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ETHICAL ISSUES IN CROSS-CULTURAL PSYCHOLOGY

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Cross-cultural psychology is the branch of psychology that attempts to test the boundaries of knowledge about human behavior by comparing it in two or more cultures. Cross-cultural psychology is a research method, a statement of scientific philosophy, and an attitude that blends inquisitive critical thinking with curiosity and interest in culture. As such, cross-cultural psychology can be an exciting and motivating adventure; but it can also be one that presents the researcher with a number of significant ethical issues and practical challenges.

In this chapter, we discuss some key ethical issues, dilemmas, and challenges associated with conducting cross-cultural research. We organize our discussion around four sections: the design of cross-cultural studies, sampling, sensitive topics, and dealing with data and the interpretation of findings. Many of the issues and challenges that crosscultural researchers are confronted with are, in actuality, quite similar to those we are faced with when conducting monocultural research. Many ethical considerations that all researchers must make—regardless of whether they are conducting a multinational study involving 30 countries and 50 languages or a simple study using a convenience sample of American college students—are somewhat universal in nature. Thus, we refer interested readers to the American Psychological Association's current guidelines on Principle Ethics (www.apa.org/ethics/code2002.html# general), which outlines five ethical principles for the conduct of

psychologists: beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity. Moreover, these issues are discussed in depth elsewhere in this volume (Chapter 8, this volume). Thus, instead of reiterating many of the same points made elsewhere by others, we strive to discuss here ethical issues unique to cross-cultural research that may not be covered elsewhere, all the while acknowledging that many of the same principles and guidelines discussed elsewhere are applicable here as well. As there are only very few resources on this topic, we consider our work a living document, the start and definitely not the end of a dialogue, on this issue.

Ethical Issues in the Design of Cross-Cultural Research

As with all properly structured and internally reliable research, issues related to design are fundamental and must be considered before contact is initiated with human participants and data are collected. One of the biggest ethical dilemmas facing cross-cultural researchers today is the potential for the findings from their studies to be used to vindicate powerful stereotypes about cultural groups. In our view, vindication is quite different from testing the accuracy of stereotypes. The latter involves researchers' conscious knowledge of stereotypes and their efforts to test their validity and boundaries; presumably such conscious knowledge would also inform researchers of the need to be aware of their potential influence on the process of research. Vindication refers to researchers' ignorance of such stereotypes, and thus their potential lack of awareness of how these stereotypes may affect their decisions about research unconsciously. Thus, it is incumbent on researchers to understand how this can be the case, and to use research designs that can minimize this possibility. We begin an exploration of these issues by discussing the limitations related to interpretations from cross-cultural comparisons.

POTENTIAL DANGERS OF CROSS-CULTURAL RESEARCH

Cross-cultural research is comparative, that is, it requires the collection of data from members of two or more cultures and the comparison of their data. One of the most fundamental issues cross-cultural researchers face, therefore, concerns their operationalization of culture. A perusal of the literature would show very quickly that there is a great diversity in these operationalizations among researchers. Many, for instance, operationalize culture by country; others use race, ethnicity, sexual orientation, or disabilities to operationalize culture.

Researchers should be aware that their choice of operationalization of culture in comparative research may have important consequences, and may be associated with possible ethical dilemmas. For example, when making decisions concerning how to operationalize cultural groups, researchers often believe that differences exist between them (which is why they are conducting the study in the first place), and conduct their studies to demonstrate that those differences actually do exist. Of course, one of the major goals of cross-cultural comparison is to examine whether or not such differences exist so that the boundaries of knowledge can be tested and elucidated. One consequence of this process, however, is those very differences that are documented can be used to help perpetuate stereotypes of differences by consumers of that research. It is fairly easy, for example, to take research findings documenting differences between Americans and South Koreans, or European Americans and African Americans, and to make statements that overgeneralize those findings to all members of those groups, essentially pigeonholing individuals into the social categories and applying those findings to them. That is, cross-cultural research (or

more precisely, the incorrect application and interpretation of cross-cultural research) can be used to ignore the large degree of individual differences that exist in human behavior, and cross-cultural researchers need to be aware of this potential when designing their studies.

For instance, Iwata and Higuchi (2000) compared Japanese and Americans using the State-Trait Anxiety Inventory (STAI) and reported that Japanese were less likely to report positive feelings, and more likely to report higher state and trait anxiety, than Americans. They wrote,

In traditional Japan, a typical collectivistic society, individual psychological wellbeing is subordinate to the well-being of the group; that is, maintenance of social harmony is one of the most important values (Iwata et al., 1994). The healthy collectivist self is characterized by compliance, nurturance, interdependence, and inhibited hedonism (P. J. Watson, Sherbak, & Morris, 1998). The inhibition of positive affect seems to represent a moral distinction and reflect socially desirable behavior in Japan (Iwata et al., 1995). For this reason, the Japanese are taught from childhood to understate their own virtues and avoid behaving assertively (Iwata et al., 1994). Because of this socialization, the Japanese seem less likely to generate positive feelings and more likely to inhibit the expression of positive feelings [italics added]. (Iwata & Higuchi, 2000, p. 58)

Unfortunately, there are many assumptions that underlie this interpretation of the data, none of which were empirically linked to the differences. These include the ideas that (a) Japan is a collectivistic society; (b) individual psychological well-being is subordinate to the well-being of the group; (c) maintenance of social harmony is one of the most important values; (d) Japanese selves are characterized by compliance, nurturance, interdependence, and inhibited hedonism; (e) the inhibition of positive affect represents a moral distinction and is socially desirable; (f) the Japanese underestimate their own virtues; and (g) the Japanese avoid behaving assertively. Based on this simple, two-country comparison, however, it is easy to generate such interpretations, and for them to be used to justify stereotypes of cultural differences that may not be true (Matsumoto, 2002).

The findings from cross-cultural comparisons can also be used in a negative way to oppress members of certain groups. If we conducted a study about cognitive ability and found significant differences in test scores for Sunni and Shiite populationswhat would the implications of our findings be? Is it possible that we would add to ethnocentric and/or stereotypic beliefs? Certainly, similar findings concerning African American differences in IQ have spurred a great debate on such issues in the past 40 years (Jacoby, Glauberman, & Herrnstein, 1995; Jensen, 1969). Researchers, thus, need to be aware that findings could be used in these ways and have the obligation of taking active steps to avoid misuse of their findings. This starts with the tempered and nuanced interpretation of their findings in their own writings, incorporating information not only about between- but also about within-group differences in their data (e.g., through the use of appropriate effects size statistics and interpreting data in relation to these statistics) (Matsumoto, Grissom, & Dinnel, 2001; Matsumoto, Kim, Grissom, & Dinnel, in press). This obligation also extends to correcting misinterpretations of one's findings by other researchers who cite one's research.

LIMITATIONS OF CROSS-CULTURAL COMPARISONS

Cross-cultural comparisons that document the existence of differences between groups constitute the core of the majority of cross-cultural psychological research. These studies are methodologically quasiexperimental in which cultural group is the

independent variable and psychological variables are dependent variables. As mentioned above, most often the cultural groups are national groups (i.e., countries), although ethnic, language, and racial groupings have also been studied. Also, as mentioned above, they are important because they test the boundaries of the traditional American monocultural research of the past.

One of the limitations of these types of comparisons, however, is that they do not allow for empirically justified interpretations about the source of group differences. When group differences have been found, researchers have typically concluded that those differences have a cultural, racial, or ethnic source, when in fact the mere documentation of between-group differences does not justify such interpretations. There are many ways in which two or more countries, ethnic groups, or racial groups may differ. Some of these ways are cultural, and some are not. The problem in inferences occurs when researchers attribute the source of group differences to culture without being empirically justified in doing so. And even if the source of observed differences is indeed culture, it is not exactly clear what cultural variables produce the differences and why. Campbell (1961) referred to this type of error of interpretation in inference as the ecological fallacy, and in the case of cross-cultural studies, this is known as the cultural attribution fallacy-the inference that something "cultural" about the groups being compared produced the observed differences when there is no empirical justification for this inference (Matsumoto & Yoo, 2006). This limitation exists partly because of the ways cultures are sampled (country, ethnic, or racial groups) and partly because many cross-cultural studies involve comparisons of only two or a small handful of groups. The groupings used, however, are not necessarily cultural. The resulting cultural attribution fallacy does, undoubtedly, lead to findings that can be considered stereotypical.

For example, in the Iwata and Higuchi (2000) studies described above, none of the

assumptions that underlie their interpretations of the findings were actually measured and empirically linked to their findings. Part of this limitation starts with the recognition that the differences researchers observe in cross-national, racial, or ethnic group comparisons are "country," "racial," or "ethnic group" differences rather than "cultural" differences per se. That is, country, race, and ethnicity are not culture. And we believe that interpretations of differences from cross-country, racial, or ethnic group comparisons without an incorporation of culture are doomed to be based on stereotypes, in which country, racial, or ethnic group differences are merely interpreted to have occurred "because of" some kind of stereotypic differences between the groups. This is unfortunate, because one of the goals of such research should be the elucidation of those stereotypes—where they are true, where they are not, and their limitations in understanding human behavior. Stereotypes are not inherently bad; but when cultures are reduced to stereotypes and these stereotypes are inflexibly used as a basis to interpret group differences without empirical justification, this is clearly an extremely limited way of doing research and understanding the relationship between culture and psychological processes. Yet the way we do cross-cultural research may, in fact, be facilitating these very limited ways.

DEFINING CULTURE

One of the reasons why stereotypic interpretations of the findings from crosscultural research are easy is because of the limitations inherent in the ways in which cross-cultural researchers operationalize culture. As mentioned above, researchers typically operationalize culture according to nationality, race, ethnicity, or some other social categories. These social groups may indeed be associated with cultural differences, but they beg the question of exactly what is culture in the first place.

In our work, we define culture as a unique meaning and information system

that is shared by a group and transmitted across generations, and that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life (Matsumoto, 2007; Matsumoto & Juang, 2007). This definition is important because it allows us to go beyond the mere documentation of differences between countries, racial or ethnic groups, and other social categories, and to search for the differences in the meaning and information systems of these groups that contribute to the observed differences. In this way, research can be designed to isolate the source of country, racial, or ethnic group differences in cultural variables, thus reducing the chance that such findings be used to perpetuate stereotypes. In contemporary cross-cultural psychology, these are known as unpackaging studies.

UNPACKAGING STUDIES

Unpackaging studies are extensions of basic cross-cultural comparisons but that include the measurement of a variable that assesses the active cultural ingredients that are thought to produce the differences on the variable(s) being compared across cultures. That is, in unpackaging studies, culture as an unspecified variable is replaced by more specific variables to truly explain cultural differences. These variables are called context variables and should be actually measured in the study to examine the degree to which they account for cultural differences. The underlying thought to these studies is that cultures are like onions, where layer after layer needs to be peeled off until nothing is left. Poortinga, Van de Vijver, Joe, and van de Koppel (1987) expressed the view this way:

In our approach culture is a summary label, a catchword for all kinds of behavior differences between cultural groups, but within itself, of virtually no explanatory value. Ascribing intergroup differences in behavior, e.g., in test performance, to culture does not shed much light on the nature of these differences. It is one of the main tasks of crosscultural psychology to peel off crosscultural differences, i.e., to explain these differences in terms of specific antecedent variables, until in the end they have disappeared and with them the variable culture. In our approach culture is taken as a concept without a core. From a methodological point of view, culture can be considered as an immense set of often loosely interrelated independent variables. (p. 22)

When measured on the individual level, researchers then examine the degree to which the context variables statistically account for the differences in the comparison, typically by mediation or covariance analyses (Baron & Kenny, 1986; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). If they do, then researchers are empirically justified in claiming that that specific aspect of culture, that is that context variable, was linked to the differences observed. If they do not, then researchers know that that specific context variable did not produce the observed differences. In either case, researchers are empirically justified in making claims about which aspects of culture are related to the variables of interest.

A number of different types of variables can be used as context variables, and unpackaging studies can be conducted in a number of different ways. In one of the first unpackaging studies (Singelis, Bond, Sharkey, & Lai, 1999), for example, country differences in self-construals unpacked country differences in embarrassability; that is, because self-construals can be considered a cultural variable, the findings allowed for an interpretation that group differences in embarrassability was empirically linked to cultural differences in selfconstruals. There are other research designs that allow for the empirical linking of the active cultural ingredients that produce group differences with those differences,

such as experiments and multilevel analyses. One important type of research in this genre, for instance, is studies that prime participants to behave in individualistic or collectivistic ways (Hong, Morris, Chiu, & Benet-Martinez, 2000), and show differences in the same individuals primed differently. Space limitations prohibit us from describing all these more fully here; interested readers are referred to other sources for detailed accounts of them (Matsumoto & Yoo, 2006; Van de Vijver & Matsumoto, in press).

ETHICAL ISSUES REGARDING THEORIES AND HYPOTHESES TO BE TESTED

One issue that cross-cultural researchers need to face is the question of whether or not their research question is worthy enough of being studied in the first place. Just because a question can be asked does not necessarily mean that it should be asked. An excellent example of this can be found in the notorious Tuskegee experiment on the disease course of untreated syphilis. Surely medical science could have done without the information gained in that "investigation" (especially since a cure for the disease was discovered before the completion of the study), not to mention the ethical misconduct of having a vulnerable population unwittingly involved in the experiment. It is also necessary to consider if the suffering involved is worth the potential knowledge. For example, even though the U.S. Army might be curious to understand how their soldiers react to feelings regarding their own mortality by designing a study that actually *evokes* these intense emotions in human participants-they might have to leave this question unanswered. The diligent researcher, however, will most likely try to operationalize their variable of interest. For example, the Army could consider using the experience of a soldier's first parachute jump, or some other naturally occurring experience (if one happens to be, in this example, a soldier in the Army). It is reasonable that most soldiers jumping out of a plane for the first time are experiencing some form of fear that is similar to a fear of death—although the ethical difference is that they are jumping out of the plane by *choice* and not by coercion.

ECOLOGICAL- VERSUS INDIVIDUAL-LEVEL ANALYSES

Although most hypothesis-testing crosscultural research uses individual participants as the unit of analysis, ecological-level studies use countries or cultures as the unit of analysis. Data may be obtained on the individual level, but subsequently aggregated into averages or overall scores for each culture. These new summaries or averages are then used as data points for each culture (Matsumoto & Juang, 2007). One of the ethical issues that arises when interpreting the results from ecological-level studies is related to the fact that relationships among variables measured at one level do not necessarily translate to the same relationships at another level. A positive correlation based on ecological-level data can be positive, negative, or zero when individual-level data are analyzed. The classic work in this field is Robinson's (1950), who demonstrated that, even though a small, positive correlation (0.118) existed between foreign birth and illiteracy when individual-level data were analyzed; strong negative correlations were obtained when data were aggregated across individuals by region (-0.619) or state (-0.526). Similar types of differences in findings have been obtained in studies of the relationship between socioeconomic status and childbirths (Entwisle & Mason, 1985), attachment and acting out behaviors (Bond, 2004), person perception and behavior intention (Bond & Forgas, 1984), and cultural values, social beliefs, and managerial influence strategies (Fu et al., 2004).

One of our recent studies highlights the major potential difference between

ecological- and individual-level correlations. On the individual level, for instance, the effects of emotional suppression on mental health and adjustment is well documented (Butler et al., 2003; Gross & John, 2003; Gross & Levenson, 1993); individuals who are more expressive are generally better adjusted than those who suppress their emotions. On the cultural level, however, suppression is not only correlated with less positive adjustment and well-being; but is also negatively correlated with negative adjustment indices such as country-level indices of depression and anxiety; smoking, alcohol, and drug abuse; and crime rates. Thus, the ecological-level relationship between suppression and negative adjustment is exactly the opposite of that which is found on the individual level, highlighting the fact that researchers cannot make inferences about individual-level processes from cultural-level data.

Issues Regarding Sampling, Recruitment, and Consent

Sampling methodology lies at the core of research involving human subjects-and can most often be the issue from which stems all sorts of ethical considerations. How do we know, in the case of sampling, that the participants who represent our target cultures of interest are a "good" representation of that culture? In the most basic cross-cultural studies, data are collected from a sample of people from one culture and then compared with the data obtained from a sample of people from another culture (or known values from another culture). Let's say, we decided to run a cross-cultural study that used the scores of 100 Americans. What if all the Americans in our sample were from the same small town in the middle of South Dakota? What if they were all naturalized citizens living in San Francisco? What if they all had the same ethnic background or all came from upper-class, dual-income families? What

are the criteria that we have decided to use to define what our "American" sample is? What does it mean to be enculturated as an "American"? What is "American" culture? These are all issues that we, as crosscultural researchers, must pay special attention to when conducting our research. They are potentially problematic, and related to ethics, because of the assumption of homogeneity among group members, researchers, and their methods. Statistics testing group differences, for instance, do not care about the specific composition of those groups; that is a methodological issue that only researchers can control. Yet the findings will be applied as if they are true for those who comprise the groups being tested and have the potential to perpetuate stereotypic impressions and interpretations or create them (Matsumoto & Juang, 2007).

Issues concerning sampling adequacy and sampling equivalence are discussed in detail elsewhere (Matsumoto & Juang, in press; Van de Vijver & Matsumoto, in press). In this section, we will focus predominantly on two issues of sampling that may need special ethical consideration: informed consent and participant recruitment.

INFORMED CONSENT

In the United States, it is impossible to conduct research involving human participants without first receiving approval from an institutional review board (IRB), and most IRB guidelines require that researchers obtain consent from the participants before collecting data. These procedures, however, do not exist in most countries outside the United States. In fact, in most places outside the United States, not only is submitting a research proposal for review unnecessary but obtaining consent from human participants is unnecessary, as well. This raises ethical dilemmas for researchers: Do we obtain consent from participants in cultures in which it is not necessary to obtain consent, or even frowned upon? Will all participants understand the

concept of "consent" in the same way? What does "consent" mean in different cultures and who is authorized to give and obtain "consent"? Furthermore, if we *do* obtain consent from our participants, how do we obtain it? Many participants in many cultures will likely view consent documents with skepticism or fear. Will they understand such a process and feel comfortable about giving consent?

Regardless of whether obtaining consent is necessary or not, we believe that researchers should always strive to ensure that (a) informed consent is obtained and understood by the participant, (b) invasion of privacy is minimized, and (c) consent will be obtained only in a manner that minimizes coercion or undue influence. How can this process be done in a culturally competent manner?

In our experience, many of the same consent procedures can be used around the world, if delivered in a skilful and culturally competent manner by the research team. This manner involves the truthful and honest description of the procedures of the study, its risks and benefits, combined with a genuine interest in the participant and his/her welfare. If written consent is required, forms need to be translated in a competent and culturally appropriate manner. Involving cultural informants as collaborators or experimenters can help ensure that researchers are making the most diligent of efforts in this difficult ethical area of research.

RECRUITMENT

In the United States, participants in most psychology studies are recruited from an undergraduate psychology participant pool of students, mostly from introductory psychology classes, who view descriptions of studies and sign up for them voluntarily and of their free will. In many cases, this process is administered by software that can be accessed by any computer connected to the Internet, in which case participants have minimal intervention by anyone else asking for their participation. Participation in research is a well-known process to many students in many universities in the United States.

In other countries and cultures, however, this is not necessarily the case. Many countries do not have an undergraduate participant pool as we do in the United States. Thus, different procedures are often required to recruit participants. In many instances, course instructors request that their students participate. In many situations, however, students may feel compelled to participate in a study that they would otherwise not choose of their own volition, because of the perceived status of the researcher or possible ramifications for noncompliance to the requesting instructor. This compelling force may border on coercion or undue influence and presents an ethical dilemma. We believe that researchers should avoid any recruitment procedures that involve actual or perceived coercion to participate in the studies.

• Sensitive Topics

When conducting cross-cultural research, it's important to be aware of the fact that there are some topics and issues that are sensitive to study and raise interesting ethical problems for researchers. We mention three of them briefly here, to raise awareness of them: sex and sexuality, human rights issues, and deception.

SEX AND SEXUALITY

The United States and much of Western and Northern Europe are cultures in which sex and sexuality issues can be discussed relatively openly and freely in everyday discourse. For that reason, conducting research on sex and sexuality is relatively much easier in those cultures. In many other cultures of the world, however, these topics are taboo, especially among youth or women. Thus, researchers must exercise caution when conducting research on these topics in cultures in which they are taboo.

For example, in some cultures of the world, homosexuality is a severe taboo, punished in some societies by social isolation, physical punishment, and in some cases, even death. A researcher studying homosexuality in such cultures may be subject to the same kinds of repercussions, which strongly prohibits the generation of much useful research information about homosexuality in those cultures. Additionally, it would be very difficult for individuals to volunteer to participate in such studies, for fear of their safety and lives. In such cultures, there may be the added anxiety that the research project itself is part of an organized activity, either by activist groups or government, to identify homosexual individuals. Such concerns exist not only for people who live in those cultures but also for individuals who emigrate to other countries; they still may fear for their lives. Thus, it may be difficult to conduct such a study on homosexual immigrants in the United States for the same reasons. We have conducted such studies (Mireshghi & Matsumoto, 2006), and they raise interesting and important questions concerning recruitment and consent, as described above.

Even if issues concerning sex and sexuality are not a direct focus of the study, they may be indirectly related because of questions concerning these issues on standard personality questionnaires. For example, two items on the Intercultural Adjustment Potential Scale (ICAPS), a scale designed to assess the potential to adjust to a multicultural environment (Matsumoto, Yoo, & LeRoux, 2007), are "sex education is a good thing" and "when a man is with a woman he is usually thinking of sex." Despite the fact that these, and many other, items are designed to indirectly tap personality constructs and are imbedded within literally tens or hundreds of other items, they may be taboo in other cultures. We have conducted studies in which cultural informants have reviewed the items and recommended or required deletion of a number of these, and those that ask about attitudes toward things such as drugs, in our protocols.

HUMAN RIGHTS ISSUES

Cultures differ considerably on many practices and issues that U.S. Americans often find difficult to understand and even offensive. These include abortion attitudes and practices, circumcision or female genital mutilation, and the punishment of women accused of premarital sex or extramarital affairs. (Conversely, many cultures find many U.S. attitudes and practices offensive, too.) Clearly, these are important social issues that are worthy of study and documentation; yet, like with issues concerning sex and sexuality, they may be taboo and difficult, if not impossible, to study in other cultures, and even in the United States.

Another human rights issue to consider is the track record of countries—in which researchers wish to work—with regard to human rights issues. Many countries in the world have been accused in the past and present of human rights violations, and how these have been and are dealt with may, in some cases, form part of an important context within which research in those countries may occur. It behooves researchers to know of these issues, and to gauge the degree to which they may affect the research and findings, and whether it is wise to do the research in the first place.

DECEPTION

Deception is used in many studies in the United States, and when it is used, it must pass muster at the level of the IRB so that its use does not introduce undue risks to the participants, and participants are fully debriefed about it at the end and give their informed consent to use the data. That is, there are complex and important checks on the use of deception in the United States. Because IRBs do not exist in many other countries, however, such checks therefore do not exist; there are, however, other ways

in which such checks are done. Thus, it becomes easier to conduct research that involves deception. Such ease, however, comes with the greater obligation to exercise caution. We do not believe that all research involving deception should be outright banned in countries with no IRB procedure; but we do believe that such research needs to be conducted with additional care and caution, by engaging cultural informants as collaborators who can gauge the necessity of the deception, and by enacting procedures that ensure the full debriefing of the participants and obtaining of consent to preserve individual participant integrity.

METHODS, SENSITIVITY, OR ETHICS?

The topics we raise in this section blend together issues concerning methodology, cultural sensitivity, and ethics. Clearly, studying sensitive topics in a culturally insensitive manner is likely to yield invalid results, thus posing a methodological dilemma. But cultural insensitivity in methodology also has the potential to treat participants and cultures in a disrespectful manner, and this clearly is an ethical problem at the same time. To be sure, we do not argue for a ban on research on sensitive topics. We do, however, suggest that such research must be undertaken with care, precision, and sensitivity for the topics studied vis-à-vis the cultures in question. Involving cultural experts as collaborators in the research, recruiting participants who participate without coercion with full informed consent, and interpreting findings in a culturally relevant manner are steps by which researchers can make progress in studying difficult topics.

Dealing With Data and the Interpretation of Findings

ANALYZING DATA

When analyzing cross-cultural data, researchers typically rely on inferential

statistics that test for group differences, such as analysis of variance, chi-square, *t* tests, and the like. The major problem with these types of statistics is that they only test for whether group means are different from each other but not the degree to which they are different, nor how individuals in those groups are different from each other. Thus, relying solely on such statistical procedures to analyze data makes it easy for researchers and consumers of research to draw rather stereotypical interpretations of the group differences, because all the statistics demonstrate whether or not group differences exist.

Statistically significant group differences in means, however, may or may not be practically significant in terms of understanding differences among people in those groups. To make such interpretations concerning practical meaningfulness, researchers who deal with quantitative data need to engage with a class of statistics known as effect size statistics. There are, in fact, many different types of effect size statistics, all of which are computed differently, serve a different purpose, and tell researchers a different thing about the group differences. Space restrictions prevent us from discussing these in detail; interested readers are referred to other sources for detailed accounts of them (Grissom & Kim, 2005; Matsumoto et al., 2001; Matsumoto, Kim et al., in press). Our point here is that researchers who deal with quantitative data should make use of this class of statistics to make more accurate and less stereotypic interpretations of the differences observed. Researchers should also consider using statistics related to dispersion more comprehensively in their reports and interpretations of the data (see Chapter 24, this volume).

CULTURAL BIASES IN INTERPRETATIONS

Just as culture can bias formulation of the research questions in a cross-cultural study, it can also bias the ways researchers interpret their findings. Most researchers will inevitably interpret the data they obtain through their own cultural filters, and these biases can affect their interpretations to varying degrees. For example, if the mean response for Americans on a rating scale is 6.0 and the mean for Hong Kong Chinese is 4.0, one interpretation is that the Americans simply scored higher on the scale. Another interpretation may be that the Chinese are suppressing their responses. This type of interpretation is common, especially in research with Asian samples. But how do we know the Chinese are suppressing their responses? What if it is the Americans who are exaggerating their responses? What if the Chinese mean response of 4.0 is actually the more "correct" one and the American one is the one that is off? What if we surveyed the rest of the world and found that the overall mean was 3.0, suggesting that both the Chinese and the Americans inflated their ratings? In other words, the interpretation that the Chinese are suppressing their responses is based on an implicit assumption that the American data are "correct." One of us has made this sort of ethnocentric interpretation of research findings in a study involving American and Japanese judgments of the intensity of facial expressions of emotion, without really giving much consideration to other possibilities (Matsumoto & Ekman, 1989). In later research (Matsumoto, Kasri, & Kooken, 1999), we were able to show that, in fact, the Americans exaggerated their intensity ratings of faces, relative to inferences about subjective experience of the posers-the Japanese did not suppress.

Anytime researchers make a value judgment or interpretation of a finding, it is always possible that this interpretation is bound by a cultural bias. Interpretations of good or bad, right or wrong, suppressing or exaggerating, important or not important are all value interpretations that may be made in a cross-cultural study. These interpretations may reflect the value orientations of the researchers as much as they do the cultures of the samples included in the study. As researchers, we may make those interpretations without giving them a second thought—and without the slightest hint of malicious intent—only because we are so accustomed to seeing the world in a certain way. As consumers of research, we may agree with such interpretations—when they agree with the ways we have learned to understand and view the world—and we will often do so unconsciously and automatically.

CULTURAL INFORMANTS

As we have mentioned throughout this chapter, the involvement of cultural informants, at least on the level of advisers and at best on the level of collaborators, is a must in cross-cultural research. While we have listed this section here toward the end of this chapter, we strongly believe that these cultural informants/collaborators should be engaged from the very beginning of any study, providing needed advice and guidance about whether or not to conduct the study in the first place, the appropriateness of the theory and hypotheses to be tested, and the adequacy and appropriateness of the research design.

The involvement of cultural informants can help avoid cultural bias in interpreting results, such as those described immediately above. We strongly encourage researchers to seek out such informant/collaborators at the earliest stages of their studies, and to work collaboratively with them throughout the research process. Most scientific organizations such as the American Psychological Association have guidelines or criteria for authorship, and we encourage researchers to ensure that informants contribute their share of intellectual material to the research to gain authorship.

CONFIDENTIALITY

In the United States, we have many rules, regulations, and guidelines concerning the need to maintain confidentiality of any data sources. Such rules do not exist in many

other countries, and many other collaborators or cultural informants may not be aware of such need or procedures. We believe that even though a country may not have such rules or regulations that data need to be kept confidential, with access only to the research team. Many participants in many other countries may worry about who has access to their data, especially if they have made statements about issues that are politically, socially, or morally sensitive in their cultures. Sometimes data have to be smuggled out of a country because of this worry (e.g., Scherer & Wallbott, 1994). Clearly, participants in research should be free of such anxiety concerning the use of their data when they provide it and afterward, researchers should take extra precautions to ensure that this is indeed the case.

IMPACT OF RESEARCH ON THE COMMUNITY

A focus on the ecology of lives approach and designing research and interventions at the community level suggest a long-term commitment to the locale as part of the research process. "One-shot" or "safari" approaches to community-based research should be discouraged, including the low probability that such an approach would leave a positive residual after the project ends or the grant money runs out. Researchers doing work in other countries and cultures should be attuned to how research can make positive impacts on the lives of the community, because many other countries do not have the reciprocal cycle of access \rightarrow benefit that we do in the United States.

We must also take heed to avoid actions, procedures, interactive styles, and so on that violate local customs and understandings of the community. Our goals are for understanding and learning to occur—not unnecessary cultural faux pas as a result of our own lack of education of a culture outside our own. Incidences of this nature can be tempered by positive learning interaction with our cultural expert and a research of customs and norms on our own. At every phase of research, including the consent process, sensitivity and attention should be given to the cultural *ethos* and *eidos* of the community.

Conclusion

In this chapter, we have raised many ethical issues concerning cross-cultural psychological research with regard to design, sampling, sensitive issues, and dealing with data. Undoubtedly, we have raised more questions than provided answers, and this may be inevitable, because in many cases the answers for many of the issues raised reside in local cultural communities, not in a one-size-fits-all approach to the ethical conduct of research in different cultures. Our purpose has been first and foremost to raise awareness of the sometimes very difficult issues that face cross-cultural researchers. As mentioned in the introduction, we sincerely hope that the issues raised here serve as the start, not end, of a dialogue concerning ethics in cross-cultural research.

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