Four Dimensions of Student Leadership: What Predicts Students' Attitudes Toward Leadership Development?

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Multiple regression was performed on four dependent variables derived from the results of a student survey measuring attitudes about student leadership: (a) leadership is important to the student, (b) the student considers himself or herself to be a leader, (c) leadership will be important to the student after college, and (d) leaders need to be able to work in teams or groups. Each of 10 independent variables was a significant predictor of one or more dependent variables.

Developing students' leadership skills is a major objective at many institutions of higher education, many of which commit considerable time and resources to student leadership development programs and initiatives. While student leadership development is of major interest to higher education institutions, it is also important to determine how students perceive the leadership development programs from which they are meant to benefit. This study was undertaken to explore student perceptions of leadership, and thus revealed characteristics of students who believe that leadership is an important part of their lives.

Involvement, according to Astin (1984), is a key determinant of college student success, satisfaction, and persistence. Involvement helps connect students to their institution, and fosters many positive relationships and learning opportunities not available within the classroom (Abrahamowicz, 1988; Astin, 1984; Schuh & Laverty, 1983). The benefits of student involvement can be substantial. Students who become involved in one organization or activity often become involved in others, and develop increasing pride in their institution (Abrahamowicz, 1988). Involvement also gives students opportunities to interact with a wide range of people, develop management skills, and enhance self-confidence (Bialek & Lloyd, 1998). Howe and Strauss (2000) commented that members of the Millennial generation, to which many current traditional-aged college students are said to belong, have been involved with more

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scheduled activities and organized sports prior to college than have other recent generations. Thus, colleges and universities may be inheriting students who do not need to be persuaded to get involved.

Involvement also can be linked to a student's place of residence, since students often find connectedness and a sense of belonging within their living environment (Astin, 1984; Terenzini, Pascarella, & Blimling, 1999). Residence hall floors, fraternity and sorority houses, and off-campus communities all have unique community features, many which can promote, or possibly inhibit, a student's involvement. The place of residence also may influence student perceptions of leadership, given the close interactions with peers and the nature of the environment. Capturing the messages that students receive about leadership from their living situation may be an important step in increasing leadership development opportunities, especially as students are being challenged to become community leaders after graduation. Previous research has revealed themes involving alternative paradigms of leadership.

Literature Review

Educating students about leadership and developing them into leaders has become a priority objective of many colleges and universities (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001). Colleges are widely expected by the public to produce national and global leaders in economics, politics, culture, education, and other spheres. While arguments exist about how best to define and develop leadership for students, at a minimum it is very clear from increased emphasis on leadership development in university mission statements that institutions of higher education are trying to answer a call to deliver more leaders to society (Rost, 1993). This call has been accentuated by new and emerging thoughts about leadership, the examination of student perceptions regarding leadership, and new trends in leadership development (Rost).

Two paradigms of leadership emerge from the literature to inform the current research. The conventional view has been labeled by some as the industrial paradigm, and emerging alternative views have been labeled the postindustrial paradigm (Rogers, 1996; Rost, 1993). The industrial paradigm contains many assumptions that dominated leadership perceptions throughout most of the 20th century, including (a) leadership is the property of an individual, (b) leadership pertains primarily to formal groups or organizations, and (c) the terms *leadership* and *management* can be used interchangeably (Rogers, 1996). The postindustrial paradigm has emerged from more recent literature and thoughts on leadership, and through criticism of the traditional paradigm. Assumptions of the postindustrial paradigm include these: (a) leadership is based on relationships and does not belong to any individual, (b) leadership is meant to create change, and (c) leadership can be done by anyone, not just by people who are designated leaders (Rogers, 1996). Differences between what leadership is supposed to be like and the realities of leadership in practice are

shown in Table 1, which summarizes commonly-held beliefs regarding the definition and function of leadership (Komives, Lucas, & McMahon, 1998).

Table 1

Counterpoint Presentation of Myths and Truths Regarding the Definition and Function of Leadership

Myths	Truths
Leaders are born that way	Leaders are developed, not born
Leadership is based in hierarchy	Leadership happens at all levels
Charisma is an essential trait for a leader	Charisma is not a prerequisite quality for leadership
There is only one way to lead	There are many different ways to lead an organization or group
Management and leadership cannot be practiced at the same time	There is a difference between management and leadership, and both can occur in a group
You can't teach leadership	Leadership can be taught and learned

Note. Reprinted with permission from Komives, Lucas, and McMahon (1998), pp. 27-30. Adapted with permission of the author.

Many of the myths in Table 1 can be linked to the industrial paradigm of leadership. Similarly, the truths are associated with the postindustrial leadership paradigm. The contemporary economy and society have developed from an earlier pattern of industrial structures and formal leadership into a more recent postindustrial model characterized by shared and diffuse leadership patterns. Colleges and universities must stay current in emerging paradigms of student leadership development theory. Determining how best to integrate students into the process of leadership development is of major importance to all aspects of modern society.

The new trend in leadership is to examine of student perceptions of leadership. Wielkiewicz' (2000, 2002) Leadership Attitudes and Beliefs Scale, designed to measure student perceptions of leadership, includes 28 items, half of which reflect "hierarchical thinking" and the other half "systemic thinking." Hierarchical thinking refers to beliefs that leadership is power-based, and that those with positions at the top exert the most influence. Survey items reflecting

this dimension of thinking included the following: "A leader must maintain tight control of the organization," and "The most important members of an organization are its leaders" (Wielkiewicz, 2000, p. 343). Systemic thinking refers to the notion that anyone within a system can exert influence. Survey items addressing this thinking included these: "Leadership processes involve the participation of all organization members," and "Organizations must be ready to adapt to changes that occur outside the organization" (Wielkiewicz, 2000, p. 343).

Shertzer, Saunders, Zheng, Shelley, and Whalen (2003) used Wielkiewicz' measures of student leadership perceptions to study how residence hall students perceive leadership and residence hall student government. Participation in and respect for student government were predicted significantly by four leadership perceptions (hierarchical, situational, democratic, and anarchistic), gender, previous leadership role, and number of semesters living in residence halls.

Demographic differences play a role in student attitudes toward leadership. Previous studies have shown the effects of gender to be particularly pronounced. Research has demonstrated that women tend to perceive leadership in a more nontraditional way (Kezar, 2000; Romano, 1996). In a study of women student leaders, Romano noted that women use words such as "nonhierarchical, interactive, accessible, one-to-one, equality, and team member" (p. 679). Kezar believed that similar differences exist between majority and minority people. People of color also tend to view leadership as nonhierarchical. In addition, Kezar stated, "Women, and women of color tended to describe leadership as collective, collaborative, empowerment-based, nondirective, process-oriented, facilitative, team-oriented, and characterized by equal power relations" (p. 8).

Evidence exists that strong communities, such as fraternities, either intentionally or unintentionally pass on group norms such as collective beliefs about leadership to new members. For example, Kilgannon and Erwin (1992) found that moral reasoning abilities of those joining Greek organizations may be restricted, simply because young members adopt the existing cultural norms of the organization. Thus, their definition of leadership and their concept of who is a leader may be determined most by the organization or the living environment.

Leadership development has been a challenge for higher education, despite the growing perception that leadership is an important component of a college education (Cress et al., 2001). Posner and Brodsky (1992) observed that the processes used in creating most higher education leadership programs evolve from the same conceptual basis as in business and other non-education environments. Common mechanisms through which leadership development is provided to students include student organizations, leadership conferences,

leadership seminars, and educational programs, generally through the student affairs division (McIntire, 1989).

Roberts and Ullom's (1989) framework for evaluating leadership distinguished among training, education, and development: Leadership training means improving students' performance through a role they presently occupy, while leadership education offers broader lessons in leadership and how to apply them in settings other than the role the student presently occupies. Leadership development places students in an interactionist environment in which they work with others toward change in complex situations. In other words, leadership development happens as students are challenged and as they work with others.

Four research questions were addressed in this study: (a) To what extent can student demographic characteristics, place of residence, and leadership perceptions predict the importance of leadership to students? (b) To what extent can student demographic characteristics, place of residence, and leadership perceptions predict whether a student considers himself or herself to be a leader? (c) To what extent can student demographic characteristics, place of residence, and leadership perceptions predict whether a student believes that leadership will be important after college? (d) To what extent can student demographic characteristics, place of residence, and leadership perceptions predict whether a student believes that leaders need to be able to work in teams/groups?

Method

Population and Sample

This study was conducted in late October 2001 at a midwestern Research Extensive university with total enrollment exceeding 27,000 students. There was no requirement that first-year students live on-campus, and students may live where they choose. Approximately 36% chose to live in on-campus residence halls or apartments, including 87% of all first-time freshmen. The remaining students lived in fraternity or sorority housing (6%) or elsewhere within the city (42%), or commuted from outside the community (16%). The university's institutional review board reviewed and approved the research survey instrument and methodology.

Participants for the study were selected through a simple random sample; no stratification was used. Table 2 presents demographic information for the largely homogeneous population, and Table 3 displays weighting information for the sample. Fewer off-campus students were sampled because of the cost involved in delivering and collecting the surveys. The relative paucity of off-campus survey responses necessitated a higher weight for each off-campus respondent, with correspondingly lower weights for Greek and residence hall respondents, to achieve proportionate representation within the sample of students across all three residential categories.

Table 2

Demographic Information for the Study Sample

Group	Population n	Population %	Sample n	Sample %	Return n	Return %
Men	11,367	45%	1,078	44%	690	48%
Women	14,143	55%	1,383	56%	740	52%
Majority (White)	23,230	91%	2,265	92%	1,313	58%
Minority	2,280	9%	196	8%	117	60%
Am. Indian/Alaska Native	75	< 1%	2	< 1%	0	0%
Non-Hispanic Black	662	3%	76	3%	41	54%
Asian or Pacific Islander	1,072	4%	67	3%	43	64%
Hispanic (Spanish American)	471	2%	51	2%	33	65%
Freshmen	6,436	25%	1,229	50%	769	63%
Sophomore	4,435	17%	565	23%	332	59%
Junior	4,563	18%	336	14%	171	51%
Senior	5,864	23%	270	11%	140	52%
Special	258	1%	15	1%	7	47%
Graduate	2,908	11%	46	2%	11	58%
Off-campus Special and Graduate	1,046	5%	N/A	N/A	N/A	N/A

Note. Population data are from the *University Fact Book* (2001)

Table 3

Weighting Information by Residence for the Study Sample

Group	Population	Sample	Returned n	Returned %	Weight Assigned
Residence hall	7,439	1,661	1,113	67%	0.52
Greek	1,543	500	214	43%	0.47
Off-campus	16,528	300	114	38%	6.58
Totals	25,510	2,461	1,441	59%	

Survey returns were tracked through university identification number. Follow-up correspondence was sent to any student whose survey was not recorded as returned. Incentives for returning the survey were offered for all three groups.

An incentive for residence hall students included a pizza dinner for the house (floor or wing) with the highest survey return rate. An incentive of being entered into a drawing for a local store gift certificate was given to Greek and off-campus students who returned their surveys. Return rates for the surveys varied (Table 3), due to the different methods of delivery and return.

Because of demographic differences in the proportions of survey responses compared to the overall student population and the smaller response rate for off-campus students, the data were weighted to reflect the distribution of students by residence group. Weights were calculated by dividing the proportion of the university population accounted for by each residence group by the proportion of the sample respondent population for each residence group (*University Fact Book*, 2001). Thus, respondents were assigned weights based on their living area (see Table 3). Means and standard deviations for the variables are presented in Table 4.

Survey and Procedures

A survey was designed by residence staff members for use at the institution, based on ideas and items from previous research (Wielkiewicz, 2000, 2002). A previous iteration of the survey was administered to residence hall students at the institution (Shertzer et al., 2003), and wording was modified slightly for some questions to make them applicable to the three subgroups of residence hall, Greek, and off-campus students.

The cover letter and survey were enclosed in a large manila envelope and distributed to the three residential groups of students by slightly different procedures, with instructions to seal the completed survey in the envelope in which it was mailed. Residence hall students received and returned their survey to the Resident Assistant (RA), who is a staff member in the residence hall house (floor or wing of the hall); whereas Greek students received and returned their survey through Greek chapter officers and off-campus students received and returned their survey through U.S. mail.

A 50-item paper and pencil survey was used to collect student responses to a variety of questions targeting perceptions of student leadership. Respondents were asked to indicate the number of semesters they had resided in their current living area, whether they have held a position in student government at the institution, and the number of student or community organizations with which they were involved. Four items in the instrument emerged as key measures of whether or not students believed leadership was important in their lives: (a) Leadership is important to me, (b) I consider myself to be a leader, (c) Leadership will be an important part of my life after college, and (d) Leaders need to be able to work in teams/groups. The majority of questions used a 5-

point Likert range (1 = *strongly disagree*, 2 = *disagree,* 3 = *neutral,* 4 = *agree,* and 5 = *strongly agree*). Higher scores reflected more positive perceptions of those aspects of leadership.

Table 4

Descriptive Statistics for the dependent and independent variables in the model (n = 1,441)

Variables	Mean	SD
Dependent Variables		
Leadership is important to resident	4.02	0.86
Resident considers self to be a leader	3.81	0.87
Leadership will be important to resident after college	4.06	0.81
Leaders need to be able to work in teams/groups	4.28	0.75
Student has held a student government position	1.86	0.35
Number of student and/or community organizations in which student is involved	2.43	1.72
Question and Factor Variables		
Student government supporter (Factor 1)	3.28	0.71
Leadership programming interest (Factor 2)	2.99	0.83
Community pride (Factor 3)	3.41	0.72
Positional leadership (Factor 5)	2.73	0.55
Authoritarian leadership (Factor 6)	3.86	0.61
Democratic leadership (Factor 7)	3.29	0.66
Civic responsibility (Factor 8)	3.40	0.53
Leadership results (Factor 9)	3.72	0.65
Shared leadership (Factor 10)	2.49	0.74
Peer education (Factor 11)	2.98	0.86
Background Characteristics		
Freshman classification	0.25	0.43
Sophomore classification	0.23	0.42
Junior classification	0.22	0.42
Male	0.46	0.50
Majority	0.84	0.37
Environmental Characteristics		
Greek	0.07	0.26
Residence Hall	0.40	0.49
College of Agriculture	0.13	0.34
College of Design	0.06	0.24
College of Education	0.08	0.27
College of Engineering	0.22	0.41
College of Family & Consumer Sciences	0.08	0.27
College of Business	0.15	0.36
College of Veterinary Medicine	0.01	0.12
In-state resident	0.67	0.47
Ability Measure		
High School Academic Rank	76.34	18.36

Note. Background characteristics and environmental characteristics are coded as dichotomous variables, with 0 not being the characteristic, and 1 being the characteristic. Thus, the mean can be interpreted as being the proportion of the sample having the characteristic.

A final question was qualitative, asking respondents to indicate up to three activities in which they had participated that they considered leadership-related. Respondents also were asked to record their university identification number, so their survey responses could be linked with the University Registrar's information file to obtain their demographic information.

Factor Analysis and Regression Model

Questions from the survey and demographic variables were used to address the research questions. A first step in analyzing the survey data was to identify the underlying factors, or latent constructs, that explained interrelationships among the leadership survey items. Factor analysis was conducted on the survey questions that shared the common 5-point Likert structure, using principal components extraction followed by varimax rotation with Kaiser normalization. The resulting factors were mutually independent, and hence had zero correlation with each other. Four questions were not included in the factor analysis because they were differently measured. Reliability analyses then were performed to determine the strength and consistency of correlations among the items that loaded most strongly on each factor. Eleven factors were obtained from these 46 survey questions. The factor loadings of each item and the labels assigned to each factor are provided in Table 5. The factor loadings have been sorted so variables with high loadings on the same factor appear together.

The factors were given functional names by the researchers to reflect the content of the items loading most heavily on each factor: (a) Student Government Supporter, (b) Leadership Programming Interest, (c) Community Pride, (d) Leadership Importance, (e) Positional Leader, (f) Democratic Leadership, (g) Authoritarian Leadership, (h) Civic Responsibility, (i) Leadership Result, (j) Shared Leadership, and (k) Peer Education (which had only one item, so no reliability coefficient could be calculated). The reliabilities for each factor, particularly the first three, were fairly high, indicating a strongly consistent pattern of correlations among the variables constituting each factor.

Four survey questions comprising the Leadership Importance factor were used as separate dependent variables. For ease of discussion, a shortened form of each question was used. The original statements (and the shortened name for each) were as follows: (a) Leadership is important to student (Leadership is Important); (b) Student considers self to be a leader (Self-as-Leader); (c) Leadership will be important to student after college (Post-college Leadership Importance); and (d) Leaders need to be able to work in teams/groups (Team Importance).

The student demographic variables (residence group, classification, gender, ethnicity, college, in-state residency, and high school academic rank), two survey questions related to the degree of student involvement (student has held a student government position, and number of student and/or community organizations involved in), and the 10 remaining factors (other than the

Table 5

Factor Loadings for Leadership Questions

Factor/Items in Each Factor	Highest Factor Loadings
Student Government Supporter (Alpha = .88)	
Q49 Student is satisfied with the performance of University student government	0.86
Q45 Student respects University's student government	0.83
Q48 Student likes University's student government	0.81
Q46 Student respects leaders in student government	0.75
Q44 Student government represents student	0.75
Q47 Students have influence over decision making within the university	0.66
Leadership Programming Interest (Alpha = .87)	
Q30 Student would attend a day-long leadership conference	0.88
Q29 Student would attend evening leadership programs	0.80
Q31 Student would attend a weekend-long leadership retreat	0.79
Q27 Student likes to learn about leadership	0.75
Q32 Student would read publications about leadership	0.65
Q34 Student would prefer to be taught by professional staff about leadership	0.58
Community Pride (Alpha = .83)	
Q39 Student has pride in living community	0.80
Q38 Student feels ownership over living community	0.77
Q43 Student has ability to affect change in living community	0.75
Q36 There is a strong sense of community where the student lives	0.72
Q40 It is important to hold peers accountable to community standards	-0.62
Q37 It is important to be involved in decisions where student lives	0.57
Leadership Importance (Alpha = .82)	
Q5 Student considers self to be a leader	0.74
Q4 Leadership is important to student	0.71
Q6 Leadership will be important to student after college	0.69
Q18 Leaders need to be able to work in teams/groups.	0.38
Positional Leader (Alpha = .68)	
Q17 Leaders need a position or title to be influential	0.62
Q23 A leader's main task is making organizational decisions	0.60
Q16 Leaders are only found in formal organizations	-0.55
Q28 Student has had enough leadership development	-0.54
Q35 University provides enough leadership development opportunities	0.50
Q7 Groups should be lead by a single leader	-0.43
Q21 A leader must control the group organization	0.34

Table 5 continued

Factor/Items in Each Factor	Highest Factor Loadings

Democratic Leadership (Alpha = .58)

Q26	Individuals do not need a position to be a leader	0.70
Q24	Student believes he/she can make a difference without a leadership position	0.65
Q19	Anyone can be a leader	0.48
Q12	Leaders should always be ethical	0.47

Authoritarian Leadership (Alpha = .63)

Q11	Leadership is something people are born with	0.73
Q8	Only certain people possess leadership qualities	0.70
Q14	Leadership cannot be learned	0.61

Civic Responsibility (Alpha = .55)

Q42	Building a strong living community is up to positional leaders	0.64
Q20	Positional leaders deserve credit for an organization's success	0.57
Q41	Individual responsibility is important in a living community	0.49
Q15	Community service is an important aspect of leadership	0.40
Q22	Leadership involves changing something	0.33

Leadership Result (Alpha = .44)

Q9	Positive change typically results from good leadership	0.73
Q13	Leaders should try to keep things stable	0.56

Shared Leadership (Alpha = .25)

Q10	Organizations can succeed without positional leaders	0.70
Q25	Leaders are the most important members of an organization	0.41

Peer Education (One item; no alpha value)

Q33	Student would prefer to be taught by peers without leadership	0.74

Notes. Extraction Method: Principal Components Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 15 iterations. To conserve space, only highest loadings are reported.

leadership dimension that was decomposed into the four separate leadership items) were used as independent variables in the statistical analysis.

Results

Results of the Estimated Regression Model

Results of estimating the full least squares multiple regression models for each of the four dependent variables are reported in Tables 6 and 7. These results were computed using the entire set of predictor variables appearing in the table. Presenting results for the four dependent variables side by side permits direct comparisons of how the predictor variables affect each of the dependent variables. This approach also makes it possible to ascertain the amount of additional explanatory power attributable to the selected predictors for each model.

Results from the four regression equations provided a response to the four research questions (Table 6).

1.   To what extent can demographic characteristics, place of residence, and leadership perceptions predict the importance of student leadership?

Demographic characteristics that were significant in positively predicting the importance of student leadership were the number of student and/or community organizations in which the student was involved, sophomore academic status, and high school academic rank. Holding a student government position and living in residence halls negatively predicted the importance of student leadership to the student. Seven of 10 leadership perception factors (Student Government Supporter, Leadership Programming Interest, Community Pride, Positional Leadership, Authoritarian Leadership, Civic Responsibility, and Leadership Results) positively predicted, and one (Peer Education) negatively predicted, the importance of leadership to the student.

2.   To what extent can demographic characteristics, place of residence, and leadership perceptions predict whether students consider themselves to be a leader?

Demographic characteristics positively predicting whether students considered themselves to be a leader were the number of student and/or community organizations in which they were involved and high school rank. Having a major in the colleges of Agriculture, Design, Education, Engineering, or Family and Consumer Sciences were negative predictors, compared with a major in the College of Liberal Arts and Sciences. Residence hall location, compared with off-campus residency, was a negative predictor. Eight of 10 leadership factors positively predicted whether students considered themselves to be a leader: Student Government Supporter, Leadership Programming Interest, Community Pride, Positional Leadership, Authoritarian Leadership, Democratic Leadership, Shared Leadership, and Peer Education.

3. To what extent can demographic characteristics, place of residence, and leadership perceptions predict whether leadership will be important after college?

Positive demographic predictors were the number of student and/or community organizations in which the student was involved, and freshmen and sophomore academic classifications (compared with senior academic classification). Membership in the colleges of Agriculture or Design (as compared with Liberal Arts and Sciences) and in-state residency were negative predictors of students' perceptions of the importance of leadership after college. Residence hall and Greek living (as compared with off-campus living) were negative predictors of the importance of leadership after college. Seven leadership factors positively predicted students' perception of the importance of leadership after college: Student Government Supporter, Leadership Programming Interest, Community Pride, Positional Leadership, Civic Responsibility, Leadership Results, and Shared Leadership. One factor, Peer Education, was a negative predictor of importance of leadership after college.

4. To what extent can student demographic characteristics, place of residence, and leadership perceptions predict whether a student believes that leaders need to be able to work in teams/groups?

The number of student and/or community organizations in which the student was involved, sophomore academic classification, majority student status, and membership in the College of Design (compared with membership in the College of Liberal Arts and Sciences) were positive predictors of students' perception of leaders needing to be able to work in teams or groups; one demographic variable, in-state resident status, was a negative predictor. Both Greek housing and residence halls as a place of residence (as compared with off-campus) were negative predictors of perceptions of leaders needing to work in teams/groups. Student Government Supporter, Leadership Programming Interest, Positional Leadership, Authoritarian Leadership, Civic Responsibility, and Leadership Results positively predicted perceptions that leaders need to be able to work in teams or groups; Shared Leadership and Democratic Leadership were negative predictors.

Four demographic variables failed to achieve significance as predictors of any of the four dependent variables: junior academic classification, male, and membership in the Colleges of Engineering and Veterinary Medicine. Greek and residence location, compared with off-campus residency, were predictors of two or more of the dependent variables. All 10 factored leadership perceptions were statistically significant predictors of one or more of the dependent variables; Student Government Supporter, Leadership Programming Interest, and Positional Leadership significantly predicted all four dependent variables. Community Pride was a positive predictor of all but the Team Importance dependent variable. Peer Education was a positive predictor of Self-as-Leader and Team Importance, but a negative predictor of Leadership is

Table 6

Estimated Coefficients for "Leadership is Important to Student" and "Student Considers Self to Be Leader" (n = 1,441)

	Leadership is Important to Student				Student Considers Self to be Leader			
	B	S.E.	Beta	t	B	S.E.	Beta	t
Constant	3.96	0.19		20.36**	3.70	0.20		18.41**
Student has held a								
student govt. position	-0.17	0.07	-0.07	-2.55*	-0.06	0.07	-0.02	-0.81
Number of student								
and/or community								
organizations involved in	0.08	0.01	0.18	5.61**	0.12	0.02	0.24	7.97**
Student Government								
Supporter (Factor 1)	0.10	0.02	0.13	4.62**	0.06	0.02	0.07	2.56*
Leadership Programming								
Interest (Factor 2)	0.22	0.03	0.25	8.52**	0.08	0.03	0.09	2.91**
Community Pride (Factor 3)	0.06	0.02	0.07	2.54*	0.12	0.03	0.14	4.60**
Positional leadership (Factor 5)	0.08	0.02	0.09	3.17**	0.05	0.03	0.06	1.97*
Authoritarian leadership								
(Factor 6)	0.09	0.03	0.10	3.43**	0.13	0.03	0.15	5.02**
Democratic leadership								
(Factor 7)	0.04	0.02	0.05	1.76	0.13	0.02	0.16	5.41**
Civic responsibility (Factor 8)	0.15	0.02	0.18	6.60**	-0.03	0.02	-0.04	-1.28
Leadership results (Factor 9)	0.15	0.03	0.17	6.02**	0.02	0.03	0.03	0.92
Shared leadership (Factor 10)	0.01	0.03	0.01	0.32	0.11	0.03	0.12	4.11**
Peer education (Factor 11)	-0.10	0.02	-0.11	-4.11**	0.06	0.02	0.07	2.38*
Greek system	0.15	0.09	0.05	1.66	-0.05	0.09	-0.02	-0.51
Residence hall	-0.27	0.07	-0.16	-3.86**	-0.37	0.07	-0.22	-5.16**
Freshman	0.08	0.09	0.04	0.85	-0.09	0.09	-0.04	-0.95
Sophomore	0.18	0.07	0.09	2.55*	0.02	0.07	0.01	0.25
Junior	-0.05	0.06	-0.03	-0.84	-0.10	0.07	-0.05	-1.54
Male	-0.08	0.05	-0.05	-1.51	0.07	0.06	0.04	1.17
Majority	0.09	0.08	0.04	1.19	-0.01	0.08	0.00	-0.11
Agriculture	-0.14	0.08	-0.06	-1.72	-0.40	0.08	-0.16	-4.81**
Design	0.07	0.10	0.02	0.68	-0.24	0.10	-0.07	-2.32*
Education	0.18	0.10	0.06	1.91	-0.27	0.10	-0.08	-2.71*
Engineering	0.06	0.07	0.03	0.87	-0.13	0.08	-0.06	-1.66
Family & Consumer Sciences	-0.16	0.09	-0.05	-1.68	-0.35	0.10	-0.12	-3.58**
Business	0.06	0.07	0.03	0.78	-0.15	0.07	-0.07	-2.02*
Veterinary Medicine	0.13	0.98	0.00	0.13	-0.53	1.01	-0.01	-0.53
In-state resident	-0.04	0.06	-0.02	-0.62	-0.09	0.06	-0.05	-1.51
High school academic rank	0.00	0.00	0.07	2.34*	0.00	0.00	0.10	3.27**

Note. The four dependent variables were the questions comprising Factor 4.
* $p < .05$; ** $p < .01$.

Table 7

Estimated Coefficients for the Full Regression Models of "Importance to Student of Leadership After College" and "Leaders Need to Be Able to Work in Teams/Groups" (n = 1,441)

	Leadership will be Important to Student After College				Leaders Need to be Able to Work in Teams/Groups			
	B	S.E.	Beta	t	B	S.E.	Beta	t
Constant	4.01	0.18		21.88**	4.07	0.16		26.26**
Student has held a student govt. position	-0.10	0.06	-0.05	-1.61	-0.01	0.05	-0.01	-0.23
Number of student and/or community organizations involved in	0.11	0.01	0.22	7.63**	0.05	0.01	0.11	4.02**
Student Government Supporter (Factor 1)	0.06	0.02	0.07	2.67*	0.07	0.02	0.10	4.07**
Leadership Programming Interest (Factor 2)	0.20	0.02	0.24	8.38**	0.10	0.02	0.14	5.12**
Community Pride (Factor 3)	0.12	0.02	0.14	5.00**	0.02	0.02	0.03	1.18
Positional leadership (Factor 5)	0.11	0.02	0.13	4.73**	0.09	0.02	0.12	4.87**
Authoritarian leadership (Factor 6)	0.04	0.02	0.05	1.88	0.26	0.02	0.34	13.03**
Democratic leadership (Factor 7)	-0.01	0.02	-0.01	-0.54	-0.05	0.02	-0.07	-2.82**
Civic responsibility (Factor 8)	0.09	0.02	0.12	4.32**	0.17	0.02	0.22	8.99**
Leadership results (Factor 9)	0.13	0.02	0.15	5.65**	0.23	0.02	0.29	11.42**
Shared leadership (Factor 10)	0.06	0.02	0.07	2.48*	-0.16	0.02	-0.20	-7.95**
Peer education (Factor 11)	-0.08	0.02	-0.10	-3.62**	0.02	0.02	0.02	0.85
Greek system	-0.20	0.08	-0.07	-2.40*	-0.15	0.07	-0.06	-2.08*
Residence hall	-0.41	0.07	-0.25	-6.25**	-0.21	0.06	-0.14	-3.79**
Freshman	0.17	0.08	0.09	2.00*	0.05	0.07	0.03	0.71
Sophomore	0.29	0.07	0.15	4.35**	0.14	0.06	0.08	2.58*
Junior	0.02	0.06	0.01	0.26	0.03	0.05	0.02	0.56
Male	0.08	0.05	0.05	1.62	-0.05	0.04	-0.03	-1.12
Majority	-0.04	0.07	-0.02	-0.56	0.15	0.06	0.07	2.42*
Agriculture	-0.21	0.08	-0.09	-2.82**	-0.08	0.06	-0.04	-1.31
Design	-0.26	0.09	-0.08	-2.71*	0.24	0.08	0.08	3.05**
Education	0.17	0.09	0.06	1.87	0.14	0.08	0.05	1.85
Engineering	-0.02	0.07	-0.01	-0.32	0.10	0.06	0.06	1.70
Family & Consumer Sciences	-0.01	0.09	0.00	-0.15	-0.06	0.07	-0.02	-0.74
Business	0.04	0.07	0.02	0.66	0.08	0.06	0.04	1.48
Veterinary Medicine	-0.60	0.92	-0.02	-0.65	-0.03	0.78	0.00	-0.04
In-state resident	-0.12	0.05	-0.07	-2.28*	-0.12	0.04	-0.07	-2.68*
High school academic rank	0.00	0.00	0.05	1.89	0.00	0.00	0.03	1.27

Note. The four dependent variables were the questions comprising Factor 4.
* $p < .05$; ** $p < .01$.

Important and Post-college Leadership. Civic Leadership and Leadership Results were significant predictors of all dependent variables except Self-as-Leader. Authoritarian Leadership was a significant predictor of all dependent variables except Post-college Leadership. Democratic Leadership was a positive predictor of Self-as-Leader, but a negative predictor of Team Importance. Shared Leadership was a positive predictor of Leadership is Important and Post-college Leadership, but, like Democratic Leadership, was a negative predictor of Team Importance.

Discussion

The first research question focuses on the influence of demographic characteristics, place of residence, and factored leadership perceptions on students' perceptions of the importance of leadership. The results of this study indicate that, at this institution, students who believe leadership is important in their life are significantly more likely to (a) live off-campus, (b) belong to several student and/or community organizations, (c) have an interest in leadership programming, (d) have pride in their community, (e) support and be involved with student government, and (e) believe that leaders are found mostly in positions of influence and in formal groups or organizations.

Importance of Student Leadership

It is somewhat puzzling to discover that off-campus students regard leadership as more important than do students who live in Greek housing and residence halls. One explanation may be that off-campus residents tend to be upper division (juniors or seniors), and may have had a residence hall and/or Greek experience already, although upper-division status may not be as important because the results of this study showed that sophomores regarded leadership as more important than did juniors and seniors. Residence hall students clearly regarded leadership as less important than did students from the other living areas. This finding gives rise to the question, What are Greek and off-campus experiences providing that residence halls do not? The literature surrounding leadership experiences and place of residence is mixed (Hamrick, Evans, & Schuh, 2002; Pascarella & Terenzini, 1991). Students in residence halls are likely to have been introduced to structured experiences as "leadership experiences." Greek students are initiated into leadership theory from the start, so everything they do is viewed as leadership. Off-campus students are likely to be older and to have lived previously in residence halls, but as they have put those experiences into practice only recently, they may not think of those experiences as leadership. Thus, a combination of maturity and the application of leadership through experience may be most helpful for students' understanding of leadership.

It is not surprising that students' involvement in organizations predicts their belief that leadership is important to their lives and that holding a student government position is a significant predictor of students' self-perception as a leader. However, it is unexpected that previous student government experience

is not a significant predictor of the perceived importance of leadership during or after college. One might expect that those more involved in leadership would see the value of leadership now and after college. This finding may occur because students who previously held a student government position are knowledgeable of the abilities and qualities it takes to be a leader. A student who has held a student government position would be likely to consider leadership to be important both now and after college.

The leadership factors that were developed through this research also yield some interesting insights. Students who were student government supporters regarded leadership as important, most likely because they see student government as being a central leadership development activity on this campus. Students who responded favorably to leadership programming also regarded leadership as important. The relationship between the two variables is expected; however, it leaves unresolved questions: (a) Why do students who do not consider themselves to be leaders not want to engage in leadership development programs? (b) Why is leadership not something they perceive as important to explore or learn more about? Community pride strongly predicted students' belief that leadership is important to them. This relationship is reasonable, but is not necessarily consistent with off-campus students' increased sense of leadership significance. Students living in off-campus apartments and houses tend not to develop the strong sense of community that is more characteristic of Greek houses and residence halls. Alternatively, it may be that the development of community in off-campus housing is underestimated.

Five of the predictor factors dealt with student perceptions of leadership: Positional Leadership, Authoritarian Leadership, Democratic Leadership, Shared Leadership, and Civic Responsibility. Students who believed in Positional Leadership also believed that leadership is important. One explanation may be that students who responded as such may be or have been in leadership positions. It also may be safe to say that one of the dominant leadership perceptions in society is that leadership involves having a position of authority or power (Rost, 1993). These results would be consistent with that belief. It also may explain why students who believed in Authoritarian Leadership considered themselves to be a leader and that leadership is important now. An authoritarian view includes the belief that leaders are born with requisite characteristics and that leadership is individualistic.

The Democratic Leadership view highlights the opposite view that anyone can be a leader. Thus, it is not surprising that students who believed in this perception also considered themselves to be leaders. The fact that they did not perceive leadership to be important now nor in the future may be attributed to a democratic view that leadership is a responsibility of all, and does not carry any special value.

Students who believe in a more postindustrial leadership perspective, reflected in the Shared Leadership factor, also consider themselves to be leaders. They see that leadership will be important in the future, but they do not consider leadership to be important at this time in their lives. This fact indicates that they do not feel prepared for this kind of leadership. It is very interesting that, although students who believed in Civic Responsibility, including the perception that leadership involves service and change, did not consider themselves to be leaders, they felt nonetheless that leadership is important now and in the future. It is possible that they held the postindustrial view that leadership is a process and not an individual possession, or perhaps the service-oriented mindset tends to lead to a less elevated self-perception.

Gender and ethnicity are likely indicators of whether students believe leadership to be important, but those two demographic variables were not significant predictors. Their lack of significance may suggest that some degree of parity has been achieved in gender- and ethnicity-based perceptions of student leadership, but does not necessarily mean that an equivalent degree of parity has been achieved in the rates at which students are engaged in leadership activities across gender and ethnic categories. Current student leaders, as well as faculty and staff, need to meet the challenge of achieving more equitable participation in student leadership through efforts such as targeted recruitment, nurturing strong female and minority role models among student leaders, or providing novel opportunities for developing nontraditional student leadership talent.

Student Consideration of Self as a Leader

The second research question addressed whether students considered themselves a leader. The current level of involvement appears to be a good indicator of students' perception of leadership, but presents a challenge to student affairs staff to educate all students, not only those in leadership positions, about various styles of leadership. Staff also could help students strengthen their understanding of their own leadership style and build leadership skills. Finally, students should be encouraged to find ways to put to use their leadership skills, whether in residence hall, university, or community positions. Similarly, although those of higher ability, as indicated by high school rank, had no problem with their self-perception as a leader, student affairs staff could work more with low- to moderate-ability students to help them see themselves as leaders.

Findings indicated that students in the majority of colleges (except the Engineering and Veterinary Medicine Colleges) have lesser self-perceptions of leadership than do students in the College of Liberal Arts and Sciences College, which is home to many students in the sciences, humanities, and undecided majors. The diversity of dozens of different Liberal Arts and Sciences major programs provides a richly varied and diverse set of opportunities for developing student leadership that is quite different from the context of

colleges with fewer and more focused major programs. This situation increases the likelihood of finding significant differences among colleges in self-perceived leadership ability. A stronger emphasis on leadership development could be included in the curriculum of those other colleges. This emphasis could be achieved by strengthening efforts by student affairs staff to train future student leaders from those colleges through mechanisms such as leadership courses and seminars, targeted recruitment efforts, or developing a more flexible curriculum open to accepting credits from courses outside the college that provide students with the impetus and knowledge base for future leadership roles.

Several factors were significant predictors of students' self-perception as a leader. For example, students who see themselves as a leader may be expected to be supportive of student government, have an interest in leadership programming, and have community pride. It is interesting that the type of leadership the students ascribed to themselves did not seem to affect their leadership self-perceptions. Students ascribing to themselves greater levels of positional leadership, authoritarian leadership, democratic leadership, and shared leadership all have higher leadership self-perceptions.

Importance of Leadership after College

The third leadership question focused on students' perception of whether leadership will be important after college. Students who saw leadership as being important after college were joiners; they were more likely to belong to student and/or community organizations and to support student government and programming. These students were more likely to be freshmen or sophomores, perhaps because those classifications were more likely to want to prepare themselves for leadership roles after college.

Students in the Colleges of Agriculture and Design were less likely than students in the College of Liberal Arts and Sciences to see leadership as important after college. Agriculture and Design students may be more focused on their discipline than on leadership opportunities. Out-of-state students were more likely than in-state students to see leadership as important after college. Out-of-state students may be more career-focused by virtue of choosing to go farther from home. This earlier independent thinking may be symptomatic of an appreciation for independence and leadership in later life.

Residence hall students, the majority of whom were freshmen and sophomores, were less likely than off-campus students to view leadership as important after college, and Greek residence was not a significant predictor of those views. This result is unexpected, particularly given the focus of leadership as part of Greek life, and underscores the need for further emphasis on leadership training by student affairs staff working with Greek and residence hall students.

Students who see leadership as important after college are more likely to have community pride and to ascribe to positional leadership or shared leadership

(rather than democratic or authoritarian) leadership styles. Because they see leadership as important after college, they may not see the more immediate benefits of peer education.

Belief that Leaders Must be Able to Work in Teams or Groups

The final research question focused on indicators of students' belief that leaders need to work in teams or groups. Students who believed leaders must be able to do so were more likely to be involved in community organizations, student government supporters, interested in leadership programming, and strong supporters of civic responsibility. Thus, involvement and interest in leadership have provided students with a good foundation for working in teams or groups.

Students who believed more strongly in positional leadership were more likely to see the value of working in teams or groups than were students who believed more strongly in democratic leadership. Based on the reasoning that democratic leadership would be expected to put a premium on cooperative, team-driven effort, and that positional leadership would be expected to emphasize the dominance of individual-centered leadership skill, this finding is surprising. This result may suggest that the power of positional leadership may be built around the individual ability to coordinate the efforts of working groups and that democratic leadership is better able to function in the absence of structured group activities. In addition, our results indicated that students who were more supportive of leadership results or the feeling that leaders should keep things stable and who felt that positive change comes from good leadership were very likely to see the value of working in teams or groups. Students involved in shared leadership and who felt that organizations can succeed without positional leaders were less likely to see working in teams or groups as valuable. Although this result might seem incongruent, the difference might be attributed to the way students view the word leadership. Students typically view leadership as positional (i.e., "I'm in charge!") rather than collaborative (i.e., "There is no 'I' in "team.").

Sophomores were better able than seniors to see the value of working in teams or groups. Perhaps a second year of student government experience provided additional maturity of leadership skills and afforded deeper insight into teamwork. Ethnicity also was related to the perceived value of teamwork, as majority students saw more value than minority students in working in teams or groups. This ethnicity-related difference may be due to the presence of greater opportunities for majority students to find teams or groups in which they wished to be involved.

Whether a student is a state resident or from outside the state also is consequential for attitudes regarding student leadership. Out-of-state students are more likely than in-state students to see the value of working in teams or groups. This finding may occur because out-of-state students generally are

farther away from friends or support groups that were established in their home state and community.

Students in the College of Design were more likely than students in the College of Liberal Arts and Sciences to see the value of working in teams or groups. Design students, by the nature of their major curriculum, emphasizing studio and other group academic activities, are inclined to see the value of collaboration on academic projects by seeking feedback from other Design students for their work. Many undergraduates in other disciplines in other colleges do not have frequent opportunities to model future societal teamwork through group work during their academic careers. Curriculum changes permitting or encouraging the experience of group academic efforts for undergraduates may produce future college-educated generations with a stronger commitment to collaborative behavior.

Implications for Practice

The research questions addressed in this article offer unique implications for staff and faculty who work with students. If an outcome of higher education is to provide society with future leaders, colleges and universities should pay attention to whether or not their students believe that leadership is important now and in the future, and if their students would consider themselves to be a leader. Many employment opportunities in the work world after college may require both leadership traits and the ability to work in teams. Acquiring both types of skill sets will necessitate more flexible academic programs and more holistic efforts by student affairs staff to convey what is required to produce well-rounded graduates.

Simply providing opportunities for leadership training may not be enough. Providing leadership skills to students may prepare them for their careers, but does not necessarily instill in them a belief that leadership is truly important. One challenge that leadership and student affairs practitioners face is providing leadership development without also providing an impression to students that a few workshops and experience in some organizations gives them all they need to know about leadership. If students feel they have everything they need as leaders, they will be less likely to become lifelong learners of leadership.

It is evident that students' living environment plays a major role in leadership development. Most interesting was that residence hall students were least likely to consider leadership as important in their lives. Residence life practitioners work extensively to help students develop a sense of community and learn the skills necessary for collaborating with others, but perhaps more work is needed to help students learn how to connect their experience living in the residence halls with leadership. Residence staff might examine how fraternities and sororities focus their efforts to educate their members about leadership and make leadership an essential part of their organizational purpose. Many colleges and universities are strengthening the connection between residence halls and academics through learning communities. Conceivably, similar efforts can be

undertaken with leadership development through the creation of residence halls themed around leadership or service.

The findings of this research show that students living in Greek housing and students living off campus currently view themselves as leaders and consider leadership important, but Greek residents do not consider leadership to be as important in the future. This view reveals that many students are not developing ways to apply the leadership lessons they have learned beyond their chapter experience. Although working in teams or groups is usual in Greek housing, this research indicates that students are not sufficiently internalizing the value and importance that leadership and teamwork play in their life after college. Further programming is needed to bring this message to Greek chapter house residents.

Despite the fact that scholars of student leadership herald a new era of leadership paradigms, many students still view leadership as following the industrial paradigm, but these same students also tend to view leadership as important in their lives. Student affairs practitioners and faculty members should continue to educate students on the shift toward shared and collaborative (postindustrial) leadership in society and help them find their place in this shifting landscape. Particularly in social sciences and education curricula, courses and methods already exist to foster this objective, and they may be applied productively by student affairs practitioners to enhance student awareness.

Some guiding principles for practitioners that we have derived from this research are these:

- Illustrate to students the value of seeing leadership as a life-long process. It is not something achieved only by programs attended or offices held.
- Help students understand that leadership is an essential life skill for everyone.
- Help students break out of the older paradigm that leadership equates with a leadership position. The newer leadership paradigm defines leadership as a process, not an outcome.
- Convince students that leadership is multidisciplinary and multifaceted. It can exist in their curricular and co-curricular experiences. Practitioners must understand this concept to be able to educate students to this reality.
- Provide opportunities for leadership education throughout a student's entire college career. More can be provided to juniors and seniors, who begin to bridge the leadership lessons learned in college with internships and other experiences in the "real world."
- Instruct practitioners about the importance of understanding the separate constituencies and demographic populations that comprise the campus community.

This study has contributed to developing knowledge of what contributes to student leadership perceptions, but additional research on the subject is needed. More specifically, further research should be undertaken on each of the four leadership perceptions addressed in this study. Research should explore the influence of students' perception of the importance of leadership, perception of themselves as a leader, perception of the importance of leadership after college, and the importance of working in teams or groups and how those perceptions influence success after college. Such further research would help substantiate the importance of students' leadership perceptions. Further research also could focus on how academic colleges or department attempt to educate students about leadership in their discipline and how that education influences students' leadership perceptions.

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