

TABLE 1

## Alpha Reliabilities and Item-Total Score Correlations for Openness to Diversity/Challenge Scale

Scale/Item	Item-total score correlation <sup>a</sup>	Alpha reliability <sup>a</sup>
OPENNESS TO DIVERSITY/CHALLENGE		0.83/0.84
I enjoy having discussions with people whose ideas and values are different from my own.	0.67/0.64	
The real value of a college education lies in being introduced to different values.	0.56/0.62	
I enjoy talking with people who have values different from mine because it helps me understand myself and my values better.	0.63/0.62	
Learning about people from different cultures is a very important part of my college education.	0.58/0.58	
I enjoy taking courses that challenge my beliefs and values.	0.55/0.57	
The courses I enjoy the most are those that make me think about things from a different perspective.	0.57/0.55	
Contact with individuals whose background (e.g., race, national origin, sexual orientation) is different from my own is an essential part of my college education.	0.55/0.55	
I enjoy courses that are intellectually challenging.	0.48/0.51	

<sup>a</sup>First number is for the precollege measure, second number is for the end-of-first-year follow-up.

TABLE 2

## Variable Definitions

## Category/Variable

## PRECOLLEGE VARIABLES

*Precollege Openness to Diversity/Challenge*: An 8-item scale measuring students' precollege level of openness to diversity and challenge, alpha reliability = 0.83 (all items shown in Table 1).

*Precollege Academic Ability*: A composite of the reading comprehension, mathematics, and critical thinking modules of the Collegiate Assessment of Academic Proficiency (CAAP), developed by the American College Testing Program, alpha reliability = 0.83.

*Female*: 1 = female, 0 = male.

*Nonwhite*: 1 = nonwhite, 0 = white.

*Age*: A continuous variable calculated by subtracting year of birth from 1992.

*Precollege Academic Motivation*: An 8-item, Likert-type scale (5 = "strongly agree" to 1 = "strongly disagree") with an internal consistency reliability of 0.65. The scale items were based on existing research on academic motivation. Examples of constituent items are: "I am willing to work hard in a course to learn the material, even if it won't lead to a higher grade," "When I do well on a test it is usually because I was well prepared, not because the test was easy," "In high school I frequently did more reading in a class than was required simply because it interested me," and "In high school I frequently talked to my teachers outside of class about ideas presented during class."

## ENVIRONMENTAL EMPHASIS OF THE INSTITUTION ATTENDED

*Average Precollege Openness to Diversity/Challenge of Each Institution's First Year Class*: Estimated by the average level of precollege openness to diversity/challenge at each of the 18 institutions in the sample. Each individual student was given the mean of his or her institution.

*Nondiscriminatory Racial Environment*: A 7-item Likert-type scale (5 = "strongly agree" to 1 = "strongly disagree") with an alpha reliability of 0.76. Examples of constituent items are: "Instructors treat all students the same regardless of race," "Few if any of the students at this college are prejudiced against minority students," and "Overall, course content at this institution reflects the experiences of minorities (e.g., a literature course would include minority authors)."

*Environmental Emphasis on the Development of Academic, Scholarly, and Intellectual Qualities*: Single item CSEQ rating on a 7-point scale, where 1 = weak emphasis and 7 = strong emphasis.

TABLE 2 (Continued)

Category/Variable
<i>Environmental Emphasis on the Development of Aesthetic, Expressive, and Creative Qualities:</i> Single-item CSEQ rating on a 7-point scale, where 1 = weak emphasis and 7 = strong emphasis.
<i>Environmental Emphasis on Being Critical, Evaluative, and Analytical:</i> Single-item CSEQ rating on a 7-point scale where 1 = weak emphasis and 7 = strong emphasis.
<i>Environmental Emphasis on the Development of Vocational and Occupational Competence:</i> Single-item CSEQ rating on a 7-point scale where 1 = weak emphasis and 7 = strong emphasis.
STUDENT ACADEMIC EXPERIENCES
<i>Total Credit Hours Completed:</i> Number of hours completed during current academic year.
<i>Hours Per Week Spent Studying:</i> Single-item, 6-point self-report of hours per week spent studying where 1 = none and 6 = more than 20 hours.
<i>Social Sciences Courses Taken:</i> Number of college courses taken in the first year in anthropology, audiology/speech pathology, child and family studies, communications, economics, geography, history, political science, psychology, sociology, or social work.
<i>Mathematics Courses Taken:</i> Number of college courses taken in the first year in pre-algebra, algebra, calculus, statistics, computer science, geometry, matrix algebra, accounting, or business math.
<i>Technical/Preprofessional Courses Taken:</i> Number of college courses taken in the first year in drawing, drafting, architectural design, criminology, education, agriculture, business, physical therapy, pharmacy, physical education, nursing, or computer programming.
<i>Arts and Humanities Courses Taken:</i> Number of college courses taken in the first year in art history, art appreciation, studio art, dance, theater, music appreciation, music performance, composition or writing, English literature, foreign language, humanities, philosophy, linguistics, classics, or religious studies.
<i>Natural Sciences &amp; Engineering Courses Taken:</i> Number of college courses taken in the first year in astronomy, botany, biology, chemistry, physics, geology, zoology, microbiology, and engineering.
<i>CSEQ Course Learning Scale:</i> A 10-item CSEQ scale reflecting students' experiences in courses (e.g., "Took detailed notes in class," "Participated in class discussions," "Tried to explain the material to another student or friend," "Did additional readings on topics that were introduced and discussed in class"). Scored on a 4-point scale, where 1 = never and 4 = often. Alpha = 0.84.
<i>CSEQ Experiences with Faculty Scale:</i> A 10-item CSEQ scale reflecting students' experiences with faculty (e.g., "Talked with a faculty member," "Discussed ideas for a term paper or other class project with a faculty member," "Worked with a faculty member on a research project," "Discussed personal problems or concerns with a faculty member"). Scored on a 4-point scale, where 1 = never and 4 = often. Alpha = 0.89.
STUDENT SOCIAL/NONACADEMIC EXPERIENCES
<i>On-Campus Residence:</i> 1 = lived on-campus, 0 = lived off-campus.
<i>Joined a Fraternity or Sorority:</i> 1 = yes, 0 = no.
<i>Participated in Intercollegiate Athletics:</i> 1 = yes, 0 = no.
<i>Participated in a Racial or Cultural Awareness Workshop:</i> 1 = yes, 0 = no.
<i>Hours Worked Per Week:</i> Combination of average number of hours of on- and off-campus work per week during the school year, coded 1 = none, to 9 = more than 35.
<i>CSEQ Clubs and Organizations Scale:</i> A 10-item CSEQ scale reflecting students' involvement in campus clubs and organizations [e.g., "Attended a program or event put on by a student group," "Worked in some student organization or special project (publications, student government, social event, etc.)" "Worked on a committee," "Met with a faculty advisor or administrator to discuss the activities of a student organization"], where 1 = never to 4 = very often. Alpha = 0.92.
<i>CSEQ Student Acquaintances Scale:</i> A 10-item CSEQ scale measuring the nature of students' interactions with peers (e.g., "Made friends with students whose interests were very different from yours," "Made friends with students whose race was different from yours," "Had serious discussions with students whose philosophy of life or personal values were very different from yours," "Had serious discussions with students from a country different from yours"), where 1 = never to 4 = very often. Alpha = 0.90.
<i>CSEQ Topics of Conversation Scale:</i> A 10-item CSEQ scale capturing the topics of conversations with other students (e.g., "Current events in the news," "Different life styles and customs," "The ideas and views of other people such as writers, philosophers, and historians," "International relations"), where 1 = never to 4 = very often. Alpha = 0.86.
<i>CSEQ Information in Conversations Scales:</i> A 7-item CSEQ scale which asked: "In these conversations with other students, about how often have you done the following?" (e.g., "Explored different ways of thinking about a topic," "Referred to something a professor said about the topic," "Changed your opinion as a result of the knowledge or arguments presented by others," "Persuaded others to change their minds as a result of the knowledge or arguments you cited"), where 1 = never to 4 = very often. Alpha = 0.86.
DEPENDENT VARIABLE
<i>End of First-Year Openness to Diversity/Challenge:</i> An 8-item scale measuring students' level of openness to diversity and challenge at the end of the first year of college, alpha reliability = 0.84 (all items shown in table 1).