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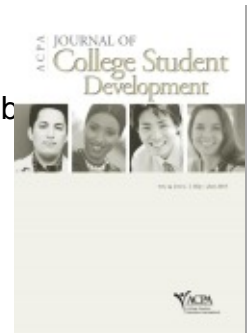
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## Examining the Effects of Student Involvement on African American College Student Development

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# Examining the Effects of Student Involvement on African American College Student Development

Lamont A. Flowers

*The purpose of this study was to investigate the extent to which student involvement experiences impacted educational outcomes for African Americans in college. Overall, the results of the study indicated that in-class and out-of-class experiences positively impacted student development for a nationally representative sample of African American students who completed the College Student Experiences Questionnaire. Implications for student affairs professionals were discussed.*

Encouraging and promoting in-class and out-of-class student involvement is the cornerstone of student affairs practice. Based on recent national data, college students seem to be benefiting from institutional efforts to enhance their college experiences. For example, in 2003, based on data from more than 100,000 students who completed the National Survey of Student Engagement (2003) 38% of the students reported that their college experience was “excellent” and 49% of the students reported that their college experience was “good.” In addition to the practical significance of student involvement experiences, an enormous body of research attests to the statistical significance of student involvement experiences in college (Astin, 1993; Pascarella & Terenzini, 1991). Moreover, during the past 25 years, several

research syntheses have been written that focused exclusively on documenting the impact of student involvement experiences on college students. For example, following a careful review of a large body of research on the effects of student-faculty interactions, Pascarella (1980) found that informal contacts between students and college faculty resulted in a number of positive educational outcomes for college students. After completing another extensive review of the higher education literature, Pascarella (1985) confirmed the importance of student-faculty interactions on college students’ cognitive development and also found that growth in academic development was influenced by students’ interactions with the institutional environment as well as the quality of student effort expended on academic and social activities on campus.

During the past 10 years, researchers have continued to produce research syntheses on the direct and indirect influences of student involvement experiences on college students. For instance, Terenzini, Pascarella, and Blimling (1996) completed an extensive literature review of research regarding the influence of students’ out-of-class experiences on their developmental learning outcomes. Based on their research synthesis, it can be concluded that a variety of college experiences (e.g., Greek affili-

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ation, participation in intercollegiate athletics, extracurricular activities, etc.) positively impact college student development. Moore, Lovell, McGann, and Wyrick (1998) also conducted a literature review on the importance of student involvement experiences and found that the weight of student involvement research overwhelmingly supports the view that student involvement positively influences moral development, cognitive development, and vocational aspirations for college students. More recently, Hernandez, Hogan, Hathaway, and Lovell (1999) performed a literature review on the effects of student involvement on college students' educational outcomes and noted similar findings as in other studies. They also noted that future research exploring the impact of student involvement on student development that incorporates larger sample sizes and data from nontraditional students (e.g., adult students, diverse populations), is needed.

Whereas a large body of research has indicated the importance of student involvement experiences for college students in general (Pascarella & Terenzini, 1991) and African American college students in particular (DeSousa & King, 1992; DeSousa & Kuh, 1996; Littleton, 2002; Mitchell & Dell, 1992; Outcalt & Skewes-Cox, 2002; Sutton & Kimbrough, 2001; Taylor & Howard-Hamilton, 1995; Watson & Kuh, 1996), a relatively small body of research has attempted to show the magnitude of particular student involvement experiences on African American student development. Most recently Littleton, employing qualitative data, demonstrated that African American students' involvement may further enhance their commitment to an institution and positively influence their retention on campus. Additionally, a small body of research, although

not totally consistent, has shown that African American and White students differ in their participation levels in student involvement activities (DeSousa & King; MacKay & Kuh, 1994; Watson & Kuh). Also, researchers exploring African American student involvement found that students' racial identities may influence their level of participation in student involvement on campus (Mitchell & Dell; Sutton & Kimbrough; Taylor & Howard-Hamilton).

Thus, the current study is significant because existing research, although important and comprehensive, has been limited in three important ways. First, previous researchers on this topic only included a small sample of institutions. Second, previous researchers based their work on small samples of African American students. Third, previous researchers did not employ an extensive array of statistical controls for the effects of potentially confounding variables. The current study addresses these previous limitations in this body of research by employing a national sample of nearly 200 four-year institutions, approximately 8,000 African American students, and a broad range of control variables for student background characteristics, institutional characteristics, as well as students' college experiences. Additionally, the current research is based on cross-sectional data collected over a 10-year period.

### Theoretical Framework

The current study is based on Astin's (1984) theory of student involvement. Based on Astin's theory, "student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297). Astin's theory of student involvement can be represented by the following propositions or

tenets:

(a) Involvement refers to the investment of physical and psychological energy in various objects; (b) Regardless of its object, involvement occurs along a continuum; (c) Involvement has both quantitative and qualitative features; (d) The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program; and (e) The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement. (p. 298)

To be sure, Astin's theory has served as the basis of a considerable amount of research over the last 2 decades (Baxter Magolda, 1992; Hernandez et al., 1999; Moore et al., 1998; Williams & Winston, 1985). Taken as a whole, the weight of research using Astin's theory indicated that student involvement experiences positively impact college student development in a variety of important ways (e.g., cognitive development, moral development, leadership skills, etc.). Because the weight of college student involvement research supports the primary tenets of Astin's theory, considerable statistical evidence supports the continued use of Astin's theory in student development research. Toward that end, this study is based on Astin's view that student involvement experiences promote students' developmental gains in college. Accordingly, for the current study, I sought to extend the research in this area, by examining the effects of student involvement experiences on academic and social gains in college on a representative sample of African American college students. Stated differently, I sought

to examine the relative magnitude of 82 student involvement experiences on measures assessing African American students' development in college.

## METHOD

### Data

The Revised 3rd Edition of the College Student Experiences Questionnaire (CSEQ) was the primary data source for this research. Because the CSEQ contained self-reported information of students' demographic characteristics, students' involvement experiences, and students' intellectual and social gains, and had an extensive history of use in American colleges and universities (Bauer, 1995; Decoster, 1989; Kuh & Hu, 2001; Kuh, Vesper, Connolly, & Pace, 1997; Pace, 1984), it was deemed as an appropriate data source for the current research.

### Sample

The sample consisted of 7,923 African American students (5,150 females and 2,773 males) from 192 postsecondary institutions who participated in the CSEQ data collection between 1990 and 2000. The sample consisted of 39% freshmen, 22% sophomores, 17% juniors, and 22% seniors. Eighteen percent of the sample attended a historically Black college or university and 82% of the sample attended a predominantly White institution. There were 93 public institutions and 99 private institutions in the institutional sample.

### Methodological Framework

The methodological framework used for this study was based on numerous research studies exploring the effects of college on student development and educational outcomes (Astin, 1993; Pascarella, 1985;

Pascarella & Terenzini, 1991; Smart, 1986; Terenzini, Springer, Pascarella, & Nora, 1995). Overall, this body of research suggests that at least four sources of influence must be considered in attempting to understand the impact of college on educational outcomes (Astin, 1993; Chickering & Reisser, 1993). These sources of influence were: (a) preenrollment characteristics of students, (b) organizational and environmental characteristics of the institution, (c) students' academic experiences, and (d) students' nonacademic experiences. Therefore, the methodological framework in this study was based, in part, on the notion that educational outcomes were a function of precollege characteristics and background factors, institutional characteristics, and academic and nonacademic factors. The methodological framework for the study was used to select appropriate control variables to include in the analytical model. Other specific ways in which this methodological framework informed the research appear in subsequent sections of this article.

## Variables

*Dependent Variables.* For the purposes of this study, educational outcomes were operationally defined as five CSEQ scales that yielded self-reported gains in understanding the arts and humanities, personal and social development, understanding science and technology, thinking and writing skills, and vocational preparation (Kuh, 1999; MacKay & Kuh, 1994; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999). The Understanding Arts and Humanities scale (5 items) assessed students' perceptions of how much they gained during college in understanding literature, philosophy, and the arts (e.g., "developing an understanding and enjoyment of art, music, and drama" and

"broadening your acquaintance and enjoyment of literature"). The Personal and Social Development scale (5 items) assessed students' perceptions of how much they progressed in college in understanding themselves and others (e.g., "developing your own values and ethical standards" and "understanding other people and the ability to get along with different kinds of people"). The Understanding Science and Technology scale (3 items) assessed students' perceptions regarding how much they gained during college in understanding scientific and technological ideas (e.g., "understanding the nature of science" and "understanding new scientific and technical developments"). The Thinking and Writing Skills scale (4 items) assessed students' perceptions of how much they gained during college in writing and thinking skills (e.g., "writing clearly and effectively" and "ability to think analytically and logically"). The Vocational Preparation scale (3 items) assessed students' perceptions of how much they progressed in developing for a career (e.g., "gaining a broad general education about different fields of knowledge" and "gaining a range of information that may be relevant to a career").

Each CSEQ gains scale had a response set comprised of four Likert-type scale choices, which was later transformed into an interval scale (i.e., 4 = *very much*, 3 = *quite a bit*, 2 = *some*, 1 = *very little*). A CSEQ gains scale score was then determined for each CSEQ gain scale, for each student, by adding up his or her scores for each item in the particular scale. Higher scores indicated greater progress made in each area. The alpha reliabilities for the five CSEQ gains scales, using data from the current study, were .75 (Understanding Arts and Humanities), .81 (Personal and Social Development), .87 (Understanding Science and Tech-

nology), .84 (Intellectual and Writing Skills), and .75 (Vocational Preparation).

*Independent Variables.* The purpose of this research was to explore the extent to which student involvement experiences influenced African American students' development in college. In the current study, student involvement was measured using the following CSEQ scales: Library Experiences; Experiences With Faculty; Course Learning; Art, Music, and Theater; Personal Experiences; Student Union; Athletic and Recreation Facilities; and Clubs and Organizations. The Library Experiences scale (10 items) measured a student's involvement with the local or college library and his or her extent of interaction with library resources (e.g., "used the library as a quiet place to read or study materials you brought with you"). The Experiences With Faculty scale (10 items) assessed a student's interactions with faculty (e.g., "talked with a faculty member"). The Course Learning scale (10 items) measured a student's level of effort used to learn course information (e.g., "took detailed notes in class"). The Art, Music, and Theater scale (12 items) assessed a student's level of involvement in artistic and musical events and activities on campus (e.g., "gone to an art gallery or art exhibit on the campus"). The Personal Experiences scale (10 items) assessed a student's level of effort used to understand himself or herself as well as others (e.g., "been in a group where each person, including yourself, talked about his/her personal problems"). The Student Union scale (10 items) measured a student's degree of use of the student union on campus (e.g., "had meals, snacks, etc. at the student union or student center").

The Athletic and Recreation Facilities scale (10 items scale) assessed a student's level of participation in wellness activities,

intramural sports, and sporting events (e.g., followed a regular schedule of exercise, or practice in some sport, on campus). The *Clubs and Organization* scale (10 items) measured a student's level of participation in campus-based student groups (e.g., attended a meeting of a club, organization, or student government group). Each CSEQ involvement scale had a response set comprised of 4-Likert type scale choices: 4 = *very often*, 3 = *often*, 2 = *occasionally*, and 1 = *never*. In the current research, the alpha reliabilities for the nine CSEQ involvement scales were: Library Experiences scale (.84); Experiences With Faculty scale (.88); Course Learning scale (.86); Art, Music, and Theater scale (.87); Personal Experiences scale (.85); Student Union scale (.89); Athletic and Recreation Facilities scale (.91); and Clubs and Organizations scale (.92).

*Control Variables.* Four sets of control variables were developed based on the methodological framework of the study. The first set of control variables was comprised of students' demographic and precollege characteristics (age, gender, and socioeconomic status). The second set of control variables consisted of characteristics of the institution, that is, students' perceptions of the extent to which the institution emphasized development of (a) academic, scholarly, and intellectual qualities; (b) aesthetic, expressive, and creative qualities; (c) critical, evaluative, and analytical thinking skills; and (d) vocational and occupational competence. A dummy variable was included in the model for college racial composition of the institution attended (coded 1 = *attended a historically Black college and university*, 0 = *attended a predominantly White institution*). A dummy variable measuring institutional control (coded 1 = *public institution*, 0 = *private*

*institution*) also was included. Additionally, a categorical variable for the selectivity of the institution attended was included in the analytical model. This variable was derived using the selectivity data taken from *Barron's Profiles of American Colleges* (College Division of Barron's Educational Series, 1996). The college selectivity variable was developed by taking each institution's selectivity information listed in *Barron's Profiles of American Colleges* and converting the categorical description into a numerical designation (coded 1 = *most competitive*, 2 = *highly competitive*, 3 = *very competitive*, 4 = *competitive*, 5 = *less competitive*, 6 = *noncompetitive*, 7 = *special*).

Students' academic experiences constituted the third set of control variables, that is, year in school, enrollment status, hours per week spent studying, grade point average, and college major. Students' social experiences constituted the fourth set of control variables, that is, hours per week spent working and campus residence. Detailed compositions of all dependent, independent, and control variables, with psychometric characteristics, are provided in several publications employing CSEQ data (Arnold, Kuh, Vesper, & Schuh, 1993; Bauer, 1995; Kuh, 1999; Kuh & Hu, 2001; Kuh, Pace, & Vesper, 1997; Kuh et al., 1997; Whitt et al., 1999).

### Analytical Procedures

The data analysis occurred in a 2-stage process. In the first stage of data analysis, means and standard deviations were computed for each CSEQ gains scale and each CSEQ student involvement scale. In the second stage of data analysis, ordinary least squares regression (Pedhazur, 1997) was used to estimate the direct effects of each CSEQ student involvement experience on

each CSEQ gains scale. Specifically, each dependent variable (i.e., CSEQ gains scale) was regressed on each independent variable (i.e., each item from the CSEQ student involvement scales), separately, while applying statistical controls for the effects of all other variables in the model as represented in the methodological framework and described in preceding sections of this article. All regression results were reported statistically significant at  $p < .001$ .

## RESULTS

Table 1 shows the descriptive statistical results for the independent and dependent variables. Table 1 reveals that African American students reported the greatest amount of gains in the following areas: vocational preparation, thinking and writing skills, and understanding science and technology. However, Table 1 also shows that African American students participated only "occasionally" (i.e., more likely to record a 2 on the CSEQ survey form indicating their participation) in student involvement experiences during the 10-year period. Tables 2 through 9 show the regression summaries for the effects of student involvement on African American students' academic and social development.

### Library Experiences

Table 2 shows that using the library as a quiet place to read or study materials yielded positive effects on African American students' gains scores on the Personal and Social Development scale ( $b = .163$ ), Understanding Science and Technology scale ( $b = .164$ ), Thinking and Writing Skills scale ( $b = .118$ ), and the Vocational Preparation scale ( $b = .089$ ). Also, African American students' gains scores on the Understanding

Arts and Humanities scale ( $b = .235$ ), Personal and Social Development scale ( $b = .204$ ), Thinking and Writing Skills scale ( $b = .231$ ), and the Vocational Preparation scale ( $b = .125$ ) were positively impacted when they developed a bibliography or set of references for use in a term paper or other report. The study also found that when African American students found some interesting materials to read just by browsing in the stacks, positive gains resulted on all five of the outcome measures. Data also revealed that when African American students ran down leads and looked for further references that were cited in things they read, positive gains were obtained on all of the CSEQ scales except Personal and Social Development.

### Experiences With Faculty

Table 3 shows that asking the instructor for information related to a course resulted in positive gains in personal and social development ( $b = .390$ ), thinking and writing skills ( $b = .277$ ), and vocational preparation ( $b = .244$ ) for African American students. Gains in understanding arts and humanities ( $b = .148$ ), understanding science and technology ( $b = .254$ ), thinking and writing skills ( $b = .187$ ), and vocational preparation ( $b = .197$ ) were also attributed to discussing career plans and ambitions with a faculty member. The findings also pointed to the positive benefits of asking the instructor for comments and criticism about work in terms of gains in understanding arts and humanities ( $b = .280$ ), personal and social development

TABLE 1.  
Descriptive Statistics for the CSEQ Gains and Involvement Scales

Variables	<i>M</i>	<i>SD</i>
<i>CSEQ Educational Gains Scales</i>		
Understanding Arts and Humanities (5 items)	12.22	3.12
Personal and Social Development (5 items)	14.05	3.41
Understanding Science and Technology (3 items)	6.32	2.51
Thinking and Writing Skills (4 items)	11.03	2.81
Vocational Preparation (3 items)	7.61	2.18
<i>CSEQ Student Involvement Scales</i>		
Library Experiences (10 items)	20.89	5.66
Experiences With Faculty (10 items)	20.69	5.61
Course Learning (10 items)	28.04	5.61
Art, Music, and Theater (12 items)	19.21	6.13
Personal Experiences (10 items)	22.96	6.34
Student Union (10 items)	22.32	7.22
Athletic and Recreation Facilities (10 items)	19.22	7.49
Clubs and Organizations (10 items)	20.48	7.66



TABLE 2.

## Regression Summaries for the Effects of Library Experiences on African American Students' Academic and Social Development

Library Experiences	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Used the library as a quiet place to read or study materials you brought with you.	.105 (.030)	.163* (.043)	.164* (.058)	.118* (.038)	.089* (.037)
Used the card catalogue or computer to find what materials there were on some topic.	-.032 (-.010)	-.009 (-.003)	-.160* (-.059)	.032 (.011)	-.016 (-.007)
Asked the librarian for help finding material on some topic.	.014 (.004)	.171* (.043)	-.062 (-.021)	-.075 (-.022)	.034 (.014)
Read something in the reserve book room or reference section.	.182* (.051)	.040 (.010)	.086 (.030)	.022 (.007)	.063 (.025)
Used indexes (such as the <i>Reader's Guide to Periodical Literature</i> ) to journal articles.	-.040 (-.011)	.037 (.010)	-.011 (-.004)	.002 (.001)	.016 (.007)
Developed a bibliography or set of references for use in a term paper or other report.	.235* (.071)	.204* (.056)	.081 (.031)	.231* (.077)	.125* (.054)
Found some interesting material to read just by browsing in the stacks.	.381* (.112)	.266* (.072)	.146* (.053)	.201* (.066)	.120* (.050)
Ran down leads, looked for further references that were cited in things you read.	.219* (.059)	.082 (.020)	.185* (.062)	.211* (.063)	.148* (.057)
Gone back to read a basic reference or document that other authors had often referred to.	.187* (.045)	.109 (.024)	.367* (.110)	.151 (.041)	-.011 (-.004)
Checked out books to read (not textbooks).	.157* (.047)	.042 (.012)	-.009 (-.004)	.029 (.010)	.026 (.012)
$R^2$	.250*	.162*	.159*	.210*	.264*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\* $p < .001$ .

( $b = .226$ ), and thinking and writing skills ( $b = .187$ ).

### Course Learning Experiences

As displayed in Table 4, many of the course-related experiences were shown to positively impact African American students' educational outcomes in college. Participating in class discussions positively influenced

gains in understanding arts and humanities ( $b = .291$ ), personal and social development ( $b = .275$ ), and thinking and writing skills ( $b = .141$ ). African American students' educational outcomes (i.e., gains in understanding arts and humanities, gains in understanding science and technology, gains in thinking and writing skills, and gains in vocational preparation) were also positively

TABLE 3.

## Regression Summaries for the Effects of Experiences With Faculty on African American Students' Academic and Social Development

Experiences With Faculty	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Talked with a faculty member.	.147 (.040)	.196* (.049)	-.106 (-.036)	.093 (.028)	.158* (.061)
Asked your instructor for information related to a course you were taking (grades, make-up work, assignments, etc.).	.160 (.044)	.390* (.097)	.130 (.044)	.277* (.084)	.244* (.095)
Visited informally and briefly with an instructor after class.	.051 (.014)	.027 (.007)	.068 (.023)	-.035 (-.011)	.027 (.011)
Made an appointment to meet with a faculty member in his/her office.	-.062 (-.017)	.118 (.030)	.093 (.032)	.045 (.014)	-.050 (-.020)
Discussed ideas for a term paper or other class project with a faculty member.	.303* (.083)	.122 (.031)	.033 (.011)	.168* (.052)	.021 (.008)
Discussed your career plans and ambitions with a faculty member.	.148* (.043)	.159 (.042)	.254* (.091)	.187* (.060)	.197* (.081)
Asked your instructor for comments and criticism about your work.	.280* (.080)	.226* (.059)	.109 (.039)	.187* (.060)	.062 (.026)
Had coffee, Cokes, or snacks with a faculty member.	.313* (.064)	.048 (.009)	-.073 (-.019)	.008 (.002)	.018 (.005)
Worked with a faculty member on a research project.	.057 (.011)	-.034 (-.006)	.403* (.099)	.054 (.012)	.099 (.028)
Discussed personal problems or concerns with a faculty member.	.106 (.026)	.066 (.015)	-.017 (-.005)	-.006 (-.002)	-.033 (-.012)
<i>R</i> <sup>2</sup>	.246*	.185*	.155*	.214*	.281*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\**p* < .001.

influenced when they thought about practical applications of the material. Table 4 also shows that African American students who worked on a paper or project where they had to integrate ideas from various sources reported positive gains in understanding arts and humanities (*b* = .450), personal and social development (*b* = .289), thinking and

writing skills (*b* = .238), and vocational preparation (*b* = .162). African American students who explained the materials to another student or friend also received positive benefits on all of the educational outcomes except understanding arts and humanities. In contrast, all five of the educational outcome measures were posi-

TABLE 4.

Regression Summaries for the Effects of Course Learning Experiences on African American Students' Academic and Social Development

Course Learning Experiences	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Took detailed notes in class.	-.021 (-.005)	.201* (.042)	.148* (.042)	.231* (.058)	.161* (.052)
Participated in class discussions.	.291* (.078)	.275* (.067)	-.130* (-.043)	.141* (.042)	.077 (.029)
Underlined major points in the readings.	.030 (.008)	.222* (.055)	-.025 (-.009)	.099 (.030)	.051* (.020)
Tried to see how different facts and ideas fit together.	.093 (.025)	.000 (.000)	.167* (.056)	.167* (.050)	.024 (.009)
Thought about practical applications of the material.	.185* (.050)	.047 (.012)	.246* (.083)	.248* (.075)	.176* (.069)
Worked on a paper or project where you had to integrate ideas from various sources.	.450* (.127)	.289* (.075)	.024 (.008)	.238* (.075)	.162* (.065)
Summarized major points and information in your readings or notes.	.114 (.031)	.061 (.016)	-.107 (-.036)	.105 (.032)	-.008 (-.003)
Tried to explain the materials to another student or friend.	.111 (.029)	.311* (.075)	.226* (.073)	.237* (.069)	.155* (.058)
Made outlines from class notes or readings.	.095 (.030)	.119 (.035)	.134* (.053)	.011 (.004)	.032 (.015)
Did additional readings on topics that were introduced and discussed in class.	.284* (.080)	.196* (.050)	.369* (.128)	.175* (.055)	.140* (.056)
$R^2$	.264*	.196*	.177*	.259*	.290*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\* $p < .001$ .

tively impacted when African American students did additional reading on topics that were introduced and discussed in class.

### Art, Music, and Theater Experiences

Table 5 displays the results that explored the impact of art, music, and theater experiences on African American students' development. Although art, music, and theater experiences

impacted several outcome measures, as a group, these experiences did not substantially influence educational gains for African American students. In fact, only two art, music, and theater experiences positively influenced three or more educational outcomes. Specifically, gains in understanding arts and humanities ( $b = .192$ ), personal and

TABLE 5.

## Regression Summaries for the Effects of Experiences With Art, Music, and Theater on African American Students' Academic and Social Development

Experiences With Art, Music, and Theater	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Talked about art (painting, sculpture, architecture, artists, etc.) with other students at the college.	.436* (.116)	.176 (.043)	.030 (.010)	.129 (.038)	.144* (.055)
Gone to an art gallery or art exhibit on the campus.	.232* (.054)	.108 (.023)	.108 (.031)	.014 (.004)	.072 (.024)
Read or discussed the opinions of art critics.	.013 (.003)	.011 (.002)	.215* (.052)	.020 (.004)	-.039 (-.011)
Participated in some art activity (painting, pottery, weaving, drawing, etc.).	.097 (.022)	.056 (.011)	-.004 (-.001)	.037 (.009)	.050 (.016)
Talked about music (classical, popular, musicians, etc.) with other students at the college.	.192* (.065)	.150* (.046)	-.053 (-.022)	.148* (.055)	.075 (.036)
Attended a concert or other music event at the college.	.227* (.068)	.290* (.080)	.122* (.046)	.195* (.065)	.096 (.041)
Read or discussed the opinions of music critics.	.164* (.041)	.012 (.003)	.133* (.041)	.129 (.036)	.072 (.026)
Participated in some music activity (orchestra, chorus, etc.).	-.006 (-.002)	-.091 (-.024)	-.010 (-.004)	-.128* (-.041)	-.032 (-.014)
Talked about the theater (plays, musicals, dance, etc.) with other students at the college.	.292* (.081)	.201* (.051)	.005 (.004)	.103 (.032)	.009 (.004)
Seen a play, ballet, or other theater performance at the college.	.105 (.029)	.079 (.020)	-.090 (-.031)	.011 (.004)	.021 (.008)
Read or discussed the opinions of drama critics.	.188 (.039)	-.051 (-.010)	.253* (.065)	.046 (.011)	.011 (.003)
Participated in or worked on some theatrical production (acted, danced, worked on scenery, etc.).	.011 (.003)	.063 (.013)	.062 (.017)	-.020 (-.005)	.000 (.000)
$R^2$	.294*	.162*	.139*	.194*	.256*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\* $p < .001$ .

social development ( $b = .150$ ), and thinking and writing skills ( $b = .148$ ) resulted when African American students talked about music with other students. Additionally, gains in understanding arts and humanities ( $b = .227$ ), personal and social development ( $b = .290$ ), understanding science and

technology ( $b = .122$ ), and thinking and writing skills ( $b = .195$ ) resulted when African American students attended a concert or other music events on campus.

### Personal Experiences

Table 6 shows that discussing with other stu-

TABLE 6.  
Regression Summaries for the Effects of Personal Experiences on  
African American Students' Academic and Social Development

Personal Experiences	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Told a friend why you reacted to another person the way you did.	-.022 (-.007)	.196* (.054)	-.092 (-.035)	.114 (.038)	.067 (.029)
Discussed with other students why some groups get along smoothly, and other groups don't.	.223* (.071)	.235* (.069)	.048 (.019)	.178* (.063)	.106* (.048)
Sought out a friend to help you with a personal problem.	.069 (.023)	.158* (.048)	-.025 (-.010)	.008 (.003)	.034 (.016)
Elected a course that dealt with understanding personal and social behavior.	.196* (.063)	.163* (.048)	.068 (.028)	.088 (.032)	.068 (.032)
Identified with a character in a book or movie and wondered what you might have done under similar circumstances.	.254* (.079)	.201* (.057)	.019 (.007)	.136* (.047)	.017 (.008)
Read articles or books about personal adjustment and personality development.	.328* (.101)	.187* (.053)	.164* (.063)	.179* (.061)	.130* (.057)
Taken a test to measure your abilities, interests, or attitudes.	.119 (.035)	.184* (.049)	.170* (.062)	.168* (.055)	.046 (.019)
Asked a friend to tell you what he/she really thought about you.	.049 (.016)	.098 (.029)	.080 (.032)	.038 (.014)	.063 (.029)
Been in a group where each person, including yourself, talked about his/her personal problems.	.065 (.022)	.086 (.026)	.038 (.016)	.026 (.010)	.055 (.026)
Talked with a counselor or other specialist about problems of a personal nature.	.082 (.022)	-.090 (-.022)	.256* (.084)	-.025 (-.008)	-.019 (-.008)
$R^2$	.258*	.204*	.152*	.214*	.268*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\* $p < .001$ .

dents why some groups get along smoothly, and other groups don't yielded positive effects on African American students' gains scores on the Arts and Humanities scale ( $b = .223$ ), Personal and Social Development scale ( $b = .235$ ), Thinking and Writing Skills scale ( $b = .178$ ), and the Vocational Preparation scale ( $b = .106$ ). Also, African American students' gains scores on the Understanding

Arts and Humanities scale ( $b = .254$ ), Personal and Social Development scale ( $b = .201$ ), and the Thinking and Writing Skills scale ( $b = .136$ ) were positively impacted when they identified with a character in a book or movie and wondered what they might have done under similar circumstances. The study also indicated that when African American students read articles

TABLE 7.

## Regression Summaries for the Effects of Experiences in the Student Union on African American Students' Academic and Social Development

Experiences in the Student Union	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Had meals, snacks, etc. at the student union or student center.	.006 (.002)	.008 (.003)	-.023 (-.010)	-.025 (-.010)	-.012 (-.006)
Looked at the bulletin board for notices about campus events.	.344* (.102)	.371* (.101)	.067 (.025)	.296* (.098)	.203* (.086)
Met your friends at the student union or student center.	-.015 (-.004)	.126 (.039)	.063 (.027)	.049 (.019)	.062 (.031)
Sat around in the union or center talking with other students about your classes and other college activities.	.022 (.008)	-.021 (-.007)	-.128 (-.055)	-.016 (-.007)	.024 (.012)
Used the lounge(s) to relax or study by yourself.	.072 (.024)	.075 (.023)	.138* (.057)	.067 (.025)	-.026 (-.013)
Seen a film or other event at the student union or center.	.194* (.061)	.045 (.013)	.039 (.015)	-.013 (-.005)	.009 (.004)
Attended social events in the student union or center.	-.031 (-.010)	.138 (.040)	-.133* (-.052)	-.047 (-.017)	.017 (.008)
Heard a speaker at the student union or center.	.204* (.060)	.122 (.033)	.258* (.094)	.167* (.055)	.043 (.018)
Played games that were available in the student union or center (ping-pong, cards, pool, pinball, etc.).	.046 (.015)	.010 (.003)	.052 (.021)	.064 (.023)	.026 (.012)
Used the lounge(s) or meeting rooms to meet with a group of students for a discussion.	.126 (.040)	.162* (.047)	.131* (.051)	.135* (.047)	.094* (.042)
<i>R</i> <sup>2</sup>	.223*	.173*	.136*	.197*	.260*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\**p* < .001.

or books about personal adjustment and personality development, this experience resulted in positive gains on all five of the outcome measures. Data also revealed that taking a test to measure abilities, interests, or attitudes lead to positive gains in three areas (i.e., personal and social development, understanding science and technology, and thinking and writing skills).

### Experiences in the Student Union

Table 7 shows that African American students who looked at the bulletin board for notices about campus events reported positive gains in understanding arts and humanities (*b* = .344), personal and social development (*b* = .371), thinking and writing skills (*b* = .296), and vocational preparation (*b* = .203). Hearing a speaker at the student

TABLE 8.

Regression Summaries for the Effects of Experiences With Athletic and Recreation Facilities on African American Students' Academic and Social Development

Experiences With Athletic and Recreation Facilities	UA&H <sup>a</sup>	P&SD	US&T	T&WS	Voc Prep
Set goals for your performance in some skill.	.230* (.079)	.427* (.135)	.141* (.060)	.345* (.133)	.200* (.099)
Followed a regular schedule of exercise, or practice in some sport, on campus.	-.113 (-.039)	.176* (.055)	-.058 (-.025)	-.142* (-.054)	-.048 (-.024)
Used outdoor recreational spaces for casual and informal <i>individual</i> athletic activities.	.145 (.045)	.113 (.032)	.251* (.097)	.132 (.046)	.078 (.035)
Used outdoor recreational spaces for casual and informal <i>group</i> sports.	.005 (.001)	-.009 (-.003)	-.026 (-.010)	-.046 (-.016)	-.026 (-.012)
Used facilities in the gym for individual activities (exercise, swimming, etc.).	.176* (.060)	.214* (.067)	.055 (.024)	.129* (.049)	.048 (.024)
Used facilities in the gym for playing sports that require more than one person.	-.050 (-.018)	-.047 (-.015)	-.029 (-.013)	.048 (.018)	.031 (.016)
Sought instruction to improve your performance in some athletic activity.	.123 (.039)	.010 (.003)	.120 (.048)	-.016 (-.006)	-.014 (-.007)
Played on an intramural team.	-.009 (-.003)	-.026 (-.007)	.047 (.018)	-.037 (-.013)	-.041 (-.018)
Kept a chart or record of your progress in some skill or athletic activity.	.023 (.006)	.021 (.005)	.161* (.054)	.056 (.017)	.019 (.007)
Was a spectator at college athletic events.	.163* (.058)	.277* (.091)	-.047 (-.021)	.099* (.040)	.098* (.050)
$R^2$	.205*	.203*	.146*	.196*	.256*

Note. Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\* $p < .001$ .

union or center also positively impacted gains in understanding arts and humanities ( $b = .204$ ), understanding science and technology ( $b = .258$ ), and thinking and writing skills ( $b = .167$ ) for African American students. Also, African American students who used the lounge or meeting rooms to meet with a group of students for a discussion reported positive gains in personal

and social development ( $b = .162$ ), understanding science and technology ( $b = .131$ ), thinking and writing skills ( $b = .135$ ), and vocational preparation ( $b = .094$ ).

### Experiences With Athletic and Recreation Facilities

Table 8 shows that setting goals for performance in some skill resulted in positive

TABLE 9.

## Regression Summaries for the Effects of Participation and Involvement in Clubs and Organizations on African American Students' Academic and Social Development

<b>Participation and Involvement in Clubs and Organizations</b>	<b>UA&amp;H<sup>a</sup></b>	<b>P&amp;SD</b>	<b>US&amp;T</b>	<b>T&amp;WS</b>	<b>Voc Prep</b>
Looked in the student newspaper for notices about campus events and student organizations.	.189* (.059)	.253* (.072)	.097 (.038)	.154* (.053)	.116* (.052)
Attended a program or event put on by a student group.	.246* (.077)	.331* (.095)	-.001 (-.001)	.137 (.048)	.091 (.041)
Read or asked about a club, organization, or student government activity.	.262* (.078)	.203* (.056)	.098 (.036)	.209* (.069)	.118* (.050)
Attended a meeting of a club, organization, or student government group.	-.084 (-.029)	-.052 (-.017)	-.009 (-.004)	-.110 (-.042)	.031 (.016)
Voted in a student election.	.060 (.021)	.119 (.037)	-.008 (-.004)	.072 (.028)	-.006 (-.003)
Discussed policies and issues related to campus activities and student government.	.306* (.092)	.165 (.045)	.123 (.046)	.175* (.059)	.052 (.023)
Worked in some student organization or special project (publications, student government, social event, etc.).	.011 (.004)	-.133 (-.042)	.012 (.005)	-.114 (-.043)	.023 (.012)
Discussed reasons for the success or lack of success of student club meetings, activities, or events.	.156 (.050)	.167 (.049)	.027 (.011)	.155* (.055)	.093 (.043)
Worked on a committee.	-.127 (-.042)	.013 (.009)	-.023 (-.010)	.015 (.006)	-.124* (-.059)
Met with a faculty adviser or administrator to discuss the activities of a student organization.	.078 (.023)	.063 (.017)	.186* (.068)	.045 (.015)	.070 (.030)
<i>R</i> <sup>2</sup>	.241*	.184*	.134*	.204*	.263*

*Note.* Top number is the unstandardized regression coefficient; number in parentheses is the standardized regression coefficient.

<sup>a</sup> UA&H = Understanding Arts and Humanities; P&SD = Personal and Social Development; US&T = Understanding Science and Technology; T&WS = Thinking and Writing Skills; Voc Prep = Vocational Preparation.

\**p* < .001.

gains on all five educational outcomes for African American students. Gains in understanding arts and humanities (*b* = .176), personal and social development (*b* = .214), and thinking and writing skills (*b* = .129) were also related to using facilities in the gym for individual activities. The findings also pointed to the positive benefits of being a spectator at an athletic event in terms of

gains in understanding arts and humanities (*b* = .163), personal and social development (*b* = .277), thinking and writing skills (*b* = .099), and vocational preparation (*b* = .098).

### Participation and Involvement in Clubs and Organizations

Table 9 displays the results that explored the



impact of participation and involvement in clubs and organizations. Although several student involvement experiences pertaining to clubs and organizations impacted the educational outcome measures, taken together, these student involvement experiences did not exert a considerable influence on academic and social developmental gains for African American students. Only two club and organization experiences positively influenced at least three educational outcome measures. More specifically, gains in understanding arts and humanities ( $b = .189$ ), personal and social development ( $b = .253$ ), thinking and writing skills ( $b = .154$ ), and vocational preparation ( $b = .116$ ) resulted when African American students looked in the student newspaper for notices about campus events and student organizations. Also, gains in understanding arts and humanities ( $b = .262$ ), personal and social development ( $b = .203$ ), thinking and writing skills ( $b = .209$ ), and vocational preparation ( $b = .118$ ) were realized when African American students read or asked about a club, organization, or student government activity.

### Summary of Results

Overall, the results of the study indicated that in-class and out-of-class experiences positively impacted student development for African American college students. The study also showed that the magnitude of the positive effects of student involvement on academic and social development was more pronounced for some student involvement experiences (e.g., library experiences, course learning experiences, personal experiences) than it was for other student involvement experiences (e.g., experiences in the student union, experiences with athletic and recreation facilities, participation in clubs and

organizations). Additionally, for most of the student involvement experiences analyzed in the study, there was only a trivial and nonsignificant direct effect on student development for African American students.

### DISCUSSION

The current findings lead to five primary conclusions. First, controlling for a comprehensive set of relevant student demographic variables and college experience variables, the findings of this study suggest that student involvement experiences directly impact student developmental gains in understanding arts and humanities, personal and social development, understanding science and technology, thinking and writing skills, and vocational preparation for African American students. This particular result resonates with findings reported by Littleton (2002) who conducted semistructured interviews with 24 African American students and, found that nearly half of the students he interviewed acknowledged that their student involvement experiences helped them to persist in college. In comparison, the findings reported here were also consistent with Martin's (2000) study, based on a student sample containing approximately 90% White students, who found that student involvement variables (e.g., student-faculty interaction, etc.) were positively related to student's developmental outcomes (e.g., development of purpose and competence). The findings reported in this study were also consistent with Moore et al. (1998) who noted, "A review of the recent literature on student involvement clarifies that student involvement impacts the collegiate experience" (p. 5). The current study also revealed that certain student involvement experiences had larger effects on student

development and influenced several gains whereas some involvement experiences did not exert a direct influence on any of the gains measures. This particular finding was also consistent with the weight of student involvement research, as expressed by Moore et al. (1998), who argued, "the differences in the studies reveal that different types of student involvement may influence the learning and development experiences differently" (p. 5).

Secondly, this study also suggested that African American students' level of involvement seemed particularly low to moderate on most of the student involvement measures used in the study (i.e., students were more likely to report only occasional participation in the activities examined in the study). For example, a view of the mean values in Table 1 revealed that African Americans were relatively uninvolved on campus and participated only occasionally in most student involvement activities. Perhaps this moderate level of participation affected their self-reported educational gains in this study. Although the analytical techniques employed in this study were not intended to statistically examine the aforementioned assertion, previous research clearly supports the notion that African American students' educational outcomes are impacted by the type, quantity, and quality of their student involvement experiences in college (Astin, 1984; DeSousa & Kuh, 1996; MacKay & Kuh, 1994). Because DeSousa and King (1992) reported similar student involvement patterns for African American students more than 10 years ago, the results of the current study should be seen as indicative of the continual need for student affairs professionals to encourage African American student involvement on campus.

A third finding of this study was that

academic-related student involvement experiences (e.g., library experiences, experiences with faculty, and course learning experiences) were more likely to positively impact vocational development for African American college students. This finding is consistent with previous research (Pascarella & Terenzini, 1991) and suggests that student affairs professionals and faculty should continue to explore ways to collaborate and positively enhance African American students' development in college. A fourth finding of this study was that African American students' out-of-class recreational experiences (e.g., art, music, and theater experiences, experiences in the student union) had fewer positive effects on educational outcomes than did academic-related student involvement experiences. This finding is consistent with Astin's (1993) findings that watching television was associated with negative educational outcomes for college students. Perhaps for the African American students in the current study, their out-of-class and social experiences had similar effects as did watching television in Astin's study and may have served to distract students from engaging in more developmental activities (e.g., studying, writing, etc.).

Fifth, in the current study, some student involvement activities negatively impacted African American student development. For example, it was found that using the card catalogue or computer to locate materials, participating in class discussions, and attending social events in the student union or center negatively impacted African American students' gains in understanding science and technology. Also, participating in some music activity and following a regular schedule of exercise or practice in some sport on campus, had a negative effect

on gains in thinking and writing skills. Lastly, working on a committee negatively impacted African American students' gains in vocational preparation. These negative results seem to be somewhat inconsistent with previous literature. For example, following a comprehensive review of research on these and other extracurricular activities on student development, Terenzini et al. (1996) noted that "the literature contains little consistent evidence suggesting that extracurricular involvement per se has a direct impact on students' academic or intellectual development" (p. 155). However, in the current study, it was not readily determinable if these activities were the result of formal or informal extracurricular activities. This distinction may not be trivial and so would be worthy of future study to determine if the level of formality in extracurricular activities impacts student development and educational outcomes. According to Terenzini et al., "It seems reasonable to suggest, however, that formal extracurricular activities may have an indirect effect on learning gains through the kinds of interpersonal contacts and interactions they create between students and faculty members and between students and their peers" (p. 155).

## IMPLICATIONS FOR STUDENT AFFAIRS PROFESSIONALS

This study showed the estimated effects of student involvement activities on African American students' educational outcomes. The findings in this study suggest that although a significant amount of student involvement experiences impact educational outcomes in positive ways, some particular involvement experiences may contribute to several academic and social developmental

outcomes. If this is true, as the study's findings indicate, then this information may suggest possible programmatic interventions that may be preferable over others. This information is economically relevant, given the rising costs of planning and implementing student affairs programs and services. Moreover, the results of this study could be used in program planning decisions as well as service initiation decisions for African American students. This recommendation underscores the importance of this empirical study as well as other empirical studies in student affairs that may be used to inform practice, program development, and service delivery, particularly for groups who are underrepresented or who have been underserved on college campuses across the country (e.g., African Americans).

To be sure, the current findings may support program planning and service delivery in many student affairs offices on campus such as the career resources center, counseling and psychological services center, academic advising center, and the student activities center. For example, because the findings indicate that particular library experiences; experiences with faculty; course learning experiences; experiences with art, music, and theater; personal experiences; experiences in the student union; experiences with athletic and recreation facilities; and participation in clubs and organizations positively influence African American students' gains in vocational preparation; perhaps, this information can be brought to bear in planning a program that specifically focuses on career development or career planning. Likewise, counseling and psychological services centers interested in improving the personal and social development of African American students may benefit from knowing that library experi-

ences, course learning experiences, and experiences with athletic and recreation facilities yielded positive effects on self-reported gains in personal and social development. Equipped with this information, counseling and psychological services centers can develop services and programs exclusively for African American students in conjunction with existing groups (e.g., fraternities/sororities) or units (e.g., culture centers, etc.) on campus and/or in the larger community.

These findings may also be useful to academic advising centers. For example, a host of student involvement experiences such as library experiences, course learning experiences, and personal experiences were shown to enhance gains in understanding arts and humanities, gains in understanding science and technology, as well as gains in thinking and writing skills. This information may be used to enhance study skills programs for African American students or may be integrated into regular academic advising sessions. Also, directors of student activities centers may find the study's results most useful as they attempt to increase African American student participation in campus activities, while enhancing their college experience in developmentally appropriate ways. More specifically, student activities centers that collect data in the course of normal operations can also collect data on students' participation in activities on campus. With these data, student affairs professionals can assess African American students' leisure time to ensure that they engage in more educationally relevant activities and have fewer experiences that detract from student development or only contribute in trivial ways.

Overall, the findings of this study support Astin's (1984) theory of student

involvement, particularly Astin's fourth proposition, which suggests that student development is directly related to the amount of student involvement experiences that students have on campus. Additionally, the current investigation supports Chickering and Reisser's (1993) work and Martin's (2000) study that found that educational outcomes were impacted by students' interactions with faculty, interactions with students, and through their participation in campus organizations. This study also contains evidence that expands Astin's theory by demonstrating that all types of student involvement experiences may not positively influence educational outcomes for students. In fact, as data indicated in this study, some student involvement experiences may even negatively impact student development (e.g., attending social events in the student union had a negative effect on understanding science and technology). Furthermore, this study revealed that certain types of student involvement experiences might exert only a small and trivial direct influence on African American students' development.

Despite the limitations of certain student involvement experiences, based on the study's findings, it is clear that appropriate types and amounts of student involvement experiences may significantly enhance African American students' educational outcomes in college. Clearly, institutions in general and student affairs offices in particular would benefit by conducting student involvement research similar to the type reported in this article. These studies could be conducted in each student affairs office on campus and would provide even more institutionally relevant and context-specific information that could be used to inform decision-making as well as resource allo-

cation decisions. Also, future researchers need to explore differences in student involvement, differences in educational gains attributed to student involvement, and differences in factors influencing student involvement by institutional type (e.g., historically Black colleges and universities vs. predominantly White institutions, two-year vs. four-year institutions, and public institutions vs. private institutions).

### Limitations of the Study

The current study has some limitations that should be factored into any meaningful attempt to use the findings in a decision-making context. The first limitation of the study is that the institutional sample and the resulting institutional characteristics controlled for in this study, though extensive, may not apply to all institutions and/or all institutional contexts. Second, although the student sample contained nearly 8,000 African American students representing a geographically diverse population of African American college students, the student sample did not include all African American students attending colleges and universities such as community colleges (or even a random sample of African American college students) and therefore the findings may not resonate with the experiences or developmental patterns of all African American college students. A third limitation is that all the data used in the study were based on student self-reported information. However, although standardized measures of academic

achievement may be preferable to self-reported achievement data (Pike, 1996), at least in terms of their psychometric properties, self-reported data have been shown to yield valid and reliable indicators of student involvement and development (Anaya, 1999; Kuh, 2001; Pike, 1995). Fourth, because statistical controls for the effects of pre-college measures of the dependent variables were not employed in this study, the effects of student involvement experiences on educational gains may have been over- and/or under-estimated in this study (Pascarella, 2001). Fifth, another limiting factor in this study resulted from the moderate values (.75) of coefficient alpha yielded for the Understanding Arts and Humanities scale and the Vocational Preparation scale. These data suggested that the inter-item reliability for these scales were low (Carmines & Zeller, 1979; Traub, 1994) and may not have consistently measured the intended constructs of interest. Sixth, this study did not attempt to explain why certain student involvement experiences had a significant influence on development while others did not. Future research should explore these questions and other related issues employing qualitative research designs or experimental research designs.

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