© Academy of Management Journal
1991, Vol. 34, No. 4, 827–847.

EFFECTS OF ETHNIC GROUP CULTURAL DIFFERENCES ON COOPERATIVE AND COMPETITIVE BEHAVIOR ON A GROUP TASK

TAYLOR H. COX
University of Michigan
SHARON A. LOBEL
Seattle University
POPPY LAURETTA McLEOD
University of Michigan

This study examined the hypothesis that differences in the cultural norms of Anglo-Americans and three other ethnic groups—Asian, Hispanic, and Black Americans—will result in different behaviors on a group task. Student subjects were assigned to ethnically diverse or all-Anglo groups. Individual and group responses were measured using a Prisoner's Dilemma task in which participants could choose to compete or cooperate with another party. We hypothesized that groups composed of people from collectivist cultural traditions would display more cooperative behavior than groups composed of people from individualistic cultural traditions. Results confirmed this hypothesis. Implications for future research and for organizations seeking to manage diversity are discussed.

The American work force is becoming increasingly diverse. Between now and the year 2000, 85 percent of the net additions to the work force will be women and nonwhite men, with Asian, Black, and Hispanic Americans and immigrants especially prevalent (Johnston & Packer, 1987). Publication of information on these trends has led to calls for effective management of diversity in organizations, and commentators have advised that unless corporations start managing diversity, they will find themselves at a competitive disadvantage (Copeland, 1988; Nelton, 1988; Schmidt, 1988). Moreover, invoking what might be termed the "value-in-diversity hypothesis," some writers have asserted that, when properly used, cultural diversity in work forces brings value to organizations and ultimately improves their performance. They have emphasized that managing diversity is an economic issue as well as a legal and social concern (Copeland, 1988; Cox & Blake, 1991; Esty, 1988; Sodano & Bailer, 1983).

This research was funded by the Office of the Vice President for Research of the University of Michigan. We also express our gratitude to Jane Dutton, Susan Jackson, Karl Weick, Harry Triandis, and Janet Weiss for valuable assistance in revising the manuscript and to Ojelanki Ngwenyama and Angela Hinton for assistance with data collection.

Despite these claims that cultural diversity may be beneficial to organizations, empirical investigations of the effects of cultural heterogeneity in organizations are virtually nonexistent (cf. Kanter, 1983). A growing literature on organizational demography essentially ignores the dimension of race and ethnicity, focusing instead on age and tenure. This study addressed that deficit. A central theme of this study was that differences in cultural norms and values among ethnic groups in the United States will manifest themselves in different work-related behaviors. We believe that identifying those differences and their impacts on behavior is important because knowledge about the behavior of people in organizations has largely been built from studies of one ethnic group, Anglos.[1] The extent to which this knowledge is applicable to organization members from other ethnic backgrounds has rarely been addressed. Therefore, there is a need for research that examines topics within the organization behavior domain with data from ethnically diverse groups.

The present study addressed this research need by examining the effects of ethnic group differences between Asians, Blacks, Hispanics, and Anglos in an assessment of cooperative and competitive behavior on a group task.

THEORETICAL FOUNDATIONS

People of different ethnic backgrounds possess different attitudes, values, and norms that reflect their cultural heritages. One of the few areas of cultural difference that has been rather extensively researched is the contrast between individualism and collectivism. In a study of value differences in 40 nations, Hofstede (1980) found that individualism-collectivism accounted for the greatest variance in work goal priorities of the dimensions he studied. Other cross-cultural researchers have also studied this polarity (for a review, see Triandis, 1989). Compared to individualist cultures, collectivist cultures place greater emphasis on the needs and goals of the group, social norms and duty, shared beliefs, and cooperation with group members (Triandis, 1989). Collectivists are more likely than individualists to sacrifice personal interests for the attainment of group goals (Bond & Wang, 1983) and are more likely to enjoy doing what the group expects of them (Bontempo, Lobel, & Triandis, 1990).

Cross-cultural studies have shown that northern and western Europeans and North Americans tend to be individualists (Hofstede, 1980; Inkeles, 1983) and that Chinese people (Hsu, 1981), other Asians, Latins, and most east and west Africans tend to be collectivists (Abrahams, 1983; Hofstede, 1980; Kwasi, 1980). There is also evidence that Hispanic (Kagan, 1977; Marin & Triandis, 1985; Triandis, Marin, Hui, Lisansky, & Ottati, 1984) and

[1] We use the term Anglos to refer to people who are racially white and of European descent.

Far Eastern minorities in the United States (Triandis, McCusker, & Hui, 1990) tend to be collectivists. In addition, values linked to our definition of collectivism have been reported for Black Americans. Specifically, a group orientation and sense of community distinguish Black culture (Foeman & Pressley, 1987; Kochman, 1981), and values of cooperation, mutual assistance, and altruism derive from the strong religious beliefs found in the Black community (Washington, 1987).

Thus, previous research has indicated that individualism-collectivism is an important dimension of cultural difference in nations in which various ethnic groups of the United States have historical roots. In general, Asians, Hispanics, and Blacks have roots in nations with collectivist traditions, whereas Anglos have roots in the Euro-Anglo tradition of individualism. Moreover, the research reviewed above on North Americans shows that there has been some carryover of these traditions among the most strongly represented ethnic groups in the U.S. work force.

The collectivist value orientation has been found to be manifested in a variety of phenomena—the strong role of family, for instance, and the prevalence of personalism over achievement (Triandis, 1989). However, our interest here is in the link between collectivism and cooperative behavior. In a test of convergent validity, collectivism was found to converge with cooperation on the Rokeach value survey and the Johnson cooperation scale (Triandis, Leung, Villareal, & Clack, 1985). Diaz-Guerrero (1984) found that collectivists emphasize the value of cooperation, whereas individualists emphasize competition. Leung (1988) found that collectivists prefer cooperative approaches like bargaining and mediation to conflict resolution. Finally, Wagner and Moch (1986) found that individualism-collectivism was related to job type. Collectivists tended to perform jobs that required teamwork and individualists performed more independent tasks. In addition, they found that collective rewards of work hold less appeal for individualists than for collectivists because such rewards must be shared rather than personally consumed.

In view of the cited research, we expected ethnic groups to differ vis-à-vis cooperation and competition. However, we wished to confirm this expectation with our data. Therefore, our first objective was to test the overall proposition that Asian, Black, and Hispanic individuals will display a more collectivist and cooperative orientation to a task than Anglos.

Previous research on the relationship between characteristics of individual members and group task performance has indicated that team creativity (Triandis, Bass, Ewen, & Mikesell, 1963) and performance on cognitive and dexterity tasks (Comrey, 1953; Wiest, Porter, & Ghiselli, 1961) often reflect the individual creativity and problem-solving prowess of the team's members. We were interested in determining if this phenomenon would also hold for cooperation behavior. We were specifically interested in whether the ethnic differences in collectivist-cooperative orientation to a task present at an individual level would translate into different behaviors for ethnically

diverse and all-Anglo task teams. We reasoned that one effect of having diverse groups in organizations composed of people with these cultural backgrounds might be to increase an intergroup cooperative approach to work and diminish the norm of individualistic competition that might be expected in all-Anglo groups. Therefore, if the differences predicted in our preliminary proposition were confirmed at the individual level, we would test the following hypothesis:

> *Hypothesis 1: Presented with a choice of behaving cooperatively or competitively, groups composed of Asian, Black, Hispanic, and Anglo individuals will act cooperatively more often than groups composed solely of Anglos.*

Hypothesis 1 describes our general expectation of how ethnic differences will affect behavior on a group task involving cooperation and competition. However, previous research on biculturalism and on situational ethnicity (Broch, 1987; Okamura, 1981; Paden, 1970; Salamone & Swanson, 1979) has suggested that situational cues may influence the manifestation of ethnic group differences.

A growing body of evidence supports the conclusion that members of the predominant minority groups of the United States tend to be bicultural and to have knowledge of Anglo norms as well as the norms of their own ethnic group. Previous theory and research has suggested that Blacks (Bell, 1986, 1990; Dubois, 1903; Thomas, 1990), Hispanics (Garza, Romero, Cox, & Ramirez, 1982; Lugones & Spelman, 1983; Wong-Reiger & Quintana, 1987), American Indians (McFee, 1968), and Asians (Bond & Yang, 1982; Wong-Reiger & Quintana, 1987) are typically bicultural. The extent to which Anglos are bicultural has rarely been studied; however, a recent study of Anglo- and Mexican Americans in Texas found that evidence of identification with both cultures was high among the latter but minimal among the Anglos (Hazuda, Stern, & Haffner, 1988).

The term "situational ethnicity" refers to the idea that bicultural members of minority cultural groups may respond using norm sets from two different cultural backgrounds and that contextual cues may dictate which norm set is operative in a given situation. Paden wrote that "particular contexts may determine which of a person's communal identities or loyalties are appropriate at a point in time" (1970: 268). Okamura (1981) added that the cognitive aspect of situational ethnicity is critical: individuals' perceptions and interpretations of the signs and symbols of a situation determine their behavioral options.

Because of the prevalence of biculturalism among Asians, Blacks, and Hispanics and the importance of situational ethnicity, we believed that the responses of many members of those groups might be based on their knowledge of the competitive, majority-culture orientation rather than their cooperative, minority-culture orientation. Therefore, in addition to testing the general expectation stated in Hypothesis 1, we wanted to test the idea that Asians, Blacks, and Hispanics will increase their cooperative behavior under

conditions that encourage their minority-group, collectivist-cooperative orientation. We reasoned that under neutral situational conditions the difference in response between Anglos and the other groups would be smaller than under conditions that increased the likelihood that the minority-culture orientation would be expressed.

Norms of competition and cooperation may both be present in some mixed-motive situations (Brickman, 1974). In other words, individuals may be partly motivated to cooperate around common interests and partly motivated to compete for a large share of resources that must be divided up. These mixed-motive situations are simulated in mixed-motive games such as Prisoner's Dilemma (Luce & Raiffa, 1957; Haggart, 1959). Previous research on mixed-motive games (Kuhlman & Marshello, 1975; Pruitt & Kimmel, 1977) has suggested that situational cues favorable to cooperative behavior may be established by creating a two-party cooperation-competition game in which feedback to one player on the other party's responses is manipulated to favor cooperation. Kuhlman and Marshello argued that people have tendencies to cooperate or compete in mixed-motive games and that these tendencies, or orientations, are stable. They also noted that the behavioral manifestations of these orientations have been found to vary with the characteristics of a situation, such as the behavior of other actors. Both Kuhlman and Marshello (1975) and Kelley and Stahelski (1970), using variations on the Prisoner's Dilemma paradigm, found that cooperatively oriented subjects responded in kind to a competitive strategy but readily reverted to cooperative behavior in response to a cooperative strategy even though the payoff matrix for the game provided higher incentives for responding competitively. Individualistically oriented subjects, on the other hand, displayed competitive behavior under both conditions. The competitive behavior of the competitively oriented subjects was apparently a defensive strategy when the other party competed and an exploitation strategy when the other party cooperated because the payoff matrix was so structured that this combination produced advantages for the party who acted competitively. Sermat and Gregovich (1966) reported similar results using "chicken," a mixed-motive game that simulates two drivers racing toward each other to see who will "chicken out" first and pull aside. In view of the research reviewed here on biculturalism, situational ethnicity, and mixed-motive games, we predicted that the more cooperatively oriented ethnic groups—Asians, Blacks, and Hispanics—would have a stronger tendency to act cooperatively in situations in which they expected cooperation from other groups. We expected task conditions to influence both the relationship between ethnicity and cooperation predicted in our initial proposition and the relationship between the ethnic composition of groups and cooperation predicted in Hypothesis 1. Specifically,

> *Hypothesis 2a: Under task conditions in which cooperative behavior is expected from others, Asians, Blacks, and Hispanics will tend to increase their level of cooperative behavior and Anglos will not.*

Hypothesis 2b: Under task conditions in which cooperative behavior is expected from others, diverse groups composed of Asians, Blacks, Anglos, and Hispanics will tend to increase their level of cooperative behavior, and Anglo-only groups will not.

METHODS

Subjects

Subjects were 136 graduate and undergraduate students from several academic majors who attended a large public university in the midwestern United States. There were 75 Anglo-Americans, 25 Asian Americans, 17 Black Americans, and 19 Hispanic Americans. Chinese Americans were the most prominent group among the Asians, and Mexican Americans were the most prominent group among the Hispanics. There were 95 men and 41 women. One hundred fifteen subjects were native-born Americans. We obtained no information on the number of generations of their families that had lived in America. Among the 21 subjects born outside the United States, the average length of time in this country was 12 years, and 18 of the 21 had lived here for more than 10 years.

Subjects were paid volunteers and were contacted by several methods: form letters sent to members of several student organizations, announcements in organization behavior classes, and letters placed in the mailboxes of students in the law, engineering, and business schools of the university. The written and verbal announcements invited students to participate in a two-to-three-hour-long research project on group dynamics.

Anglo subjects were randomly assigned to a group that was either ethnically diverse or all-Anglo. All non-Anglo subjects were randomly assigned to ethnically diverse groups. To the extent possible, we assigned one member from each ethnic group, including Anglo, to the diverse groups to minimize pressure to conform to the norms of a dominant group. All the diverse groups had one Anglo and three non-Anglos. One all-Anglo group had three members and one had five members; all the others had four. In total, we obtained data from 17 ethnically diverse groups and 16 all-Anglo groups. We tried to assign subjects so as to have comparable gender compositions in the mixed ethnicity and all-Anglo groups; however, because of a slight gender imbalance, a fully comparable distribution of men and women across groups was not achieved. Of the ethnically diverse groups, 9 had two men and two women, and the other 8 were all men. There were also 8 all-male groups among the Anglos, but only 4 of the remaining 8 groups were balanced on gender. We therefore did an analysis of variance to determine whether gender had a significant effect on cooperative behavior. Since this analysis indicated no significant effect of gender, the lack of complete parallelism in gender composition should not have affected our results.

Task

The task we employed to assess both individual and group response was a two-party Prisoner's Dilemma. In the two-party version of Prisoner's Dilemma, each party is faced with two choices represented by alphabetic characters. For example, the first party must chose A or B and the second party must chose X or Y. Numerical "payoffs" are assigned to the combinations of choices such that a two-by-two matrix is created. The matrix is specified in such a way that whether a given choice by one party yields a positive payoff depends on the other party's choice.[2] Previous research on cooperative behavior has used this game extensively (Komorita, 1987; Pruitt & Kimmel, 1977; Radlow, 1965; Uejio & Wrightsman, 1967; Van-Lange, Liebrand, & Kuhlman, 1990). In researching the literature on Prisoner's Dilemma games, we discovered that Dawes (1980) argued that the two-person version of the game was less representative of real-world social dilemmas than the N-party game involving more than two parties. At least two other articles (Komorita, 1987; Messick & Brewer, 1983) have referred to Dawes's arguments. We used a two-party game in this study, however, and are confident of the validity of our decision for the following reasons: (1) Despite Dawes's concerns, the two-party game remains at least as popular in research as the N-party version. Although Komorita and Van-Lange and colleagues (1990) chose to focus on the N-party game, other recent researchers have employed the two-party game (e.g., McCallum et al., 1985; Pruitt, 1967). (2) Komorita found that his results with the N-party game supported Pruitt's (1967) findings with the two-party game and therefore noted that the difference in games was not important to the variables under study. (3) Previous writers on Prisoner's Dilemma seem to have agreed that the underlying dynamics of the game, in the form that we used it, contrasts cooperation and competition, and recently Van-Lange and colleagues explained the game in exactly the terms that we wished to use it here, as a behavioral manifestation of the difference between collectivists and individualistic orientations: "One of the most thoroughly studied forms of social interdependence is the Prisoner's Dilemma, which Kahan (1974) describes as arising from two conflicting definitions of rationality, one individualistic and the other collective. . . . Individual rationality prescribes noncooperation; irrespective of others' behavior. . . . Collective rationality prescribes cooperation. . . ." (1990: 35).

Figure 1 shows the decision choices and payoff matrix used in the game as played in this study. This version of the game has been popular in recent university teaching and research (Lau & Jelinek, 1984).

As shown in Figure 1, a cooperative response by both parties results in a moderate mutual gain. Nonetheless, a cooperative choice is risky because if the other party does not cooperate, the cooperator will suffer a large loss

[2] More detail on the two-party version of Prisoner's Dilemma is available in Pruitt and Kimmel (1977).

FIGURE 1
Choices and Payoff Points for the Prisoner's Dilemma Game

		Party 2	
		X Cooperative	Y Competitive
Party 1	A Cooperative	3, 3	−6, 6
	B Competitive	6, −6	−3, −3

and the competitor will realize a large gain. If neither party cooperates, both suffer a moderate loss. In order to simulate a real-world work environment in which work groups in a firm compete for resources but depend on each other to accomplish work, we told subjects in each group to work under the following assumptions: (1) all participants were members of the same class, (2) the other party in their game was another group participating in the experiment with whom they might have to collaborate on work in the future, and (3) the payoffs were extra credit points that would be applied to the final class ranking for grading purposes. No instruction was given about what the objective of the game should be.

Previous research on the game has suggested that for most groups, the competitive strategy appears optimal, particularly in the absence of feedback about the other party's behavior (Kahn, Hottes, & Davis, 1971). It is important to note, however, that in nearly all the previous research, subjects were of only one ethnic group, Anglo. As implied previously, one objective here was to examine whether or not the competitive strategy would also appear optimal to groups of alternative ethnic compositions.

Two conditions of the game were employed: a no-feedback condition and a cooperative-feedback condition. For each condition, there were ten rounds of choices. We manipulated conditions to test our prediction that differences in cooperative behavior between the diverse and all-Anglo groups would increase when group members expected cooperation from the other party (Hypotheses 2a and 2b). In the initial rounds of the game, the no-feedback condition, we made expectations of response from the other party neutral by providing no information about the other party's responses. Subjects simply decided on their strategies, selecting A or B individually and then in their teams. Before the cooperative-feedback rounds, we told subjects that the other party (party 2) had selected cooperative choices for all ten rounds during the no-feedback phase and that previous research on Prisoner's Dilemma suggested they could expect the other party to continue to cooperate. In reality, we contrived the responses—there was no other party.

Procedures

All data were collected during a single session. Upon arrival for the experiment, each subject received a packet containing the research questionnaires and response forms for individual responses on Prisoner's Dilemma. Subjects were assigned to groups on the basis of self-descriptions of ethnicity elicited by a questionnaire. Each group received a group response sheet and was assigned to a separate work area. In the work area, an experimenter read the instructions from a standard script.

While seated together in their groups, but before beginning group discussion of the task, subjects chose and recorded individually their strategies for all of the first ten rounds. They were also asked to record the reasons for their choices in their own words. The objective of the second request was to obtain another measure of cooperative or competitive orientation to the task and information for a manipulation check on the no-feedback and cooperative-feedback conditions.

After their members had recorded their individual choices for the first ten rounds, the groups were given eight minutes to discuss and reach consensus on strategies for all ten rounds at once. During this time, the subjects knew nothing of the choices made by the other party. When this period was over, an experimenter checked that each group had recorded choices for ten rounds and then gave the contrived feedback about the other party's choices. The spatial separation of groups was such that no group knew what feedback any other group had received. The subjects then played another ten rounds in the same manner, first choosing responses individually and then making consensual choices.

Another option in Prisoner's Dilemma is to have the subjects discuss the strategy for each round, record the decisions, then discuss the next round. We rejected this format because we did not believe that it would add value to the experiment. We wanted to compare feedback and no-feedback conditions to test Hypothesis 2 and wanted the game to be as similar as possible in other respects in the two conditions. Furthermore, repeatedly moving individuals into a group format and then back to making individual choices can enhance group influence on individual decisions.

Measures

Following Uejio and Wrightsman (1967), we used the total number of cooperative responses for each of the ten rounds as our primary measure of cooperation. In addition, the reasons that individual subjects gave for their personal choices were analyzed and blind-coded independently for both competitive and cooperative themes. A reason could have both cooperative and competitive elements. Cooperative themes included mentioning consideration of mutual benefits or a desire to cooperate, even if some degree of protection was also seen as necessary. Competitive themes included mentioning seeking maximum gain, pursuing a strategy of winning or "going in

the hole together," and choosing a cooperative strategy initially to gain the trust of the other party so as to subsequently exploit them.

Two measures of a collectivist, cooperative orientation were employed. First, all subjects completed a 14-item questionnaire designed to measure individualism-collectivism. The questionnaire items were taken from work on collectivism by Triandis and colleagues (1986) and Hui (1988). Subjects indicated the extent of their agreement with the items on a seven-point Likert-type scale. Two examples of the items are: (1) "When faced with a difficult problem on the job, it is better to decide what to do yourself, rather than follow the advice of others" and (2) "One generally does better working alone than in a group." The second measure was the number of cooperative responses on Prisoner's Dilemma that subjects made individually before they had group discussion.

RESULTS

Manipulation Check

To determine whether the subjects were convinced by the information that the other parties had made cooperative choices during the no-feedback rounds of the game, we examined the reasons they gave for their individual choices during the cooperative-feedback rounds. The reasons 82 percent of the subjects gave indicated a belief that the other team would continue to cooperate. For example, they said that trust had been established and they would therefore act accordingly, or they said that since their partner was going to cooperate, they should take advantage of them. The remaining subjects did not give any reasons, said they used a random response strategy, or gave reasons that were undecipherable. Thus, it appeared that under the cooperative-feedback condition most subjects based their decisions at least in part on the expectation that their partners would continue to cooperate. In contrast, the majority (73%) of the reasons given in the no-feedback phase simply related to winning or losing and did not refer to an expectation of cooperation from the other party.

Analyses

Our initial proposition predicts that Asian, Black, and Hispanic individuals will display a more collectivist, cooperative orientation to the task than will Anglos. Mean scores on the individualism-collectivism scale were 56.75 for Asians, 58.80 for Blacks, 57.86 for Hispanics, and 56.49 for Anglos; higher numbers indicate a collectivist orientation. "Pairwise" comparisons of the means (Rosenthal & Rosnow, 1985) revealed that all differences are in the predicted direction; however, none of the contrasts reached statistical significance. The reliability of this measure of collectivist-cooperative orientation in terms of coefficient alpha was a very low .41. Because of the low reliability of the scale, we gave more emphasis to our second measure of collectivist-cooperative orientation, which was the number of cooperative game strategy choices individuals made prior to group discussion. Table 1

TABLE 1
Cooperative Responses and ANOVA Results for Individuals

(a) Means and Standard Deviations[a]

Task Conditions	Asians		Blacks		Hispanics		Anglos	
	Means	s.d.	Means	s.d.	Means	s.d.	Means	s.d.
No feedback	4.04	3.58	4.18	3.07	3.95	2.70	3.03	3.35
Cooperative feedback	6.36	3.60	4.41	3.52	4.84	3.93	2.60	3.89
Combined	10.40	6.05	8.65	3.86	8.79	5.91	5.61	5.81

(b) ANOVA Results	Mean Squares	*F*
Ethnic group	86.76	5.39*
Task condition	27.73	3.03
Ethnic group by task condition	24.69	2.70*

[a] Scores ranged from 0 to 10. N's were respectively 25, 17, 19, and 75 for the groups as listed.

* $p < .05$

presents the mean numbers of individuals' cooperative choices by ethnic group and the results of an analysis of variance (ANOVA) predicting responses in terms of ethnicity and game condition. Although the members of all ethnic groups gave more competitive than cooperative responses, the main effect for ethnic group showed that the groups did differ from each other significantly ($F_{3,132} = 5.39$, $p < .05$, $r = 0.34$).[3] Pairwise analysis of the means revealed that the members of each of the minority ethnic groups indeed had significantly more cooperative orientations to the game than did the Anglos. The results of these pairwise comparisons were: Asians, $F = 15.54$, $p < .001$, $d = .69$; Blacks, $F = 5.96$, $p < .05$, $d = .42$; Hispanics, $F = 6.79$, $p < .05$, $d = .45$; all df 1,132). The minority ethnic groups did not differ significantly from one another.

Our basic proposition received additional support from the analysis of the reasons given for the individual, before-group-discussion choices. For this analysis, we singled out subjects who gave reasons that were either exclusively competitive—for instance, they referred to winning—or exclusively cooperative: they referred to mutual gain. Under the no-feedback condition, 51 percent ($N = 69$) gave such responses, and under the cooperative-feedback condition, 63 percent ($N = 83$) did so. Of these subjects, 82 percent ($N = 45$) of the Anglos gave competitively oriented responses under the

[3] We used the effect size d when reporting differences between two groups, calculating it as $2t/\sqrt{df}$, where t is the result of a t-test and df is degrees of freedom. We used the effect size r when reporting differences between more than two groups (Cohen, 1977), calculating it as $\sqrt{\frac{F \times df_{numerator}}{F + df_{denominator}}}$.

no-feedback condition, as compared to 73 percent ($N = 20$) of the Asians, 60 percent ($N = 9$) of the Blacks, and 70 percent ($N = 9$) of the Hispanics. During the cooperative-feedback phase, 84 percent of the Anglos gave competitive reasons as compared to 63 percent of the Asians, 57 percent of the Blacks, and 33 percent of the Hispanics. Pairwise tests of differences between proportions (Ferguson, 1966) showed that the proportion of Anglos giving competitive responses was significantly greater than the proportion of individuals from other ethnic groups doing so (all $p < .01$). Furthermore, the percentage of people giving competitive rationales declined in the cooperative-feedback condition for all the ethnic groups except the Anglos.

Since the overall data confirmed our predictions about ethnic differences at an individual level,[4] we were next interested in whether or not these cultural differences would affect behavior on a group task that was related to this difference. Table 2 presents the mean number of group cooperative responses for group composition by feedback condition and the results of an ANOVA of group by task condition. To test Hypothesis 1, we analyzed the group-level data with a two-by-two (ethnic composition by feedback condition) analysis of variance with repeated measures on the second factor. Hypothesis 1 predicts that ethnically diverse groups will make more cooperative choices than groups composed of all Anglos.

The ANOVA results given in Table 2 show a significant main effect for group type. As predicted, the ethnically diverse groups made significantly more cooperative choices than the groups composed solely of Anglos ($F_{1,31} = 12.63$, $p < .001$, $d = 1.28$). Therefore, the data support Hypothesis 1.

Hypothesis 2a predicts that Asians, Blacks, and Hispanics will increase levels of cooperative response when they expect others to cooperate, whereas Anglos will not. In Table 1, the interaction term for ethnicity by task condition is significant ($F_{3,132} = 2.70$, $p < .05$). A planned comparison showed that Anglos gave fewer cooperative responses when they expected cooperative responses from the other party, but individuals from all the other ethnic groups gave more cooperative responses under this task condition ($F_{1,132} = 4.42$, $p < .05$, $d = 0.37$). This result supports Hypothesis 2a.

Hypothesis 2b predicts that the difference between the diverse groups and groups composed solely of Anglo-Americans will increase under conditions that suggest that a cooperative norm is appropriate. This hypothesis was tested with the group-composition-by-task-condition interaction effect.

[4] Previous work on individualism-collectivism has shown it to be a difficult construct to measure directly. Two reasons for this difficulty are the problem of measurement equivalence in cross-cultural research (Triandis, Malpass, & Davidson, 1973) and the multidimensional nature of the construct (Schwartz, 1990; Wagner & Moch, 1986). In view of these problems, Triandis and colleagues (1973) suggested that cross-cultural differences in collectivism are best substantiated by patterns of relationships among variables rather than by mere differences in means on questionnaire responses. In this case, the direction of means on the collectivism scale, the ethnic group responses in Prisoner's Dilemma, and the reasons given for game responses formed a consistent pattern that suggests a more collectivist-cooperative value orientation for Asians, Blacks, and Hispanics than for Anglos.

TABLE 2
Cooperative Responses and ANOVA Results by Group Type and Task Condition

(a) Means and Standard Deviations[a]

	All-Anglo Groups		Ethnically Diverse Groups	
Task Conditions	**Means**	**s.d.**	**Means**	**s.d.**
No feedback	1.69	3.03	3.41	3.16
Cooperative feedback	2.50	3.37	7.06	3.56

(b) ANOVA Results	**Mean Squares**	***F***
Group type	762.69	12.63**
Task condition	81.96	9.37**
Group type by task condition	33.11	3.79*

[a] Scores ranged from 0 to 10. N's were respectively 16 and 17 for the two group types.
* $p < .10$
** $p < .001$

The means were in the predicted direction, but the effect was only marginally significant ($p = .06$). Although it failed to reach conventional levels of significance, the size of the effect ($d = 0.70$), was medium to large (Cohen, 1977), and the level of significance was very close to the conventional standard for alpha, despite the relatively small number of cases. In addition, it should be noted that under the cooperative-feedback condition, the difference in the numbers of cooperative responses the ethnically diverse and all-Anglo groups made was quite large in absolute terms; the mean was 7.06 out of 10 for the diverse groups versus just 2.5 for the all-Anglo groups.

DISCUSSION

This study provides empirical evidence that ethnic group differences affect at least some aspects of behavior in task groups. The study found that at an individual level, Asian, Black, and Hispanic individuals had a more collectivist-cooperative orientation to a task than Anglo individuals. This finding is consistent with previous research and theory suggesting that these differences originate from differences in the national cultures in which the various groups have cultural roots. This conclusion is consistent with cross-national as well as U.S. ethnic group research on individualism-collectivism. We further found that we could draw on knowledge of this individual-level difference to predict differences in group behavior on a group decision-making task. Specifically, ethnically diverse groups composed of Asians, Blacks, Hispanics, and Anglos acted more cooperatively than all-Anglo groups, and those behavioral differences tended to increase when the situational cues favored cooperation. These findings have implications for the practice of management and for future research.

Since the non-Anglo ethnic groups studied here are the three largest

such groups in the U.S. population, and since the work force will increasingly be composed of members of these groups in the future, the behavior differences we found may have a significant impact on how work is done in organizations. The findings suggest that one effect of the presence of Asians, Hispanics, and Blacks in organizations may be to influence those organizations to take a more cooperative approach to work than has been prevalent. A review of recent literature citing leaders of many top-performing U.S. organizations such as United Hospitals Corporation, Digital Equipment Corporation, General Foods Corporation, and Texas Instruments indicates that cooperative work behavior is increasingly viewed as necessary to improve the competitiveness of U.S. firms (Bassin, 1988; Galagan, 1986; Hatcher & Ross, 1985; Levine, 1987; Markowich, 1987; Raudsepp, 1988; Scott & Cotter, 1984).

There is a caveat to the conclusion that increased hiring of Asians, Blacks, and Hispanics may move organizations toward a more cooperative approach to work. Although these ethnic groups acted more cooperatively than Anglos, the predominant response of all the groups expressed in both decisions and in the reasons given for decisions in the no-feedback rounds was competitive. It is useful to interpret this finding in light of two findings from the feedback condition. First, the Anglos were the only group to become more competitive when they expected cooperation from the other party. Second, there were differences in normative responses at the group level of analysis, with the homogeneous Anglo groups selecting the cooperative choice only 25 percent of the time compared to over 70 percent for the ethnically diverse groups. Acculturation and biculturalism may explain this combination of results. As discussed earlier, minority group members are often bicultural in that they are knowledgeable about and identify with norm and value systems from the majority Anglo culture as well as those from their minority culture group. Both previous research and the current effort have established that the Anglo norm for this game is to select the competitive response. Since nearly all the Asians, Hispanics, and Blacks were native-born Americans, we can expect some degree of assimilation to the Anglo norm to have been present and that the bicultural subjects were aware of both a competitive, majority culture and a cooperative, minority culture norm for approaching the game. Thus, the competitive reactions of the majority of Asians, Hispanics, and Blacks in the initial rounds could reflect the effects of assimilation to the Anglo norm. The fact that these groups had more inclination toward cooperation than the Anglos indicates that the subcultural norm was operative for significant numbers of Asians, Blacks, and Hispanics. The shift toward cooperation when feedback was provided for individuals in all groups except the Anglos suggests that members of the minority culture groups were more likely to display their subcultural group norm when they expected it to be reciprocated. Finally, the stronger manifestation of the cooperative norm at the group level of analysis than at the individual level might reflect reinforcement of that norm by other members of the group who were also from minority culture backgrounds. Thus, the

highest incidence of the minority culture cooperative orientation occurred under conditions most favorable to the expression of that norm, when individuals expected that the other party would cooperate and not exploit them in the game, and others from backgrounds with collectivist, cooperative norms were in the group.

Another important implication of our findings on cooperating in the game for cooperative behavior in work settings concerns how group boundaries are defined. Triandis (1989) suggested that collectivists tend to apply cooperative norms chiefly to other parties defined as within their in-group. In-groups are composed of individuals who share norms, goals, and values and are contrasted with out-groups, individuals viewed as dissimilar or as having norms, goals, and values unrelated to those of the in-group.

As previously explained, our experiment was designed to simulate two interdependent groups whose members viewed themselves as subpopulations of the same organization. Whether our data are consistent with those of Triandis depends on how the subjects defined in-group boundaries. We have no specific information on this, but the results suggest that the individuals and groups whose orientations tended to be collectivist-cooperative may have defined their in-group more broadly than those with more competitive orientations, seeing it as including other members of the same class, even though they were not in their specific task team. We so interpret the findings because the payoff matrix is such that the cooperative response only seems rational if people define the goal of the game as maximizing the combined outcome of the parties and not simply the outcome affecting themselves. This interpretation of our results is consistent with Pruitt and Kimmel's (1977) theory regarding the prediction of cooperative responses in Prisoner's Dilemma. They argued that cooperation will only be high when a party (1) defines the goal of the game as achieving mutual cooperation and (2) expects cooperation from the other party. In the second phase of our game, people expected cooperation from the other party and, therefore, would have been likely to respond cooperatively if they defined the goal as mutual cooperation, or maximizing joint outcomes.

Since a rough parallel to our groups in an organizational setting would be two different departments or divisions of the same company, groups sharing an organizational affiliation but vying for allocations of limited resources, our experiment contrasts cooperation and competition in a way that is relevant to organizations. However, our research was limited to looking at cooperative behavior between groups, and we did not address intragroup cooperativeness. Therefore, an avenue for future research is examination of the effects of cultural diversity on intragroup cooperative behavior.

The results for the tests of Hypotheses 2a and 2b were most intriguing. We predicted that the ethnic group differences in cooperative behavior would increase when participants expected cooperative behavior from the other party. The weight of the evidence supports this prediction. Our theory was based on our ideas about task cues, situational ethnicity, and biculturalism. We argued that many members of ethnic minorities are bicultural and therefore identify to some extent with both the dominant culture's compet-

itive norm and the minority culture's cooperative norm. By manipulating the game, we created situational cues in the second phase that shifted members of ethnic minorities from a dominant cultural norm to their minority cultural norm. Since the incidence of biculturalism among the Anglos was expected to be low and there was unlikely to be an alternative norm set to which they could shift, the situational ethnicity phenomenon should not have affected them. The implication for management is that situational cues in an organizational context will be important in determining the extent of the expression of ethnic minority norms in predominantly Anglo organizations. To the extent that organizations value diverse points of view, the organizational climate must be such that people with perspectives that diverge from the dominant culture feel free to express them.

Another possible interpretation of the results for Hypotheses 2a and 2b is that the groups composed of Asians, Blacks, Hispanics, and Anglos were more likely than the Anglo-only groups to define the objective of the game as maximizing joint outcomes and not as beating the other party. Such an interpretation would be entirely consistent with the collectivist value orientation ascribed here to Asians, Blacks, and Hispanics.

This study has a number of limitations that future research should address. First, our results address only one cultural difference and one behavioral manifestation of a collectivist orientation. As Wagner and Moch (1986) suggested, more research using cultural differences on the individualism-collectivism dimension could contribute to models of leadership, job design, and team building. Further, investigation of a broader spectrum of cultural differences and relevant work force behaviors is necessary, as is better utilization of the existing research in the fields of sociology, psychology, and anthropology as a basis for theory construction in organizational research.

Second, our research suggested the importance of biculturalism and situational ethnicity but did not test these effects. Future research should explore the notions of biculturalism and situational ethnicity more directly. For example, it would be useful to know more about the types of situational cues biculturals use to select either a minority or a majority norm set for response. Also, research is needed that clarifies the amounts of variance within ethnic groups on biculturalism and how different ethnic identity profiles affect behavior.

A third limitation is that the ethnically diverse groups in this experiment had equal representation of the ethnic categories studied. In workplaces, however, representation is typically less balanced, and decisions are made in the context of an organizational culture. Using a balanced configuration, we avoided the typical situation in which minority culture members conform to majority Anglo norms and thus facilitated our objective of uncovering ethnic group differences. At the same time, the extent to which our results are applicable to a more typical work group in which Anglos predominate might be questioned. Our research demonstrates the potential for people to take different approaches to a task on the basis of ethnic differences, but we make no claim that this potential will be manifested in groups

with highly skewed ethnic profiles. Kanter's (1977) research showed the dysfunctional effects of highly skewed group identity profiles and suggested the importance of achieving a "critical mass" representation of minority groups in order to mitigate these effects. In a study using a game similar to Prisoner's Dilemma, Espinoza and Garza (1985) found that Hispanics acted more competitively when their representation was low than when it was high. Additional research is needed to clarify how variations in the ethnic composition of groups influence the expression of dominant and minority group norms. If such research indicates that minority group density moderates differences in cooperation and competition between minority and majority group members in predominantly majority work groups, it will reinforce Kanter's conclusions about the importance of achieving critical mass and avoiding token representation of minorities in work groups.

Finally, this study employed ad hoc groups meeting for a single session. The effects of ethnic diversity are likely to vary during a group's developmental stages. Some effects of diversity, such as the occurrence of stereotyping behavior, may be strongest during the early stages of a group's life, when the physical differences between ethnic groups are very salient and other sources of information are limited. Other effects of diversity, such as creating a climate in which diverse points of view are expressed, may not occur until the later stages of group development. Or perhaps the relationship between diversity and group life stage depends on a group's task. For example, it may be that the effect of ethnic diversity is greater in the early stages of group development only if the group task is related to ethnicity. Thus, the saliency of ethnicity in group dynamics may be greater for a decision involving an affirmative action policy than for a cooperation-competition task. These speculations cannot be addressed using the data presented here, but they point to paths for future studies.

Another research direction this study suggests is examination of the effects of ethnic homogeneity and heterogeneity per se, independent of the specific ethnic groups represented. The present study compared a particular type of homogeneous group to a particular type of diverse group. There is a need for studies addressing the differences between homogeneity and heterogeneity more generally. The existing literature on group heterogeneity effects contains very few studies that include ethnicity or race as a dimension of heterogeneity. One serious problem with completing this type of research is obtaining enough ethnic minority subjects for complete-cell research designs. Doing so is especially difficult in research that focuses on managers of organizations.

In conclusion, an important general implication of this research is that both academics and practitioners should give more attention to identifying the potentially positive effects on organizational behavior and effectiveness deriving from behavioral differences associated with non-Anglo cultures. Identifying these effects would be a vital first step toward establishing truly multicultural organizations in which the positive aspects of many cultures are accepted and incorporated and the value in diversity is recognized.

REFERENCES

Abrahams, R. D. 1983. ***African worlds.*** New York: Pantheon Books.

Bassin, M. 1988. Teamwork at General Foods: New and improved. ***Personnel Journal,*** 67: 62–70.

Bell, E. 1986. ***The power within: Bicultural life structures and stress among black women.*** Unpublished doctoral dissertation, Case Western Reserve University, Cleveland.

Bell, E. 1990. The bicultural life experience of career-oriented black women. ***Journal of Organizational Behavior,*** 11: 459–477.

Bond, M. H., & Yang, K. S. 1982. Ethnic affirmation versus cross-cultural accommodation. ***Journal of Cross-Cultural Psychology,*** 13: 169–185.

Bond, M. H., & Wang, S. H. 1983. Aggressive behavior in Chinese society: The problem of maintaining order and harmony. In A. P. Goldstein & M. Segall (Eds.), ***Global perspectives on aggression:*** 58–74. New York: Pergamon.

Bontempo, R., Lobel, S. A., & Triandis, H. C. 1990. Compliance and value internalization in Brazil and the U.S.: Effects of allocentrism and anonymity. ***Journal of Cross-Cultural Psychology,*** 21: 200–213.

Brickman, P. 1974. Role structures and conflict relationships. In P. Brickman (Ed.), ***Social conflict:*** 1–33. Lexington, MA: Heath.

Broch, H. B. 1987. Ethnic differentiation and integration: Aspects of inter-ethnic relations at the village level on Bonerate. ***Ethnic Groups,*** 7: 19–37.

Cohen, J. 1977. ***Statistical power analysis for the behavioral sciences.*** New York: Academic Press.

Comrey, A. L. 1953. Group performance in a manual dexterity task. ***Journal of Applied Psychology,*** 37: 207–210.

Copeland, L. 1988. Valuing diversity: Making the most of cultural differences at the workplace. ***Personnel,*** 65(6): 52–60.

Cox, T., & Blake, S. 1991. Managing cultural diversity: Implications for organizational competitiveness. ***Academy of Management Executive,*** 5(3): 45–56.

Dawes, R. M. 1980. Social dilemmas. In M. R. Rosenzweig & L. W. Porter (Eds.), ***Annual review of psychology,*** vol. 31: 169–193. Palo Alto, CA: Annual Reviews.

Diaz-Guerrero, R. 1984. La psicologia de los Mexicanos: Un paradigma. ***Revista Mexicana de Psicologia,*** 1(2): 95–104.

Dubois, W. E. B. 1903. ***The souls of Black folk.*** New York: The New American Library.

Espinoza, J., & Garza, R. T. 1985. Social group salience and interethnic cooperation. ***Journal of Experimental Social Psychology,*** 21: 380–392.

Esty, K. 1988. Diversity is good for business. ***Executive Excellence,*** 5(1): 5–6.

Ferguson, G. A. 1966. ***Statistical analysis in psychology education.*** New York: McGraw-Hill.

Foeman, A., & Pressley, G. 1987. Ethnic culture and corporate culture: Using Black styles in organizations. ***Communication Quarterly,*** 35: 293–307.

Galagan, P. 1986. Work teams that work. ***Training and Development Journal,*** 40(11): 33–35.

Garza, R. T., Romero, L. G., Cox, B., & Ramirez, M. 1982. Biculturalism, locus of control, and leader behavior in ethnically mixed small groups. ***Journal of Applied Social Psychology,*** 12: 237–253.

Hatcher, L. L., & Ross, T. L. 1985. Organization development through productivity gain sharing. ***Personnel,*** 62(10): 42–50.

Hazuda, H. P., Stern, M. P., & Haffner, S. M. 1988. Acculturation and assimilation among Mexican Americans: Sales and population-based data. ***Social Science Quarterly,*** 69: 687–706.

Hofstede, G. 1980. ***Culture's consequences.*** Beverly Hills, CA: Sage.

Hoggart, A. C. 1959. An experimental business game. ***Behavioral Science,*** 4: 192–203.

Hui, C. H. 1988. Measurement of individualism-collectivism. ***Journal of Research in Personality,*** 22: 17–36.

Hsu, F. L. K. 1981. ***American and Chinese: Passage to differences*** (3d ed.). Honolulu: University of Hawaii Press.

Inkeles, A. 1983. The American character. ***The Center Magazine,*** 16: 25–39.

Johnston, W. B., & Packer, A. 1987. ***Workforce 2000: Work and workers for the 21st century.*** Indianapolis: Hudson Institute.

Kagan, S. 1977. Social motives and behaviors of Mexican-Americans and Anglo children. In J. L. Martinez (Ed.), ***Chicano psychology:*** 45–86. New York: Academic.

Kahn, A., Hottes, J., & Davis, W. 1971. Cooperation and optimal responding in the Prisoner's Dilemma game. ***Journal of Personality and Social Psychology,*** 17: 267–279.

Kanter, R. M. 1977. ***Men and women of the corporation.*** New York: Basic Books.

Kanter, R. M. 1983. ***The changemasters.*** New York: Simon & Schuster.

Kelley, H. H., & Stahelski, A. J. 1970. Social interaction basis of cooperators' and competitors' beliefs about others. ***Journal of Personality and Social Psychology,*** 16: 66–91.

Kochman, T. 1981. ***Black and white styles in conflict.*** Chicago: University of Chicago Press.

Komorita, S. S. 1987. Cooperative choice in decomposed social dilemmas. ***Personality and Social Psychology Bulletin,*** 13: 53–63.

Kuhlman, D. M., & Marshello, A. F. 1975. Individual differences in game motivation as moderators of preprogrammed strategy effects in Prisoner's Dilemma. ***Journal of Personality and Social Psychology,*** 32: 922–931.

Kwasi, W. 1980. ***Philosophy and an African culture.*** London: Cambridge University Press.

Lau, J. B., & Jelinek, M. 1984. ***Behavior in organizations.*** Homewood, IL: Irwin.

Leung, K. 1988. Some determinants of conflict avoidance. ***Journal of Cross-Cultural Psychology,*** 19: 125–136.

Levine, M. 1987. Making group collaboration work. ***Production and Inventory Management,*** 28: 31–33.

Luce, R. D., & Raiffa, H. 1957. ***Games and detectives: Introduction and critical survey.*** London: Wiley.

Lugones, M., & Spelman, E. 1983. Have we got a theory for you! Feminist theory, cultural imperialism and the demand for the women's voice. ***Women's Studies International Forum,*** 6: 573–581.

McCallum, D. M., Harring, K., Gilmore, R., Drenan, S., Chase, J. P., Insko, C. A., & Thibaut, J. 1985. Competition and cooperation between groups and between individuals. ***Journal of Experimental Social Psychology,*** 21: 301–320.

McFee, M. 1968. The 150% man, a product of Blackfeet acculturation. ***American Anthropologist,*** 70: 1096–1103.

Marin, G., & Triandis, H. C. 1985. Allocentrism as an important characteristic of the behavior of Latin Americans and Hispanics. In R. Diaz-Guerrero (Ed.), ***Cross-cultural and national studies in social psychology:*** 69–80. Amsterdam: North Holland.

Markowich, M. M. 1987. Using task forces to increase efficiency and reduce stress. ***Personnel,*** 64(8): 34–38.

Messick, D. M., & Brewer, M. B. 1983. In L. Wheeler & S. P. Shaver (Eds.), ***Review of personality and social psychology,*** vol. 4: 11–44. Newbury Park, CA: Sage.

Nelton, S. 1988. Meet your new workforce. ***Nation's Business,*** 76(7): 14–21.

Okamura, J. 1981. Situational ethnicity. ***Ethnic and Racial Studies,*** 4: 452–465.

Paden, J. 1970. Urban pluralism, integration and adaptation of communal identity in Kano, Nigeria. In R. Cohen & J. Middleton (Eds.), ***From tribe to nation in Africa: Studies in incorporation processes:*** 268–293. Scranton, NJ: Chandler Publishing.

Pruitt, D. G. 1967. Reward structure and cooperation: The decomposed Prisoner's Dilemma game. ***Journal of Personality and Social Psychology,*** 7: 21–27.

Pruitt, D., & Kimmel, M. 1977. Twenty years of experimental gaming: Critique, synthesis, and suggestions for the future. In M. R. Rosenzweig & L. W. Porter (Eds.), ***Annual review of psychology,*** vol. 28: 363–392. Palo Alto, CA: Annual Reviews.

Radlow, R. 1965. An experimental study of cooperation in the Prisoner's Dilemma game. ***Conflict Resolution,*** 9: 221–227.

Raudsepp, E. 1988. Put teamwork into work teams. ***Chemical Engineering,*** 95(10): 113–114.

Rosenthal, R., & Rosnow, R. 1985. ***Contrast analysis: Focused comparisons in the analysis of variance.*** Cambridge, England: Cambridge University Press.

Salamone, F., & Swanson, C. 1979. Identity and ethnicity: Ethnic groups and interactions in a multiethnic society. ***Ethnic Groups,*** 2: 167–183.

Schmidt, P. 1988. Women and minorities: Is industry ready? ***New York Times,*** October 16: 25–27.

Schwartz, S. H. 1990. Individualism-collectivism: Critique and proposed refinements. ***Journal of Cross-Cultural Psychology,*** 21: 139–157.

Scott, K. D., & Cotter, T. 1984. The team that works together earns together. ***Personnel Journal,*** 63(3): 59–67.

Sermat, V., & Gregovich, R. P. 1966. The effect of experimental manipulation on cooperative behavior in a chicken game. ***Psychonomic Science,*** 4: 435–436.

Sodano, A. G., & Baler, S. G. 1983. Accommodation to contrast: Being different in the organization. ***New Directions for Mental Health Services,*** 20(December): 25–36.

Thomas, D. A. 1990. ***Strategies for managing racial differences in work-centered developmental relationships.*** Working paper, Wharton School of Business, University of Pennsylvania.

Triandis, H. C. 1989. Cross-cultural studies of individualism-collectivism. In J. J. Berman (Ed.), ***Nebraska Symposium on Motivation: Cross-cultural perspectives,*** vol. 37: 41–133. Lincoln: University of Nebraska Press.

Triandis, H. C., Bass, A. R., Ewen, R. B., & Mikesell, E. H. 1963. Team creativity as a function of the creativity of the members. ***Journal of Applied Psychology,*** 17: 104–110.

Triandis, H. C., Bontempo, R., Bentancourt, H., Bond, M., Leung, K., Brenes, A., Georgas, J., Hui, C. H., Marin, G., Setiadi, B., Sinha, J. B. P., Verma, J., Spangenberg, J., Touzard, H., & Montmollin, G. 1986. The measurement of the ethnic aspects of individualism and collectivism across cultures. ***Australian Journal of Psychology,*** 38: 257–267.

Triandis, H. C., Leung, K., Villareal, M., & Clack, F. L. 1985. Allocentric versus idiocentric tendencies: Convergent and discriminant validation. ***Journal of Research in Personality,*** 19: 395–415.

Triandis, H. C., McCusker, C., & Hui, C. H. 1990. Multi-method probes of individualism-collectivism. ***Journal of Personality and Social Psychology,*** 59: 1006–1020.

Triandis, H. C., Malpass, R. S., & Davidson, A. R. 1973. Psychology and culture. In ***Annual Review of Psychology,*** vol. 24: 355–378. Palo Alto, CA: Annual Reviews.

Triandis, H. C., Marin, G., Hui, C. H., Lisansky, J., & Ottati, V. 1984. Role perceptions of Hispanic young adults. ***Journal of Cross-Cultural Psychology,*** 15: 297–320.

Triandis, H. C., Marin, G., Lisansky, J., & Betancourt, H. 1984. Simpatia as a cultural script of Hispanics. ***Journal of Personality and Social Psychology,*** 47: 1363–1375.

Uejio, C. K., & Wrightsman, L. 1967. Ethnic group differences in the relationship of trusting attitudes to cooperative behavior. ***Psychological Reports,*** 20: 563–571.

Van-Lange, P. A. M., Liebrand, W. B. G., & Kuhlman, D. M. 1990. Causal attribution of choice behavior in three N-person Prisoner's Dilemmas. ***Journal of Experimental Social Psychology,*** 26: 34–48.

Wagner, J. A., III, & Moch, M. K. 1986. Individualism-collectivism: Concept and measure. ***Group and Organization Studies,*** 11: 280–304.

Washington, C. W. 1987. Acculturation of minorities in large organizations. ***The Bureaucrat,*** 16(1): 29–34.

Weist, W. M., Porter, L. W., & Ghiselli, E. E. 1961. Relationships between individual proficiency and team performance and efficiency. ***Journal of Applied Psychology,*** 45: 435–440.

Wong-Rieger, D., & Quintana, D. 1987. Comparative acculturation of Southeast Asian and Hispanic immigrants and sojourners. ***Journal of Cross-Cultural Psychology,*** 18: 345–362.

Taylor Cox is an assistant professor in the School of Business Administration at the University of Michigan. He received his Ph.D. degree from the University of Arizona. His current research focuses on the implications of racial-ethnic, gender, and nationality differences in organizations and on organizational career issues.

Sharon A. Lobel is an assistant professor of management at the Albers School of Business, Seattle University. She received her Ph.D. degree from Harvard University. Her recent publications and research interests focus on understanding people's investment in work and family roles, global leadership competencies, and cross-cultural differences.

Poppy L. McLeod is an assistant professor of organizational behavior at the School of Business Administration, University of Michigan. She received her Ph.D. degree from Harvard University. Her research interests include small group behavior and the social impacts of technology.