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Mapping the Ethnic Landscape: Personal Beliefs About Own Group's and Other Groups' Traits

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Brewer and Campbell showed that stereotypes fall along dimensions of achievement and evaluation. This study examines individuals' personal beliefs about their own and other ethnic groups, along with indicators of in-group bias. Three hundred fifty-one college students who were members of six ethnic groups selected 4 traits from a list of 30 traits that best described each group. The six ethnic identities and the traits were represented in two dimensions using correspondence analysis. An achievement dimension emerged that we termed Collectivist Achievement Ethic*, which contrasted three high-achieving Asian identities with three lower achieving non-Asian identities. The second dimension was linked with the socioeconomic status of the ethnic identities and had variable relationships with favorability ratings of the traits. In-group bias was found in five out of six cases; however, White Americans exhibited in-group derogation.*

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An increasing number of Americans are living, working, and going to school in multiethnic social environments. Moreover, the nature of the ethnic landscape in many parts of the United States has changed dramatically over the past 3 decades. A significant aspect of this change involves increased immigration from Mexico and Pacific Rim countries. In California, for example, the proportion of the population of Mexican heritage rose from 19.2% to 32.4% from 1980 to 2000 (U.S. Census Bureau, 1980, 2000). Over the same span of years, the proportion of the California population that is of Asian ancestry doubled, increasing from 5.3% to 10.9%. Research on how we view our varied ethnic landscape has not kept apace of these demographic changes (Hayward, 2001).

Historically, research on social stereotypes and personal beliefs about ethnic groups in this country has focused mainly on Blacks and Whites. Within the past decade, researchers have broadened the scope of their investigations to better represent the communities in which we now live (notable examples include Fiske, Cuddy, Glick, & Xu, 2002; Jackson et al., 1996; Zebrowitz, Montepare, & Lee, 1993). Although research on stereotypes of Asians is growing (Fiske et al., 2002; Ho, Sanbonmatsu, & Akimoto, 2002; Jackson et al., 1996), few studies have gone beyond the examination of a pan-Asian ethnicity identity. This is a serious shortcoming, inasmuch as Asian-ancestry groups in the United States have diverse national origins and different temporal, political, and economic histories in the United States. In addition, the various Asian American groups have complex relations among themselves, based in part on past and present relations among the Asian countries that are their ancestral homes.

Another shortcoming of research on stereotypes and personal beliefs is its heavy concentration on the perceptions of Whites

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about other ethnic groups with little attention to other ethnic groups' personal beliefs and stereotypes about Whites (e.g., Devine & Elliot, 1995; Fiske et al., 2002; Ho et al., 2002; Islam & Jahjah, 2001; McKay & Pittam, 1993; Stangor, Sullivan, & Ford, 1991; Wilson, 1996). Fiske (1998) noted this imbalance in a recent assessment of the field, concluding that "stereotypes about traditionally less powerful groups [have been] studied to the virtual exclusion of stereotypes about traditionally more powerful groups" and suggesting that more research should be conducted on stereotypes of Whites (p. 380). Researchers' neglect of minority groups' views of Whites may be in part the result of long-standing power differentials in society; in addition, the venues in which stereotype research has often been conducted (i.e., universities and communities with a largely White population) may have contributed to the problem. Few studies, moreover, employ multigroup, fully crossed designs, in which multiple ethnic groups of respondents in an environment report perceptions of their own group as well as each other group specified in the study. Designs in which just one group (typically, Whites) reports its views of several other groups, or two-group designs (e.g., in which Blacks and Whites rate Blacks and Whites; see Krueger, 1996), do not fully capture the beliefs and stereotypes that prevail in the larger social setting.

In this study, which uses data collected by Hayward (2001), we examine the personal beliefs (as opposed to knowledge of social stereotypes; see Devine & Elliot, 1995) of respondents from six ethnic groups—Chinese, Korean, Vietnamese, Mexican, White, and African American—about their own group and each of the other five groups. Specifically, we examine the content and structure of the traits that respondents believe to be most typical of each ethnic group and the valence (favorability) of those traits.

In formulating hypotheses, we draw substantially on Brewer and Campbell (1976). Their study, conducted in Kenya, Tanzania, and Uganda, provides a rare example of a fully crossed design. In each nation, they collected data from members of 10 ethnic groups, who rated their own group, the other 9 groups from their nation, and 4 groups from an adjacent nation. Hence, their study included three fully crossed designs, one for each nation. Brewer and Campbell asked respondents to specify which ethnic group best exemplified each of 52 traits. Factor analysis of the data yielded three interpretable factors. The first factor, Evaluation, had positive loadings for traits such as obedient, peaceful, friendly, clean, and religious and negative loadings for traits such as quarrelsome,

cruel, and hot-tempered. The second factor, Socioeconomic Advancement and Achievement, had positive loadings for traits such as wealthy, progressive, smart, hard working, thrifty, and lacking generosity and negative loadings for traits such as backward, poor, stupid, and lazy. These two dimensions seem compelling to us because evaluation has often appeared as a semantic dimension relevant to traits (Rosenberg, Nelson, & Vivekanathan, 1968) and other social processes (Burton & Romney, 1975) and because achievement taps into important processes in capitalist societies (McClelland, 1961; Weber, 1930). Brewer and Campbell's third factor, physical attractiveness, referred to particular racial distinctions that were made within an East African context and would not be expected to generalize to research in most other settings.

This study examines the applicability of Brewer and Campbell's (1976) thinking about stereotype content to the realm of personal beliefs. In addition, we examine the extent to which respondents differentiate among several Asian American identities. Finally, we explore issues related to the occurrence of in-group bias, defined as bias in favor of one's own group (Allport, 1954; Brewer, 1979; Tajfel, 1981). Asian Americans are one of the fastest growing groups in the United States and often have high levels of achievement. Our study design allows for comparison of the personal beliefs of three Asian American groups (Chinese American, Korean American, and Vietnamese American) with three non-Asian groups (White American, Mexican American, and African American) about their own group and each of the five other groups. All of these ethnic groups except African Americans are present in substantial numbers on the campus where the study was conducted. We nonetheless included African Americans because of their important role in past research about ethnicity in America. Within the two categories (Asian American and non-Asian), we selected ethnic groups that varied by social status. In this study, we examined the following hypotheses:

Hypothesis 1: Personal beliefs about the ethnic groups and their associated traits will exhibit a primary dimension that reflects achievement. This dimension will be shared across all six groups of respondents. This hypothesis follows from Brewer and Campbell's (1976) finding of an achievement dimension and from the fact that the respondents to this study are in a social context that places a high emphasis on achievement.

Hypothesis 2: A second meaningful dimension will emerge that focuses on evaluation (favorability) of traits and associated identities. We expect this dimension to contrast favorable traits and identities with unfavorable traits and identities and to emerge from the data obtained from each ethnic group. This hypothesis follows from Brewer and Campbell's (1976) finding of an evaluation dimension.

Hypothesis 3: In-group bias will be shown by all respondent groups with respect to achievement and evaluation. Members of each respondent group will assign higher scores on the achievement dimension to their own group, relative to the assignment of the same group by members of other groups of respondents, and will assign more favorable traits to their own group than to other groups.

Hypothesis 4: Non-Asian (White, Mexican, and African American) respondents will perceive more similarities among the three Asian American subgroups than will Asian Americans themselves. That is, they will tend to merge the three Asian American identities into a single Asian identity. It is commonplace, both in the media and in the research literature, to encounter references to a pan-Asian (American) identity. Moreover, non-Asian American college youths are likely to have limited knowledge about the distinctive histories and cultures of various subgroups of Asian Americans compared to Asian Americans themselves.

METHOD

RESPONDENTS

The data were collected in 1996 as part of a related research endeavor (Hayward, 2001). Respondents in the core study were 323 undergraduates enrolled at a large, ethnically diverse, public university in Southern California. In fall 1999, more than half of the student body claimed Asian ancestry, and 31.5% of the student body claimed ancestry from one of the three Asian groups on which we focus in this study: Chinese, 15.7%; Korean, 8.3%; and Vietnamese, 7.5%. White Americans were only 26% of the campus population: Mexican Americans, 7.0%; and African Americans, 1.8%.[1] Respondents were recruited from eight social science courses and were offered a modest amount of extra course-credit in exchange for completion of an anonymous survey that required approximately 45 minutes. Seventy-three percent of the sample was female, reflecting the gender composition in social science courses at the university. The average age of respondents ranged from 19.9 to 20.2 years for the five groups of non-Whites and 22.1 years for

White Americans. Most respondents (58.9%) were born in the United States. However, most respondents had a mother (71.4%) or father (69.4%) who was born outside the United States. Of those who were foreign born, most (66.9%) came to the United States before age 10.

PROCEDURE

Surveys were administered in noninteractive group sessions ranging from 15 to 25 respondents by one of the authors, a White male (C.H.), and a female undergraduate assistant of a different ethnicity from him. As part of the survey, which covered a wide range of issues, respondents were asked to characterize the members of their own and five other ethnic groups using a 30-adjective checklist. We included in this study only data provided by students who reported their ethnicity as Chinese American ($n = 94$), Korean American ($n = 49$), Vietnamese American ($n = 42$), Mexican American ($n = 61$), African American ($n = 18$), or White American ($n = 87$).[2] The list of adjectives we constructed drew on a number of previously published adjective checklists and stereotype measures (e.g., Devine & Elliot, 1995; Dovidio & Gaertner, 1986; Karlins, Coffman, & Walters, 1969; Katz & Braly, 1933; Stephan & Rosenfield, 1982; Stephan et al., 1993) with some additions of our own. We attempted to choose roughly equal numbers of positive, negative, and neutral adjectives that are in common usage.

The cover sheet of the survey stated that the investigators were interested in learning how the respondents perceived various members of their social world. On each of six consecutive pages, a single ethnic group was named (e.g., Chinese American). The list of 30 adjectives was presented beneath the name of the target ethnic group. Respondents were instructed to examine the list and circle all adjectives they thought characteristic of the group. After completing this initial pass through the checklist, which was intended to prime thoughts and images of the particular group, respondents were instructed to select the four traits they thought most characteristic of the group in question. These instructions correspond to solicitation of "personal beliefs" rather than "knowledge of cultural stereotypes" (see Devine & Elliot, 1995). The order of presentation of both ethnic groups and adjectives was identical across all respondents (White, Chinese, Korean, African, Mexican, and Vietnamese American).

A separate sample of 102 students from two other social science courses completed a brief, anonymous questionnaire in the classroom in which they evaluated the previously described 30 traits on a 5-point scale as follows: 1 = *clearly negative*, 2 = *somewhat negative*, 3 = *neutral*, 4 = *somewhat positive*, and 5 = *clearly positive*. Respondents in this study were not asked to assign traits to members of ethnic groups. Extra course-credit was not provided due to the brief nature of the task. The sample was ethnically diverse: 14 Chinese, 10 Korean, 8 Vietnamese, 19 Mexican, 21 White, 3 African, and 7 Filipino Americans, along with 20 "others" (mainly biracial individuals).

MEASURES

Ethnic-group trait descriptions. Two traits, cruel and skeptical, were rarely used by respondents in the main study. Because the inclusion of these traits in the ensuing analyses would have reduced the reliability of results, these two traits were deleted. The remaining 28 traits are listed in Table 1, along with their favorability ratings.

To derive measures of trait favorability, we used data from the smaller ($N = 102$) study described above. Because the trait evaluations were produced by members of several different ethnic groups, we used the cultural consensus model developed by Romney, Weller, and Batchelder (1986) to test whether the evaluation of traits was shared across respondents. The resulting interrespondent reliability was .996, and the ratio of the first and second eigenvalues was 26.70, showing a very high degree of sharing among respondents in their trait evaluations. Furthermore, the Quadratic Assignment Procedure (Hubert, 1987) showed no effect of ethnicity on agreement among respondents in the favorability of ratings. Significant differences between Asian and non-Asian respondents, as examined with t tests, were found only with respect to two traits: Asians gave lower favorability ratings than non-Asians to warm and intelligent. Given that we would expect 1.5 significant differences by chance, we concluded that there were minimal differences in trait evaluations with respect to the ethnicity of raters. As a consequence, we used the aggregated data to compute the average favorability of each trait (see Table 1).

As can be seen in Table 1, eight traits were rated very negatively (1-1.99), nine traits were rated mid-range in favorability (2-3.99),

TABLE 1
Means and Standard Deviations of Ratings of Trait Favorability

	Favorability Ratings	
Trait	M	SD
Aggressive	1.73	0.85
Ambitious	4.36	0.82
Arrogant	1.77	0.80
Assertive	3.63	0.86
Deceitful	1.26	0.61
Emotional	3.37	0.83
Family oriented	4.63	0.73
Flexible	4.39	0.75
Fun loving	4.43	0.73
Hard working	4.75	0.48
Humorous	4.50	0.63
Impatient	1.98	0.76
Intelligent	4.38	0.83
Lazy	1.76	0.79
Loud	2.31	0.77
Materialistic	2.08	0.97
Neat	4.31	0.70
Not trusting	1.45	0.82
Proud	3.58	1.03
Passive	2.63	0.67
Reliable	4.84	0.39
Religious	3.71	0.99
Reserved	3.10	0.74
Selfish	1.92	1.04
Serious	3.24	0.71
Sociable	4.39	0.66
Stingy	1.74	0.73
Warm	4.69	0.51

NOTE: Traits were rated on a 5-point scale, with 1 being *most negative* and 5 being *most positive*.

and 11 were rated very positively (4-4.99). These results indicate that we succeeded in obtaining approximately equal numbers of positive, neutral, and negative traits. We assigned these averaged favorability ratings to the four adjectives selected by the respondents in the larger, core study sample to describe their beliefs about the six groups. The sum of these ratings, divided by the number of adjectives (some respondents selected fewer than the four traits requested), yielded a favorability index for each respondent's ratings of each ethnic identity. These individual indices were then averaged across respondents to produce measures of favorability

TABLE 2
Positions of the Six Ethnic Identities on First Dimension of Correspondence Models Achievement

	Ethnic Identity Rated					
Rater's Ethnic Group	*Chinese American*	*Korean American*	*Vietnamese American*	*Mexican American*	*White American*	*African American*
Chinese American	1.14	0.35	0.41	–0.19	–0.88	–0.80
Korean American	0.89	0.88	0.30	–0.22	–1.03	–0.84
Vietnamese American	0.83	0.35	0.76	0.01	–0.72	–1.22
Mexican American	0.75	0.52	0.53	0.10	–0.50	–1.37
White American	0.85	0.54	0.68	–0.22	–0.65	–1.19
African American	0.57	0.74	0.69	–0.44	–0.79	–0.73

NOTE: A position at the mid-point of the dimension would have a value of .00.

for each ethnic group of raters in relation to their own and the other groups (e.g., the favorability of Chinese Americans' ratings of Chinese Americans, the favorability of Chinese Americans' ratings of White Americans, etc.; see Table 3).

Other measures. Respondents provided information about their gender, ethnicity, and age. Ethnicity was assessed by the item, "I usually identify myself as . . . ," followed by eight ethnic identities reflecting the most populous groups on campus and a ninth category ("other") with instructions to write in a specific ethnic identification.

Socioeconomic status (SES) of each of the six ethnic groups was assessed using U.S. census data (2000) for the county in which the university from which the sample was drawn is located. Eight indicators were included: average per capita income, average household income, percentage of ethnic group members living in poverty, percentage of adults who are high school graduates, percentage who are college graduates, percentage in professional occupations, and percentage unemployed. An unrotated principal components analysis of these data revealed that a single factor accounted for 80.3% of the variance. The resulting scores on this factor were, in descending order of SES, Chinese Americans, 1.19; White Americans, 1.04; Korean Americans, .35; African Americans, .0; Vietnamese Americans, –1.11; and Mexican Americans, –1.47. These results suggest that the groups fall into three tiers with respect to SES: high, Chinese and White Americans; medium, Korean and African Americans; and low, Vietnamese and Mexican Americans. Hayward (2001) obtained very similar results using averaged rank orders.

RESULTS

PLAN OF ANALYSIS

To represent the structure of attribution of traits to ethnic identities, we first computed the total number of times each trait was assigned by members of a particular ethnic group to each target group—for example, the number of times that Chinese American respondents said that Mexican Americans were family oriented. The resulting response profiles were then subjected to correspondence analysis (Greenacre, 1984; Kendall & Stuart, 1961;

TABLE 3
Means and Standard Deviations of Favorability Ratings of Traits Selected to Describe Six Ethnic Groups

	Ethnic Group Rated					
Respondent Group	*Chinese American*	*Korean American*	*Vietnamese American*	*Mexican American*	*White American*	*African American*
Chinese American	3.77(0.59)	3.52(0.61)	3.17(0.88)	3.33(0.85)	3.66(0.63)	3.31(0.69)
Korean American	3.62(0.60)	3.84(0.58)	3.16(0.87)	3.47(0.84)	3.82(0.64)	3.25(0.72)
Vietnamese American	3.90(0.69)	3.58(0.73)	3.78(0.55)	3.74(0.66)	3.53(0.62)	3.38(0.69)
Mexican American	3.85(0.55)	3.73(0.61)	3.67(0.77)	4.22(0.31)	3.00(0.84)	3.38(0.62)
White American	3.98(0.50)	3.84(0.67)	3.65(0.66)	4.16(1.19)	3.50(0.63)	3.33(0.73)
African American	3.82(0.36)	4.10(0.27)	3.90(0.35)	3.87(0.70)	3.09(0.86)	4.11(0.29)

NOTE: Standard deviations are in parentheses.

Nishisato, 1980; Weller & Romney, 1990) to produce models of how each group of respondents perceived the six groups and their associated traits. Correspondence analysis has been used in a number of fields and frequently in anthropological studies that conjointly map cultural constructs and cultural groups by placing them in a common space (Burton, Moore, Whiting, & Romney, 1996; Romney & Moore, 1998). We use correspondence analysis here because it is well-suited to the problem of comparing structures across respondent groups and because it allows for representation of the ethnic identities and their associated traits in a common space. In contrast, in a factor analytic model such as that used by Brewer and Campbell (1976), the factor loadings and factor scores are measured on different scales. Thus, with correspondence analysis, one can simultaneously study variation across groups in their trait attributions and variation across traits in the groups to which they have been assigned. In such analyses, ethnic identities will appear in close proximity to one another if respondents tend to attribute the same traits to them. Traits will appear in close proximity to each other to the extent that respondents attribute them to the same ethnic identities.

Whereas past studies often have incorporated as few as one perspective (e.g., Whites' views of Blacks), we are representing 36 perspectives (i.e., six ethnic groups rating six ethnic groups). There are two possible approaches to representing these 36 perspectives. One approach would be to stack the six data matrices and produce a single representation showing the 36 ethnic perspectives—for example, the Chinese American view of Korean Americans, the Korean American view of Mexican Americans, and the White American view of Vietnamese Americans. This approach minimizes differences between respondent groups by forcing a common perspective. We have chosen instead to take the second approach, which is to produce six correspondence models, each representing the perspective of a single group of respondents. This approach produces a more complete representation of cultural differences among the response groups. Any similarity between the different respondent patterns would be evidence for the independent replication of a pattern, not an artifact of a method that was designed to produce a common structure.

We first describe the correspondence models, with one model per ethnic group of respondents. After describing the correspondence model for a given respondent group, we discuss the relationships between favorability of traits and SES for that respondent group.

CORRESPONDENCE MODELS

For each of the six data sets, we computed a two-dimensional correspondence model using as input a 6 × 28 matrix listing the number of times the respective respondent group assigned each trait to each identity. The two dimensions together accounted for between 55.1% and 65.0% of the variance. The configurations were rotated using the Procrustes routine in SYSTAT (Systat, 2001) to match the correspondence model that was obtained by aggregating the data across all six respondent groups. The effect of the rotations was to produce similar alignments of the six configurations to facilitate comparisons among them.

The rotated correspondence models are shown in Figures 1 through 6. We measured the intercorrelations among the six configurations using the Quadratic Assignment Procedure (Hubert, 1987) in the Anthropac program (Borgatti, 1996). All correlations were significantly greater than zero (all ps < .001)[3] and ranged in magnitude from .26 (between the Korean American and Mexican American configurations) to .74 (between the Korean American and Chinese American configurations).

First Dimensions of the Configurations

The six configurations shared a first dimension, represented as the horizontal axes of Figures 1 through 6. Evidence for a shared first dimension is provided by the high correlations among the first dimensions of the six configurations. These ranged from r = .64 to r = .94 with a mean value of .79. These first dimensions all contrasted the three Asian American identities with the three non-Asian identities, with Chinese American at the positive pole and either White American or African American at the negative pole.

To assess the content of the first dimensions, we tallied traits that had consistently high or low loadings on the first dimension across the majority of the respondent groups. Specifically, a trait was considered to have a high positive loading on this dimension if it had a score greater than .50 and a high negative loading if it had a score less than –.50. Ten traits had a high positive loading in most of the configurations. In 13 out of the 14 remaining instances, the loading was less than .50 but still positive. Hence, these 10 traits had a consistent pattern of positive loadings on the first dimension. The 10 consistently positive traits on the first dimension were intelligent, reserved, serious, stingy, hard working,

family-oriented, neat, reliable, ambitious, and passive. At the opposite pole, 9 traits had negative loadings in all of the configurations. These 9 traits had a consistent pattern of negative loadings. The 9 consistently negative traits on the first dimension were sociable, fun-loving, humorous, assertive, aggressive, warm, emotional, lazy, and loud.

Based on these patterns, we interpreted this first dimension as having to do with achievement (hard work, savings, social ambition, success) and collectivism (family, self control, low levels of individual assertion); hence, we call the first dimension the *Collectivist Achievement Ethic*. We see this dimension as including traits consistent with achievement in a culture where accomplishment is oriented toward the needs and goals of the group, including the family, and entailing a muting of individual assertion (Triandis, 1995).

As noted earlier, the three Asian American identities, whose cultures have often been described as collectivist, are at the positive pole of this dimension in the configurations produced by all six respondent groups. White American and African American are consistently at the negative pole of the first dimension, and Mexican American tends to be near the mid point. The grouping of White Americans with African Americans at the low end of an achievement dimension is notably different from the system of beliefs about ethnicity that has prevailed historically, at least from a White perspective, in American society. In the past, White Americans were perceived to have high levels of achievement and African Americans to have low levels of achievement. Our respondents consistently perceive the two groups to be at the low end of the achievement dimension.

Although achievement is a positively valued trait in American society, the first dimensions of the configuration are not evaluation dimensions. Correlations between the first dimensions and the trait favorability scale were low, ranging from –.02 (Chinese American respondents) to .31 (Mexican American respondents), and not statistically significant. The reason the first dimensions are not evaluation dimensions is that some negatively valued traits (e.g., stingy, passive) are associated with the positive poles of these dimensions and some positively valued traits (e.g., sociable, fun-loving, humorous, warm) are associated with the negative poles of these dimensions.

We have noted that the Chinese American identity is always at the positive pole of the first dimension. This makes the Chinese American identity a kind of gold standard for achievement to

which the other identities are compared. In some instances, we can see a self-promotion of one's own identity with respect to achievement. For example, Chinese Americans (see Figure 1) place their own identity first on the achievement scale with the Korean American and Vietnamese American identities virtually tied in second place. The Korean Americans (see Figure 2) promote their own identity to be equal to the Chinese American identity while leaving the Vietnamese American identity in second place. The Vietnamese Americans (see Figure 3) likewise promote their identity to be equal to the Chinese American identity while leaving the Korean American identity in second place.

Second Dimensions of the Configurations

The configurations showed more variability in the second dimensions. Correlations among the second dimensions of the trait configurations were lower, ranging from –.06 to .78 with a mean of .42. These lower correlations suggest that there are stronger cultural differences with respect to the second dimensions of the configurations.

However, all six configurations placed White Americans at the positive pole of the second dimension and either African American or Mexican American at the negative pole. Correlations across respondent groups in the location of the six identities on the second dimension ranged from .41 to .99 with a mean value of .81. Hence, there was more cultural sharing in the second dimension with respect to placement of the six identities than with respect to placement of the personality traits. Furthermore, placement of the six ethnic identities on the second dimension had positive correlations with the objectively assessed SES of the ethnic groups, ranging from $r = .46$ to $r = .73$. Therefore, we interpreted the second dimension as *Status* of the ethnic identities.

The second dimensions differ, however, with respect to favorability of trait ratings. We discuss briefly the different relations of these second dimensions to patterns of trait attribution.

Chinese American respondents. The second dimension of the Chinese American configuration (see Figure 1) has a positive correlation, $r = .53, p = .004$, with the favorability ratings of the traits. For the Chinese American respondents, status and favorability are linked, and the second dimension is both a status dimension and an evaluation dimension.

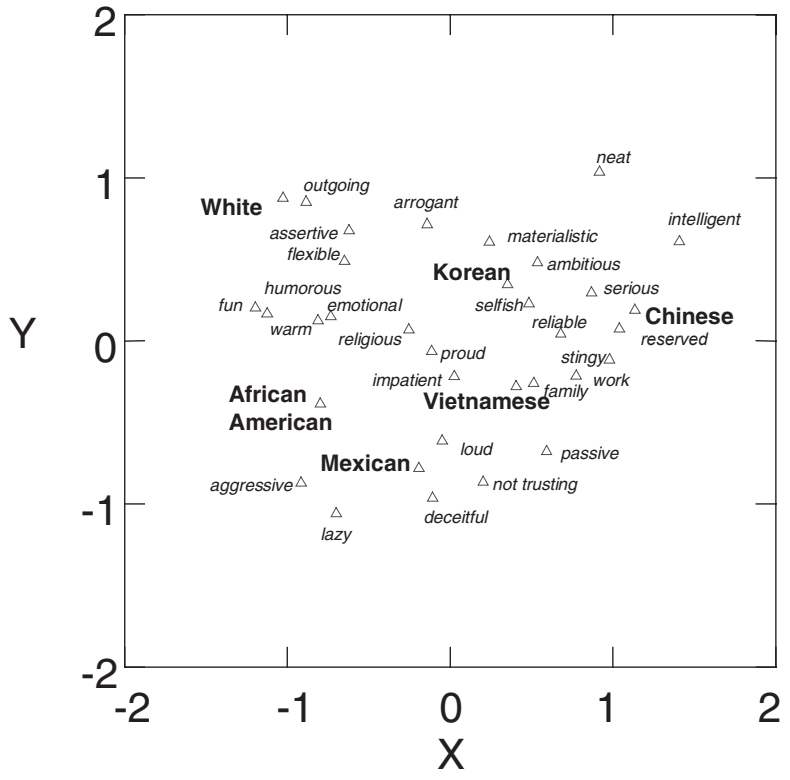

Figure 1: Correspondence Model of Traits and Ethnic Identities: Chinese American Respondents

Korean American respondents. As with Chinese American respondents, overall favorability scores of the traits for Korean American respondents (see Figure 2) had a positive correlation, $r = .58$, $p < .001$, with the second dimension. Like the Chinese American respondents, Korean American respondents associated status with favorability.

Vietnamese American respondents. For Vietnamese American respondents, favorability ratings of traits had a low correlation, $r = .04$, n.s., with the status dimension (see Figure 3). Unlike Chinese Americans and Korean Americans, the Vietnamese American respondents did not link favorability with status.

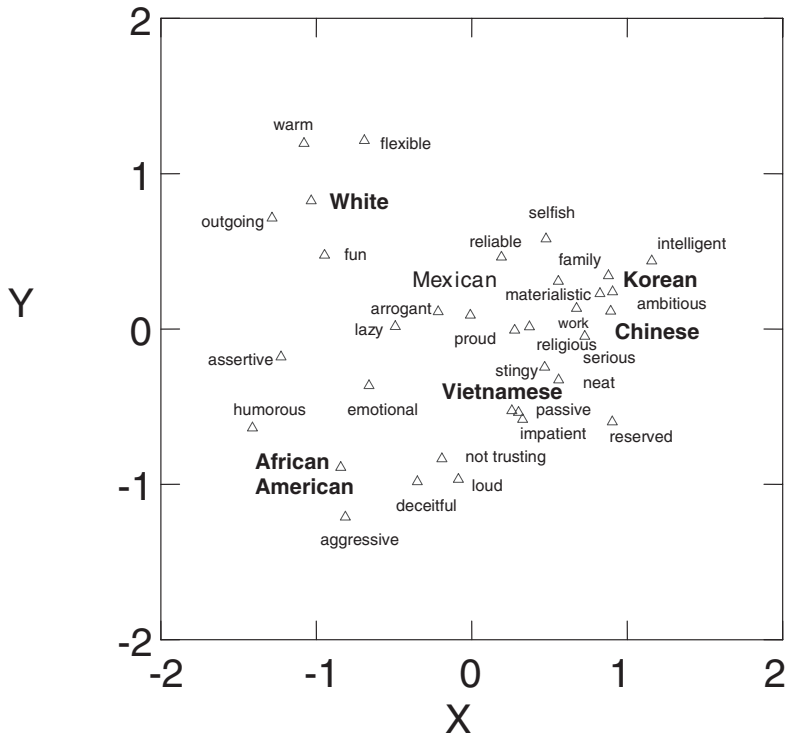

Figure 2: Correspondence Model of Traits and Ethnic Identities: Korean American Respondents

White American respondents. White Americans (see Figure 4) sharply contrasted their own group with Mexican Americans. At the positive pole of the second dimension, in proximity to White American, were one positive trait (outgoing) and three negatively evaluated traits (selfish, materialistic, and arrogant). At the opposite pole was Mexican American, proximal to two positively evaluated traits (religious and warm) and one negatively valued trait (deceitful).

White Americans assigned significantly less favorable traits to their own group than to all other groups except African Americans (all ps < .001). White Americans gave the highest favorability score to Mexican Americans. The low evaluation of White Americans by White Americans is surprising. Rather than showing in-group

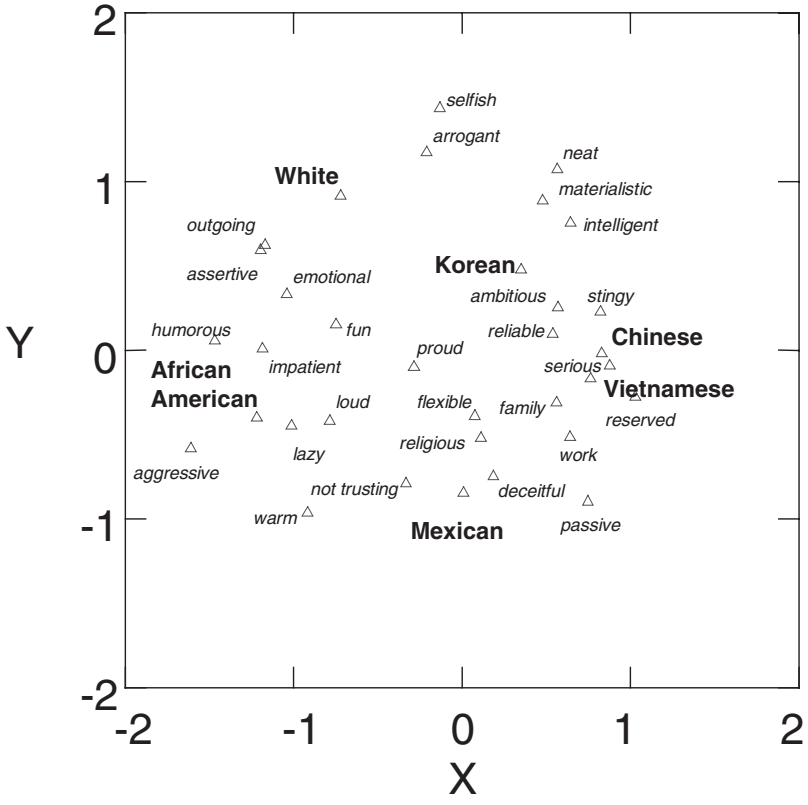

Figure 3: Correspondence Model of Traits and Ethnic Identities: Vietnamese American Respondents

bias, White Americans show bias against their own group with respect to favorability ratings and the achievement dimension. Much has been written about White American prejudice against African Americans. In this case, White Americans assigned low favorability to themselves as well as to African Americans.

White Americans' ratings of trait favorability had a very low correlation, $r = -.05$, n.s., with status. Like Vietnamese Americans, White Americans did not link trait favorability and status.

Mexican American respondents. In the Mexican American configuration (see Figure 5), the overall favorability of traits had a strong negative correlation, $r = -.68$, $p < .001$, with status (the

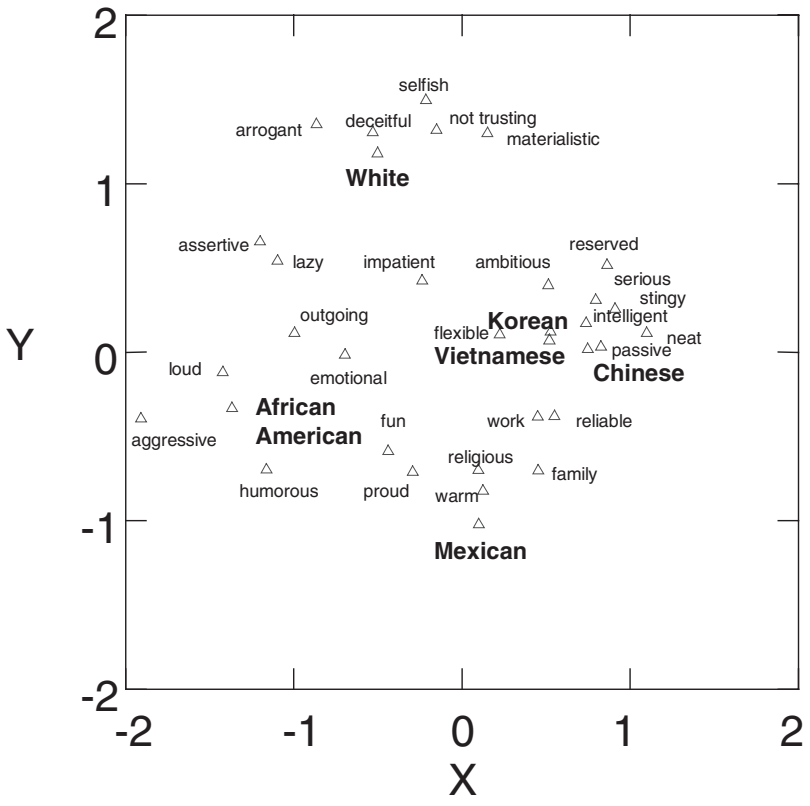

Figure 4: Correspondence Model of Traits and Ethnic Identities: Mexican American Respondents

second dimension). Hence, the relation between Status and global evaluation is the opposite of the patterns for Chinese and Korean American respondents. In particular, this took the form of very low favorability evaluations for the socially dominant White American identity. Mexican Americans placed the high-status White American identity in proximity to a cluster of negatively evaluated traits, made up of materialistic, selfish, not trusting, deceitful, and arrogant. Mexican Americans' descriptions of White Americans yielded the lowest favorability score in our study—significantly lower than the scores assigned by Mexican Americans to any of the other groups (all ps < .001). In contrast, Mexican Americans placed their own identity close to the following positively evaluated traits: hard

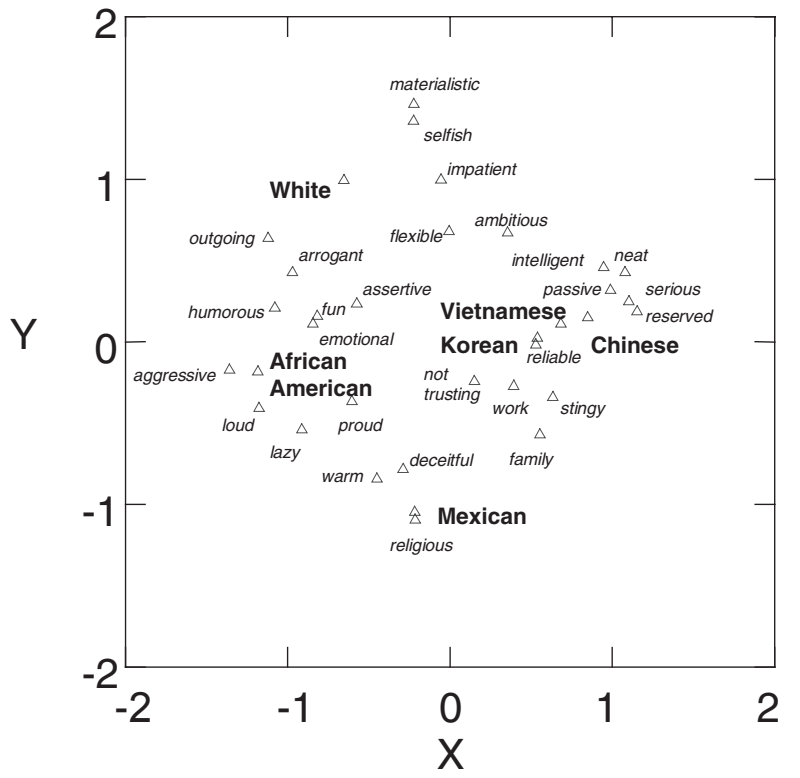

Figure 5: Correspondence Model of Traits and Ethnic Identities: White American Respondents

working, family oriented, religious, warm, proud, and fun-loving. Mexican Americans' trait descriptions of their own group produced the highest favorability score in this study—significantly greater than the scores given by Mexican Americans to any of the five other groups (all *p*s < .001).

African American respondents. The African American correspondence model (see Figure 6) should be considered exploratory in view of the small size of the African American sample.[4] African Americans' favorability ratings of traits had a low correlation, $r = -.19$, n.s., with the status dimension. The White American identity was regarded as quite distinct from the other five identities with respect

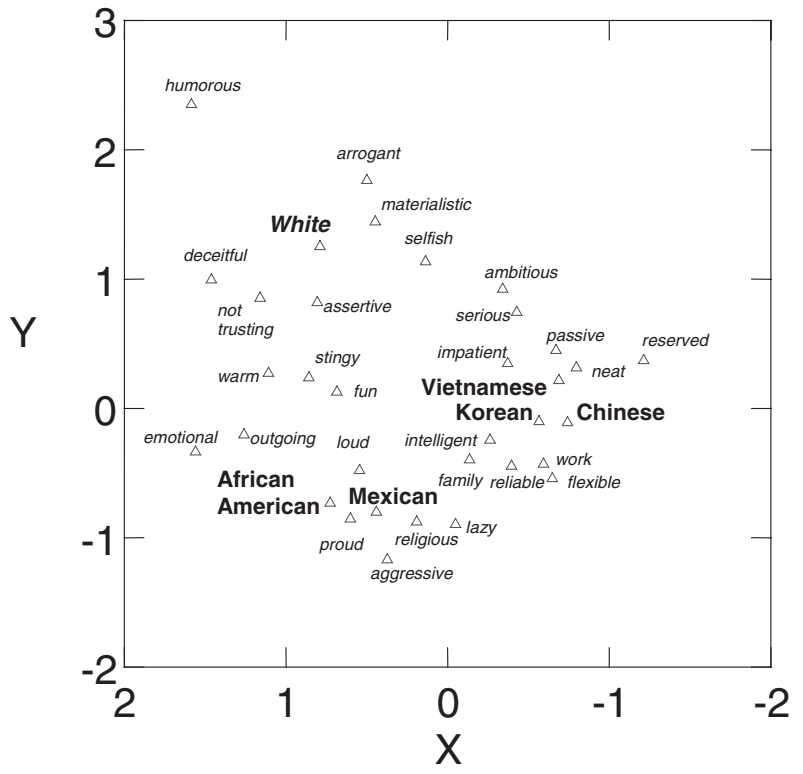

Figure 6: Correspondence Model of Traits and Ethnic Identities: African American Respondents

to status and was placed at the positive pole of this dimension in the midst of a cluster of socially undesirable traits, including arrogant, materialistic, selfish, deceitful, and not trusting, and one positive trait, humorous. These are the same negative traits that the Mexican Americans assigned to White Americans. It is apparent from the means displayed in Table 3 that African Americans have favorable views of all groups except White Americans. African Americans regarded Whites significantly less favorably than they viewed Chinese, Vietnamese, and Mexican Americans (all $ps < .01$). African American and Mexican American respondents had the most negative global evaluation of the White American identity (see Table 3).

IN-GROUP BIAS

We assessed whether respondents showed in-group bias by examining two domains of evaluation: placement of in- versus out-groups on the first dimension (Collectivist Achievement Ethic) and overall favorability ratings of traits believed to characterize the in-group and out-groups. Using matched-pair *t* tests, we compared each of the six ethnic groups of respondents with each of their five out-groups on each of these two domains. Thus, each test involved 30 pairs (six in-groups compared with each of five out-groups). Because of the number of significant tests conducted, we set the alpha level at $p < .001$.

In general, members of the respondent groups did not tend to place their own groups higher than other groups on the achievement dimension, $t(29) = 1.41$, n.s. However, in-group bias did occur in a more subtle form. Respondents tended to place their own group at a higher position on the collectivist achievement dimension than did respondents from other groups, $t(29) = 8.68$, $p < .001$. This information appears in the columns of Table 2. For example, Korean American respondents gave their in-group a value of .88 on the achievement dimension (see column 2, row 2), whereas Chinese American respondents gave Korean Americans a value of .35 (see column 2, row 1).

To assess whether respondents selected more favorable traits to describe the in-group than the various out-groups, we made two sets of comparisons. First, we compared the favorability score for each of six groups of respondents with regard to the in-group with the favorability scores of the traits they assigned to each of their five out-groups (see the rows of Table 3). For example, Mexican Americans gave an aggregate favorability rating of 4.22 to the Mexican American identity (row 4, column 4) and an aggregate favorability rating of 3.85 to the Chinese American identity (row 4, column 1), thereby "preferring" the in-group. A strong pattern of in-group favoritism emerged in this domain, $t(29) = 3.74$, $p < .001$. However, as noted above, White Americans exhibited the opposite trend, giving their own group a lower favorability rating than all groups except African Americans, hence exhibiting in-group derogation rather than in-group bias.

For the second set of comparisons, we compared the trait favorability score from each of the six groups of respondents with regard to the in-group with the favorability scores of traits that other groups of respondents assigned to the in-group. The relevant

figures appear in the columns of Table 3. The data show, for example, that the traits Korean Americans selected to describe the Korean American identity had an average favorability score of 3.84, whereas Chinese Americans rated the Korean American identity less favorably, 3.52. Again, a strong pattern of in-group bias emerged. Members of in-groups tended to give their own group higher scores than did members of other groups, $t(29) = 4.00$, $p < .001$. Again, the White American respondent group was an exception to this pattern, assigning less favorable traits to their own identity than did any other group except Mexican Americans.

In sum, all respondent groups exhibited in-group bias with respect to the achievement dimension. All groups except White Americans exhibited in-group bias with respect to the favorability of traits they selected to describe their own group. White Americans exhibited in-group derogation in this regard.

MERGING OF ASIAN AMERICAN IDENTITIES

We had hypothesized that non–Asian American respondents view the Asian American groups as being "all the same." Examination of the six correspondence configurations suggests that the three Asian American identities are indeed clustered more closely together in the White, Mexican, and African American configurations and separated more widely within the Chinese, Korean, and Vietnamese American configurations. To test this hypothesis, we measured the distances among the three Asian American identities within the six configurations. As predicted, the distances among the three Asian American identities were significantly smaller within the non–Asian American configurations, $t(16) = 5.38$, $p < .001$. There was no parallel tendency for Asian American groups to see non–Asian Americans as being all the same, $t(16) = 1.05$, n.s.

DISCUSSION

This study examined the personal beliefs of members of each of six ethnic groups concerning their own group and each of five other groups. We found strong support for an achievement dimension that underlies beliefs about one's own and other ethnic groups. However, the achievement dimension in this study had a

particular theme that led us to propose the term *Collectivist Achievement Ethic*. There was considerable similarity across groups in the traits that defined this dimension, and all six respondent groups placed the three Asian American identities at the positive pole of this dimension. All six groups assigned the highest value on the Collectivist Achievement Ethic to the Chinese American identity, making that ethnic group a gold standard for the construct. All six respondent groups placed White Americans, African Americans, or both at the negative pole of this dimension.

The second dimensions of the correspondence configurations showed consistent positive associations with the status of the social identities, and variable relationships with the favorability of traits. Two groups (Chinese and Korean Americans) gave favorable ratings to high status identities, thereby linking favorability, status, and the second dimension of the correspondence configuration. For three groups (Vietnamese Americans, African Americans, and White Americans), there was no correlation between favorability and status. For Mexican Americans, status and favorability were negatively correlated. In social psychological terms, the Chinese American and Korean American pattern could plausibly be interpreted as system justification (Jost & Banaji, 1994), whereas the Mexican American patterns could be interpreted as a form of resistance to domination.

Evidence for in-group bias was strong. However, White Americans showed an opposite pattern—in-group derogation.[5] Their in-group derogation may be responsive to the social ecology of the geographic area in which the study was conducted: an ethnically diverse area in which high school- and college-age White Americans are aware that their peers from other ethnic groups, especially those of Asian ancestry, are achieving rapidly in both academic and occupational settings.

This study also provided an opportunity to examine the degree to which Asian American and non–Asian American college students believed there was a pan-Asian ethnic identity. Our hypothesis that non–Asian American respondents would tend to see Asian American groups as "all the same" with respect to most characteristic traits was confirmed. There was no parallel tendency for Asian American respondents to see non-Asians as "all the same."

STRENGTHS AND LIMITATIONS OF THE STUDY

This study extended the approach of Brewer and Campbell (1976) to the study of social stereotypes to a study of personal beliefs about six ethnic groups. One strength of this study is its use of a fully crossed design in which all six groups rated themselves and each other. In contrast, many previous studies have focused primarily on perceptions by White Americans of out-groups. Our study allows the perceptions of White Americans to be placed in a broader ecology of intergroup relationships.

Other strengths include disaggregation of the pan-ethnic identity, Asian American, into three specific ethnic groups and the specification of a Mexican American identity rather than the use of broader categories such as Latino or Hispanic (see Niemann, 2001). The use of specific ethno-cultural identities in this study yields more fine-grained information than is available from studies that adopt pan-ethnic categories.

Our use of correspondence analysis to map the way in which various groups view the ethnic landscape provides an improvement over factor-analytical approaches. Correspondence analysis simultaneously represents the relations among the traits and the relations among the ethnic identities. Brewer and Campbell (1976) merged data from all respondent groups, whereas our correspondence models produced separate representations of each respondent group, allowing for representation of differences that may be due in part to the particular cultures and social histories of the respective groups.

Limitations of the study include the fact that the sample was made up of university students and the number of African American respondents was small. The overall sample was 73% female, a factor that probably led us to present a more positive picture of personal beliefs about various ethnic groups—especially ethnic out-groups—than would be found in a gender-balanced sample. It has often been documented (see, for example, Deaux & Lafrance, 1998; Pratto, Stallworth, & Sidanius, 1997) that females are more tolerant of and more favorable to out-groups than are males.[6]

We believe it would be worthwhile to extend this study to a larger set of ethnic identities in other regions and to a broader group of respondents. Demographic, socioeconomic, and other factors that prevail in particular settings might lead to different beliefs about in-group and out-group characteristics. Future studies could test the generality of the dimensions we identified in this

study and our interpretation of these dimensions as representing a Collectivist Achievement Ethic and Status. Such research has the potential to contribute to the understanding of intergroup relations in multiethnic communities by identifying people's personal beliefs about the groups making up their communities.

Notes

1. Data are from the University of California–Irvine Office of Analytical Studies. Data for fall 1999 were used because prior to that time, Vietnamese Americans were not listed as a separate group. In light of campus trends, the figures above may slightly overrepresent the proportions of Asian Americans at the time the data for this study were collected. The campus population also included sizable groups of Filipino Americans (8.4%) and other Asians (7.5%), who for reasons mentioned above were not included as raters or targets of ratings.

2. Individuals of all ethnicities were given the opportunity to participate in the study for course credit. However, data from respondents of ethnic groups other than the six groups highlighted in this study were not analyzed.

3. These tests are permutation tests, based on 5,000 randomized permutations of the rows and columns of the matrices.

4. Correspondence analysis is a model describing the relationships between rows and columns of a contingency table. The rule of thumb for contingency table analysis is that the cells of the table should have an expected value of 5. With 30 traits being rated, this rule would require a total of 150 trait judgments for each identity that was rated. Respondents assigned 4 traits to each identity, so 152 trait judgments would be produced by 38 individuals. All of our respondent groups except African American had more than 38 individuals.

5. This pattern of in-group derogation on the part of White Americans was also noted by Hayward (2001) across two studies.

6. Indeed, when we examined gender differences in our sample in overall favorability ratings, we found that females assigned significantly more favorable traits to out-groups than did males, $F(1, 304) = 9.40$, $p < .01$. Females and males did not differ in the favorability of traits attributed to the in-group, $F(1, 319) = .04$, n.s.

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