

Factors Influencing Honors College Recruitment, Persistence, and Satisfaction at an Upper-Midwest Land Grant University

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INTRODUCTION

Student success and the “completion agenda” are important issues in higher education today (Complete College America). For honors programs and colleges, understanding and advancing these issues requires data-driven approaches tailored to the unique honors student population and broader institutional contexts. Honors faculty and administrators hoping to succeed in their recruitment, retention, and graduation efforts need an accurate understanding of why students decide to enroll and persist as well as their satisfaction with honors experiences. Our research data provide particular insight into the student experience at South Dakota State University (SDSU) but may also be instructive to a broader audience of honors professionals seeking to enhance their programs’ impact and their students’ success.

METHODS AND DATA

In the spring of 2012, as a part of our honors college’s strategic planning process, we invited students at SDSU to complete an online survey about their honors experiences. Herron’s lead essay for the Forum on Admissions and Retention in this issue of *JNCHC* calls on honors administrators to leverage “data-based assessments” for program improvement and to “have the numbers to support our claims” about the impact of honors. Our study seeks, in part, to answer Herron’s call and, more broadly, to guide and inform the future development of honors at our university.

We developed an online survey to collect the following information: 1) the key factors that affected students’ initial decision to enroll in the honors college; 2) the main factors affecting current honors students’ decision to

continue their enrollment; 3) the challenges students faced in graduating with Honors College Distinction; 4) students' satisfaction in their honors experience; and 5) student characteristics such as demographic background, involvement with the honors college, academic performance since high school, and future career plans. We also included open-ended questions to solicit students' comments and suggestions that we could use in future recruitment efforts, curriculum development, and strategic planning.

The researchers invited a small group of current honors students who serve on the Dean's Student Advisory Council to review an early draft of the questionnaire and suggest modifications of its structure and content. Based on their input, we shortened the length of the original questionnaire and selected the thirty-five most important questions for the final draft. The formal survey study was conducted between April and May of 2013. Students were encouraged to use the link sent through their emails to finish the questionnaire online. Alternatively, they could scan the barcode through their cell phones or other electronic devices to access the questionnaire. At the end of the survey period, researchers collected the answers and transferred them into SAS format data for analysis. After deleting unusable responses, we had data from 138 students who completed the survey (a 65.09% completion rate). Log records showed that the average time to complete the survey was twenty minutes. The 138 participants represent approximately 28% of the total number of students pursuing graduation with Honors College Distinction at SDSU, a public land-grant university with a total enrollment of approximately 12,500 students, 40% of whom are first-generation.

Table 1 provides descriptive statistics of the 138 sample students. The data indicate that about 66% were female; the average age was 20.14. 20% were seniors, 17% juniors, 27% sophomores 27%; and 34% freshmen; 84.62% intended to graduate with Honors College Distinction, 1.4% did not, and 13% were undecided; 96% identified themselves as white; the average high school GPA was 3.90; the average current college GPA was 3.74; and only 7% were transfer students.

To determine their career plans, we asked respondents to use Likert scale (i.e., 1: strongly disagree; 5: strongly agree) to rank statements about their plans to pursue a PhD, master's, bachelor's, or professional degree. Table 1 indicates that most students were very determined to earn a bachelor's degree (4.19) and also to pursue a master's (3.30) and professional degree (3.28). On the other hand, the score for a PhD (2.65) suggests a smaller level of determination, possibly because the majority of sample students were freshmen and sophomores, who were perhaps less aware of opportunities associated with graduate education.

Table 1 also provides descriptive statistics of sub-groups divided by gender, STEM or non-STEM major or minor, and year in college. The females were approximately one year younger than the males, with a higher percentage of freshmen, and had higher ACT and GPA scores. A higher percentage of female students planned to pursue a professional degree (3.28 vs. 2.71), but male students showed a stronger interest than females in pursuing a PhD (2.95 vs. 2.65). Table 1 suggests that more female students planned to graduate with Honors College Distinction. Moreover, the majority of the sample students (116) either had a STEM major or minor. Compared to non-STEM students, STEM students were younger and more likely to pursue a professional degrees.

We defined as STEM majors or minors students in engineering, agriculture, biological sciences, nursing, pharmacy, and selected disciplines in the College of Arts and Sciences (e.g., chemistry, biochemistry, physics, and geographic information sciences) and the College of Education and Human Sciences (e.g., health and nutritional sciences or exercise science). These colleges also include a significant number of students pursuing pre-health professional pathways such as pre-medicine, pre-dentistry, pre-optometry, or pre-physical therapy. The STEM/non-STEM breakdown reported in the study generally reflects the current honors college enrollment at SDSU. We explored these differences to develop a better understanding of student experiences across a range of academic disciplines.

Table 1 shows we had more lower-level than upper-level students, potentially skewing the results since students in their early college career often have different perspectives than juniors and seniors. We also found that a higher percentage of freshmen respondents were female or transfer students than more advanced students and that sophomore respondents had a smaller percentage of STEM students. In addition, sophomore respondents were less likely to graduate with Honors College Distinction or to pursue a master's or higher-level degrees.

Table 1: Data Descriptive Statics

Variables	Full Sample (N=138)	Male Students Only (N=47)	Female Students Only (N=91)	STEM (N=116)	Non-STEM (N=22)	Fresh. (N=47)	Soph. (N=37)	Junior (N=24)	Senior and above (N=27)
Female (Yes=1)	0.66	0.00	1.00	0.66	0.64	0.70	0.62	0.63	0.63
age	20.14	20.30	19.57	20.24	19.57	18.7	20.00	20.70	22.04
Stem (yes=1)	0.84	0.83	0.85	1.00	0.00	0.79	0.57	0.96	0.85
Freshman (Yes=1)	0.34	0.30	0.36	0.32	0.45	1.00	0.00	0.00	0.00
Sophomore (Yes=1)	0.27	0.30	0.25	0.26	0.32	0.00	1.00	0.00	0.00
Junior (Yes=1)	0.17	0.19	0.16	0.20	0.05	0.00	0.00	1.00	0.00
Senior (yes=1)	0.20	0.21	0.19	0.20	0.18	0.00	0.00	0.00	1.00
High school GPA	3.90	3.86	3.92	3.91	3.87	3.90	3.93	3.96	3.91
White	0.96	0.96	0.96	0.96	0.95	0.91	1.00	1.00	0.96
Transfer Student	0.07	0.06	0.07	0.06	0.09	0.11	0.03	0.00	0.11
College GPA	3.74	3.70	3.76	3.74	3.76	3.75	3.70	3.76	3.76

ACT	29.16	29.89	28.80	29.16	29.19	29.17	29.14	29.00	29.11
Plan to pursue PhD degree	2.65	2.95	2.52	2.75	2.11	2.93	2.22	2.68	2.76
Plan to pursue Master's Degree	3.30	3.40	3.25	3.27	3.47	3.28	2.79	3.43	4.00
Plan to pursue bachelor's degree	4.19	4.13	4.21	4.07	4.75	4.16	4.31	4.20	4.15
Plan to pursue Professional degree	3.28	2.71	3.55	3.55	1.81	3.27	3.15	3.52	3.24
Plan to graduate with Honors degree (yes=1)	0.85	0.81	0.86	0.84	0.86	0.81	0.76	0.86	0.96

RESULTS

We now present and discuss the students' responses to the following questions:

- their initial reasons for enrolling in the honors college;
- their reasons for continuing to pursue graduation with Honors Distinction;
- their view of the most challenging aspects of graduating with Honors Distinction; and
- the factors that determined their satisfaction with their honors experience.

All the questions were developed under a five-level Likert scale system, which we chose to ensure the symmetry of categories, with the midpoint presenting a clearly defined linguistic qualifier for the respondents. After transferring the original information to the SAS format data, we used the SAS "PROC MEANS" procedure to generate mean values and standard deviations of the answers. We also used the "PROC NPAR1WAY" procedure to conduct nonparametric tests (i.e., Kruskal-Wallis Tests) to compare the answers between sub-groups. The null hypothesis of these nonparametric tests was that answers given by respondents in different sub-groups shared the same distribution. The main reasons we chose nonparametric tests over other conventional ANOVA tests were to avoid the normality assumption and to generate more stable results given uneven sample sizes of sub-groups. We also added the comparison and discussion of answers from the sub-groups to reflect the potentially various perspectives. In the presentation of data in tables below, p values at the significance level of .05 are represented with an asterisk (*); p values at the significance level of .01 are represented with two asterisks (**); and p values at the significance level of .001 are represented with three asterisks (***)

Results of the survey provide insight into SDSU Honors College students' perspectives and may be applicable to other honors college administrators hoping to maximize student satisfaction and success.

FACTORS INFLUENCING STUDENTS' INITIAL DECISION TO ENROLL IN THE HONORS COLLEGE

One series of survey questions asked students to rate the relative strength of various factors influencing their initial decision to enroll in the honors college. We listed nine factors and asked respondents to rate the influence of these factors, with "1" as "not influential" and "5" as "extremely influential." Table 2 summarizes the average scores for these factors, and Figure 1 (the radial chart) provides an illustration of the relative importance for each factor.

Table 2: Factors influencing students’ initial decision to enroll in the Honors College

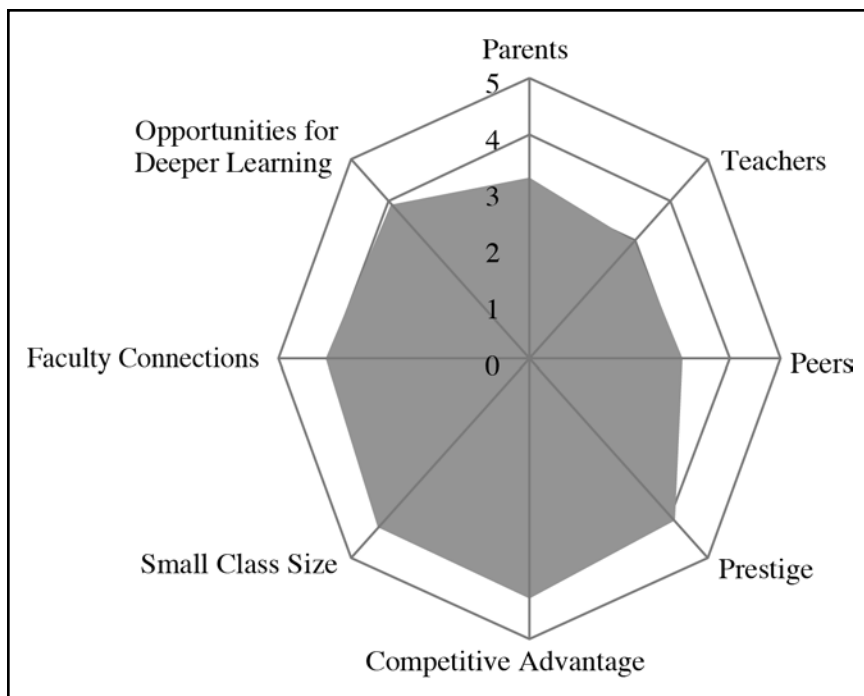
Factor	Average Score*
Competitive advantage	4.292
Small class size	4.262
Prestige associated with Honors College enrollment	4.069
Connections with faculty	4.048
Opportunities for deeper learning	3.896
Supplemental opportunities (e.g. research, travel, leadership, service)	3.441
Parents	3.241
Peers	3.042
Teachers	2.952
Average	3.694

*Score refers to average responses to the Likert-type scale questions; 1 = not influential, 3 = neutral, 5 = extremely influential.

The highest-scoring responses were competitive advantage associated with honors college enrollment (4.29) and smaller classes (4.26). Connection with faculty (4.05), prestige associated with honors college enrollment (4.07), and opportunities for deeper learning (3.90) were also highly rated by students. On the other hand, “supplemental opportunities” had a score of 3.44, indicating that our students were less motivated by the desire to do research, travel, and assume leadership positions when they made their initial decision to enroll in the honors college. Moreover, Table 2 suggests that the influence of parents (3.24), teachers (2.95), and peers (3.04) was relatively neutral. The SDSU Honors College, unlike many honors programs across the country, does not provide financial incentives such as scholarships or textbook stipends to incentivize student enrollment, but other honors programs might include such factors in a similar survey.

Table 3 demonstrates the average score of each factor given by each subgroup. Although male students tended to give lower scores for most of the factors, the results of Kruskal-Wallis tests indicated no significant gender differences. Moreover, the scores given by STEM respondents were generally higher than those given by non-STEM students. Compared to non-STEM students, the Kruskal-Wallis Test results showed that STEM students gave

Figure 1: Factors Influencing Students' Initial Decision to Enroll in Honors



significantly higher scores to influence of peers, competitive advantage, and connections with faculty.

While the overall scores were similar to those shown in Table 2, Table 3 suggests that prestige was the only statistically significant factor when comparing scores by students in different academic years. We found sophomore students generally gave lower scores for all factors than students in other years, especially compared to freshmen and seniors. As shown in Table 1, our sample sophomores had a smaller percentage of STEM students and lower ACT and GPA scores. They were also less willing to consider pursuing further education after the baccalaureate degree; the differences in characteristics may provide some insight into the lower scores. Table 3 also shows that the scores of prestige, connection to faculty, and supplemental opportunities became smaller as students moved to later phases of their college career while the scores for opportunities for deeper learning increased.

Table 3: Comparison of Initial Honors Enrollment Factors, by Gender, STEM/Non-STEM, Year in School

Factor	Female	Male	Kruskal-Wallis Gender	STEM	Not STEM	Kruskal-Wallis Major	Fr	So	Jr	Sr	Kruskal-Wallis Year
Parents	3.37	3.085		3.24	3.41		3.38	3.24	3.04	3.35	
Teachers	2.92	3.127		3.07	2.59		3.09	2.81	3.00	3.00	
Peers	3.19	2.934		3.23	2.45	**	3.15	3.27	3.22	2.62	
Prestige	4.17	3.38		4.07	3.95		4.47	3.49	3.96	4.12	***
Competitive Advantage	4.28	4.22		4.38	3.64	***	4.47	3.97	4.26	4.27	
Small Class Size	4.31	4.36		4.38	4.05		4.38	4.35	4.04	4.38	
Connections with Faculty	4.06	4.02		4.18	3.36	***	4.09	4.19	3.91	3.92	
Supplemental Opportunities	3.50	3.23		3.46	3.14		3.55	3.46	3.42	3.15	
Opportunities for Deeper Learning	3.94	3.87		3.92	3.91		3.81	4.03	3.83	4.12	

REASONS TO CONTINUE PURSUIT OF GRADUATION WITH HONORS COLLEGE DISTINCTION

The survey contained a set of questions asking respondents to rate the factors affecting their decision to graduate with Honors College Distinction. As indicated in Table 4 and Figure 2, the quality of the honors learning environment was the top-cited factor influencing students' continuing pursuit of graduation with Honors College Distinction, followed closely by connections with honors college faculty and access to priority registration. Parents were least influential.

Table 4 shows students gave higher scores to prestige (4.11), connection to faculty (4.21), and supplement opportunities (3.67). These factors also had high scores in Table 2 for questions about students' initial decision to enroll in honors. In addition, although students gave a lower score for small class size (3.84), Table 4 suggests that the quality of classes offered/honors learning environment had the highest score (4.24) of all the factors.

Overall, the high scores for quality-related factors shown in Table 4 indicated that our students had surpassed their initial expectations and continued to consider having high-quality education/services as the key factor in deciding to graduate with Honors College Distinction whereas parental influence was notably smaller than it had been on initial enrollment (3.24 vs. 2.63).

Table 5 shows the scores given by sub-groups for the same factors included in Table 4. We found the quality of classes, prestige, and the connections to faculty were consistently ranked as the most important factors by all sub-groups.

Females and males gave very similar rank-orders to the factors included in Table 5, but male students gave lower scores to all of the factors. The Kruskal-Wallis Test results indicated that females gave higher scores than males to the connections to other honors students in their decision to continue their honors experience. Moreover, Kruskal-Wallis Test results showed that females also gave significantly higher scores to the importance of prestige. Otherwise, females and males gave similar scores the scores for quality of classes, parents, and small class size.

The comparison between STEM and non-STEM students showed a similar pattern. Although STEM and non-STEM students gave similar rank-orders to most factors, the STEM students gave higher scores to all the factors. The Kruskal-Wallis Test results showed STEM students gave significantly higher scores to small class size, community with other honors students, supplemental opportunities, and access to priority registration. However, we could not find obvious differences in how STEM and non-STEM students rated the most important three factors (quality of classes, prestige, and connection to faculty) as the Kruskal-Wallis Tests failed to reject the null hypothesis of no difference.

Table 4: Reasons for Continued Pursuit of Graduation with Honors College Distinction

Factor	Score*
Peers' influence	3.014
Parents' influence	2.625
Prestige	4.111
Connection to Honors College faculty	4.208
Small class size	3.854
Quality of classes offered/Honors learning environment	4.243
Community with other Honors College students	3.819
Supplemental opportunities (e.g. research, travel, leadership, service)	3.669
Access to priority registration	4.014
Average	3.732

*Score refers to average responses to the Likert-type scale questions; 1 = not influential, 3 = neutral, 5 = extremely influential.

Figure 2: Factors Influencing Continued Honors Enrollment

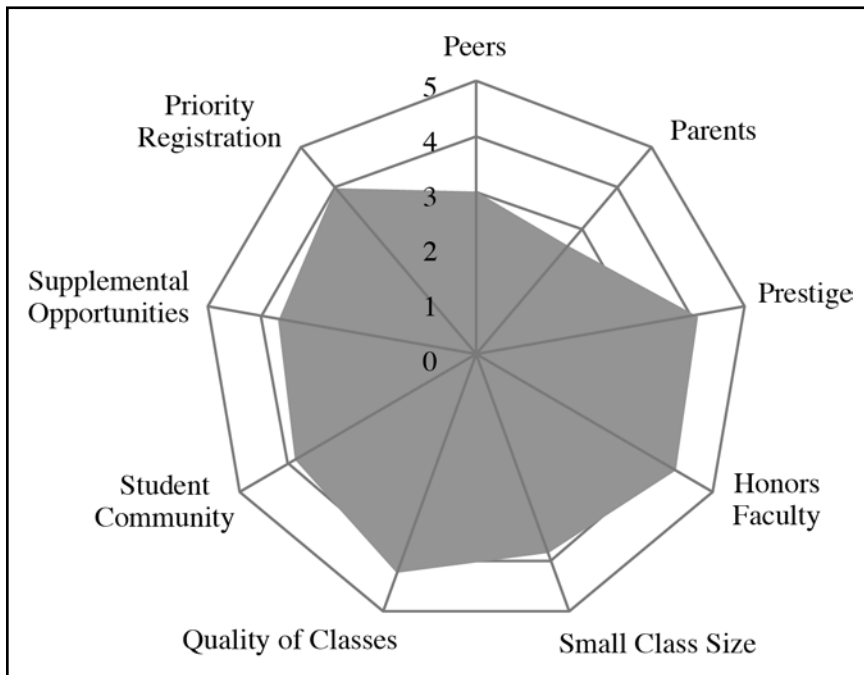


Table 5: Comparison of Continuing Honors Enrollment Factors, by Gender, STEM/Non-STEM, Year in School

Factor	Female	Male	Kruskal-Wallis Gender	STEM	Not STEM	Kruskal-Wallis Major	Fr	So	Jr	Sr	Kruskal-Wallis Year
Peers	3.13	2.83		3.09	2.72		2.89	3.05	3.13	3.24	
Parents	2.68	2.66		2.64	2.96		2.87	2.62	2.71	2.42	
Prestige	4.23	3.87	**	4.12	4.05		4.43	3.84	4.25	3.77	*
Connection to faculty	4.21	4.15		4.23	3.95		4.15	4.03	4.21	4.54	
Small class size	3.91	3.85		3.94	3.64	*	4.14	3.65	3.33	4.23	**
Quality of classes	4.28	4.23		4.29	4.14		4.32	4.11	3.96	4.58	*
Community with other Honors students	4.02	3.43	***	3.89	3.45	*	3.95	4.05	3.59	3.58	
Supplemental Opportunities	3.70	3.57		3.77	3.05	**	3.85	3.41	3.78	3.62	
Access to priority registration	4.09	3.85		4.07	3.68	*	4.30	3.86	3.92	3.85	

Students' class levels did influence how they rated the factors of prestige, small class size, and quality of classes. Table 5 suggests that, as students advanced through their college years, the influence of prestige gradually decreased. The influences of small class size and quality of classes also fell when students entered their sophomore and junior years. However, these influences rose significantly once students became seniors although the administration of the survey in the spring may have influenced responses. Additionally, the Kruskal-Wallis Test showed no significant difference between students' academic years in the ratings of some factors: connection to faculty, access to priority registration, supplemental opportunities, and community with other honors students. Finally, the influence of peers and parents was rated consistently low among all students.

MOST CHALLENGING ASPECTS OF GRADUATING WITH HONORS COLLEGE DISTINCTION

Requirements for graduating with Honors College Distinction at SDSU are as follows: 3.5 cumulative grade point average; 12 credits of honors general education; 3–6 credits of upper division contracted credits in a major/minor field of study; 3–6 credits of Honors Colloquium (multi-disciplinary examination of a contemporary topic of interest); 3 credits of Honors Independent Study (an original piece of scholarly work, executed under the direction of a faculty member and published or presented at a conference).

The survey questionnaire listed six potential challenges to graduating with Honors College Distinction. Respondents were requested to use Likert scale to rate these challenges. Table 6 and Figure 3 present the results of students' ratings.

As shown in Table 6, students rated most challenges lower than the neutral point of 3 and thus not significant obstacles, but they perceived Honors Independent Study as the most challenging requirement (3.72). Moreover, the scores for completing the contracted courses (2.92) and fitting honors requirements with their major (2.98) suggested some students may have trouble tailoring course plans with their home departments in order to graduate with Honors College Distinction.

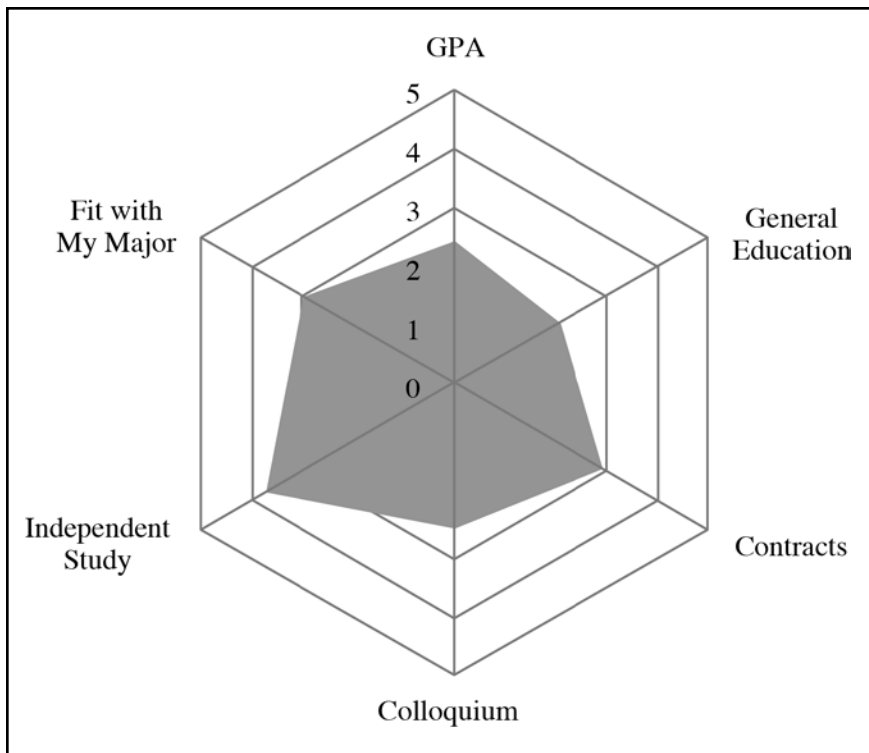
Table 6 shows that students saw completing the honors general education requirements, completing honors colloquium courses, and maintaining the required grade point average as the program's least challenging components. The low score for honors general education requirements (2.08) suggests that fulfilling the twelve-credit requirement as part of their regular four- or five-year program did not seem challenging to most students (the question did not ask students to rate the academic rigor of these courses). Given the strong academic credentials and dedication of honors student, we were not surprised

Table 6: Most Challenging Aspects of Graduating with Honors College Distinction

Factor	Score*
Maintaining required grade point average	2.444
Completing Honors College general education requirement	2.078
Completing Honors College contracted courses	2.915
Completing Honors Colloquium requirement	2.476
Completing the Honors Independent Study	3.716
Making Honors College requirements fit with my major	2.979
Average	2.768

**Likert-type scale: 1 = not at all challenging, 5 = extremely challenging

Figure 3: Student Perceptions of Honors Challenge



that they did not find the required 3.5 grade especially challenging. This study did not include issues relating to general education requirements such as AP courses.

Table 7 offers comparison of students' responses from different sub-groups. Except for fitting honors requirements with their major, male students rated all aspects as being more challenging although the results of Kruskal-Wallis Tests indicated that the differences by gender were not significant.. Table 7 also shows that non-STEM students gave higher scores to most of the challenges except maintaining required GPA (2.27 vs. 2.46) and completing general education required courses (2.00 vs. 2.10). The results from Kruskal-Wallis tests suggest no significant differences between STEM and non-STEM students' responses. Moreover, we found that most of the scores decreased as students moved toward later phases of their college career except for the challenge of finishing independent study, and sophomores and juniors found making honors requirements fit with the their major requirements significantly more difficult than freshmen or seniors did.

STUDENT SATISFACTION WITH HONORS COLLEGE EXPERIENCE

Another set of questions in the survey solicited students' input on their satisfaction with different components of their honors college experience. Responses from students are reported in Table 8 and Figure 4. With the exception of the facilities item (score = 3.860), average student satisfaction scores were between very satisfied (score = 4) and extremely satisfied (score = 5).

Students reported their highest levels of satisfaction with the following components: the faculty (4.62), the Honors College Dean's office (4.51), the honors college living and learning community (4.36), and their overall honors experience (4.37). This result suggests the primary importance of leadership and faculty in student satisfaction and also the value of an excellent living and learning environment. Other components such as honors courses (4.32), peers (4.25), advising and support (4.22), and honors college activities (4.08) also received scores higher than 4.00. In keeping with these positive responses, 94% of respondents indicated that they would recommend the honors college to others; 5% responded 'it depends' or 'not sure'; and only 1% indicated that they would not recommend the honors college.

Table 9 summarizes the response of each sub-group about their satisfaction with the honors college experience. Female respondents reported higher satisfaction than males with their overall honors college experience. However, we found male students were more satisfied with honors faculty, advising and support, and the dean's office even though the results of Kruskal-Wallis Tests indicated that the differences by gender were not significant. On the other hand, The Kruskal-Wallis Test results showed female students were significantly

Table 7: Comparison of Most Challenging Aspects of Honors by Gender, STEM/Non-STEM, Year in School

Factor	Female	Male	Kruskal-Wallis Gender	STEM	Not STEM	Kruskal-Wallis Major	Fr	So	Jr	Sr	Kruskal-Wallis Year
Grade Point Average	2.38	2.51		2.46	2.27		2.55	2.62	2.46	1.96	
General Education	2.00	2.23		2.10	2.00		2.06	2.16	2.25	1.88	
Honors Contracts	2.84	3.13		2.88	3.30		3.16	3.05	2.79	2.58	
Honors Colloquium	2.43	2.63		2.48	2.59		2.57	2.72	2.25	2.23	
Independent Study	3.69	3.74		3.68	3.85		3.89	3.67	3.71	3.42	
Fit with Major Requirements	3.04	2.87		2.98	3.00		2.91	3.24	3.25	2.38	*

Table 8: Student Satisfaction with Their Honors College Experience

Component of Honors Experience	Score
Honors College courses	4.319
Honors College faculty	4.616
Advising and support for Honors College students	4.215
Honors College Dean’s Office	4.514
Honors College activities and opportunities	4.077
Honors College facilities	3.860
Fellow Honors College students	4.246
Honors College living and learning community***	4.360
Overall Honors College experience	4.368
Average	4.268

***Respondents who had not lived on the Honors floor were instructed to leave this question blank.

Figure 4: Student Satisfaction with Honors Experience

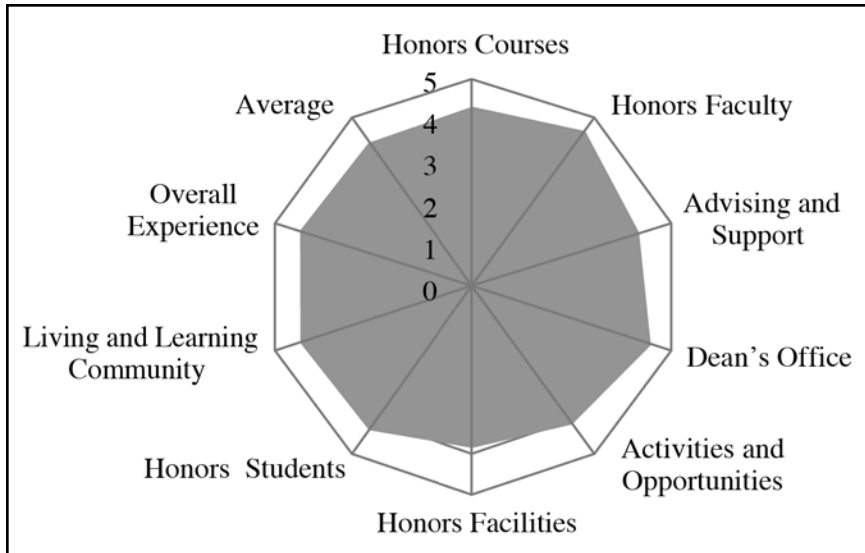


Table 9: Student Satisfaction in Honors by Gender, STEM/Not STEM, Year in School

Factor	Female	Male	Kruskal-Wallis Gender	STEM	Not STEM	Kruskal-Wallis Major	Fr	So	Jr	Sr	Kruskal-Wallis Year
Honors Courses	4.35	4.28		4.39	4.00	**	4.26	4.19	4.33	4.58	
Honors Faculty	4.59	4.62		4.65	4.32	*	4.49	4.65	4.67	4.62	
Advising and Support	4.16	4.34		4.28	3.91		4.04	4.35	4.13	4.42	
Dean's Office	4.43	4.66		4.55	4.32		4.53	4.51	4.38	4.54	
Activities and Opportunities	4.13	4.00		4.17	3.62	***	4.11	4.03	3.96	4.20	
Facilities	3.94	3.72	*	3.89	3.73		3.98	3.95	3.52	3.85	
Fellow Honors students	4.42	3.96	***	4.31	4.00		4.17	4.51	4.09	4.20	*
Living Learning Community (if applicable)	4.38 (N = 48)	4.19 (N = 26)		4.34	4.40		4.59 (N = 22)	4.38 (N = 21)	3.98 (N = 15)	4.46 (N = 13)	**
Overall Experience	4.40	4.38		4.44	4.14	*	4.34	4.32	4.25	4.69	

more satisfied with facilities and fellow students than male students, and they also gave higher scores for honors courses, the living and learning community, and honors activities.

STEM students reported greater satisfaction than non-STEM students with almost all components of their honors experience. The Kruskal-Wallis Test results indicated STEM students were significantly more satisfied with honors courses, faculty, and activities and opportunities than their non-STEM counterparts. STEM students also reported significantly higher levels of satisfaction with their overall honors experience.

Data presented in Table 9 suggest that fellow honors students and the honors living learning community were the two factors that showed significant differences in satisfaction related to class level. Seniors ranked satisfaction with their fellow honors students highest; for freshman, satisfaction with the honors living and learning community was highest; and juniors gave slightly lower scores than other students to most of the components except honors courses and faculty. However, the Kruskal-Wallis Test results suggested that these differences were mostly not significant.

DISCUSSION AND IMPLICATIONS

Several trends emerged from the data. One was the reported weakness of influence from parents and high school teachers, ranked the lowest of any of the factors influencing students' initial decision to enroll, but, since all data here is self-reported, it could be that teenagers—particularly high-achieving recent high school graduates—aspire to independence and are not eager to acknowledge the influence of others in their decision-making process. The data suggest that the top-ranked factors—competitive advantage, small class size, prestige, and faculty connections—may resonate primarily with new honors students and thus should be emphasized in recruitment and orientation materials. These data on influences affirm Herron's call for numbers to support our claims about the honors experience. For example, data that quantify the average class size in honors, student/faculty ratio, and the competitive advantage earned through an honors education would strengthen the program's ability to attract prospective students.

The data indicate a difference between the factors that influenced initial enrollment and those that influenced persistence in the program. The primary persistence influences included the quality of the honors learning environment and connections to honors faculty followed by prestige and priority registration. A key implication of this work is the challenge to deliver on the promise of honors. While students may have been attracted to different factors initially, the overall program quality and connections with honors faculty were the most powerful influences on students' decisions to persist in honors. Parents'

influence was even less important than in initial enrollment, perhaps a sign of students' continued personal development and independence.

Most students did not rank maintaining the required grade point average or completing honors curriculum requirements as "challenging, very challenging, or extremely challenging," but they saw the Honors Independent Study requirement as the most challenging honors requirements. This result speaks to our need to demystify the independent study process and provide adequate guidance and support in this capstone experience. One such intervention currently underway at SDSU is Introduction to Independent Study," a course designed to walk students step-by-step through the process of preparing for their scholarly work. This new course represents one of the ways we are trying to follow McKay's suggestion that honors programs must evaluate the effects of program policies and develop ways to encourage retention and graduation.

Our research was gratifying in the reported high levels of student satisfaction with their honors college experience. They were most satisfied with honors faculty and the dean's office, underscoring the importance of the human dimensions of the honors experience. At the time of this survey, the SDSU Honors College had fairly modest facilities that were ranked lowest in student satisfaction in the survey; these included a classroom, the dean's office and conference room housed in the university library, and a living-learning community on one floor of an older residence hall. Beginning in fall 2013, partly because of student feedback, program growth, and momentum, the living learning community has expanded four-fold into a brand new honors residence hall, which also houses the college's classroom, administrative office, and collaborative learning and community building spaces. Thus, we are hopeful that student satisfaction with honors college facilities will improve in future years.

In examining influencing factors, STEM students reported competitive advantage as more important than non-STEM students did, perhaps because of the large number of STEM students aspiring to competitive professional programs. STEM majors may also be more pragmatic in nature and more interested in the tangible benefits an honors education may provide. STEM students also tended to be more satisfied than non-STEM students with honors courses, faculty, activities, opportunities, and their overall honors experience, reflecting the commitment and effort of STEM faculty at SDSU to expand their course offerings and level of participation in honors college activities. While these indicators are positive, they are also a reminder to college administration and faculty to continue their commitment to liberal arts students and programs, long the foundation of honors at SDSU and across the country.

In the comparison between male and female students, females tended to rank relationships as more important, including the influence of peers and the community of honors students and they were more satisfied with their fellow honors students and college facilities. As McKay and also Campbell and Fuqua found in their studies, females were significantly more likely to complete honors requirements than males. Given enrollment trends and the responses of males and females in this study, continued exploration of programmatic strategies to recruit, retain and provide meaningful experiences for male as well as female students will be critically important to the college's future.

In survey responses by class level, sophomores and juniors reported significantly greater challenges in fitting their honors requirements within those of their academic major, perhaps an inevitable consequence of finishing up their general education requirements and beginning to enroll in a larger number of major-specific courses. Further, while SDSU aims many activities and curricular experiences at new freshmen and graduating seniors, we do not work as hard to make second- and third-year students feel connected to the honors college. Recently, SDSU has introduced one-credit sophomore- and junior-level seminars to address program retention and this potential mid-stream drift.

Senior students reported being most satisfied with their honors college experience and saw their honors requirements as less challenging than freshmen, sophomores or juniors did; This likely reflects student maturity and also the timing of the survey when seniors had successfully completed most of their program requirements. These data point to the value of the honors seniors serving as peer mentors to provide encouragement and support to younger students. As discussed by Campbell and Fuqua, such approaches and supports enhance overall program retention and satisfaction.

Among the several limitations of this research was that respondents skewed young and female. While SDSU's rapidly growing honors college is majority-female, and freshman and sophomore classes are significantly larger than junior and senior classes, the sample is disproportionately so. Also, the online survey took respondents on average twenty minutes to complete, and thus only 138 students, of the 212 who started the survey, completed it (65.09%), possibly influencing responses. We will streamline future assessment efforts to enhance participation and survey completion rates. Finally, the sample was not random; all students were invited to complete the survey, and those who responded chose to do so, their only incentive being a coupon for a free ice cream cone, so results cannot be generalized to a broader honors college student population at SDSU or beyond.

CONCLUSIONS AND RECOMMENDATIONS

As Achterberg argues, stereotyping honors students is inappropriate and misleading. Administrators should avoid sweeping conclusions and work to gather empirical data to inform their decisions. This study is one attempt to gather some of that “more empirical data.”

These data have prompted and informed a variety of programmatic initiatives at SDSU, some of which may be appropriate for comparable honors colleges and programs seeking to strengthen student success:

1. designing recruitment materials and messages that emphasize competitive advantage, prestige, and small class sizes;
2. supporting opportunities for deep learning and engagement between honors college faculty and students;
3. investing in honors college facilities, with special attention to living and learning environments;
4. providing targeted mid-program support to honors students that assists them in integrating honors requirements with those in their major fields of study;
5. distributing more information and enhancing guidance and support for students as they prepare for Honors Independent Study;
6. investing in the development of a systemic peer-mentoring program and developing enhanced opportunities for meaningful, positive interactions and relationship-building among honors college students;
7. engaging honors college faculty and students in a conversation on academic rigor in honors;
8. conducting a more focused examination of the honors college student experience in different academic majors;
9. convening faculty, students, and appropriate administrators to discuss strengthening the honors college student experience in the liberal arts; and
10. examining curricular and extracurricular opportunities to ensure appeal and relevance to both male and female students.

Future research may probe our survey responses and produce further data to enhance understanding of factors that influence honors student enrollment, persistence, and satisfaction. Such data will ground administrators in their students’ perspectives and help them to target recruitment materials, programming, and services more effectively. Qualitative analyses will shed further light and deeper insight into the experiences of honors college students

and help achieve maximum benefits. Given the enormous range and diversity of honors programs, other institutions are cautioned against interpreting any institution-specific data as having particular relevance for their programs. However, engaging in a similar attempt to study, analyze, and better understand their own students' experiences may produce the insights and consequent adjustments that we have made at SDSU.

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