This study focused on a set of outcome measures that reflect some of the values that support engagement in a diverse democracy (commitment to racial understanding and commitment to social activism), and the impact of college on the development of these values. Critical theory is also presented as a perspective that shapes and broadens the understanding of this study's findings. Within each of the four racial groups, the study examined the effects of gender on the development of civic values. Data came from the Cooperative Institutional Research Program sponsored by the American Council on Education and the Higher Education Research Institute (HERI) at the University of California, Los Angeles and some studies at other institutions using the HERI questionnaire. The sample for the study consisted of 19,915 students. This study supports previous research that found that having a diverse student body does not, by itself, foster positive developmental outcomes. For commitment to activism, the racial diversity of the student body was not significant in the regression analysis. For the measure of commitment to promoting racial understanding, a diverse student body was a significant predictor only for white students, and its effect is negative. This finding, coupled with findings regarding the positive effects of diversity activities suggests that policies should be developed that take advantaged of a diverse student population by increasing the number and intensity of opportunities for students to interact cross racially. Study findings suggest that treating students as one group masks important factors that influence the development of values. The study implies that are educational practices that are good for all (or at least many) students, which challenges the critical postmodern idea that difference is the most important organizing principle. The study does suggest that race and gender do make a difference when the effects of college on the development of civic values are examined. Yet, there are activities that have positive effects across races, including enrolling in ethnic studies, attending racial awareness workshops, engaging in cross-racial interactions, and participating in community service. An appendix contains supplemental tables. (Contains 9 tables and 44 references.) (SLD)
The Impact of College on the Development of Civic Values: How do Race and Gender Matter?

Lori J. Vogelgesang

Paper presented at
American Educational Research Association
Seattle, April 2001

Contact:
Lori J. Vogelgesang, Ph.D.
Higher Education Research Institute, UCLA
2005C Moore Hall, Box 951521
Los Angeles, CA 90095-1521
vogel@ucla.edu
The Impact of College on the Development of Civic Values: How do Race and Gender Matter?
Lori J. Vogelgesang

In the last 10 to 15 years, there has been renewed attention to the need to educate students to be concerned, involved citizens. As Boyte and Kari (2000) eloquently reflect: “there is an urgent need to form a more ‘public’ citizenry in this time of civic disaffection, (and) widespread feelings of powerlessness… How do we become a people who see our individual self-interests embedded in the general welfare, who have more faith in each other and in our public institutions, who can act together with poise and boldness?” (p. 38).

Evidence of this concern is reflected in various national initiatives that target the development of college students and even higher education institutions themselves as engaged citizens. Examples include The Association of American Colleges & Universities project, “American Commitments: Diversity, Democracy and Liberal Learning,” the Kellogg Foundation’s “Kellogg Forum on Higher Education Transformation (KFHET),” and multiple projects of Campus Compact, all of which seek to encourage higher education institutions to increase attention to efforts that enhance this diverse democracy. (AAC&U, 2001; Campus Compact, 2001).

In large part these educational efforts have been undertaken in response to a national political scene where, on the one hand, conservatives lament the lack of common values and shared beliefs, and on the other hand, liberals decry the lack of tolerance for diversity and multicultural values. Smelser and Alexander (1999) argue that such divisions have weakened the “intellectual middle ground” which can “create grounds for ideological consensus and the resolution of political conflict in American public life” (p. 7).

The fact that these particular initiatives are targeting higher education reflects a belief that individuals and institutions can and must have a stake in, and skills to navigate, the social and political issues of an increasingly diverse nation. The projects assume that that there can be some common ground across difference. Smelser and Alexander affirm that “mutual understanding is the key to mutual respect, deliberative democracy, engaged debated, and affirming citizenship” (1999, p. 7). Yet, there is social and political change needed to move toward equal voice and opportunities for all citizens to participate in this democracy.

In order to examine the relationship between democracy and diversity in any meaningful way, it is necessary to acknowledge the historical experience of various groups of Americans; the
history of race and gender relations provides ample evidence that not all Americans have experienced democracy in the same way. Race and gender (among other factors such as social class, religion and immigrant status) have been used to differentiate opportunities for Americans, creating a system of social and political power and privilege for some while relegating others to the margins.

As historians know, the ways in which race and gender have “mattered” vary, depending on one’s race and the historical time period; one need only examine the history of immigrants and how they interacted with those immigrants “already here.” For instance, Eastern and Southern European immigrants were viewed as superior to Blacks and Asian-Americans, but defined as a race below Whites (Barrett & Roediger, 1997; Foley, 1997). Over time the definition of whiteness has broadened to include those groups, but their position of “not quite white” has been taken by other groups. For those who were white, and for others as well, gender shaped their experiences in profound and different ways. Takaki (1993) writes of the oppressions faced by Chinese (male) immigrants in the 1870s, who faced, among other acts of racism, unfair competition for jobs from European immigrants. Chinese women, notes Takaki, are “twice a minority,” (p. 209) enduring racism and sexism within the Chinese culture.

Of course, the power of race and gender to shape the lives of Americans is not merely an historical artifact. Rendon (1996) writes of the difficulties she faced (as a poor Latina) navigating higher education when no one in her family had gone before, and the struggles of being in a system where the dominant values are not her own. Collins (1998) notes the current tensions (and intersections) of race and gender for Black women in this country. Clearly, there have been significant power differences based on race and gender. But what does this historical and current reality mean for the development of civic values among college students today?

Perhaps the most important measure of how successful higher education is in its endeavor to cultivate concerned citizens is reflected in the values, beliefs and behaviors of students. Thus, this study focuses on a set of outcome measures that reflect some of the values that support engagement in a diverse democracy (commitment to racial understanding and commitment to social activism), and the impact of college on the development of those values. I also present critical theory as a perspective that shapes and broadens our understanding of this study’s findings.
The impact of college environments on student values and skills

There is a good deal of research on how different college environments impact student values (e.g. Pascarella and Terenzini, 1991, Astin, 1977, 1993). Pascarella and Terenzini (1998) note that we know quite a bit about the effects of college, and the conditions that enhance student development. Astin (1993) notes the importance of college peer groups in shaping the patterns of change in values during college. He addresses, for instance, the differences between Whites and African-Americans on several outcomes of interest to this study: "...the two groups also grow much farther apart in their agreement with the proposition that racial discrimination is no longer a problem and in their commitment to the goal of promoting racial understanding" (p. 406). The widening disparity, observes Astin, may be due in part to the fact that students tend to be segregated by race during the undergraduate years – voluntarily as they choose which clubs to join and friends to make, but also due to the structure of the higher education system (including demographic and geographic causes), which tends to concentrate enrollments by racial groups into different institutions. Similarly, Astin notes the influence of gender peer groups, writing that "virtually every gender difference observed at inputs widens with time" (1993, p. 406). Again, segregation factors may be part of the explanation, as students tend to have many same-sex affiliations, and structures such as single-sex residence halls and women’s colleges mean that students tend to be influenced by the values of their same-sex peers.

Two bodies of literature have paid particular attention the enhancement of the kinds of values that will nourish democracy in a pluralistic society. Both the research on the educational benefits of diversity and the community service/service-learning literature examine college experiences and environments that strengthen such values as commitment to racial understanding and commitment to civic engagement through social activism.

The effect of “diversity” and on student values and skills

Research on the educational impact of diversity has examined the effects of a diverse student body and the effects of various “diversity” activities on the development of these kinds of civic values (Milem, 1992; Astin, 1993; Chang, 1996; Pascarella, Edison, Nora, Hagedorn & Terenzini, 1996; Tanaka, 1996). Though the studies do not uniformly find a direct positive effect of student-body diversity on the development of values, they do suggest some indirect links. One of the important mediating experiences seems to be personal interaction across races and cultures,
especially for White students. Additionally, participating in racial or cultural awareness workshops appears to strengthen these kinds of values.

These studies contribute to our understanding of how diversity might affect students of color in different ways than white students, yet there is more work to be done. There is a need to continue to disaggregate students of color, and to examine their development not as a whole (i.e. "non-white"), but as separate racial/ethnic groups, for whom such factors as gender and college environments might not operate the same way in shaping values. One study of the influence of ethnic peer groups on values similar to those under investigation in this study disaggregated students of color. Villalpando (1996) found gender differences among Chicano students, noting that Chicanos “are affected more by interacting with other Chicano/as during and after college. Chicanas, on the other hand, are affected more by college experiences that address racial/ethnic or political/social issues and by participating in volunteer activities” (Villalpando, 1996; p. xvii).

The effect of performing community service on student values and skills

The literature on community service has produced many insights about service (and service-learning) as an intervention, and even a philosophy, that encourages the development of values and beliefs needed in a diverse democracy. Research examining service documents the positive effects that community service and service learning has on student values such as commitment to promoting racial understanding and commitment to community action programs, beliefs such as self-efficacy, and behaviors such as choosing a service-related career and continuing one’s involvement in service after college. (Astin & Sax, 1998; Astin, Sax & Avalos, 1999; Astin, Vogelgesang, Ikeda & Yee, 2000; Eyler & Giles, 1999). However, these studies have not closely examined how race and gender might interact to shape the service experience for students. Though not a primary focus of his work, Rhoads (1997) acknowledges these constructs as he explores students’ sense of self and caring as a result of participating in service experiences.

Though the community service and diversity literature examines in the aggregate how students might develop these civic values, there has been little attention given to how different racial/ethnic groups might develop these values and skills differently. Though many agree on the importance of educating students to participate in a democracy that is increasingly diverse, there is less clarity on how one’s race and gender interact with the college environment to shape the development of these civic values.
Critical frameworks: Understanding how race & gender influence civic values

Critical theory assumes that the organizing principles of race and gender (and class) have shaped lives differently and inequitably for different groups in this nation. Therefore, it provides a useful way in which to understand this study. However, critical perspectives are associated with qualitative research, so part of my work in this study is to understand how quantitative research can be critical. In this section I discuss the major elements of critical theory, and then explore the ways in which my research attempts to be critical.

Critical Theory

Critical Theory as a perspective traces its roots to the Frankfurt school in post WWI Germany (Tierney & Rhoads, 1993; Kincheloe & McLaren, 1994). Though this group of thinkers did not adhere to one single perspective, their underlying premise reflected a belief that a power structure existed, and unequal distribution of power meant that injustice shaped the lives of many people. Early work drew on the theories of Marx, and examined issues of capitalism, class and power – the marginalization of the working class; the goals of emancipation and justice have always been fundamental (Tierney & Rhoads, 1993). From the outset, critical theorists have challenged the status quo (Kincheloe & McLaren, 1994). Rather than adhering to a unified definition of this form of social and cultural criticism, critical researchers seem to point to some shared assumptions, and then define for themselves what might be components of critical theory as it pertains to their work.

Within the field of education, Kincheloe and McLaren (1994, p. 139-140) delineate seven assumptions concerning a critical approach to theory or research. Stage (1997) paraphrases these assumptions in a very useful way for my work, so I quote her directly:

1. Thought is mediated by social and historically created power relations;
2. Facts cannot be isolated from values;
3. The relationship between concept and object is never fixed and is often socially mediated;
4. Language is central to the formation of subjectivity;
5. Certain groups in society hold privilege over others that is maintained if subordinates accept their status as natural;
6. Oppression has many faces that must be examined simultaneously;
7. Mainstream research practices generally reproduce class, race and gender oppression (p. 2).
According to Tierney and Rhoads (1993), difference becomes the organizing concept in critical (and postmodern) research, and as a vehicle for social change, critical research is praxis-oriented. Particularly important for my work is their contention that “categories such as race, class, gender and sexual orientation need to be understood not merely as variables that help account for an individual’s success or failure; rather critical and postmodern researchers need to investigate these categories as organizing agents in the larger research project in which they are engaged,” and that studies which use “the individual as the unit of analysis have overlooked the confining circumstances in which individual action occurs” (p. 325).

What Tierney and Rhoads emphasize, then, is that it is not enough for the researcher simply to put individuals into groups (i.e. race) for analysis, but rather that one also needs to understand the meaning of those constructs in the larger context of unequal distribution of power in society. Their contention suggests that it is difficult to do quantitative critical work, because quantitative work necessarily groups individuals for analysis.

**Developing a Critical Lens for Quantitative work**

Stage (1997) writes that most higher education researchers “assume that critical analysis is outside the purview of researchers who employ quantitative approaches to data collection and analysis” (p. 1). Qualitative research lends itself to critical frameworks, because one can explore the complexities of individual experience in the context of power relations and cultural forces. Admittedly, quantitative approaches have used the constructs of race, class and gender as independent variables instead of contexts for better understanding the experience of individuals. But, is quantitative work de facto outside the realm of critical approaches?

Stage suggests that quantitative research methods can be critical, and goes further to state that quantitative researchers need to be part of the critical analysis discourse. She quotes Kincheloe and McLaren (1994), who say that critical researchers “pos[e] the research itself as a set of ideological practices” (p. 144) and then she asks “who better to help uncover the ‘ideological inscription’ in quantitative research than quantitative analysts themselves?” (1997, p. 3) For it is quantitative researchers, she notes, who best understand the “the details of measurement of some variables, the ignoring of other variables, and the implications of positional placements within causal models” (p. 3).

In considering how the college environment might shape the civic values of students, I have chosen to examine the experiences of four major racial groups. By disaggregating students by race,
I acknowledge that race itself shapes the experiences of students. In this way, I am not treating race simply as an independent variable, but begin to examine race as context. Within each racial group, I examine the effects of gender on the development of civic values.

By conducting a study that acknowledges the importance of race (especially) in shaping the experience of all students, while at the same time making some comparisons across racial groups, this study raises some questions. Is racial difference the most salient organizing principle in the development of civic values among students? To what extent might there be some experiences that have similar effects on all students?

My position in undertaking this research differs somewhat from the perspective of postmodern critical theorists, who criticize the modernist assumption that "simply through dialogue we will be able to understand one another's differences" (Tierney, 1993, p. 7). I argue that dialogue, as a precursor to deeper relationships across differences, is a necessary (though not sufficient) condition of a functioning pluralistic democracy. I do, however, agree with the postmodern critique that that "we have too often conceived of differences as categories that differ from the norm" (Tierney, 1993, p. 7). Tierney establishes the idea of "border zones" as places where differences can be understood. This study, then, is conducted from the perspective that race and gender differences need to be understood in their own right, not just in comparison to the norm, but that dialogue and other interactions in the "border zones" advances social justice and democratic goals.

Data and Method

In conducting this study I use data collected as part of the Cooperative Institutional Research Program (CIRP), which is sponsored by the American Council on Education and the Higher Education Research Institute (HERI) at the University of California, Los Angeles. The entering student data were collected between 1993 and 1996, using the Student Information Form (SIF), which is designed as a pre-test for longitudinal assessments of the impact of college on students. The paper and pencil instrument surveys student activities during high school, values, beliefs and attitudes.

The follow-up data come from students at 68 schools who participated in the 1998 College Student Survey (CSS). Additionally, students at 102 schools were administered the survey directly by HERI as part of several grant-funded projects. The overall return rate for the HERI -
administered surveys was 22%. Items on the CSS assess students’ values, beliefs, attitudes aspirations, and college activities.

The sample for this study consists of 19,915 students who completed both the SIF and the 1998 CSS. Collectively, the students represent 170 institutions. Most of the students in this study (77%) completed the SIF in 1994. This study is limited to four racial groups: African American/Black (n=547), Asian American/Asian (n=928), Latino (students who marked Mexican American/Chicano, Puerto Rican American, or Other Latino) (n=755), and White (n=17,483). Students were instructed to mark “all that apply” so may be included in more than one group.

**Analysis**

One major purpose of this study is to see whether particular environments affect the outcomes for different (racial) groups of students differently, and to examine the effect of gender within each racial group. For these purposes I employed a method of causal modeling which uses blocked, stepwise linear regression analysis to study the changes in partial regression coefficients for all variables at each step in the analysis (Astin, 1991). The advantage of this form of analysis is that it allows one to observe the effects of multicollinearity among the independent measures.

I conducted separate blocked, stepwise regressions for the four racial groups to see what kind of picture emerges, especially as it might apply to variables that interact with race. This is a place where critical theory informs my work in important ways, as I analyze the environments that affect the development of civic values within the context of race (as opposed to using race as an independent measure). For this set of analyses, I conducted two regressions (one for each dependent measure) for each of four race groups, for a total of 8 regressions.

After conducting regression analyses for each racial group using a blocked stepwise procedure, I identified independent variables that entered any of the regressions for a given dependent variable, and then conducted another set of regression analysis by race for that dependent variable, forcing in all of the variables that entered any of the four original race regressions (and eliminating any variables that entered none of the regressions). Forcing the exact same set of variables into different regressions (one for each race) allows me to make comparisons of the

---

1 Postmodernists, notes Tierney (1993), often take the position that it is impossible to understand each other across differences.

2 The 68 schools which participate in the CSS distribute the survey themselves, so it is not possible to establish a return rate.

3 By including students who entered college in 1993, 1995 and 1996, the representation of public institutions and students of color is increased.
magnitude of coefficients across regressions because the same set of variables is included in each analysis. This final kind of analysis allows me to see interaction effects between race and gender, or race and any other independent variable on the dependent measure.

**Dependent Measures**

I conducted separate regression analyses for each of four racial groups (White, Black, Latino/Chicano, and Asian American) for each dependent measure:

- Civic Engagement through Commitment to Activism
- Commitment to Promoting Racial Understanding

Both “commitment” measures are pre-tested on the SIF. The Commitment to Promoting Racial Understanding measure reflects responses to the following item: “Indicate the importance to you personally of each of the following: Helping to promote racial understanding” The response categories include “essential,” “very important,” “somewhat important,” and “not important.”

The Civic Engagement through Commitment to Activism variable is measured using the same ratings scale, but is a composite measure of seven items – the importance (to the student) of influencing the political structure, influencing social values, helping others who are in difficulty, becoming involved in programs to clean up the environment, participating in a community action program, and keeping up to date with political affairs. It also includes one measure of behavior – the frequency of discussing politics (using the scale “frequently,” “occasionally,” or “not at all”). This activism composite measure was factorially derived (alpha = .8021) for a recent HERI study on service learning (Astin, Vogelgesang, Ikeda & Yee, 2000) which used nearly the same data set.

**Independent Variables**

The blocked, stepwise regressions were run in a series of 3 blocks. Student characteristics at the time of college entry, including pre-tests for the outcome measures, comprised the first block. See Appendix A1 for a complete list of independent variables.

The next two blocks reflected a temporal order of student exposure to college environments. In the second block of the regression analyses, I controlled for several institutional characteristics – type, size, & selectivity – to measure those aspects of the environment that might influence the dependent measures. The dichotomous measures of institution type reflects control (public / private), status (college / university), and affiliation. A second variable reflects the total enrollment at the institution, and selectivity is represented by the institution’s mean SAT score. A measure of the racial diversity of student body was also included in the second block. Following the work of
Chang (1996), I used the % non-white students as my measure of the diversity of the student body. Finally, I controlled for the year the student entered college, in order to account for any cohort effects in this multi-year sample.

The third block of the regression analyses included a number of activities and involvements. These are activities in which students may have engaged (and in many cases, the variables reflect the intensity of engagement) during college. For the most part, these are factors that previous research has shown to affect the outcomes I’m interested in studying. Appendix Table A1 lists the variables and the coding scale for each measure.

**FINDINGS**

**Race and gender differences at time of college entry**

Analyzed by racial group, entering students varied in their level of commitment to activism and commitment to promoting racial understanding. Black students placed the most value on the importance of racial understanding and activism, and White students expressed the least amount of commitment to each of these values. (See Appendix Tables A2 and A3 for the means for each racial group on these measures.) T-tests confirmed that White students entered college with significantly lower levels of commitment to promoting racial understanding (p < .001) than did Asians, Blacks or Latinos. For the commitment to activism measure, the mean for White students was significantly lower than that of Black students and Latino students. Though the mean activism score for Whites was lower than the mean for Asians, this difference was not found to be significant (p > .05).

Among all racial groups, women entered college with a higher average level of commitment to promoting racial understanding than did men. T-test analyses confirm that this difference was significant for Asian, Black, and White students. Table A4 displays the means. For the commitment to activism measure, the results were a bit more mixed (Table A5). Asian, Black and White women entered with a higher degree of commitment to these values than did their male counterparts, but the gender difference was significant only for White students.

**Results from multivariate analyses: the impact of gender and environments**

The effects of gender on the development of civic values and skills across racial groups vary, depending on race and which outcome is being examined. This discussion will focus on gender and several environmental variables, paying particular attention to any interaction effects.
with race. The environmental variables include institutional diversity, cross-racial interactions, community service and participating in cross-cultural activities and courses.

*Commitment to Activism*

Participating in community service during college was a strong predictor of increased commitment to activism for all four races (Table 1). In fact, the size of the effect of community service was substantial and nearly equal for all groups. This is powerful evidence to support service-learning advocates' claims that service can play an important role in undergraduate

Table 1. Commitment to Activism: Overview of Forced-Variable Entry

<table>
<thead>
<tr>
<th>Variable</th>
<th>Asians</th>
<th>Blacks</th>
<th>Latinos</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Female</td>
<td>07*</td>
<td>-11*</td>
<td>-03</td>
<td>-04***</td>
</tr>
<tr>
<td>SES</td>
<td>02</td>
<td>-05</td>
<td>-08*</td>
<td>00</td>
</tr>
<tr>
<td>Community Service</td>
<td>13***</td>
<td>14***</td>
<td>13***</td>
<td>14***</td>
</tr>
<tr>
<td>Cross-racial Interactions</td>
<td>-00</td>
<td>06</td>
<td>02</td>
<td>07***</td>
</tr>
<tr>
<td>Ethnic Studies Course</td>
<td>06</td>
<td>02</td>
<td>15***</td>
<td>06***</td>
</tr>
<tr>
<td>women's studies course</td>
<td>03</td>
<td>00</td>
<td>03</td>
<td>04***</td>
</tr>
<tr>
<td>Ethnic/racial Student Organization</td>
<td>-01</td>
<td>01</td>
<td>04</td>
<td>03***</td>
</tr>
<tr>
<td>Racial/ethnic Awareness Workshop</td>
<td>07*</td>
<td>04</td>
<td>03</td>
<td>06***</td>
</tr>
</tbody>
</table>

* .01 < p < .05
** .001 < p < .01
*** p < .001
education. It is not surprising that community service should play an important role in enhancing the development of students’ commitment to activism. Giving students the opportunity to participate in service typically raises their awareness of social concerns, and this awareness is probably closely tied to their enhanced commitment to the activism values. Recall that the activism measure is a composite of community involvement items such as influencing the political structure, influencing social values, helping others who are in difficulty, participating in a community action program, etc.

There were clear interaction effects between gender and race for the commitment to activism measure. For Asians, women appeared to be more likely than men were to strengthen their commitment during college, while for Black and White students, men appeared more likely than women to become more committed during college. Upon inspection of the means at the point of college entry and at the time of follow-up, though (Appendix Table A2), we see that what is really happening is that Asian women are less likely to weaken their commitment to activism during college (the net change is a decrease). Similarly, White men are less likely than White women to weaken their commitment. Black students overall showed a net increase (though it was very small – from 16.64 to 16.66) in commitment to activism between college entry and the time of the follow-up survey. This research suggests, then, that during college Black men are even more likely to enhance their commitment to activism than are Black women. Though the reasons for this effect are not clear, it may be that the college experience empowers Black men to feel they can make a difference in the world, and thus increases their commitment to doing so. One hypothesis might be that they become more activist because they become more engaged in ethnic student groups, but there is no direct effect of belonging to such a group on the activist outcome measure. Another hypothesis might be that getting a college education encourages them to think about “giving back to the community.” This might account for the fact that no other activities – except community service - seem to affect Black students’ commitment to activism, but it doesn’t explain why men change more than women.

There were also clear interaction effects between race – in this case, being white – and the impact of cross-racial interactions on one’s level of commitment to activism. While cross-racial interaction had a positive effect on promoting racial understanding across several races (see discussion section), in the case of activism, such interactions are significant only for White students.
This is probably due to the fact that these experiences are more novel for White students, and thus have a stronger and more widespread effect. However, the size of the coefficient for Black students (.06) is nearly the same as the coefficient for Whites (.07). Could this be explained by segregated schools? Such a theory might explain the fact that cross-racial interactions have the largest effects on Blacks and Whites for both measures of civic values. If segregated schools are part of the explanation, though, I would expect to see similar effects on Latino students. This “segregated schools” theory is only partially supported by the findings for Latino students. For Latinos, cross-racial interactions significantly affect the level of commitment to promoting racial understanding, but do not have significant impact on the level of commitment to activism.

In addition to the two types of activities already mentioned – participation in community service and cross-racial interactions – there are three factors that appear to strengthen commitment to activism across several racial groups. Enrolling in an ethnic studies course is significant for Whites and Latinos (and the coefficient for Asians (.059) is equal to the coefficient for Whites (.058); the p-value was borderline significant (p= .06)). Enrolling in an ethnic studies course is a particularly strong predictor of increased levels of commitment to activism among Latinos, a finding I explore in the discussion section. Participating in a racial awareness workshop was significant for Asians and Whites. Though there are not clear patterns across races (except for the fact that all of the diversity activities are significant for Whites), these findings suggest that both diversity activities and faculty support contribute to the enhancement of students’ sense of commitment to activism.

Commitment to Promoting Racial Understanding

For this dependent measure, gender again had interaction effects (Table 2). The effect of gender for Asian students is noteworthy, as is the suggestion that Asian is the only group not to show a positive relationship between cross-racial interaction and commitment to racial understanding.

---

4 The interaction effect for cross-racial interactions and race is really between Whites and Asians, for whom the coefficient is zero.
5 When a larger coefficient does not reach this level of confidence (e.g. for Black students) one can say that there is a greater likelihood that there may have been a Type-II error in the negative inference drawn from the smaller sample.
6 Latinos are possibly the most segregated racial group in the United States (Olivas, 1997; Chapa & Valencia, 1993) cited in DiBrito, Torres & Talbot (2000).
7 Note, however, that since the (nonsignificant) coefficient for Blacks (.05) does not differ significantly from the significant coefficient for Asians, the interaction here involves Asians as contrasted with Whites and Latinos.
Table 2. Commitment to Promoting Racial Understanding:
Overview of Forced-Variable Entry

<table>
<thead>
<tr>
<th>Variable</th>
<th>Asians</th>
<th>Blacks</th>
<th>Latinos</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Female</td>
<td>07*</td>
<td>05</td>
<td>01</td>
<td>-00</td>
</tr>
<tr>
<td>SES</td>
<td>00</td>
<td>00</td>
<td>-10*</td>
<td>00</td>
</tr>
<tr>
<td>Institutional Diversity</td>
<td>-03</td>
<td>-08</td>
<td>-07</td>
<td>-06***</td>
</tr>
<tr>
<td>Cross-racial Interactions</td>
<td>-00</td>
<td>12*</td>
<td>08*</td>
<td>19***</td>
</tr>
<tr>
<td>Community Service</td>
<td>08*</td>
<td>07</td>
<td>06</td>
<td>08***</td>
</tr>
<tr>
<td>Ethnic Studies Course</td>
<td>07*</td>
<td>07</td>
<td>13***</td>
<td>08***</td>
</tr>
<tr>
<td>Racial Awareness Workshop</td>
<td>15***</td>
<td>14**</td>
<td>06</td>
<td>09***</td>
</tr>
<tr>
<td>Ethnic /Racial Student Org</td>
<td>09**</td>
<td>13**</td>
<td>13***</td>
<td>07***</td>
</tr>
</tbody>
</table>

* .01 < p < .05  
** .001 < p < .01  
*** p < .001

In so many ways, the Asian group is very heterogeneous. Regional differences, immigrant status, and cultural/ethnic background all determine one’s perspective. So any findings here certainly merit further investigation. But, why are Asian men more likely than Asian women to decrease their commitment to promoting racial understanding during college? Recall that women enter with (significantly) higher levels of commitment, and there is a net decline in commitment to promoting racial understanding among all Asians. Therefore, what this interaction is reflecting is a decrease primarily among Asian men.
One reason why this decrease might occur is that Asians are more likely to major in the sciences and engineering, which are not hotbeds of inquiry into matters such as social injustice. The focus in these fields, relative to others, is on learning and applying "factual" knowledge, and there is probably less questioning of one's identity. And if Asian men are more likely than Asian women to be enrolled in the sciences and engineering, this might explain why men and women change differently in college.

Subsequent analyses of this data reveal that Asians are more likely than students of other races to choose a science or engineering major, and among all races men are more likely than women to choose these majors (Table 3). This finding supports earlier work by Astin (1993), who found that majoring in science or engineering is a negative predictor of commitment to promoting racial understanding.

Table 3. Engineering / Science Majors, by Race.

<table>
<thead>
<tr>
<th></th>
<th>% Majoring Engineering or Science* on Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Asian</td>
<td>764</td>
</tr>
<tr>
<td>Black</td>
<td>436</td>
</tr>
<tr>
<td>Latino</td>
<td>586</td>
</tr>
<tr>
<td>White</td>
<td>14,838</td>
</tr>
</tbody>
</table>

* biological science or physical science

The other interesting finding for Asians is the ineffectiveness of cross-racial interactions as a tool to increase their commitment to racial understanding. Here it is important to consider the sample for this study – represented in large part by private four-year institutions, which are not located on the west coast (where the large Asian communities are). Asians not attending college on the west coast in general, and at private schools in particular, may have been more likely to grow up in predominantly white neighborhoods. When they come to college, the racial/ethnic environment is not that much different from secondary school. So the cross-racial interactions will not have the same effect as they do for Whites, Blacks and Latinos because of the relative lack of novelty. This
is supported by the fact that Whites, Blacks and Latinos are more likely to have grown up in segregated communities.

It is worth noting here that Asians report more cross-racial interactions than do students of other races (Table 4). In other words, Asians report the highest frequency of cross-racial interaction, but these interactions don’t mean that Asians strengthen their commitment to promoting racial understanding.

Table 4. Frequency of Cross-racial Interactions, by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian (n=908)</td>
<td>12.53</td>
<td>2.33</td>
</tr>
<tr>
<td>Black (n=527)</td>
<td>11.81</td>
<td>2.26</td>
</tr>
<tr>
<td>Latino (n=699)</td>
<td>11.78</td>
<td>2.37</td>
</tr>
<tr>
<td>White (n=17,126)</td>
<td>9.72</td>
<td>2.14</td>
</tr>
</tbody>
</table>

In addition to cross-racial interactions, several other diversity-related activities have significant effects on strengthening students’ commitment to promoting racial understanding. Across all races, participating in a racial/ethnic student organization is a positive predictor of increased commitment to promoting racial understanding. This effect is strongest for Black and Latino students. Enrolling in an ethnic studies course was significant for Asians, Latinos and Whites (and the coefficient for Blacks (.075) is slightly higher than the coefficient for Asians (.067), although it does not reach the .05 level of significance). The final Beta for enrolling in an ethnic studies course is highest for Latino students, a finding I address in the discussion section. Finally, participating in a racial awareness workshop is positively associated with stronger commitment to activism on the post-test for Asians, Blacks and Whites.

In sum, the effects of gender and diversity-related activities vary, depending on the outcome. However, the effects tend toward the positive for most races most of the time. As an environmental measure, the diversity of the student body was not a factor (it did not enter the regressions, or was nonsignificant across all races) in predicting commitment to activism.
DISCUSSION

The first thing that becomes apparent as one tries to understand these complex patterns across racial groups is that no two racial groups “look alike.” Thus, this research does not support the idea of discussing “Blacks and Latinos” – both underrepresented minorities in higher education – as one group, to be compared to “Asians and Whites” lumped together on the other side. Indeed, the way that gender interacts with race shows very few cross-race patterns. Also, it should be emphasized that this study is national in scope and does not focus either on potentially important regional differences, or on whether students are coming from communities that are predominantly white, predominantly same-race, or mixed. On the other hand, engaging in the kinds of curricular and co-curricular activities that promote commitment to civic values does show remarkable effects across racial groups. Given the diversity of cultures and experiences that students bring to college, such a finding is important.

A consistent race order pattern does appear when the simple means of race groups are compared on measures of civic values and skills: Blacks have the highest average commitment to civic values both at the time of college entry and at the time of the posttest. Next in order are Latinos, followed by Asians, with Whites expressing the least commitment both to promoting racial understanding and to civic engagement through activism. Though the differences are not always significant, the pattern of ordering here is noteworthy, since it reflects a commonly accepted “rank ordering” of American racial groups from least- to most-privileged.

African American/ Black Students

Black students enter college placing a higher value on civic engagement through activism and promoting racial understanding than do their Asian, Latino and White classmates. And they maintain their strong commitment during the college years. Perhaps this is not surprising, as Blacks may have the most to gain from improvements in race relations (or decreases in racism) in this country. The same is probably true for social change in general. As Bell (1992) points out in his book title, Blacks are the “Faces at the Bottom of the Well,” the group that everybody looks down on. And though this country is becoming ever more racially diverse, there is no denying the permanence of what DuBois in 1903 termed “the problem of the color line” and Myrdal in the 1940s called “An American Dilemma.”

For Black students in this study, the interactions of race with gender and the effect of college activities varied depending on the outcome measure. The influence of gender, though, seems to be
less prominent for Blacks, given that gender enters only one of the regressions with a significant weight. In a way, this is consonant with what Bell is referring to by calling Blacks the “faces at the bottom of the well” – given the social implications being Black, it matters less what one’s gender (or income level) is. Collins confirms the importance of race for Black women: “Although race, class and gender may share equal billing under the paradigm of intersectionality as a heuristic device, most African-American women would identify race as a fundamental, if not the most important, feature shaping the experiences of Black women as a group” (1998, p. 209).

**Asian / Asian American Students**

In order to interpret any findings for the group of students identified as Asian, one must first consider how very diverse the group is in terms of ethnicity and culture. It includes recent refugees from Southeast Asia, individuals of East-Indian descent, and fourth generation Chinese- and Japanese-Americans, to name a few. In this study, “Asian American/Asian” has the highest percentage (24.2) of students indicating they are not U.S. citizens (compared to 12.7% of Latinos, 7.6% of Blacks, and 1.0% of Whites). Sue & Okazaki (1995) remind us that not only do conditions vary widely for Asian groups overseas, but the differences among Asian Americans are also important. They point to earlier work on predictors of educational performance (Sue & Abe, 1988) that suggests significant differences among Asian American groups. Generalizations based on race, therefore, can mask differences across ethnicities and cultures as well as across the gender and socioeconomic class constructs examined in this study.

That Asian women enter college with a stronger commitment to promoting racial understanding than their male counterparts and maintain the stronger commitment during the college years may be related to the fact that among Asians, women tend to marry outside of their race in greater numbers than men. Farley (1999) uses 1990 Census data to compare the rates of out-marriage among racial groups. Among native-born Asians, 54% of women and 45% of men marry non-Asians (among foreign-born Asians, 23% of women and 10% of men outmarry). Research by Fong & Yung (1995-96) suggests that the reasons why Asian Americans\(^8\) out-marry (usually to Whites) in relatively high numbers are numerous, and include such things as “the dismantling of racial barriers and the assimilation process” but also “aversion to Asian patriarchy, overbearing Asian mothers, cultural and economic compatibility... upward mobility; and media representations of beauty and power” (p. 78). Both men and women who married non-Asians cited these reasons.

---

\(^8\) Fong and Yung interviewed Chinese and Japanese Americans for this study
However, it is not unreasonable to connect the tendency of Asian women to be more committed to promoting racial understanding with the idea that they may be even more likely than men to want to escape a patriarchal system.

Kibria (1999) looks specifically at the adjustment experiences of Asian Americans in college, where frustration with traditional (i.e. male-dominated) gender roles also emerged in interviews with Asian women, in this case in reference to students navigating friendship groups and deciding whether or not to join Asian clubs on campus.

Among all race groups, Asians show the biggest decline during college in commitment to civic engagement through activism. As noted previously, this may be due in part to the fact that Asians major in engineering and biological / physical sciences at higher than average rates, which has been negatively associated with commitment to activism (Astin, 1993; Sax, 2000).

Once student characteristics and college activities are controlled, Asian women are less likely than men to decrease their commitment to activism during the college years. It's possible that women are more likely to be committed to social change, particularly if they perceive that there are social traditions within the Asian community (such as patriarchy) that need changing. This argument – of wanting to change a sexist society – is noteworthy, especially when one considers the fact that this gender pattern doesn’t hold for any other racial group in regression analyses.

**Latino Students**

The ethnic diversity among Latino students, like that among Asians, is great. The experiences and attitudes of fifth generation Mexican American/Chicanos may be quite different than that of recently immigrated Cuban Americans, for example. Among Latinos in this study, 12.7% identified as non-citizens of the U.S. Examining the group as a whole, however, gender did not appear to play a role on the development of civic values.

An interesting finding for Latino students as a group is the positive influence of enrolling in an ethnic studies course on both dependent measures, and the relative strength of the relationship. The reasons for this are not entirely clear, but several possibilities come to mind. Could it be associated with the fact that Latinos are more likely than other races to come from segregated schools (as mentioned in the findings section)? Could it be that this finding is influenced by one of

---

9 Kibria interviews second-generation Chinese and Korean Americans in this study.

10 It should be noted, though, that in the larger study socioeconomic status appears to play a significant role in the development of civic values among Latinos (Vogelgesang, 2000).
the ethnic groups within this broader “Latino” category? Further research would shed light on these possibilities.

**White Students**

Considered as a group, White freshmen are less committed to activism and to promoting racial understanding than are Asians, Latinos, and especially Blacks. Further, during the college years they show declines in average levels of commitment and no net change in commitment to promoting racial understanding. They are also least likely of all races to report that college has strengthened their ability to deal with people of other races & cultures.

This rather discouraging picture is brightened only somewhat by the finding that participation in certain curricular and co-curricular activities can have a significant, although usually modest, positive impact on White students’ civic values. One major difficulty with trying to strengthen White students’ commitment to activism and to promoting racial understanding is that they have a tendency to believe there is no longer a problem with racism in this nation. Given their sheer numbers, White students can often complete college while having only superficial contact with students from other racial groups, as evidenced in this study by the low mean for frequency of cross-racial interactions (see table 4).

The notion of “white privilege” sheds light on some of this study’s findings for White students. When Whites take their experience as the norm – and social and political power structures support this – it is relatively easy for them avoid considering how they might be privileged by virtue of their race. Average declines in commitment to activism, and in commitment to promoting racial understanding reflect a belief that they are less likely to see a need for social change. Sax and Arredondo (1999), for instance, find that white college freshmen are more likely than students of other races to say that affirmative action in college admissions should be abolished. The authors explore reasons such as self-interest, prejudice, etc., that might explain such behaviors. The concept of white privilege is examined in detail in some of the critical race work being done (e.g. Delgado & Stefancic, 1997).

Among White students, women enter college with stronger commitment to both civic values than do men. As discussed already, White women complete college more committed to activism than their male counterparts, but once their entering (freshman) level of commitment to activism is controlled, there is no gender difference on the outcome measure. Further, once White students’ college experiences are controlled, the relationship of gender to activism is reversed, with gender:
female actually becoming a negative predictor. Part of the reason may be that increases in commitment to these values by women are “explained” by participation in various activities (such as community service). For men, who tend to participate less in service, the ways in which commitment to activism is strengthened may need further research.

Environments / Activities

It is difficult to make generalizations about what factors affect the development of civic values and skills without considering specific outcomes. In this study, there are distinct differences regarding the role of class and gender within racial groups, depending upon the civic outcome being considered. There are also differential effects of service and diversity-related activities for the different outcomes. There is, however, also a surprising amount of consistency when one examines the effects of college activities across races.

Diverse Student Body

This study confirms previous research (Chang, 1996; Tanaka, 1996) which found that having a diverse student body does not, by itself, foster positive developmental outcomes. For commitment to activism, the racial diversity of the student body was not significant in the regression analysis. For the measure of commitment to promoting racial understanding, a diverse student body is a significant predictor only for White students, and its effect is negative. It should also be noted that the negative coefficients for Latinos and Blacks are actually larger than the significant White coefficient, though they did not reach significance in those smaller samples.

This finding, coupled with the findings regarding the positive effects of “diversity” activities (see below) suggests that policies should be developed that take advantage of a diverse student population by increasing the number and intensity of opportunities for students to interact cross-racially.

“Diversity” Activities

Curricular and co-curricular activities that support the exploration of race and identity issues clearly strengthen the commitment of students of all races to civic values, especially commitment to promoting racial understanding. For all races, belonging to a racial or ethnic student organization is a significant and positive predictor. For Asians, Blacks, and Whites, attending a racial or cultural awareness workshop is a significant positive predictor; for Asians, Latinos and Whites, enrolling in an ethnic studies course is significant (the coefficient for Blacks is the same size as that for Asians,
though with the smaller sample it doesn’t reach significance). Finally, for Blacks, Latinos and Whites, cross-racial interaction is significant positive predictor.

Diversity activities have less widespread effects on the activism measure, although the positive influences for White students are statistically significant. Among White students, participating in either an ethnic studies course, a racial awareness workshop, or an ethnic student organization, as well as cross-racial interaction, are all positively associated with growth in activism. For Asians, participating in a racial awareness workshop is a positive predictor and for Latinos, enrolling in an ethnic studies course has a positive impact.

Community Service

As noted before, and supporting previous research (Astin & Sax, 1998; Astin, Vogelgesang, Ikeda & Yee, 2000; Sax 2000), participating in community service is a consistent predictor of increased commitment to activism for all students. It also positively predicts commitment to promoting racial understanding for Asians and Whites.

USING A CRITICAL FRAMEWORK

This study suggests that treating students as one group masks important factors that influence the development of values, and thus implicitly challenges those theories that were developed using the experience of White students as the norm. Despite this challenge, though, the findings also confirm the efficacy of several general theories that were, in fact, developed using a dataset of predominantly White students. This study suggests that Astin’s (1977) involvement theory – that is, that students who are more engaged in curricular and co-curricular activities are likely to realize greater benefits from the college experience – is valuable across all racial groups. However, different kinds of experiences may benefit different groups. Also supported is the notion that one’s peer group may explain differences across race, especially in those cases where differences at the time of college entry actually widened during the college years (Astin 1993).

The other theoretical consideration regards the usefulness of critical theory as a framework to understand quantitative research. My understanding of this study’s findings is that there is strong support here for Tierney’s (1993) notion of community around diversity. In order that the reader might better understand the complexity of what he conveys, I quote Tierney: “It is curious, perhaps, that I am suggesting that we build the idea of community around the concept of diversity, for communities generally suggest commonality. Such communities, however, have inevitably silenced
those of us on the borders. Instead, we need to develop the notion of difference and engage in dialogues across border zones.... Dialogues of difference also enable us to respond to the current challenges in education” (1993, p. 25). In other words, a critical approach helps us to understand the importance of differences across race and gender, but it also suggests work to be done, namely creating communities across these differences. It also suggests that as educators we need to be willing to engage in sometimes uncomfortable practice of examining our own beliefs and assumptions so that we may create such dialogue and such communities.

The results of this research, viewed within the framework of creating community across differences, suggest educational practices which need to be examined. This study, like others (i.e. Chang, 1996, Tanaka, 1996) finds that “compiling” a diverse student body is a necessary, but not sufficient, practice to support the development of civic values and skills among students. It is critical to add meaningful cross-racial interactions. Just how one creates an environment where “meaningful” interaction can happen is not the subject of this study, but other work (Hurtado, 1992, Cress, 1999) supports the idea that overall campus climate is an important factor. Students need to perceive a climate that is, at a minimum, non-hostile, and ideally is supportive of their development.

This study implies that there are educational practices that are good for all (or at least many) students, which challenges the critical postmodern idea that difference is the most important organizing principle. For instance, these findings suggest that courses and activities which explore differences, and those that may be exposing students to their own histories for the first time, should be supported. Specifically, ethnic studies courses, as well as opportunities to participate in racial awareness workshops and in ethnic student organizations, appear to strengthen students’ level of commitment to civic values, and may also provide opportunities to explore and affirm one’s ethnic identity. Involvement in such activities shows enough consistency across racial groups that I suggest that these kinds of activities are, in general, good educational practice.

LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

As with any study, there are limitations, and questions remain for further research. The first limitation of the study is that the Beta values, in general, are quite small, as are the differences in Beta values across races. Thus, interpretation of findings should be undertaken with caution, especially in those cases where findings do not confirm earlier studies. Second, although I tried to acknowledge students’ multi-ethnic backgrounds, this was possible only at a superficial level in this
study. Further work needs to be done to examine how the identities of different races intersect and shape the experiences of multi-racial students, especially work that employs a critical perspective.

Given the nature of this study — looking at differences across racial, class and gender groups — it is important to note the composition of the sample. HERI data draws disproportionately from private institutions of higher education. Though I made efforts to increase the representation of students of color and public institutions, the sample is not a random one drawn proportionately from all colleges and universities, and doesn’t include community colleges. Since community colleges are where students of color are overwhelmingly concentrated, this study may be limited in its ability to speak to the experience of students of color in general. That being said, this data set includes a broad representation of students attending four-year institutions, and the substantial variance among demographic characteristics reflects the fact that the students in the study are diverse in terms of race, socioeconomic status and beliefs and behaviors.

Besides understanding the mix across racial groups, we need to study ethnic groups within races separately. This is particularly true for Asian Americans and Latinos, where immigrant status and the country (or culture) of origin may be important factors. Also relevant to such a study would be more information on where the student came from - urban vs. rural, mixed vs. segregated neighborhood, etc.

Finally, there is a sampling bias towards students who persist in college. This survey is conducted mainly by institutions, which are more likely to survey graduating seniors than students who dropped out. Again, since there are discrepancies in rates of persistence for different races, this fact should be noted.

This study suggests that race and gender do make a difference when we examine the effects of college on the development of civic values. Yet, there are activities that have positive effects across races, including enrolling in ethnic studies courses, attending racial awareness workshops, engaging in meaningful cross-racial interactions, and participating in community service. Though not all activities appear to positively affect all races, there is enough consistency to render them positive influences.

The research has examined the ways in which colleges and universities contribute to building a pluralistic democracy, specifically by the way in which they educate students. It suggests that higher education can and should play an important role in developing a “broad, many-sided democratic politics that grounds authority among the citizenry” (Boyte & Kari, 2000, p. 37).
REFERENCES


APPENDIX

Table A1. Variables in the Regression Model

Pre-test measure for outcomes
Commitment to Activism
Commitment to Promoting Racial Understanding

Student Characteristics
Race (4 dummy variables)
Gender
Socioeconomic Class
Religious preference (4 dummy variables reflecting Catholic, Jewish, other religion and no religious preference)
high school GPA

High School Activities: (Frequently, Occasionally, Not at all)
Attended religious service
participated in demonstrations
performed volunteer work
studied with other students
tutored another student
was a guest in teacher’s home

High School Activities: (hours per week)
studying or doing homework
socializing with friends
talking with teacher outside of class
working for pay
volunteer work
student clubs and organizations

Self-ratings
Academic ability
leadership ability
intellectual self-confidence
social self-confidence
understanding of others
writing ability
cooperativeness

\textsuperscript{11} The measure of social class was developed through a two step process. First I standardized students’ scores on mother’s education, father’s education and parental income. The standardized score reflects an individual’s score as compared with all other students in the study. Next I added the three t-scores and divided by 3 (the number of measures) to retain a t-distribution (with a mean of 50 and standard deviation of 10).
View: individual can do little to change society
Reason for attending college: make more money
Future plans: participate in volunteer work

Institutional (structural) Characteristics (dummy variables)¹²

- public university
- private university
- public college
- non-sectarian private college
- Catholic college
- Protestant college.

College Activities

College activities (dichotomous measures)
- Taken an ethnic studies course
- Taken a women's studies course
- Joined a fraternity or sorority
- Had a part-time job on campus
- Had a part-time job off campus
- Attended a racial/cultural awareness workshop
- Participated in an ethnic/racial student organization
- Had a roommate of a different racial/ethnic group

College activities (frequently, occasionally, not at all)
- performed volunteer work
- attended religious services
- Cross-racial interaction: At the college you entered as a freshman, indicate how often you....(the variable is a total of the scores on these 5 items, which were scored: frequently, occasionally, not at all)
  - Studied with someone from a different racial/ethnic group
  - Dined with someone from a different racial/ethnic group
  - Dated someone of a different racial/ethnic group
  - Interacted with someone of a different racial/ethnic group in class
  - Socialized with someone of a different ethnic group

College activities (hours per week)
- studying / doing homework

¹² There was only one Predominantly Black College in the 1998 CSS, so it is not included as a type of institution in this study.
Faculty Support\textsuperscript{13} (not all, occasionally, frequently)

Emotional faculty support is a composite measure of seven variables reflecting support provided:

- faculty took a personal interest in student’s progress
- advice about student’s educational program
- respect (treated student like a peer)
- emotional support / development
- honest feedback about abilities
- intellectual challenge/ stimulation
- opportunity to discuss coursework

Research support by faculty was a composite measure of the following:

- encouragement for graduate and professional work
- opportunities to work on research projects
- opportunity to publish
- letter of recommendation

Both composite of measures of faculty support were derived via factor analysis. The reliability (alpha) coefficient for emotional support is .841, and the coefficient for research support is .662.

\textsuperscript{13} Although the findings from the two faculty support measures are not the subject of this paper, it should be noted that these were controlled in the final analyses.
Table A2. Commitment to Social Activism: Mean Pretests and Posttests, by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Entering College (pretest)</th>
<th>Follow-up (posttest)</th>
<th>Change in Mean</th>
<th>Simple r (pre-post test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian (n=865)</td>
<td>15.88</td>
<td>15.60</td>
<td>-.28</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>3.68</td>
<td>3.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black (n=480)</td>
<td>16.64</td>
<td>16.66</td>
<td>.02</td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td>4.03</td>
<td>4.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino (n=654)</td>
<td>16.47</td>
<td>16.56</td>
<td>.09</td>
<td>.45</td>
</tr>
<tr>
<td></td>
<td>3.72</td>
<td>3.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (n=16,176)</td>
<td>15.60</td>
<td>15.45</td>
<td>-.15</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>3.47</td>
<td>3.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All (n=18,199)</td>
<td>15.67</td>
<td>15.54</td>
<td>-.13</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>3.51</td>
<td>3.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1= not important; 2= somewhat important; 3= very important; 4= essential on each of seven measures
### Table A3. Commitment to Promoting Racial Understanding: Mean Pretests and Posttests, by Race

<table>
<thead>
<tr>
<th></th>
<th>Entering College (pretest)</th>
<th>Follow-up (posttest)</th>
<th>Change in Mean</th>
<th>Simple r (pre-post test)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asian</strong> (n=893)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>2.65</td>
<td>2.63</td>
<td>-.02</td>
<td>.37</td>
</tr>
<tr>
<td>std dev</td>
<td>.90</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Black</strong> (n=512)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>3.10</td>
<td>2.99</td>
<td>-.12</td>
<td>.35</td>
</tr>
<tr>
<td>std dev</td>
<td>.87</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Latino</strong> (n=681)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>2.70</td>
<td>2.67</td>
<td>-.03</td>
<td>.42</td>
</tr>
<tr>
<td>std dev</td>
<td>.91</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>White</strong> (n=16,750)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>2.22</td>
<td>2.22</td>
<td>.00</td>
<td>.39</td>
</tr>
<tr>
<td>std dev</td>
<td>.85</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All</strong> (n=18,879)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td>2.28</td>
<td>2.28</td>
<td>.00</td>
<td>.41</td>
</tr>
<tr>
<td>std dev</td>
<td>.87</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1= not important; 2= somewhat important; 3= very important; 4= essential
### Table A4. Commitment to Promoting Racial Understanding Among Entering Students, by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Gender</th>
<th>mean</th>
<th>Std dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>male</td>
<td>2.52</td>
<td>.93</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>2.72</td>
<td>.89</td>
</tr>
<tr>
<td>Black</td>
<td>male</td>
<td>2.97</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>3.17</td>
<td>.80</td>
</tr>
<tr>
<td>Latino</td>
<td>male</td>
<td>2.64</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>2.73</td>
<td>.88</td>
</tr>
<tr>
<td>White</td>
<td>male</td>
<td>2.12</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>2.27</td>
<td>.84</td>
</tr>
</tbody>
</table>

1= not important; 2= somewhat important; 3= very important; 4= essential

* gender difference significant at .001 < p < .05
** gender difference significant at p < .001

### Table A5. Commitment to Activism Among Entering Students, by Race & Gender

<table>
<thead>
<tr>
<th>Race</th>
<th>Gender</th>
<th>mean</th>
<th>Std dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>male</td>
<td>15.68</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>16.01</td>
<td>3.69</td>
</tr>
<tr>
<td>Black</td>
<td>male</td>
<td>16.55</td>
<td>4.32</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>16.65</td>
<td>3.88</td>
</tr>
<tr>
<td>Latino</td>
<td>male</td>
<td>16.51</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>16.49</td>
<td>3.65</td>
</tr>
<tr>
<td>White</td>
<td>male</td>
<td>15.43</td>
<td>3.61</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>15.69</td>
<td>3.40</td>
</tr>
</tbody>
</table>

1= not important; 2= somewhat important; 3= very important; 4= essential on each of seven items
** gender difference significant at p < .001
I. DOCUMENT IDENTIFICATION:

Title: The Impact of College on the Development of Civic Values: How do Race & Gender Matter?

Author(s): Lori J. Vogelgesang

Corporate Source: UCLA

Publication Date: Spring 2001

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

Level 1

[ ] PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2A

[ ] PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2B

[ ] PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Lori J. Vogelgesang

Printed Name/Position/Title: Lori J. Vogelgesang

Organization/Address: UCLA

Telephone: 310 825 4815

FAX: 310 825 4815

E-Mail Address: vogelgesang@ucla.edu

Date: 04/12/01

(over)
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION
UNIVERSITY OF MARYLAND
1129 SHRIVER LAB
COLLEGE PARK, MD 20742-5701
ATTN: ACQUISITIONS

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 2/2000)