Predictors of Residence Hall Involvement

Ana Arboleda, Yongyi Wang, Mack C. Shelley, Donald F. Whalen
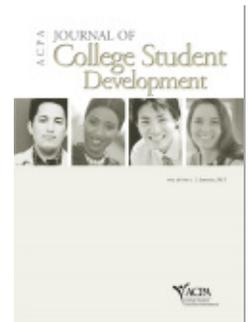
Predictors of Residence Hall Involvement

Ana Arboleda   Yongyi Wang   Mack C. Shelley, II   Donald F. Whalen

Residence hall students' (N = *1,186, 52% male, 90% White, 66% freshmen*) *involvement in their living community is influenced significantly by precollege student characteristics (gender, ethnicity), classification, attitudes (toward hall director, house cabinet, academic comfort, social environment, group study), and environmental variables (noise, time spent in the house, residence assistant interaction, peer academic conversations, employment).*

Student involvement outside of the classroom has been linked to students' learning and development, as well as persistence and retention (Astin, 1977, 1999; Tinto, 1993). In outlining what has become known as his involvement theory, Astin (1999) postulated that students' involvement occurs along a continuum and that the amount of learning and personal development with any educational program is directly proportional to the energy invested. According to Astin's theory, an involved student is one who "devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students" (p. 518).

Astin (1999) found the student's residence to be "probably the most important and pervasive" environmental influence on the student's persistence in school. He posited that those who live on campus have a natural advantage over commuter students in developing an attachment to and involvement in undergraduate life. Further, living in residence is positively associated with faculty interaction, student government involvement, and participation in a fraternity or sorority, and increases the student's chances of persisting and of aspiring to a graduate degree. Tinto (1993) found that residence hall living contributes significantly by assisting in students' social integration into the institution.

Involvement in Residence Halls

Residence halls are communities at least in the sense that they possess geographical boundaries that define them. Talcott Parsons (1960) defined *community* as "that aspect of the structure of social systems which is referable to the territorial location of persons . . . and their activities" (p. 153). Beyond geographical definition, residence halls possess what Israel Rubin (1983) believed should be feelings of congeniality and an opportunity for community members to participate in the social processes. In this study, we used Chiricosta, Work, and Anchors' (1996) definition of *community* that is not only geographical, but also an environment to which the individual develops a sense of belonging and in which he or she shares common experiences through frequent interactions.

Residence hall communities play a major role in establishing an environment for students' involvement in campus-related and off-campus activities during their undergraduate years. Because most college

Ana Arboleda is a graduate student in Industrial Relations at Iowa State University. Yongyi Wang is a graduate student in Statistics. Mack C. Shelley, II is Professor of Educational Leadership and Policy Studies and Professor of Statistics at Iowa State University. Donald F. Whalen is Coordinator of Research and Assessment in the Department of Residence at Iowa State University.

students are still in the process of forming their identity, being involved in community activities may influence their personal development (Moore, Lovell, McGann, & Wyrick, 1998). Interacting with others is an essential component in identity formation because it enables the development of a sense of respect and a sense of interdependence (Chickering & Reisser, 1993). Additionally, environmental influences gained in the residence halls, such as friendships and sense of community, have a powerful influence over students' development.

Inman and Pascarella (1998) found that the inclusion of selected involvement measures resulted in a slight but statistically significant increase in end-of-year critical thinking among freshmen. A key element in this process of student development is student involvement. Students' participation in out-of-class experiences is a complement to their learning and development; it provides a broader understanding of a learning experience. Out-of-class experiences enhance interpersonal skills, such as the ability to communicate and cooperate, which are being demanded strongly by employers (Kuh, 1995).

Students who live in residence halls in which involvement in out-of-class activities is higher (as in living-learning centers) experience greater cognitive gains than do those living in conventional housing (Pike, 1999; Terenzini, Pascarella, & Blimling, 1996). However, there may be reasons for students joining learning communities or participating in residence halls activities in general; students' characteristics may determine their expectations of the purposes and consequences of such involvement. Moore et al. (1998) noted that students' involvement in the residence hall community is a unique kind of involvement in the

collegiate setting, which may have a particular influence on learning and development different from in-class or other out-of-class experiences.

Residence hall involvement is also related to students' satisfaction with their living environment. An international study of 183 institutions found satisfaction with the ability to interact with others in the residence halls to be the most important factor in predicting overall satisfaction among students living in residence halls (Association of College and University Housing Officers–International/Educational Benchmarking, Inc. 2001).

Students living in residence halls who participate in activities to support and build their community are engaging in learning experiences that impact their education and personal development (Astin, 1999). Thus, living in residence halls in which academic and nonacademic aspects are well integrated may have a positive influence on the student (Terenzini et al., 1996). The real advantage of living in residence halls is not necessarily derived from the place itself, but from the activities and opportunities for socialization that students have by virtue of their shared living space (Terenzini et al.).

Institutional support for connecting academics and community involvement may increase students' interest in leadership experiences. Leadership skills are positively related with students' intentions to develop these skills in others, and thus increase the likelihood of involvement in community action programs and more interest in promoting interracial and ethnic understanding (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001).

The effect of environmental support has been observed in comparing traditional residence halls with residential learning

communities. Students in residential learning communities have a significantly higher level of involvement and interaction than do students living in traditional residence facilities (Pike, 1999). However, students select to enter these environments; they do not live in residence halls just because of services or programs in which they could participate. Moreover, students tend to engage in activities for which their skills and abilities are already strong and to avoid areas in which those skills and abilities are not as well developed (Hess & Winston, 1995).

Influences on Students' Involvement

Although there are many reasons why students wish to be involved in their residential communities, other factors may prevent their involvement. Employment can detract from students' ability to be involved. Students who work off campus tend to be less involved in out-of-class activities and to have less interaction with faculty (Furr & Elling, 2000). On the other hand, working on-campus seems to have a positive effect on students' involvement in organizations and contact with faculty (Furr & Elling; Terenzini et al., 1996).

The influence of students' major field has been found to be an indicator of students' involvement. For example, majoring in business or engineering tends to have negative effects on social activism and on promoting racial understanding (Astin, 1993). Business and engineering majors may be less involved in diverse communities.

Men experience a greater sense of community than do women (Chiricosta et al., 1996). Assuming that a greater sense of community would lead to more involvement, then men logically should be more involved than women. However, living in a co-educational house fosters more student involvement in residence hall activities than does living in a same-sex house (Warner & Noftsinger, 1994).

It is known that daily interpersonal interaction with peers and faculty members has a direct influence on student intellectual and cognitive development, particularly when the topics of discussion are academic or intellectual (Astin, 1993; Terenzini et al., 1996). However, spending more time socializing with friends is not necessarily a predictor of higher academic achievement. Social activities and out-of-class activities have an indirect, rather than direct, effect on academic achievement, due to their interpersonal contacts with peers and faculty (Terenzini et al.).

Findings from previous research suggest that there is a moderate relationship between intellectual development and both social activity and sense of belonging (McCluskey-Titus et al., 2002). Assuming that sense of belonging is positively related to involvement, more involved students should experience more academic success. The perceived dedication to academics by others on the floor has a positive influence on residents' academic achievement (McCluskey-Titus et al.).

Students who take the opportunity to discuss racial or ethnic issues and to socialize with others of different racial or ethnic groups realize experiences that enhance their learning (Kuh, 1995; Terenzini et al., 1996). On the other hand, differences in communication and interaction styles due to ethnic and racial differences may cause difficulties among residents. For example, it has been observed that African Americans and European Americans may have continuous problems when they are living in the same residence hall if there is no attempt to understand each other. This condition

decreases social interaction and comfort in residence halls (Johnson-Durgans, 1994) and may affect residents' participation. When students lean toward a "majority rules" decision-making process it is harder to foster participation that includes both majority and minority ethnic groups; therefore, staff must work to guarantee equitable participation (Engstrom, Hallock, Riemer, & Rawls, 2000).

The attitude toward minority students by residence hall staff and their recognition of differences has a big impact on residence climate (Johnson-Durgans, 1994). An active residence assistant (RA) has the opportunity to generate involvement by hall residents because he or she sees residents' environmental needs and expectations for participation. Veteran RAs usually are more active and more involved in housing programs than less experienced RAs are. Women RAs tend to create programs addressing development and personal challenge; male RAs, on the other hand, prefer programs that enhance competition (Bierman & Carpenter, 1994).

The purpose of this research was to examine students' involvement from a different perspective—developing a model for examining precollege characteristics and influences from the residence hall environment, to predict students' involvement in undergraduate residence halls. Our study is potentially important to student affairs decision-makers in particular, and more generally to those who are engaged in student affairs service and research. Information regarding which student traits are strongly associated with involvement in residence halls makes it easier to target and nurture those students who are most likely to play a productive role. In addition, we show which enhancements to residence hall environments may provide the greatest improvement in student involvement**.**

METHOD

Population and Sample

This study was conducted at a large Midwestern land-grant university. Although there are no on-campus living requirements, approximately 36% of all students choose to live in on-campus residence halls or apartments, including 87% of all first-time freshmen. The remaining students live in fraternity or sorority housing usually adjacent to campus (6%), live elsewhere within the city (42%), or commute from outside the community (16%) (University Fact Book, 2001).

Participants in the study were undergraduate students living in campus residence halls and who had completed a residential environment survey. Undergraduate residence halls at this institution consist of 19 separate residence hall buildings that include a total of 138 houses. Houses are floors or wings within a residence hall designed to accommodate 20 to 70 residents. A hall director was assigned to one or more buildings containing a collection of houses. Each hall director supervised the house RAs, who were present to provide personal, academic, and administrative support for students. Approximately 8,700 (37%) of the university's undergraduates live in undergraduate residence halls and apartments for single students; of those, 83% live in an undergraduate residence hall and 17% live in an apartment.

Table 1 includes means for the demographic characteristics of students participating in the survey. The respondent sample was 52% male, 10% minority, 72% in-state residency status, 66% freshmen, 22% sophomores, 8% juniors, and 4% seniors.

Most participants were enrolled in either the college of liberal arts and sciences (33%) or the college of engineering (29%); the fewest were in the colleges of education (8%) and design (8%).

Most of the participants (82%) lived in a coeducational building, and 22% lived in a coeducational house. Most lived in a smoke-free house (94%). Although most students do not like to restrict their housing options, a few chose to live in an alcohol-free house (3%), a quiet house (5%), or a single room (17%). Nine percent had changed roommates during the Fall semester. Thirty-nine percent said they worked either part-time or full-time.

Survey Instrument

The survey instrument is a 66-item survey developed at the institution. Survey items included two groups of questions. The first group of 39 items, referred to as house feedback questions, sought students' attitudes toward their RA, house cabinet (i.e., the executive officers of the house government), hall director, and house atmosphere. The second group of 27 questions solicited information on their residence hall involvement (the focus of this study), study habits, faculty involvement, alcohol and cigarette use, employment and volunteer involvements, and financial indebtedness. The second group of questions was included with house feedback questions to collect information about student issues already linked to student academic success. The questions offered good face validity and construct validity. Reliabilities and other psychometric properties for the derived factors are included later in the listing of items for each factor.

Procedure

The university's institutional review board provided participant approval of the survey instrument and procedures for its administration. The survey was administered in late October 2001, and participation was requested from 25% of the residence hall students ($n = 1,779$). Residence hall directors and RAs distributed the surveys with a cover letter explaining the purpose of the survey. Questionnaires were enclosed in preaddressed envelopes to allow students to return their completed survey in confidence by sealing the envelope. Responses were recorded on an optical scan sheet. House-based incentives were used to achieve a return of 1,186 surveys (66.7%).

The student's university identification number was used to merge matched demographic and academic information from university files, after which the identifier was removed. A total of 1,109 survey responses provided the student's university identification number. Demographic variables (see Table 1) included gender, ethnicity, in-state residency, classification, and college of enrollment. Academic performance was measured by Fall semester cumulative GPA.

RESULTS
Factor Analysis

To identify the underlying factors, or latent constructs, that explain interrelationships among the survey items, factor analysis (principal components extraction, followed by varimax rotation with Kaiser normalization) was conducted on key survey questions that shared a common measurement scale and topic. The first factor analysis was conducted on house feedback items related to students' satisfaction with their RA, house cabinet, connection with hall director, academic and social environment, and academic progress. A second factor analysis

TABLE 1.

Descriptive Statistics for Dependent and Independent Variables in the Model

Dependent and Independent Variables		*M*	*SD*[n]
Dependent Variable[m]	**Residence Hall Involvement**[a]	**2.80**	**0.67**
Demographic	Gender (1 = *male*, 0 = *female*)	0.52	
	Ethnicity (1 = *majority*, 0 = *minority*)	0.90	
	In-state resident (1 = *yes*)	0.72	
	Sophomore (1 = *yes*)	0.22	
	Junior (1 = *yes*)	0.08	
	Senior (1 = *yes*)	0.04	
	Agriculture college member (1 = *yes*)	0.10	
	Design college member (1 = *yes*)	0.08	
	Education college member (1 = *yes*)	0.06	
	Engineering college member (1 = *yes*)	0.29	
	FCS college member (1 = *yes*)	0.02	
	LAS college member (1 = *yes*)	0.33	
Attitudinal[m]	Satisfaction with house resident assistant[b,l]	4.09	0.72
	Satisfaction with house cabinet[b,l]	3.77	0.81
	Connection with hall director[b]	3.17	1.16
	Academic comfort[b]	3.84	0.73
	Social environment[b]	3.64	0.96
	Academic progress[b]	3.44	0.91
	Study habits: Group study[c]	3.22	1.40
	Study habits: Quiet study[c]	2.73	1.40
	Study habits: Solitary study[c]	5.09	1.40
Environmental	Quiet house (1 = *yes*)[l]	0.05	
	Same-sex building (1 = *yes*)	0.18	
	Smoke-free house (1 = *yes*)	0.94	
	Alcohol-free house (1 = *yes*)	0.03	
	Coed house (1 = *yes*)[l]	0.22	
	Single room (1 = *yes*)	0.17	
	Interactions with RA during semester[d]	3.25	1.54
	Hours spent in house each day not sleeping[e,l]	2.39	0.77
	Judgment of noise level in house[f,l]	2.02	0.41
	Roommate change during semester (1 = *yes*)	0.09	
	Hours/day spent studying[g]	2.87	1.30
	Frequency of academic conversations with peers[h]	2.49	0.57
	Frequency of academic conversations with faculty[h]	1.69	0.61
	Drinking behavior during the past year[i]	2.12	1.34
	Smoking behavior during the past year[j]	1.49	1.17
	Part- or full-time employment (1 = *yes*)	0.39	
	Hours/week volunteering for community service[k]	1.44	0.75
	Hours/week volunteering in clubs or organizations[k]	1.85	1.16
	Fall cumulative GPA	2.81	0.80

table continues

TABLE 1. *continued*

Descriptive Statistics for Dependent and Independent Variables in the Model

---

a Scale: 1 = *never*, 2 = *seldom*, 3 = *sometimes*, 4 = *often*.

b Scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *no opinion*, 4 = *agree*, 5 = *strongly agree*.

c Scale: 1 = *never*, 7 = *always*.

d Scale: 1 = *0 to 5 times*, 2 = *6 to 10 times*, 3 = *11 to 15 times*, 4 = *16 to 20 times*, 5 = *21 or more times*.

e Scale: 1 = *0 to 3 hours*, 2 = *4 to 7 hours*, 3 = *8 to 11 hours*, 4 = *12 or more hours*.

f Scale: 1 = *too quiet*, 2 = *about right*, 3 = *too loud*.

g Scale: 1 = *less than 1 hour*, 2 = *1 to 5 hours*, 3 = *6 to 10 hours*, 4 = *11 to 15 hours*, 5 = *16 to 20 hours*, 6 = *more than 20 hours*.

h Scale: 1 = *never*, 2 = *sometimes*, 3 = *frequently*.

i Scale: 1 = *do not or did not consume alcohol*, 2 = *consume or consumed alcohol once a week or less, consuming 1 to 3 drinks*, 3 = *consume or consumed once a week or less, consuming 4 or more drinks*, 4 = *consume or consumed alcohol more than once a week, consuming 1 to 3 drinks*, 5 = *consume or consumed alcohol more than once a week, consuming 4 or more drinks*.

j Scale: 1 = *did not smoke*, 2 = *smoked once a week or less, consuming 1 to 3 cigarettes*, 3 = *smoked once a week or less, consuming 4 or more cigarettes*, 4 = *smoked more than once a week, consuming 1 to 3 cigarettes*, 5 = *smoked more than once a week, consuming 4 or more cigarettes*.

k Scale: 1 = *0 hours*, 2 = *1 to 5 hours*, 3 = *6 to 10 hours*, 4 = *11 to 15 hours*, 5 = *16 to 20 hours*, 6 = *21 to 25 hours*, 7 = *26 to 30 hours*, 8 = *more than 30 hours*.

l A house is a subgroup within a residence hall building that accommodates 20 to 70 residents.

m The dependent variable and all the attitudinal variables are factors. The distribution of each factor's scores has a mean of 0 and a standard deviation of 1 after principal components extraction and varimax rotation. Therefore, the means for raw data within each factor were used to compute the means and standard deviations for each factor.

n The standard deviations were not computed for dichotomous variables; the means of dichotomous variables indicate the proportions in the survey sample that have the attributes denoted by 1s.

---

was based on a group of questions related to students' study habits. Another group of survey questions, focused on residence hall involvement, was used to conduct a third factor analysis, the result of which was used to constitute the dependent variable.

Six factors were obtained overall from the house feedback questions. Collectively, these provide a comprehensive overview of the multiple dimensions underlying student perceptions of the residence hall environment. The factors, with their assigned labels, factor scores, and reliabilities (Cronbach's alpha values) were as follows:

1. Satisfaction With House Resident Assistant had high loadings on: (a) RA is knowledgeable of campus and community services (.77), (b) RA shows enthusiasm for job (.77), (c) RA pro-motes respect of individuals' differences (.75), (d) RA encourages relations with all types of people (.75), (e) RA enforces policies appropriately (.75), (f) RA follows residence hall rules and regulations (.74), (g) RA is good at directing academic help (.73), (h) resident feels comfortable approaching RA confidentially (.72), (i) RA is available in the house (.70), (j) RA works well with house cabinet (.69), (k) RA has tried to get to know resident (.68), and (l) RA encourages residents to be responsible for their actions (.67). Reliability for the factor was .9316.

2. Satisfaction With House Cabinet had high loadings on: (a) cabinet members respect house members (.80), (b) cabinet works well together (.79), (c) cabinet

members build house community effectively (.75), (d) house meetings are run effectively (.70), and (e) the cabinet plans activities considering the entire house (.70). Reliability for the factor was .8563.

3. Connection With Hall Director had high loadings on: (a) resident knows how to reach hall director (.87), (b) resident knows hall director (.84), and (c) hall director knows resident (.76). Reliability for the factor was .7871.

4. Academic Comfort had high loadings on: (a) resident studies mostly in residence (.65), (b) resident is able to study in the residence halls (.64), (c) resident has satisfactory relationship with roommate (.61), (d) resident feels comfortable living in house (.53), and (e) resident confronts those who adversely affect him/her (.37). Reliability for the factor was .6303.

5. Social Environment had high loadings on: (a) resident knows most people in house (.78), and (b) individuals and their beliefs are respected in the house (.58). Reliability for the factor was .6156.

6. Satisfactory Academic Progress had high loadings on: (a) resident is satisfied with academic progress this semester (.84), and (b) there are enough activities in the house (.46). Reliability for the factor was .3608.

Three factors were extracted from questions related to students' study habits. The factors, their assigned labels, factor scores, and their reliabilities (Cronbach's alpha values) were:

1. Group Study had high loadings on: (a) resident prefers to study with friends (.83), (b) resident prefers to study with others in the same major (.80), and (c) resident prefers to study with other house members (.77). Reliability for the factor was .7346.

2. Quiet Study had high loadings on: (a) resident prefers to study in university library (.82), and (b) resident prefers to study in residence hall quiet areas (.71). Reliability for the factor was .4424.

3. Solitary Study had high loadings on: (a) resident prefers to study alone (.85), and (b) resident prefers to study in own room (.76). Reliability for the factor was .4846.

Finally, only one factor was extracted from questions related to residence hall involvement. This factor, named *residence hall involvement*, had high loadings on: (a) resident attends house programs and activities (.80), (b) resident interacts informally with house members (.75), (c) resident participates in house intramurals (.67), (d) resident attends house meetings (.66), (e) resident studies with others in house (.65), and (f) resident leaves door open (.61). Reliability for the factor was .7748. This factor was used to define students' involvement in residence halls.

The student demographic variables (gender, ethnicity, in-state residency, classification, and college), the factored attitudinal variables (house feedback variables and study habits variables) and the environmental variables (house type, alcohol use, cigarette use, employment and other involvement, cumulative GPA, etc.) were included as independent variables in subsequent enhancements to a regression model. Residence Hall Involvement was used as the dependent variable. The method of ordinary least squares was used to estimate the model, with the predictor variables entered in

successive steps, to determine the relative contributions of the three types of predictors (background, attitudinal, and environmental variables) to explaining the observed patterns of variation in student involvement.

Regression

Results of the regression equation for the full model are reported in Table 2. This approach provides an idea of the amount of additional explanatory power attributable in the model to the selected predictors at each step.

The student demographic variables that were significant consistently throughout all three steps of the model were ethnicity and senior classification, although it should be noted that the numbers of both minority and senior students were small (reflecting the predominance in the residence halls of majority and underclass students). Majority students were more involved than minority students, and seniors were significantly less involved than freshmen. Gender was significant in Steps 1 and 3, and membership in the engineering college was significant during the first two steps of the model. Males were more involved than females, and engineering college members were more involved than business college members (the baseline for comparison across colleges). The background variables combined explained about 5.1% of the variation in residence hall involvement.

Six attitudinal variables entered in Step 2 were statistically significant predictors of residence hall involvement, and five of them remained significant at Step 3 when the environmental variables were added into the model: satisfaction with their house cabinet, connection with their hall director, academic comfort, social environment, and group study. Satisfaction with their house RA was significant at the second step but not the

third. Students who were more involved were more satisfied with (a) the house cabinet, (b) the house RA, (c) their academic comfort, and (d) the social environment. In addition, students who tended to be more involved had better connections with their hall director, and preferred to study in groups.

Approximately 29% of the variation in residence hall involvement was explained by inclusion of the attitudinal variables, beyond the 5.1% explained by the background variables, for a combined total of 34.1% of variation explained. Substantially more of the variation in residence hall involvement was explained by the attitudinal variables than by the student background variables.

Six environmental variables were significant predictors of residence hall involvement after these new predictors were added in Step 3. Students who had more interactions with their RA during the semester, spent more hours in their house each day not sleeping, and had frequent academic conversations with their peers were significantly more involved in house activities. Clearly, greater interactions with student officials, more "face time" with other hall residents, and focused discussions are associated with students becoming more actively engaged in the residence halls. Students who (a) lived in a quiet house, (b) considered their house to be noisier, and (c) had either a part-time or full-time job tended to be significantly less involved. A lesser degree of involvement is likely from students who prefer quiet environments and are drawn away from the residence halls by the demands on their time and presence imposed by employment. An additional 7.6% of the variation was explained by adding the environmental variables to the student background and attitudinal variables, for a total of about 41.7%

TABLE 2.
Coefficients for Each Step in Developing the Full Regression Model

Variables	Step 1				Step 2				Step 3			
	B	SE	Beta	t	B	SE	Beta	t	B	SE	Beta	t
(Constant)	-0.49	0.14		-3.51**	-0.50	0.12		-4.20**	-1.48	0.32		-4.68**
Gender (1 = male, 0 = female)	0.17	0.07	0.09	2.53*	0.09	0.06	0.05	1.53	0.17	0.06	0.08	2.61**
Ethnicity (1 = majority, 0 = minority)	0.47	0.11	0.14	4.45**	0.46	0.09	0.14	5.02**	0.44	0.10	0.13	4.54**
In-state resident (1 = yes)	-0.08	0.07	-0.04	-1.10	-0.05	0.06	-0.02	-0.87	0.00	0.06	0.00	0.00
Sophomore (1 = yes)	-0.02	0.08	-0.01	-0.31	-0.09	0.06	-0.04	-1.33	-0.07	0.07	-0.03	-1.03
Junior (1 = yes)	-0.09	0.12	-0.02	-0.72	-0.16	0.10	-0.04	-1.57	-0.08	0.11	-0.02	-0.77
Senior (1 = yes)	-0.40	0.17	-0.08	-2.40*	-0.47	0.16	-0.08	-3.03**	-0.46	0.16	-0.08	-2.82**
Agricultural college member (1 = yes)	0.03	0.13	0.01	0.20	0.08	0.11	0.02	0.66	-0.06	0.12	-0.02	-0.49
Design college member (1 = yes)	-0.02	0.14	-0.01	-0.16	0.00	0.12	0.00	0.03	-0.08	0.13	-0.02	-0.65
Education college member (1 = yes)	0.25	0.15	0.06	1.62	0.30	0.13	0.07	2.30*	0.18	0.14	0.04	1.32
Engineering college member (1 = yes)	0.24	0.11	0.11	2.18*	0.22	0.09	0.10	2.38*	0.10	0.10	0.05	1.04
FCS college member (1 = yes)	0.14	0.22	0.02	0.63	0.24	0.19	0.04	1.31	0.13	0.19	0.02	0.66
LAS college member (1 = yes)	-0.01	0.11	-0.01	-0.14	0.12	0.09	0.05	1.28	0.03	0.09	0.02	0.34
Satisfaction with house RA[a,k]					0.12	0.03	0.12	4.49**	0.02	0.03	0.02	0.64
Satisfaction with house cabinet[a,k]					0.18	0.03	0.18	6.91**	0.14	0.03	0.15	5.17**
Connection with hall director[a]					0.19	0.03	0.19	7.07**	0.15	0.03	0.15	5.13**
Academic comfort[a]					0.17	0.03	0.17	6.20**	0.12	0.03	0.12	3.82**
Social environment[a]					0.29	0.03	0.29	10.65**	0.21	0.03	0.21	7.23**
Academic progress[a]					-0.03	0.03	-0.03	-1.03	-0.05	0.03	-0.05	-1.64
Study habits: Group Study[b]					0.21	0.03	0.21	7.61**	0.17	0.03	0.17	5.67**
Study habits: Quiet Study[b]					0.05	0.03	0.05	1.71	0.04	0.03	0.04	1.27
Study habits: Solitary Study[b]					-0.04	0.03	-0.04	-1.58	-0.06	0.04	-0.05	-1.81
Quiet house (1 = yes)[k]									-0.31	0.13	-0.07	-2.46*
Same-sex building (1 = yes)									0.04	0.08	0.02	0.55
Smoke-free house (1 = yes)									0.13	0.12	0.03	1.13
Alcohol-free house (1 = yes)									0.22	0.17	0.03	1.24
Coed house (1 = yes)[k]									0.02	0.07	0.01	0.21
Single room (1 = yes)									-0.10	0.09	-0.04	-1.17
Interactions with RA during semester[c]									0.17	0.02	0.26	8.26**

table continues

TABLE 2. *continued*

Coefficients for Each Step in Developing the Full Regression Model

Variables	Step 1				Step 2				Step 3			
	B	SE	Beta	t	B	SE	Beta	t	B	SE	Beta	t
Hours spent in house each day not sleeping[d,k]									0.15	0.04	0.11	3.81**
Judgment of noise level in house[e,k]									−0.25	0.07	−0.10	−3.40**
Roommate change during semester (1 = yes)									0.14	0.10	0.04	1.42
Hours/day spent studying[f]									0.00	0.02	0.00	−0.16
Frequency of academic conversations with peers[g]									0.19	0.05	0.11	3.53**
Frequency of academic conversations with faculty[g]									−0.01	0.05	−0.01	−0.29
Drinking behavior during the past year[h]									0.02	0.02	0.03	1.07
Smoking behavior during the past year[i]									−0.03	0.03	−0.04	−1.27
Part- or full-time employment (1 = yes)									−0.14	0.06	−0.07	−2.36*
Hours/week volunteering for community service[j]									0.04	0.05	0.02	0.82
Hours/week volunteering in clubs or organizations[j]									0.00	0.03	0.00	0.06
Fall cumulative GPA									0.01	0.04	0.01	0.34

Notes. The dependent variable is Residence hall involvement. R^2 for Step 1 = .051 (adjusted R^2 = .040), R^2 for Step 2 = .341 (adjusted R^2 = .326), R^2 for Step 3 = .417 (adjusted R^2 = .388).

a   Scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *no opinion*, 4 = *agree*, 5 = *strongly agree.*

b   Scale: 1 = *never*, 7 = *always.*

c   Scale: 1 = *0 to 5 times*, 2 = *6 to 10 times*, 3 = *11 to 15 times*, 4 = *16 to 20 times*, 5 = *21 or more times.*

d   Scale: 1 = *0 to 3 hours*, 2 = *4 to 7 hours*, 3 = *8 to 11 hours*, 4 = *12 or more hours.*

e   Scale: 1 = *too quiet*, 2 = *about right*, 3 = *too loud.*

g   Scale: 1 = *never*, 2 = *sometimes*, 3 = *frequently.*

h   Scale: 1 = *did not consume alcohol*, 2 = *consume or consumed alcohol once a week or less, consuming 1 to 3 drinks*, 3 = *consume or consumed alcohol once a week or less, consuming 4 or more drinks*, 4 = *consume or consumed alcohol more than once a week, consuming 1 to 3 drinks*, 5 = *consume or consumed alcohol more than once a week, consuming 4 or more drinks.*

i   Scale: 1 = *did not smoke*, 2 = *smoked once a week or less, consuming 1 to 3 cigarettes*, 3 = *smoked once a week or less, consuming 4 or more cigarettes, 4 = smoked more than once a week, consuming 1 to 3 cigarettes*, 5 = *smoked more than once a week, consuming 4 or more cigarettes.*

j   Scale: 1 = *0 hours*, 2 = *1 to 5 hours*, 3 = *6 to 10 hours*, 4 = *11 to 15 hours*, 5 = *16 to 20 hours*, 6 = *21 to 25 hours*, 7 = *26 to 30 hours*, 8 = *more than 30 hours.*

k   A house is a subgroup within a residence hall building that accommodates 20 to 70 residents.

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

of variation in residence hall involvement explained by the combined three sets of predictors.

DISCUSSION

In this study we explored the association of student demographic characteristics, student satisfaction with residence hall living, and student perceptions of the residence hall environmental characteristics, with student involvement in residence hall activities, which in turn have been linked to overall student satisfaction with residence halls life Association of College and University Housing Offiers–International/Educational Benchmarking, Inc., 2001). Although a relationship was not found here between involvement and academic success, other studies have made that link (Astin, 1993).

It is not surprising that men were more involved than women. Previous research (Chiricosta et al., 1996) supported men's greater sense of community and belonging through common experiences and frequent interactions. Majority students were more involved than minority students, presumably because of a higher level of comfort with their residence environment. As Engstrom et al. (2000) suggested, the "majority rules" nature of the house government structure makes it harder to include minority students. As a consequence, minority students may look to be involved in campus life activities elsewhere than in residence halls.

The small proportion of students in the study who were classified as seniors were less involved, perhaps because these students are more likely to focus their attention outside the living unit. The higher level of involvement by engineering students is not surprising, given the emphasis of the curriculum of that college on leadership experiences. Most engineering work is done in groups, where teamwork and leadership are important.

Students who were more satisfied with their house cabinet also were more likely to be involved in residence halls. Students attribute responsibility to elected cabinet members, possibly motivating intense affective reactions (Weiner, 2000). With students' affective expectations comes a willingness to be more involved in the community by attending house meetings and supporting the house cabinet because it helps to demonstrate having made a good decision. In other words, people support what they help create.

Staff contact was another significant issue impacting student involvement. Connection with the hall director, the only indicator in the data set measuring contact with that staff level, was connected significantly to student involvement in house activities. The first line of staff contact with the student—the RA—did play a role in the student's level of house involvement. Students' satisfaction with the RA, which was significant in the second stage of the regression model, was absent at the third stage when contact with the RA entered the model. This result may occur because contact with their RA overshadowed satisfaction with the RA in predicting their involvement in house activities. So, when it comes to trying to get students involved in house activities, the quantity of contact must be considered as well as the quality of contact with the RA.

Students who were more likely to be involved in group study or those who had more frequent academic conversations with peers were more likely to be involved in house activities. Because frequency of study with others in the house was one component

of that factor, this finding is not surprising. It also may be that those who prefer group study are more extroverted and thus naturally would be more likely to get involved in other house activities. This finding is reinforced by the negative influence of preference for quiet study or single room occupancy. Although preference for quiet study can be an attribute of a conscientious student, more involvement in study with others and general involvement in the house also may contribute to academic success. Thus, although some students seek quiet and solitude, much can be gained from getting to know others and getting involved in the residence community. Supporting this conclusion is the positive relationship of both academic comfort and the social environment with residence hall involvement, and the negative relationship of quiet house with residence hall involvement.

As one would expect, time spent in the house is positively associated with involvement. Similarly, the negative relationship of employment with involvement makes sense because the time committed to the job limits house involvement opportunities. However, there was no indication that volunteering in community service or in clubs or organizations played a role in house involvement.

CONCLUSIONS

In this study we focused on key demographic, attitudinal, and environmental variables that contribute to students' involvement in their residence community. We presupposed that there are benefits from student involvement in the college and in the residence community. Involvement contributes to activities that are linked to academic success and to overall satisfaction with the residence halls. Students who are more involved in their living community tend to be more satisfied with their living environment, both academically and socially, and thus can find it easier to study and collaborate academically with others in their community.

Some predictors of residence hall involvement are intuitive (e.g., spending more time in the house and working fewer hours allow students to have more time to get involved). Similarly, students who are more involved likely will find time to interact with the RA or to connect more with their hall director, although this interaction may not mean they are more satisfied with the performance of their RA. They also would have more time to converse about academics with peers or be involved in a study group.

It is not surprising that students who are generally satisfied with their living community, as suggested by their satisfaction with their house cabinet and the social environment, choose to be more involved in it. It also makes sense that students who feel more comfortable in the house, and are comfortable in studying there, would be more involved in house activities.

The relationship of students with their house cabinet is an important one. House cabinet members often spend considerable time deciding on house activities to increase students' social involvement. This research reinforces the idea that getting house members more involved in the community also builds support for cabinet members. These results give rise to the notion of a circular pattern relating student involvement and satisfaction with the cabinet: Get students more involved and they will be more satisfied with what you do; satisfy students more, and they will want to get more involved.

Conversely, knowing the characteristics

of students who are not involved in residence hall activities is a first step for residence hall staff members who might wish to identify individual students who are not involved and subsequently have conversations with them about the benefits of becoming more involved. For example, this study has indicated specifically that women and minority students are not as involved. Conversations might reveal specific reasons for not being involved, and therefore allow a staff member to help the student to become more engaged both in the residence halls and the university, and in turn to be a more successful student.

Two negative predictors of residence hall involvement were living in a quiet house and feeling that the house is too noisy. Both of these seem to be counter to the idea of community involvement. Although someone might prefer quiet surroundings and still be very involved, this seems improbable. Students who locate in a quiet house live there because they prefer an atmosphere in which socialization conducted within the house is done quietly behind closed doors. Communal activities that foster involvement likely would be considered disruptive to the house environment, and actions to encourage socialization such as leaving the door open would be discouraged.

Encouraging student involvement gets students more involved not only in the residence hall community, but also in the broader university community, which in turn can help them perform better academically. Residence hall involvement also helps to model the process of community involvement for use later in students' lives. Community involvement is intrinsically good in that it allows its members to give back something to the community that supports them. Finding ways to help students learn to get involved now can help students want to get involved after graduation in organizations and activities in their new community, thereby enhancing the connectedness among members that is essential for maintaining societal structures and providing opportunities for democratic citizenship.

Additional research on student involvement may be informed by both the results and the limitations of these findings. Ascertaining the applicability of the current findings to other institutions, especially smaller colleges and universities, could be a focus of subsequent research efforts. Future research also might include variables that were not employed in this study, such as information about students' involvement outside the residence halls or a wider array of measures of family and personal financial status. We hope that this article has contributed toward the evolution of that broader line of inquiry.

Correspondence concerning this article should be addressed to Donald F. Whalen, 1204 Friley Hall, Iowa State University, Ames, Iowa 50012; dwhalen @iastate.edu

REFERENCES

Association of College and University Housing Officers-International and Educational Benchmarking, Inc. (2001). *Benchmarking project: Year 2001 total participant group study findings*. Springfield, MO: Authors

Astin, A. W. (1977). *Four critical years*. San Francisco: Jossey-Bass.

Astin, A. W. (1993). *What matters in college?* San Francisco: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*, 518-529.

Bierman, S. E., & Carpenter, D. S. (1994). An analysis of resident assistant work motivation. *Journal of College Student Development, 35*, 467-474.

Chickering, A. W., & Reisser, L. (1993). *Education and identity*. San Francisco: Jossey-Bass.

Chiricosta, S. M., Work, G. G., & Anchors, S. (1996). The relationship between gender and feelings of community in residence hall students. *The Journal of College and University Student Housing 26*(2), 35-39.

Cress, C. M., Astin, H. S., Zimmerman-Oster, K., & Burkhardt, J. C. (2001). Developmental outcomes of college students' involvement in leadership activities. *Journal of College Student Development, 42*, 15-27.

Engstrom, C. M., Hallock, H., Riemer, S. M., & Rawls, J. (2000). Perspectives of democracy: A lens for analyzing students' experiences in a pilot community standards program. *Journal of College Student Development, 41*, 265-278.

Furr, S. R., & Elling, T. W. (2000). The influence of work on college student development. *NASPA Journal, 37*, 454-470.

Hess, D. W., & Winston, R. B., Jr. (1995). Developmental task achievement and students' intentions to participate in developmental activities. *Journal of College Student Development, 36*, 314-321.

Inman, P., & Pascarella, E. (1998). The impact of college residence on the development of critical thinking skills in college freshmen. *Journal of College Student Development, 39*, 557-568.

Johnson-Durgans, V. D. (1994). Perceptions of racial climates in residence halls between African-American and Euroamerican college students. *Journal of College Student Development, 35*, 267-274.

Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education, 66*(2), 123-155.

McCluskey-Titus, P., Oliver, R. S., Wilson, M. E., Hall, L. M., Cawthon, T. W., & Crandall, P. D. (2002). The relationship between community and academic achievement in residence halls. *Journal of College and University Student Housing, 30*(2), 11-16.

Moore, J., Lovell, C., McGann, T., & Wyrick, J. (1998). Why involvement matters: A review of research on student involvement in the collegiate setting. *College Student Affairs Journal, 17*(2), 4-17.

Parsons, T. (1960). *Structure and process in modern societies*. Glencoe, IL: Free Press.

Pike, G. R. (1999). The effects of residential learning communities and traditional residential living arrangements on educational gains during the first year of college. *Journal of College Student Development, 40*, 269-284.

Rubin, I. (1983). Function and structure of community: Conceptual and theoretical analysis. In R. L. Warren & L. Lyon (Eds.), *New perspectives on the American community* (pp. 54-61). Homewood, IL: Dorsey Press.

Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development, 37*, 149-162.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: The University of Chicago Press.

University Fact Book. (2001). Iowa State University, Office of Institutional Research.

Warner, M. J., & Noftsinger, J. B. (1994). Increasing student involvement through residence hall lifestyle assignments and developmental programming. *Journal of the Freshman Year Experience, 6*(1), 91-114.

Weiner, B. (2000). Intrapersonal and interpersonal theories of motivation from an attributional perspective. *Educational Psychology Review, 12*(1), 1-14.