Moving Into Students' Spaces: The Impact of Location of Academic Advising on Student Engagement among Undecided Students

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University stakeholders recognize the importance of exposing all students to academic advising as a means to enhance their engagement with the institution. Living-learning communities are of particular promise. In this study, conducted at a midwestern land grant university in the 2004-05 academic year, advisees in living-learning communities reported significantly higher engagement in their educational experiences than advisees with access only to a central advising office, and the differences in levels of engagement with advisors were significant as other predictors of engagement were taken into account.

KEY WORDS: advising centers, advising delivery, living-learning communities, outcomes of education, residence hall advising, student expectations of advising

Relative Emphasis: practice, research, theory

University stakeholders recognize the potential that academic advising affords to all students and are therefore devoting greater resources to make academic advising programs available to students in a variety of settings (Frost, 1991; Young, 1989). The development of personal relationships between advisors and students has been emphasized when crafting advising programs (Gallagher & Allen, 2000; Kelley & Lynch, 1991; Love & Tinto, 1995; Schnell, 1998; Shapiro & Levine, 1999; Winston & Sandor, 1984; Zhao & Kuh, 2004). The importance placed on the value of personal relationships is wellgrounded in research, which shows a link between developing a personal relationship with an academic advisor and students' satisfaction, success, and persistence (Schnell, 1998; Winston & Sandor, 1984).

Universities have sought to make advising more accessible by offering academic advising services in residence halls and living-learning communities (Schein, Biggers, & Reese, 1986). Schein (1995) noted that residential halls are uniquely located to provide easy access to academic advising. Consequently, he postulated that such proximity would enhance the probability of students devel-

oping meaningful connections with academic advisors. Love and Tinto (1995) called attention to learning communities as another mechanism to increase engagement with academic advising. They argued that academic advisors are the individuals on campus best equipped to construct course clusters, assist with the recruitment of students into learning communities, and participate as members of the learning community.

Although there has been a 20-year discussion about the role academic advising can play in students' spaces, particularly in learning communities, little previous literature is backed with empirical findings. In this study, we address this deficiency by examining the following research question: To what extent does the location of academic advising impact the engagement of undecided students? To analyze this research question, we compared advising provided in three different locations: conventional residence halls, living-learning communities, and a central advising office. The literature on living-learning communities, student engagement, and academic advising suggests that academic advising provided in living-learning communities will have the greatest impact on student engagement, while students will be impacted least when they have access only to a central advising office. The structures and events in living-learning communities provide more opportunities for advisors to get involved in the community and to publicize academic advising services (Love & Tinto, 1995; Zhao & Kuh, 2004).

As universities devote more resources (e.g., salary, time, and office space) to making academic advising services available in a variety of students' living spaces, the significance regarding effectiveness of service location is heightened. While personal relationships between students and academic advisors are known to matter (see Schnell, 1998; Winston & Sandor, 1984), the question remains: Does the physical location of such services matter?

Literature Review

Student engagement has long been recognized by the major student personnel organizations as a valid criterion in judging the likelihood of student learning. As cited in *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* (Keeling, 2004), both the National Association of Student Personnel Administrators and the American College Personnel Association recognized a connection between student engagement and personal development that manifests itself in learning. In a previous publication, the American College Personnel Association (1996) stressed the importance of creating a seamless environment that links students' in-class and out-of-class experiences and focuses on academic success and student learning.

Such emphasis on student learning to appraise the quality of academic services is well-grounded in research, which shows that engagement matters for learning, persisting to graduation, and experiencing greater success after graduation (Astin, 1984, 1993; Kuh, 2003; Pascarella & Terenzini, 2005; Pike, 2004; Tinto, 1997). While some research shows that students' backgrounds and demographics have a significant impact on their levels of engagement (Hu & Kuh, 2002; Pascarella & Terenzini, 2005), other research shows that institutions can develop programs that increase students' engagement (Astin, 1993; Kuh, 1996; Terenzini, Springer, Pascarella, & Nora, 1995; Tinto, 1997).

Learning communities can be a tool universities use for increasing student engagement and persistence (Tinto, 1997; Zhao & Kuh, 2004). Most of the effect that learning communities have on engagement appears to be channeled through the social relationships they foster (Kuh, 2003; Pike, 2000; Pike, Schroeder, & Berry, 1997; Stassen, 2003; Tinto, 1997; Zhao & Kuh, 2004). Because of this social connection, learning communities have been recognized as potential programmatic areas to foster seamless and sustained relationships with academic advisors (Tinto, 1997; Zhao & Kuh, 2004).

As research on learning communities has focused on faculty-student and student-to-student relationships, the role of academic advising in increasing student engagement within learning communities has not been examined. Some evidence suggests that administrators (specifically academic and student affairs professionals) may have a positive impact on student learning and development (Love, 1995; Schroeder & Mable, 1994). Kuh, Schuh, and Whitt (1991), in particular, hypothesized that academic advisors may play an important role: They noted that student affairs personnel are more likely than college professors to be present when learning opportunities take place outside the classroom. In a similar vein,

Evenbeck and Williams (1999) argued that familiarity with and accessibility to academic advisors are two strengths associated with learning communities. Based on learning community evaluations, Evenbeck and Williams found that students reported being comfortable with their advisor, asking questions as they arise, and not waiting for scheduled appointments to see their advisor. They further speculated that the advisor-student connection often continues long after the learning-community experience has ended.

Methodology

Research Design

We used a longitudinal research design to answer the research question: Does the location of advising services impact student engagement? During summer orientation, we surveyed students to collect information on students' expectations for academic advising and predispositions to engage in college. A follow-up survey was conducted at the end of the students' first college year to assess students' levels of engagement with advising and educational experiences. Demographic data and academic ability measures were obtained from student records.

Target Population

The target population is comprised of first-time, first-year undecided students attending a major, midwestern, land grant university during the 2004-05 academic year. The university under study is a highly selective suburban institution with over 40,000 undergraduate and graduate students. Undecided students were identified during summer orientation and assigned to a noncollege-based academic-advising unit. Approximately 1,500 first-time first-year students are assigned to the noncollege-based advising office serving undecided, or exploring, students. Academic advising for undecided freshmen is provided in three different locations: conventional residence halls, living-learning communities, and a central advising office. The conventional residence halls in this study have academic advising offices located on the first floor. The living-learning communities are housed within university-owned residence halls that house academic advising offices on the first floor. Students must specifically apply to live in the two available living-learning communities and pay additional fees (\$300 per academic year) for the learning community programs and services. The students who comprise the control group only have access to academic advising through the central advising office; they do not have advising offices

within their living environments.

The selection of undecided first-year students was based on several considerations. First-year students represent the majority (80%) of students who live in university residence halls. They also constitute the majority of undecided students at the focus institution. Only staff from the advising units that serve undecided students work in residence hall and learning community offices. Moreover, the emphasis on first-year students is consistent with the literature that characterizes the first year of college as critical to student success and persistence (Barefoot, 2000; Upcraft & Gardner, 1989).

Sample

A total of 714 first-time first-year students who received advising from the advising office for undecided students during the 4 weeks under study at summer orientation consented to participate and completed the initial survey. Five participants provided false or unidentifiable student identification numbers and two withdrew from the university prior to the start of the fall semester. As a result, the sample population consisted of 707 first-time firstyear undecided students. The participants were all contacted in the spring semester and asked to complete the follow-up survey. The follow-up surveys were linked to students' initial surveys based on student identification numbers. The use of numbers. rather than names, provided more accuracy and anonymity. In attempting to achieve a higher response rate, we created several incentives including entry in a raffle drawing for six gift cards, five E-mail reminders for nonresponders, and a mailed paper survey to all students who had not responded by the third E-mail contact.

Of the original sample of 707 students, 333 of them (47.1%) completed the follow-up survey. Thirty-four of the respondents had declared a major and were therefore no longer assigned to the advising office for the undecided. In addition, academic advising at this university is optional, and 42 students reported that they had never utilized advising. The declared and nonadvised students were eliminated from the analysis. Of the remaining 257 students, 108 received academic advising in a conventional residence-hall setting, 36 students received academic advising in a living-learning community, and 113 students received academic advising at the central campus advising office.

Comparisons between the original sample of 707 students and the final sample of 257 students revealed that the final sample population is skewed toward females ($X^2 = 19.8$; df = 1; p < .0001), those

with higher academic performance in high school (t = 3.968; df = 705; p < .0001), and higher reported high-school academic engagement (t = 2.341; df = 701; p < .05) than the original sample. No differences were noted between the original and final sample based on the extent of social engagement in high school (t = .224; df = 701; p = .823), post-secondary degree expectations (t = 1.026; df = 705; p = .305); or ethnicity $(X^2 = 3.55; df = 2; p = .17)$. We were unable to compare the original and final samples based on first-generation status as that information was collected at the follow-up survey.

Survey Development

Both the initial and follow-up surveys comprised questions derived from the National Survey of Living-Learning Programs (NSLLP) (Inkelas & Brower, 2004), the National Survey for Student Engagement (NSSE) (National Survey of Student Engagement, 2007), and a nonpublished first-year expectations questionnaire used at Arcadia University (D. Gallagher, personal communication, April 24, 2004). Two different focus groups were conducted to review the survey questions. The first focus group included eight academic advisors who work in the advising office involved with this research as well as two members of the university's orientation committee. The second focus group was comprised of five undergraduates who had utilized academic advising at the university.

The focus group of academic advisors brainstormed on their beliefs about the outcomes of effective advising as well as provided feedback on the logistics of collecting survey information from incoming students at summer orientation. The group believed that a short survey would be important because new students are focused on picking classes and would not have a long attention span at the beginning of the orientation day. A small number of advisors provided specific feedback on how questions should be worded for better clarity. The student focus group members specifically addressed some terminology they did not understand and thought should be reworded for their peers. They also suggested new elements to make the survey quicker and easier to navigate. All feedback was considered and used to redesign and reword questions in the final survey.

Variables

Dependent variables. Two variables were used to measure engagement: engagement with enriching educational experiences and student-advisor engagement. The items comprising these two scales

were drawn from the NSLLP (Inkelas & Brower, 2004), the NSSE, and from themes emerging from the focus group meetings with academic advisors and students who gauged the nature of academic advising at different settings within the university. This approach in scale development is consistent with Pike's (2006) recommendation that factor structures should be reliable indicators of student experiences at a particular institution.

Items comprising each scale were identified after a series of exploratory factor analyses based on a principal components option with varimax rotation. The Enriching Educational Experiences scale is made up of eight items used to appraise the contribution of the university in learning and personal development. Five of the eight items are drawn from the NSSE and three are drawn from the NSLLP.

The Student-Advisor Engagement scale is made up of five items used to appraise the quality of relationships with academic advisors and the extent to which advising was conducive to defining career and personal goals. These items were designed based on a series of themes students identified as characteristic of the most successful advisors.

Independent variables. The independent variables are the three locations where academic advising is provided for the students in this sample: conventional residence halls, living-learning communities, and a central advising office. For the purposes of this research, a conventional residence hall is considered a university-owned building where undergraduates live together without a building-wide learning community program to organize them. Shapiro and Levine (1999, p. 36) defined a livinglearning community as a "student living space with intentional academic programming and services, such as in-hall tutoring, ongoing lecture series, and academic advising." The central advising office serves students who only have access to academic advising through it: therefore, it serves as the control variable. Two dummy variables were used to identify whether the student received academic advising at a conventional residence hall or at a living-learning community.

Confounding variables. In an ideal research situation, the effect of location could be ascertained by random assignment of students to the different locations of academic advising (see Kirk, 1981). In the academic advising environment, random assignment to treatments can rarely be accomplished (Conrad & Serlin, 2006). Students self-select different living locations where academic advising is undertaken, and academic advisors at the focus

institution are assigned by location. Therefore, one could argue that learning through enriching educational experiences and engagement with one's academic advisor is more likely associated with students' personal characteristics than the location of advising. The engagement behaviors may be the product of previous involvement in academic and social activities in high school, students' educational goals, and students' predispositions to engage with academic advisors. Gender, degree aspirations, academic ability, and even being raised by parents without a college education could affect this choice of location and predispositions to interact with academic advisors. Therefore, we sought to capture information on three constructs: a) predispositions to engagement (degree aspiration, selfreported social engagement in high school, and self-reported academic engagement in high school), b) expectations for academic advising ($\alpha = .689$), and c) students' expectations for engagement in college academic, social, and residential life.

Results

Demographics and Scale Reliabilities

The Student-Advisor scale yielded factor loadings ranging from .54 to .85 (α = .836). The factor loadings for the eight items in the Enriching Educational Experiences scale ranged from .54 to .74 (α = .835). Table 1 displays selective descriptive statistics and reliabilities for the variables and scales used in the study.

Mean Differences between Location and Engagement

Mixed support was found for the hypothesis about the connection between location of advising and engagement. ANOVA analyses reveal no significant differences in engaging with academic advisors across the three advising locations. In other words, students in living-learning communities reported similar levels of engagement with academic advisors as their counterparts at conventional residential halls and students with access only to the central office, F = (30, 257) = 27.536; p = .979. While location does not appear to matter for engaging with one's academic advisor, the location where students received academic advising had an impact on students' enriching educational experiences. Students in living-learning communities reported higher levels of enriching educational experiences than did those students who were advised at the central office (F = [34, 257] = 1.857;p < .01). Because under an ANOVA analysis the experimental conditions are presumed to be ran-

Table 1 Descriptive statistics for final sample

Characteristic	Variables	Mean	SD	Frequency F	Reliability
Demographics	Female			72%	
- 1	White			90%	
	First-generation			7%	
Location of advising	Central office			113 (44%)	
	Living-learning community			36 (14%)	
	Residential hall			108 (42%)	
Prior academic	High school GPA percentile	90.33	7.536		
achievement	ACT composite	27.31	2.928		
Engagement variables	Enriching-educational				
	experiences (scale 1-8)	3.55	0.688		0.835
	Student-Advisor Engagement				
	(scale 1-5)	2.41	0.768		0.836
Expectations for	Expectations to Engage with				
advising	Advisor (scale 1-5)	3.53	0.535		0.689
Predispositions	Degree aspirations (scale 1-5)	2.15	0.887		
to engage (self reported)	High school academic				
	engagement (scale 1-5)	3.89	0.894		
	High school social engagement	4.46	0.741		
	(scale 1-5)				

domly assigned, a series of regression analyses were performed to account for alternative factors associated with engagement other than location of advising.

Predictors of Engagement

Two multiple regression analyses were performed to examine the impact of location along with other factors associated with engagement. In all regression models, the pair-wise option was employed (while relatively large, the sample of 257 was not large enough to use a list-wise selection of cases). Prior to conducting the regression analysis, we examined the data for outliers and multicolinearity. Colinearity diagnostics produced tolerance levels and variance inflation factor levels within the acceptable limits cited in the literature. 1

To examine whether variation in engagement had more to do with predispositions, academic ability, and demographic characteristics than with location, variables were grouped in blocks and entered sequentially. The first block included demographic characteristics (i.e., gender, ethnicity, and status as first-generation college student). The second block included measures of academic ability (high school grade-point average [GPA] by percentile and ACT composite score), and motivation (highest degree expected). The third block included self-

reported measures of engagement in academic and social activities while in high school. The fourth block incorporates expectations toward advising as reported during the orientation session. The fifth block, student-advisor engagement, was used to assess the effect of the quality of engagement with advisors on enriching educational experiences. The sixth block in the regression model comprised the location where students had access to academic advising. The order of the blocks conforms to Hu and Kuh's (2002) research on the factors that most influence students' likelihood to engage in university programs.

Changes in Variance Explained

Table 2 summarizes the results of the two regression analyses (one for each student engagement outcome). The R^2 columns depict the proportion of variance explained in each engagement outcome due to demographics, prior academic achievement, past engagement, pre-college expectations for advising, student-advisor engagement, and location of advising. The Δ R^2 columns document the change in the value of R^2 accompanying the entry of the block set. They signify the contribution of instructional practices to student engagement to the augmented differences in students' background or demographic characteristics or their pre-college

¹ Cohen, Cohen, West, and Aiken (2003) suggested that variance inflation factor values of 10 or higher signify multicolinearity problems and that tolerance levels of 0.10 or less are also problematic.

experiences and predispositions.

As can be seen in Table 2, the regression models explained 14.4 and 28.9% of student-advisor engagement and enriching educational experiences, respectively. Most of the variance observed in student-advisor engagement resulted from pre-college factors. This explained variance resulted from the expectations students had prior to their collegiate experiences about engaging with academic advising (4.2%). While students' level of engagement in high school also mattered, its contribution was rather small at approximately 3.0% of the variance observed. The location where advising took place did not contribute in a significant manner.

In contrast to student-advisor engagement, both pre-collegiate and collegiate factors significantly contributed to having enriching educational experiences. Of the pre-college factors, the block of variables regarding predispositions to engage dominated in explaining this engagement factor, accounting for 6.6% of the variance observed, while previous academic achievement accounted for 4.3% of variance, and students' expectations for advising accounted for 2.8% of variance. The engagement with advisors, however, accounted for 9.1% of the variance observed, or a little more than one third of the variance that was explained. Location factors, as a group, did not contribute in explaining enriching educational experiences.

Predictors of Engagement

Results of the two regression models, one each for student-advisor engagement and enriching educational experiences, are reported in Tables 3 and 4. In both models, the independent variables as a group were significantly associated with student-advisor engagement (F[11,257] = 3.156; p < .01) and enriching educational experiences (F[12,257]

= 6.98; p < .01). Each engagement factor appears to be differentially affected by different pre-college and collegiate experiences.

Student-advisor engagement. Regression results confirm the initial ANOVA test: Location where advising takes place did not matter to student engagement with advisors; however, with a moderate size effect (B = .236), pre-college expectations for advising are predictors of advisee-advisor interactions. For every one unit of standardized increase on pre-college expectations, students were approximately 9 percentile units above the overall student-advisor engagement mean.

Enriching educational experiences. Even after controlling for confounding pre-collegiate factors and demographic characteristics, an impact was found on advising within a living-learning community setting. Students participating in learning communities reported higher enriching educational experiences than those students securing their advising at conventional residential halls or in the central advising office. In addition to living-learning communities, enriching educational experiences are significantly associated with students' social engagement while in high school and engagement with college advisors. The effect of positive social engagement experiences and of engaging with one's academic advisor was of moderate size (B = .326). For every standard deviation unit increase seen in this variable, enriching educational experiences increases by almost one third standard deviation unit over or 13 percentile units above the mean.

In summary, partial support was found for the hypothetical connection between location of advising and student engagement for our sample of undecided first-year college students. Location of academic advising did not have a significant impact on student-advisor engagement; however, inte-

Table 2 Contribution of factors to student engagement

		-Advisor gement	_	Educational iences
Blocks of Factors	R^2	ΔR^2	R^2	ΔR^2
1. Demographics	.038	_	.042	
2. Previous academic achievement	.055	.017	.085	.043*
3. Past engagement while in high school	.085	.030*	.151	.066**
4. Students' expectations for advising	.127	.042**	.179	.028**
5. Student-advisor engagement			.289	.091**
6. Location	.144	.017	.198	.019
Final model R ²	.144		.289	
Final model R ² adjusted	.098		.248	
F-test, df	3.156 **,	11	6.98 **, 1	2

Note. *p < .05; **p < .01.

Table 3 Regression model for student-advisor engagement

	Unstandardized	Standard	Standardized
Variable	Betas	Error	Betas
Female	.064	.120	.037
White	308	.178	122
First-generation in college	.123	.197	.042
High school percentile	.003	.007	.030
ACT composite	017	.020	066
Degree aspiration	022	.059	026
High school academic engagement	.128*	.060	.149
High school social engagement	089	.070	085
Expectations for advising	.339**	.101	.236
Central advising office vs. others	192	.110	124
Living-learning community vs. others	.040	.156	.018

Note. *p < .05; **p < .01.

Table 4 Regression model for enriching educational experiences

	Unstandardized	Standard	Standardized
Variable	Betas	Error	Betas
Female	.179	.098	.117
White	.158	.147	.070
First-generation in college	.127	.161	.049
High school percentile	006	.006	063
ACT composite	019	.016	080
Degree aspiration	.066	.048	.085
High school academic engagement	.086	.050	.112
High school social engagement	.142**	.057	.153
Expectations for advising	.148	.085	.115
Student-advisor engagement	.291**	.057	.326
Central advising office vs. others	.151	.091	.109
Living-learning community vs. others	.285**	.128	.114

Note. *p < .05; **p < .01.

grating academic advising in living-learning communities had a significant effect on engagement with enriching learning experiences among this group of first-year undecided students. This association was significant even when other predictors of engagement were held in control.

Discussion

Determinants of Engagement

In our study, we questioned whether location of academic advising delivery has an impact on the quality of students' interactions with advisors. Grounded in the literature (e.g., Love & Tinto, 1995; Schein, 1995; Zhao & Kuh, 2004), the hypothesis we posed stated that students housed in living-learning communities and residential halls with advising offices would be more prone to develop personal relationships with academic advi-

sors than are those students securing their advising in central offices. Our results indicate that location does not matter. Learning communities, residential halls, and central offices offer equal opportunities for students to engage with academic advisors in a meaningful manner.

However, we found that location of advising does make a difference in exposing students to enriching educational experiences. Consistent with the literature, students in the learning communities in our study reported greater gains in learning and personal development as a result of their experiences with the university. Therefore, our findings validate the claim that learning communities, as a result of the social relationships they foster with academic advisors, peers, and faculty members, can be tools upon which universities can rely for increasing student engagement and persistence (Kuh, 2003; Pike,

2000; Pike et al., 1997; Stassen, 2003; Tinto, 1997; Zhao & Kuh. 2004).

While seeking to answer questions regarding the impact of advising location, we reaffirmed the centrality of the academic advisor in student development and learning. In appraising the student-advisor relationship, our scale highlighted such domains as helping define personal and career goals, discussing personal matters, expressing interest in students' academic and personal success as well as the importance to the student of getting to know his or her advisor and accessibility to the assigned advisor. It is evident that the depth of these relationships between advisors and students along those domains empowered the student to become engaged in educational practices leading to enriching educational experiences.

Our results also call attention to the role of high school counseling as a precursor to engagement with college academic advising. As our analyses show, students who were engaged with high school counselors were also more likely to be engaged with college advisors. This finding is consistent with McDonough's (1997) research showing that high school counseling eases the transition from high school to college. However, our results uncover another facet of the importance of high school counseling—shaping a student's plans, predispositions, and expectations toward college advising. In other words, the high school counselor socializes the student into the culture of academic advising that would later on prove critical for engaging college advisors and acting upon their advice in using educational services. This finding calls for collaborating efforts between colleges and high schools on behalf of creating seamless advising programs.

Strengths and Limitations

Several limitations in this study are important to consider when interpreting our results. First, the length of time that lapsed between surveys may be a shortcoming: One academic year may be inadequate to determine the real impact of academic advising on the academic and personal plans of students. However, our study captures the most critical year in the academic life of the college student. Past researchers (e.g., Metzner, 1989) have shown that the freshman year plays a pivotal role in defining a student's career goals and even individual student's decisions to persist in college (see Barefoot, 2000; Pascarella & Terenzini, 2005; Tinto, 1997; Upcraft & Gardner, 1989).

A second limitation rests on the possibility that engagement with academic advisors may be based more on the personality, commitment, and knowledge of the advisor than the location where the advising takes place. Kelley and Lynch (1991, p. 31) proposed that "the advisor who is a warm, caring individual will fare better in the evaluative process than one who is more distant, even though both may have equal knowledge about the system and conduct equally effective meetings." An individual advisor's openness to informal interactions, accessible personality, and commitment to attending community events may have a more significant impact on student engagement than the location where advising takes place. While it is an important consideration, this limitation is controlled to some extent in this study. The central advising office is staffed by 12 academic advisors and each residence hall or living-learning community office is staffed by 2 to 4 professional advisors. Students may have interacted with different advisors throughout the year, even though they received advising in the same location.

Third, our study is targeted to undecided first-year students; thus, generalizations to other groups are discouraged. The sample was selected for several reasons beyond its availability to the advising office: Not only does the literature indicate that first-year students constitute the majority of undecided students (Gordon, 1995), it has also been argued that addressing their advising relationships in their first year of college is important for students to return for their second year (Boyer, 1987; Upcraft & Gardner, 1989).

Despite these limitations, this study addresses some of the gaps in the literature regarding the area of location of student services. Many research universities now staff satellite offices for student services (e.g., writing centers, academic advising, and personal counseling) on college campuses based on the assumption that providing services at times and places convenient to students will encourage them to take advantage of available resources. While the notion rests on a sound theoretical basis, empirical research to back the assertion does not exist.

Implications for Further Research

Strong student-advisor relationships are pivotal in enhancing students' first-year educational experience. This study showed that the location of academic advising has an impact on students' participation in educational activities and that location of advising has only an indirect link to student-advisor engagement. While the living-learning communities in this study do not have an impact on the quality of student-advisor engagement, they did enhance students' participation in enriching

educational experiences. Based on this conclusion, future researchers should consider the variables that impact student engagement.

Because the majority of students did not have significant contact (more than two meetings with their academic advisor during the academic year when this research was conducted), research on the impact of location of academic advising should utilize another measure for effectiveness. Although this study supports the conclusion that location of advising does not have a significant impact on student-advisor engagement, the data show that the majority of students had limited contact with academic advisors. While student engagement is an accurate measure of student learning, an alternate measure that could more directly assess students' relationships and experiences with academic advising might be a better measure for the differential impact of location on advising.

The impact that academic advising may have on student engagement may not be strong enough to overcome the nature of the undecided student population to be less engaged than their decided counterparts (Hu & Kuh, 2002). The link between academic advising and student engagement does not show statistically significant differences, particularly over the course of only one school year. In a follow-up study those students that research (Hu & Kuh. 2002) shows are more likely to be engaged should be included: declared students, juniors and seniors, and those enrolled at private or small institutions. Because residential advising offices at the focus institution are offered in living spaces predominantly housing first-year students, we could not access the upper level students who are relatively more likely to be engaged. In addition, the only staff at residential advising offices come from the academic advising office for undecided students. Therefore, the nature of the sample population may have a negative impact on the results.

Implications for Practice

Because this research shows that engagement in academic and social activities in high school and students' expectations for college academic advising are both statistically significant for students' engagement with college advisors and for engaging in college educational programs, college stakeholders need to work more closely with high school counselors and high school students. Both high school counselors and college advisors working with high school students can develop expectations for advising among students. Both groups must communicate the value of academic advising

and the potential benefits advising affords to students. This is especially pertinent as students and their families show increasing concern about college costs and express the need for a direct path to graduation.

Even as predispositions to engage and demographic differences are controlled, this research shows evidence that living-learning communities are effective in students' engagement with educational experiences. Academic advisors can play a larger role in encouraging incoming college students to participate in a learning community if they interact with students while they are still in high school. Academic advisors should work more closely with high school guidance counselors to provide information about learning communities, advising, and other academic programs.

Conclusion

Based on the belief that convenient services will have a greater impact on students than those offered in a central location, a number of universities now offer advising services in students' living spaces. This study shows that advising provided in living-learning communities has a significant impact on students' participation in educational programs. It also shows those students' expectations for advising, level of engagement in high school, and previous academic achievement play a significant role in their likeliness to engage with academic advisors and with educational activities. College academic advisors must recognize that students develop attitudes and inclinations about advising before they enter the university, and they should work with high school students and counselors to ensure that students understand the significant positive impact a relationship with their academic advisor will afford them.

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