snow, 1986). Indeed, on the second level of population sensitivity the goal is to identify those persons who, because of their similarity to the mainstream population on some relevant individual-difference dimension, could appropriately benefit from a standard service.

From the field of mental health comes the sensible proposal that the choice of services should be based on an objective assessment of the degree of acculturation manifested by the individual client. In preparing for a decision regarding the treatment of choice, the psychologist conducts an assessment of the client's level of acculturation to the mainstream. This dimension reflects how much the ethnic minority individual's personality has incorporated the values, beliefs, and modes of behavior characteristic of the

mainstream culture (Berry, Trimble, & Olmedo, 1986). If the client's score on the acculturation scale is sufficiently high to seem to warrant it, the client is then treated in the same manner as the members of the mainstream (Rogler et al., 1987). In the field of bilingual education the analogous concern is with assessing the language-minority student's English proficiency level in order to make entry/exit decisions regarding eligibility for participation in a special program for such students or assignment to a regular English-language classroom.

In sum, on the second level of population sensitivity, the approach involves distinguishing between those individuals who can be treated as members of the mainstream and those who require special treatment reflecting their relevant population-specific characteristics. It is the latter group that brings out the need for the next level of population sensitivity (Rogler et al., 1987).

Modifying Services to Fit the Population

If services can be selected to fit the characteristics of the individual, so too can services and institutions be adapted to fit the characteristics of the individual. As such, on the third level of population sensitivity the aim is to identify elements of the nonmainstream population's culture and use them to complement or modify a mainstream service or institution. The intention is to accomplish this incorporation without abandoning or compromising the fundamental functions and character of the service or institution (Rogler et al., 1987). Two notable efforts to adapt mainstream services to the modal cultural characteristics of special populations are those originating at the Spanish Family Guidance Clinic in

Miami, Florida, and at the Kamehameha Early Education Program in Honolulu, Hawaii.

Spanish Family Guidance Clinic. The Spanish Family Guidance Clinic is situated in a large Cuban-American community. As with other refugee or émigré populations, special problems in this community include those resulting from the impact of the stresses of acculturation on psychosocial functioning and mental health. The approach employed by Szapocznik and his associates at the Spanish Family Guidance Clinic has been to examine the "characteristics and unique needs of its [Cuban-American] client population, and to establish treatment methods that respect and preserve the cultural characteristics of the . . . clients. . . . by adapting the treatment to the client" (Szapocznik, Scopetta, & King, 1978, p. 113). Through their initial clinical observations and systematic research comparing Cuban and Anglo Americans, Szapocznik and his co-workers identified several relevant dimensions on which these two cultural groups seem to differ (Szapocznik, Kurtines, & Hanna, 1979; Szapocznik, Scopetta, Aranal, & Kurtines, 1978). One dimension appears to be a generally stronger tendency among Cubans for lineality in family relationships. It was also observed that behavior disorders (such as drug abuse and antisocial comportment) in young Cuban-American clients tended to be accompanied by a breakdown of the lineal relational pattern in the family. This breakdown appears to reflect intergenerational differences in acculturation, as the youngsters seemed to be acculturating at a faster rate than their parents. Interestingly, clinical experience suggested that in these cases, the "desired therapeutic outcomes are reached most expeditiously by restoring the lineal-hierarchical relational structure to the family" (Szapocznik, Scopetta, & King, 1978, p.

116). Hence, by incorporating elements of Cuban culture in the therapeutic relationship, the Spanish Family Guidance Clinic's treatment method seeks to restore the family's lineal milieu and reaffirm the parents' authority. Once this is accomplished, the family is then taught the skills necessary to "negotiate" the youngster's differentiation from the family. Szapocznik and colleagues propose that this "culturally sanctioned framework" (p. 117) is a necessary condition for the process of individuation of the Cuban-American youngster to take place.

The cultural dimension is further capitalized upon by incorporating it in the client-therapist relationship. To this end, the culturally prescribed relational style may receive the support of the therapist in various components of the treatment, such as in the manner the therapist relates to the client by recognizing the client's perception of the therapist's role as functioning within a hierarchical relationship. In sum, on the basis of their clinical observations and systematic research, the staff of the Spanish Family Guidance Clinic have elaborated a model of the psychology of the Cuban family and, using this model, have adapted a U.S. mainstream form of family therapy for use as a treatment of choice for Cuban-American clients.

Kamehameha Early Education Program. A particularly well-researched attempt at adapting institutional services to fit the cultural characteristics of a special population is the Kamehameha Early Education Program. The Kamehameha program's primary goal is to discover instructional methods that are effective in teaching Hawaiian children of Polynesian background to read English. As a group, descendants of the Polynesian inhabitants of the Hawaiian Islands, especially those of low socioeconomic status, fare poorly in school, a major problem being with the children's

development of reading skills--schools with large Hawaiian populations typically score within the first or second stanine on standardized tests of reading achievement (Au & Jordan, 1981).

Operating an experimental school (kindergarten through third grade), the Kamehameha staff have developed, after years of sustained research and experimentation, a program that is quite successful in developing Hawaiian children's reading skills (Au & Jordan, 1981). The program attempts to take account of the cultural background and abilities developed by the children in the home and to design an instructional arrangement that is both culturally congruent with home and community practices and manageable in the public schools. A central assumption of their research and development has been that the sources of Hawaiian children's school failure are discrepancies between the styles of learning in the home and those in the school, and that an understanding of these cultural differences may offer insights into ways of creating school environments in which these children can succeed (Au & Jordan, 1981; Cazden, 1981).

The origins of the present Kamehameha program are traceable to the 1960s, when studies conducted by social scientists in Hawaiian-ancestry communities began to field descriptions of the culture and styles of interaction characteristic of this population. This research stimulated questions and hypotheses about discrepancies in styles of learning affecting the development of children from this ethnolinguistic group--about differences between the ways Hawaiian children learn at home or among their peers and the ways in which they are expected to learn in school. It is hypothesized that such differences may prevent or interfere with learning to read because the children find themselves in classroom instructional

situations that are incongruent with the learning strategies already familiar to them; if school learning contexts and classroom teaching strategies could be changed so as to make them more similar to those the children are accustomed to, learning might improve. Building on the findings from these studies, the Kamehameha program was created as a research and development project aimed at finding ways of improving the school performance of educationally at risk Hawaiian children (Au & Jordan, 1981; Cazden, 1981; Jordan, Au, & Joesting, 1983).

The effectiveness of the Kamehameha program is attributed largely to its use of a special type of reading lesson, one that resembles talk-story, a unique speech activity that occurs naturally and frequently in Hawaiian culture. The activity is characterized by overlapping speech and cooperative production of narrative by several speakers (Au & Jordan, 1981). In the reading lesson the teacher therefore allows the children to discuss text ideas using rules for speaking and turn-taking similar to those in talk-story. Au and Jordan emphasize that the reading lesson is not isomorphic with these cultural forms. It does, however, exhibit several similarities to them, and "in responding to these similarities, the children are able to apply their abilities to the task of learning to read to a greater degree than they can in conventional reading lessons" (p. 151).

Significantly, efforts to apply the Kamehameha program to another cultural population have not been successful. To test the generalizability hypothesis, in recent years the Kamehameha team has also operated a research-and-development site on the Navajo reservation of northern Arizona, selected because of the sharp contrasts of the two cultures. With Navajo children, key features of the program have not functioned well. The reason appears to

be differences in the participation structures (i.e., communicative traditions)--modes of organization by which everyday interaction is conducted; the rules governing speaking, attending, and turn-taking among interactional partners--characteristic of the Navajo and Hawaiian cultures. Accordingly, Navajo and Hawaiian versions of the program have emerged with clear differences (Jordan, Tharp, & Vogt, 1985--cited in Tharp, n.d.).

The projects just described that are taking place at the Spanish Family Guidance Clinic and the Kamehameha Early Education Program represent outstanding examples of the third level of population sensitivity--namely, efforts aimed at adapting a mainstream service, institution, or policy in order to accommodate the sociocultural characteristics of a special population, thereby syntonically enhancing its appropriateness and effectiveness for members of that population.

Developing Services to Fit the Population

Whereas the level of population sensitivity just described stresses adapting mainstream services, the fourth and highest level reflects approaches that aim at creating services specifically to meet the special needs of the focal population and to do so in a manner consistent with that population's values, traditions, and other cultural characteristics. Cuento or folktale therapy, a recent creation by Costantino, Malgady, and Rogler (1986), illustrates this level of population sensitivity.

Cuento therapy is a psychotherapeutic technique for psychologically distressed Puerto Rican children. It was designed for second-generation mainland children who may find themselves in conflict as a result of competing demands from their two different cultures. Based on the principles

of social learning theory, the technique takes as its medium the folktales of Puerto Rican culture. The objective of telling folktales to the children in this context is to transmit cultural values, foster pride in the Puerto Rican cultural heritage, and reinforce adaptive behavior. Because the folktales convey a message or a moral to be emulated, folktale characters are presented with therapeutic intent as models of adaptive emotional and behavioral functioning within the Puerto Rican and U.S. mainstream cultures. By presenting culturally familiar characters of the same ethnicity as the children, the folktales are intended to model functionally adaptive behaviors. To conduct the therapy, a bilingual and bicultural therapist reads the folktales in both English and Spanish to the children and then leads a group discussion of the meaning or moral of the story, emphasizing the "good" and "bad" behaviors of the characters. In the next step of the intervention, the group participants role-play the various characters in the story. This activity is videotaped, and subsequently the children view themselves on tape and discuss the role-playing activities with the therapist in relation to their own personal problems. The therapist then proposes new scenarios for role playing, and the children act out solutions to problems presented in the scenarios while the therapist verbally reinforces adaptive behaviors and corrects maladaptive ones. Recent evaluation research by Costantino et al. (1986) suggests that for Puerto Rican children, this technique is more effective than conventional group therapy. Cuento therapy, then, illustrates the fourth and highest level of population sensitivity--a service that is structured in the client's rather than in the professional's sociocultural background.

WEIGHING THE RISKS AND BENEFITS

Few would argue against recognizing and being sensitive to the client's population-derived individuality. On the other hand, population-sensitive practices are not necessarily free of risk.

An unintended outcome of a population-sensitive service or policy may be differential expectations. In order to adapt services, classifications of individuals often must be made. But in some contexts, particularly in institutional settings, classification can have undesirable consequences. When an organization is required to "process" a large number of people, for example, classification can become functional for bureaucratic purposes rather than serve its original intent (Doyle, 1985).

Another potential risk involved in the provision of population-sensitive services may be differential quality. Consider, for example, attempts to adapt instructional services in schools. Differentiation of instruction may engender fundamental differences in curriculum. These differences may occur both in the amount that is covered and the fundamental character of the material covered. Given the contingencies of time and resources in schools, population-sensitive instruction may restrict the special population to a narrow band of the curriculum (Doyle, 1985).

Yet another possible, undesigned consequence of a population-sensitive approach may be an undue constriction of focus. That is to say, the public's or the professionals' attention may become confined to part of the special population's range of needs and characteristics--to the exclusion of other, perhaps equally relevant, variables for that population. On this point, we are reminded of Good and Stipeck's (1983) discussion of the pros and cons of adaptive instruction, in which they expressed fear that an undue emphasis on

a single dimension (e.g., learning style) can lead to neglecting other important factors in learning.

It is ironic that dilemmas of stereotyping or of misjudging the complexity of problems can emerge from population-sensitive services, which themselves arose in response to negative stereotypes and simplistic assumptions. Those who favor population-sensitive approaches argue, however, that there are ways of designing such services so as to avoid or minimize risks (e.g., Trueba, 1988; Weisner, Gallimore, & Jordan, 1988). Certainly, perils attend whenever analyses that hold at the group level are applied indiscriminately to the individuals in the group. This is of course as true for the mainstream as for nonmainstream populations, and it is just as serious a generalizability problem as that of generalizing across populations.

Given that population-sensitive practices are not necessarily free of risk to the individuals being served, evaluations of the applied psychologist's professional conduct should incorporate the following questions: (a) In deciding upon the service to be rendered, were the expected benefits properly weighed against the potential risks? (b) Was the service-receiver made properly aware of any known potential risks or side effects? (c) Was the service-receiver included as a participant in the decision-making process leading to the practical application? (d) Was there a mechanism adopted for continuously monitoring the service or policy for unanticipated undesirable consequences?

As the discussion thus far indicates, in moving from scientific research to applied practice the central question shifts from "How can the service, institution, or policy be made more accessible or adaptable to the special

population?" (or "How can the individual's needs be met in a population-sensitive manner?") to "When is a population-sensitive approach necessary, and what are its consequences?" Both sets of questions are important for the development of knowledge about population-sensitive approaches, but the latter set further uncovers a particularly heavy ethical burden for the applied professional.

SEPARATION AND EQUALITY

Related to the issue of potential risk is an additional set of difficult ethical problems, which depend more broadly on societal questions of separation and equality. If alternative services are developed for special populations, then these populations will be separated, at least to some degree, from the mainstream. Can uniform standards of quality be formulated between the mainstream services and the population-sensitive services? If such standards of quality are formulated, are they, or can they be, uniformly enforced?

Aside from whether the particular population-sensitive approach involves separation and thus some degree of segregation during the course of the service, will a further social distancing (in the society at large) between the nonmainstream and mainstream populations be among the effects of the population-sensitive service or policy? Is such distance a valued or desirable state of affairs (other things being equal)? If there were disagreement on this question, who would decide whether to make the population-sensitive service an available option?

One of the underlying currents in these tensions and indeed in the very concept of population sensitivity is the age-old philosophic problem of the

relation between the universal and the particular. This is an intellectual issue, certainly, but one that ultimately finds expression in the political arena. It is helpful to keep in mind the three basic units of a social entity: the society--that is, the structure and functions of its human compositions; the group, namely a coherent subgroup with identifying characteristics by objective criteria and speaking with a common voice on some issues; and the individual. It is the "jostling of interests of the three units [that] forms the stuff of politics" (Holmes, 1988, p. 238). People differ as to the priority they accord to the three units, and this difference varies with the decision to be made. As an extant or proposed policy or practice may be, and in any case, is believed by some to be supportive and by others prejudicial to the larger society or some of its groups, societal conflict is at hand. Much of this conflict results from "competing claims for sensitivity to alleged common characteristics of the larger society, to the desires of coherent groups, and to the asserted 'rights' of individuals" (Holmes, 1988, p. 238).

Embedded as each individual is in his or her own particular sociocultural context, applied psychologists cannot escape these conflicts (Fisher & Tryon, 1988; Laosa, 1983; Messick, 1980, 1986; Sigel, 1983). A heavy ethical burden thereby falls on the applied psychologist.

These ethical dilemmas are reflected in the apparent ambivalence toward ethnic and racial diversity evident in U.S. public policies. In effect, the government's role in ethnicity has oscillated between "color consciousness" and "color blindness." We have seen the nation's dominant orientation shift from a color-conscious approach to policy, as reflected in the laws enacted in southern states in the 1830s prohibiting literacy instruction of Blacks

(Bremner, 1970) and the practice in the southwest until more recently prohibiting Mexican-American children from using their native language in schools under penalty of punishment (Laosa, 1984), to the color-blind orientation evident in the Civil Rights Act of 1964. The nation then shifted again to a color-conscious philosophy as expressed in affirmative action policies in employment and the requirements for bilingual education in public elementary and secondary schools (Glazer, 1982; Laosa, 1984; Takaki, 1982), and back again to the present color-blind course reflected in the retreat of the federal government from involvement in civil rights issues and also evident in the English-language-only movement. The color-blind society, which places a premium on individual effort, right, responsibility, and reward, seems inextricably entwined with the color-conscious society, which sets the individual in the context of the group for the purpose of maximizing equity in the "allotment of societal shares" (Van Horne, 1982, p. ix). Those who favor group entitlement (e.g., Takaki, 1982) argue that such entitlement serves to increase the chances of the individuals composing the group to win for themselves the shares they might otherwise have been unable to appropriate, given a range of disadvantages--race, language, poor education, unfamiliarity with certain institutional social norms--"in open brute competition of individuals qua individuals" (Van Horne, 1982, p. ix). Others ask whether a color-conscious public policy runs a terribly high risk of inequity and injustice to the individual qua individual insofar as group entitlement supersedes individual rights (e.g., Glazer, 1982, 1983). Implicit in the latter question is the presumption that the risk of inequity and injustice of a color-conscious public policy is greater than that of a color-blind public policy (Van Horne, 1982). Often, both sides of the debate

seem to ascribe moral superiority to their respective positions. It is difficult to ignore, however, that color-conscious public policies created many of the present social inequalities that color-blind public policies allow to persist. There is a compelling irony in this history. Van Horne (1982, p. x) has put it well: "Color-conscious public policies gave rise to the demands for color-blind ones, which in turn have given rise to a new demand for color-conscious ones."

SUMMARY AND CONCLUSIONS

Applied psychologists in nations comprising diverse sociocultural groups, such as the United States, face special ethical dilemmas. These ethical issues revolve around the concept of population generalizability, which refers to the applicability of research findings across different populations. Important empirical and theoretical advances relevant to this concept are being made in various disciplines. The emerging evidence increasingly supports a general model of reality in which interactions may occur between population-specific characteristics and particular stimuli. Accepting this model we can never take for granted, in the absence of proper generalizability evidence, that the impact or outcome of a particular service, institution, or policy will be the same for different populations.

In the realm of basic research, population generalizability remains a scientific concern, whereas in applied psychology it becomes an ethical issue. It is an ethical issue because we cannot predict the effects of a particular service, intervention, or policy on populations different from the samples that yielded the research findings. The outcome of the application might differ from the intended one. An ethical question, therefore, is

whether--or under what circumstances--it is within the bounds of professional ethics to prescribe or recommend a service or intervention for members of a population on which no relevant research evidence is available.

Population sensitivity refers to an orientation that seeks to make services, institutions, or policies harmonious with the basic values, needs, and characteristics of diverse populations. Population-sensitive efforts may occur on four levels (Rogler et al., 1987): On the first level are attempts to increase a nonmainstream population's access to a mainstream service or institution--usually by adding a complementary feature to the standard service or institution. On the next level of population sensitivity are approaches that intend to identify those individuals from a nonmainstream population who are sufficiently acculturated to be served as members of the mainstream. The third level reflects efforts to adapt a mainstream service to a nonmainstream population. On the fourth and highest level are services especially designed for a particular population.

Although few people would argue against recognizing and being sensitive to the client's population-derived individuality, population-sensitive services are not necessarily free of risk. Possible unintended consequences include different expectations according to group membership and different quality of service. On the other hand, advocates of population-sensitive approaches contend that there are ways of designing such services so as to avoid or minimize these risks.

Because potential risks may be involved in population-sensitive services, the following questions should be incorporated in evaluating the applied psychologist's professional conduct: (a) In deciding upon the service, were the expected benefits carefully weighed against the potential

risks? (b) Was the service-receiver properly informed of any known potential risks or side effects? (c) Was the service-receiver included as an active participant in the decision-making process leading to the practical application? (d) Was a mechanism adopted for continuously monitoring for unintended consequences?

Related to issues of risk are ethical dilemmas that pertain more broadly to societal questions of separation and equality. Will participation in a population-sensitive service entail separation from the mainstream group? Can uniform standards of quality be formulated between the population-sensitive services and the mainstream services? If such standards are formulated, are they, or can they be, uniformly enforced? Aside from whether population-sensitive services may involve separation and therefore some segregation during the service, additional questions arise: Will a population-sensitive approach to services lead to a further distancing in the society at large between nonmainstream populations and the mainstream? Is such distancing desirable (all else equal)? Who decides whether to make population-sensitive services an available option?

These ethical dilemmas are reflected in the apparent ambivalence toward ethnic and racial diversity evident in U.S. public policies. The government's dominant orientation has shifted back and forth between a "color conscious" and a "color blind" role. Much of the conflict arises from competing claims between sensitivity to alleged common characteristics of the larger society, to the needs and desires of coherent groups, and to the asserted "rights" of individuals (Holmes, 1988). Embedded in his or her own particular sociocultural background, the applied psychologist cannot escape

these conflicts. This introduces a sensitive ethical task into the latter's professional role.

The dearth of research evidence pertaining to population generalizability adds considerably to the ethical burden of the applied psychologist. Given the emerging evidence on the perils involved in generalizing research findings across populations, what is the applied psychologist to do in the absence of scientific information pertaining specifically to the client's sociocultural background? Is it preferable in such circumstances to abstain from intervention in order to avoid potential or unknown risks? Should one treat the client in the same manner as one would someone from a population about which there are relevant data--and hope that the outcome will be the same in both populations? How can one meet the client's needs for professional services? How can the level of decision-making in such cases be improved? Ethically, what should one do in each of these situations?

With the growing sociocultural diversity in this society, the knotty ethical concerns raised in this chapter are bound to arise with increasing frequency. A framework for dealing with these pressing issues is therefore needed. This nascent framework, presently sketched only in broad outline, should be one in which these ethical dilemmas are dealt with in the context of an ongoing interplay between research and application. Specifically, the framework should include three basic elements: (a) a scrutiny of the empirical evidence that justifies a particular application to members of a specific population; but, in the absence of this evidential basis, (b) an examination of plausible rational justifications, and (c) the design of

experimental applications intended to test the hypothesis of population generalizability through evaluation research.

FOOTNOTES

¹Although the point of reference in this chapter is applied developmental psychology, the issues also apply to other psychological specialties and other fields as well, including, of course, education, psychiatry, and social service, and they apply to both professional practice and policymaking.

²The term treatment is used in the very general sense that it conveys in experimental or quasi-experimental research and not necessarily in its medical sense.

³Basically, studies of these topics compare regression slopes. With criterion \underline{C} , predictor \underline{X} , and groups of people defined on some basis, the \underline{C} on \underline{X} regression can be evaluated in each group. The hypothesized effect may be represented also by analyzing all cases together in a regression equation with three predictors--the original predictor, the grouping variable, and a product term, which represents the interaction. Various tests of significance for such models have been proposed, and they differ in statistical power (Gronbach, 1987). Another approach to representing mathematically the concept of population generalizability is through structural equation procedures, such as those advanced by Jöreskog (see Hayduk, 1987). Degree of generalizability is determined by simultaneously testing the fit of a hypothetical model to two or more groups.

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