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# Student Perception and Affinity: Establishment of an Institutional Framework for the Examination of Underrepresented Programs Such as Agriculture in Honors

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**Abstract:** This (2019) study assesses student perceptions of an honors college relative to other colleges in an institutional framework. Disproportionately low enrollments in honors from specific majors (particularly those in the College of Agriculture, Food, and Environmental Sciences) prompt researchers to investigate the culture of honors, perceived curricular demands, and the relationship of honors to other colleges and the students they serve. Researchers survey honors and non-honors students ( $n = 259$ ) across disciplines ( $n = 59$ ) representing all academic colleges across campus. Data suggest that while a majority of students affirm their abilities to complete the honors curriculum and perceive honors study to be beneficial, fewer than half (.4) of respondents report actively pursuing honors distinction. Researchers identify three major reasons: perceived lack of time, misunderstanding of requirements, and aversion to independent study. Respondents also indicate that their interests in honors might increase if connections between honors and their majors/colleges were more apparent. The authors conclude that student-centered ideas for creating value in honors are essential for future efforts in programming and recruitment.

**Keywords:** student recruitment; student attitudes; QuestionPro software; Association of Public and Land-Grant Universities (APLU); South Dakota State University (SD)—Van D. and Barbara B. Fishback Honors College

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## INTRODUCTION

From the earliest days of the United States, its national leaders have recognized that agriculture is a critical tool for the survival of humanity. Thomas Jefferson once said, “Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness.” Later, in 1862, Congress passed and Lincoln signed the Morrill Act, granting each state land to form an agricultural college where students could learn practical, everyday skills that would revolutionize the agricultural industry. In 2009, the National Research Council urgently called for transformative education in agricultural sciences, and in 2014 the United States Department of Agriculture identified five grand challenges affecting the world that can be addressed through advances in agricultural sciences.

Despite the emphasis that national leaders place on disciplines such as agriculture, these disciplines remain largely underrepresented within honors colleges and programs in higher education (Sellick, 2013), thus disregarding one important element of diversity. In considering the importance of a diverse honors student population, West Virginia University President E. Gordon Gee and Kenneth P. Blemings saw one of the biggest benefits to be an increased amount of purposeful, rigorous discussion in classrooms as more honors students come to campus (2015). As students become more and more diverse, this upper-level discussion is extended into more classrooms. Fortunately, honors education at institutions of higher education has experienced growth in numbers as well as diversity of the programs and opportunities offered over the past fifty years (Scott & Smith, 2016).

The benefits of diversity are just one of the reasons that students choose to pursue honors. According to one study, the top reason that students pursue honors is the quality of classes offered and the learning environment created in honors classes and community (Nichols & Chang, 2013). The advantages of handpicked and engaging professors, innovative learning strategies, and cultural experiences are also compelling reasons for choosing to participate in honors (Pattillo & Tkacik, 2015).

Alumni of the South Dakota State University (SDSU) Honors College reported that participating in honors added value to both their personal and professional lives (Kotschevar et al., 2018). Alumni credited honors with their ability to apply critical thinking, write effectively, and communicate ideas and beliefs with clarity, civility, and respect. Alumni additionally credited their interactions with honors faculty and the rigors of an honors curriculum with

their abilities to communicate and overcome challenges in their professional roles. Students in honors receive a hands-on, engaging experience: an environment achieved through the smaller, more intimate class sizes with professors who are passionate about their area of study as well as about their students (Nichols & Chang, 2013).

## **Making the Case for Honors and Agriculture**

Land-grant and public universities can attract some of the best and brightest students to their campuses through honors (Sellick, 2013), and these high-performing students can elevate the academic and scholarly outputs of a university. For example, the grand challenges facing our world are complex issues requiring interdisciplinary approaches to innovative solutions. The development of upper-division honors colloquia focused on these challenges simultaneously enables students to develop employability skills such as critical thinking, problem solving, and global awareness while also establishing a classroom where students from every academic discipline can collaborate to address solutions (Nichols et al., 2019). In a recent call for undergraduate research proposals addressing the grand challenge priority areas, student and mentor pairs from nearly every academic college responded (Nichols et al., 2019). Honors students have historically been effective partners in tackling such significant issues (Polk, 2014; Bott-Knutson et al., 2019), and partnerships between honors and agriculture benefit the student, the university, and society at large.

## **Exploring the Honors and Agricultural Education Gap**

Honors colleges and programs provide an enriched education. Employers do not feel that higher education is equipping graduates with the necessary employability skills to be successful in the workforce (Robinson & Garton, 2008), but through the opportunities provided by honors, students strengthen these employability skills as they not only apply them to their major but also connect what they are learning to other areas of study. Most colleges affiliated with the Association of Public and Land-Grant Universities (APLU) that have agricultural programs also offer a cross-college honors program or college (Sellick, 2013). Though the opportunity exists, the fact remains that students from some disciplines remain underrepresented.

## **Objectives**

The current study contributes to Sellick's (2013) call for further research on the missing agricultural population in honors programs across the United States while also affirming previous publications on perceptions of honors in multiple disciplines. Across the seven academic colleges of SDSU, the College of Agriculture, Food, and Environmental Sciences (CAFES) has the second largest undergraduate enrollment (1,917 students in fall 2019) yet the second lowest representation (9%) within honors, only slightly higher than the College of Education and Human Sciences (CEHS), which represents 7% of honors students. This study establishes a framework for extending honors into underrepresented disciplines by exploring student perceptions of and their affinity toward the honors college among 1) honors and non-honors students and 2) students from each academic college with the objective of developing an institutional framework for investigating why some academic disciplines such as agriculture are less represented within honors.

## **MATERIALS AND METHODS**

### **Design**

A 49-question survey was built in QuestionPro and was approved by the SDSU Human Subjects Institutional Review Board (IRB-1904010-EXM). This electronic survey was designed to gain insight into student perceptions of and affinity toward the honors college at SDSU. Questions collected demographic information and information regarding each participant's knowledge of honors requirements, student learning preferences, and campus and civic involvement as well as their involvement in honors. A total of 3,826 undergraduate students enrolled in CAFES, CEHS, and the honors college were invited to participate. The honors college has an equitable distribution of all academic colleges with the exception of CAFES and CEHS, which is why students from those colleges were specifically invited to participate. A total of 259 students from across all academic colleges completed the survey in an average of six minutes. The de-identified data from the survey were analyzed in an aggregate.

### **Data Collection**

The link to the QuestionPro survey was distributed via campus email on April 17, 2019, by contacts in the deans' offices of the three colleges that were

invited to participate in the survey. A single reminder email was sent on May 1, 2019. Data were collected from Wednesday, April 17, to Friday, May 3, of 2019.

## Data Coding

Data were downloaded from QuestionPro, and raw data were used to verify descriptive statistics. Statements and questions were grouped based on the information portrayed, and data were grouped similarly into tables and figures.

## Statistical Analyses

Survey responses of honors and non-honors students were analyzed for statistical significance with a *t*-test (Table 1). Survey responses among academic colleges at SDSU were analyzed with an *F*-test (Table 2) or, for binary responses, a Chi-Squared test. Seven academic colleges were represented in our data set: CAFES; College of Arts, Humanities, and Social Sciences (CAHSS); CEHS; College of Engineering (COE); College of Pharmacy and Allied Health Professions (CPAHP); College of Natural Sciences (CNS); and College of Nursing (CON). Results were considered statistically significant when  $P < 0.05$ . Analyses were completed with R software.

## RESULTS AND DISCUSSION

The survey had a 7% response rate with 259 completed responses. Sixty-three respondents (21.00%) were male, 235 (78.33%) were female, and 2 (0.67%) chose not to disclose their gender. Students from all years responded to the survey; 107 (35.55%) were first-year students, 63 (20.93%) were second-year students, 58 (19.27%) were third-year students, 62 (20.60%) were fourth-year students, and 11 (3.65%) were in their fifth year or beyond. In ethnicities, 288 (92.31%) were Caucasians, 8 (2.56%) were Hispanic or Latinx, 5 (1.60%) were American Indian or Alaskan Native, 5 (1.60%) were Asian, 2 (0.64%) were African American, 1 (0.32%) was Native Hawaiian or Other Pacific Islander, and 3 (0.96%) chose not to disclose or chose “Other.”

The genders of participants are not representative of SDSU’s undergraduate population as 46% of students are male and 54% are female (fall 2019). However, multiple studies find that females are more likely to participate in surveys (Cull et al., 2005; Saleh & Bista, 2017). The participants’ ethnicities are representative of the undergraduate student population at SDSU (fall 2019).

Participants represented 59 different academic majors and all seven of SDSU’s academic colleges. One hundred seventeen (37.62%) students were

from CAFES, 101 (32.48%) from CEHS, 30 (9.65%) from CAHSS, 25 (8.04%) from CNS, 16 (5.14%) from CPAHP, 11 (3.54%) from CON, and 11 (3.54%) from COE. Of the 294 participants, 119 (40.48%) reported pursuing graduation with Fishback Honors College Distinction.

## Comparison of Honors and Non-Honors Students

### *Perceptions of Honors*

Data presented here are compiled from the survey completed by student participants on their perceptions of the honors college and their reasons for choosing whether or not to pursue honors distinction. Honors students were more familiar with honors requirements, and they expressed a greater belief in their ability as well as their desire to complete those requirements ( $P < 0.001$ ; Table 1A). Non-honors students were more likely to believe that certain honors courses might be too difficult ( $P = 0.011$ ). Additionally, about 40% of the students who took the survey indicated that they were pursuing honors distinction, yet over 50% of students believed that they would benefit from participation in the honors college, with honors students being more likely to hold this belief ( $P < 0.0001$ ). While two-thirds of participants said that they were aware of the opportunity to participate in the honors college ( $M = 3.71, n = 266$ ), awareness of honors was disproportionately reported by honors students ( $P < 0.0001$ ). Thus, there is still room for improvement to create a greater awareness of honors among current and future students.

The survey also revealed that students are aware of the honors independent study requirement. In their 2016 study, “Demography of Honors: The National Landscape of Honors Education,” authors Richard I. Scott and Patricia J. Smith looked at the differences in graduation requirements for students pursuing honors at different colleges and universities. Scott and Smith refer to a survey done by NCHC that considered the differences specifically between honors programs or colleges at two-year schools versus four-year schools. This survey found that, in individual projects required for graduation, two-year programs often require students to complete a service project while a thesis is more likely to be required by a four-year institution (Scott & Smith, 2016). Only 38% of the students in the current study agreed or strongly agreed that they desired to complete the necessary independent study ( $M = 3.07, n = 268$ ), with honors students having a greater desire ( $M = 3.8, P < 0.001$ ). This finding is consistent with the study “Factors Influencing Honors College Recruitment, Persistence, and Satisfaction at an Upper-Midwest Land Grant University,” where the authors found that students perceived

the most challenging graduation requirement to be the independent study (Nichols & Chang, 2013).

Student perceptions of honors distinction requirements and the compatibility of honors requirements with their academic programs are reported in Table 1B. Over 62% of participants said that they agreed or strongly agreed that pursuing honors distinction is appropriate for all majors on campus, but they were less likely to agree that their major's requirements fit well with the honors curriculum (41%). Honors students were more likely to believe that honors distinction is appropriate for all majors and that more students should pursue honors ( $P < 0.001$ ).

Honors classes are discussion-oriented (Moritz, 2011), teaching students the skills they need to effectively contribute to an educational discussion. Students bring these skills to non-honors classes, leading to the enrichment of other students' education. Survey participants were asked about their learning preferences, specifically for learning practices that typically differ between honors and non-honors courses (Table 1C). There was no difference between honors and non-honors students related to their preference for classes with clear right and wrong answers versus those that offer a more analytical or application-based approach ( $P = 0.180$ ), but honors students tended to prefer discussion-based or student-led courses ( $P = 0.057$ ). Students reported a strong preference for small class sizes, with 75% of participants agreeing or strongly agreeing that small classes are preferable to large ( $M = 3.99, n = 267$ ), but that preference was more robust among honors students ( $P < 0.001$ ). Small class sizes are a staple of honors courses; thus, honors may be able to recruit more students in the underrepresented colleges by offering smaller class sizes for major-related courses.

Overall, the data presented thus far demonstrate that students prefer the passive characteristics of honors such as small class sizes but balk at the more active elements of honors education such as critical thinking, discussions, and completion of the independent study. These results provide further justification for employers to give preference to honors students since they have actively pursued a more rigorous curriculum.

### *Reasons for Choosing or Not Choosing Honors*

Students pursuing honors distinction were asked to identify the factors that helped them decide to pursue this distinction (Figure 1). The 134 participants pursuing honors were able to select multiple answers, and those not pursuing honors were omitted. The factor with the most pull was the smaller

**TABLE 1. STUDENT PERCEPTIONS OF THE HONORS COLLEGE AT SDSU AMONG STUDENTS WHO SELF-REPORTED AS 1) INTENDING TO GRADUATE WITH HONORS DISTINCTION (N=119) AND 2) NOT INTENDING TO GRADUATE WITH HONORS DISTINCTION (N=175)**

Table 1A. Student Knowledge of and Interest in the Honors College					
Statement	n	Mean Honors Students	Mean Non-Honors Students	t-test	P
I am familiar with the requirements to graduate with honors distinction at SDSU.	291	4.5	2.4	18.65	<.0001
I believe that I could complete the honors curriculum.	288	4.5	3.3	11.44	<.0001
I have the desire to invest the necessary time to take honors courses.	268	4.3	2.5	16.27	<.0001
I believe that certain honors classes may be too difficult.	268	2.9	3.3	2.56	.011
I have the desire to complete the necessary independent study to graduate with honors.	268	3.8	2.5	9.66	<.0001
I believe that I would benefit from participating in the Honors College.	267	4.5	2.9	15.08	<.0001
I was aware of the opportunity to participate in the Honors College at SDSU.	266	4.6	3.0	13.57	<.0001

Table 1B. Student Perception of Honors Requirements and Academic Program Compatibility					
Statement	n	Mean Honors Students	Mean Non-Honors Students	t-test	P
I believe that pursuing graduation with honors distinction is appropriate for any major on campus.	285	4.2	3.3	7.25	<.0001
I believe that my major's requirements fit well with completing the honors curriculum.	287	4.0	2.8	9.25	<.0001
I believe that more students in my major should pursue graduation with honors distinction.	286	3.9	2.9	9.05	<.0001

Table 1C. Student Classroom Preferences for Learning

Statement	n	Mean Honors Students	Mean Non-Honors Students	t-test	P
I prefer classes that have specific right or wrong answers over classes that are more analytical or application-based.	268	3.3	3.1	1.34	.180
I prefer classes that are discussion-based and student-led.	268	3.1	2.8	1.91	.057
I prefer smaller class sizes.	267	4.2	3.8	4.17	<.0001

Note: Student preferences reported using a five-point Likert scale.

class size of honors courses ( $n = 103$ ), which reflects the data in Table 1 that 75% of participants prefer smaller class sizes. Close behind was the factor of achieving honors college distinction ( $n = 99$ ). Toward the bottom of the list is receiving research opportunities through participation in the honors college, which only 40 students selected. Research opportunities often seem daunting and are commonly integral to the required independent study, which in Table 1 only 38% students said they desired to complete. Another factor with lower reported impact was hearing positive student testimonies ( $n = 42$ ). Improvement in advertising the honors college to students may have an impact on this data. Demonstrating a fit between honors and agriculture, food, and natural sciences can be an important recruitment tool for new students at the school who might be interested in pursuing both paths (Fairbanks, 1990) and can help bring bright minds to the school. Finally, four participants chose “other” and elaborated with the following answers “early class registration” and “pride.”

Next, students were asked to identify factors that affected their decision not to pursue honors distinction (Figure 2). Students participating in the honors college were omitted from the question. One hundred sixty-two students responded and were able to select multiple answers. Sixty-nine of the participants believed they did not have the time to complete the honors curriculum. Thirty-seven percent ( $n = 60$ ) said they did not understand the requirements to graduate with honors distinction. The third reason students chose not to pursue honors distinction was that they did not want to complete an independent study ( $n = 58$ ). Participants not pursuing honors distinction were then asked what opportunities would increase the likelihood of their participating in honors (Figure 3). Students responded that they might be more interested in the honors college if more opportunities were available that closely aligned with their major or college; such possibilities included more major-related honors classes ( $n = 81$ ) and receiving encouragement from faculty and advisors in their college ( $n = 85$ ). Twenty students selected “other” and provided open-ended responses indicating the belief that they were ineligible, wanted financial help from honors, lacked information regarding benefits of participation, or simply lacked the desire to participate.

### *Student Engagement*

Honors students are often thought of as stereotypic go-getters who are involved in many activities, yet some potential students fear that pursuing honors means that they will not have time for employment, service, or other

activities. To determine whether participation in honors was associated with fewer student engagement characteristics, we asked survey participants about their involvement. Honors students tended to be more involved in both on- and off-campus opportunities (Figure 4). The average number of hours spent in employment, volunteer work, or participating in activities was calculated for students reporting any increment of time above zero. Non-honors students worked an average of 2.4 hours per week in off-campus jobs and 2.6 hours per week in on-campus jobs whereas honors students worked a weekly average of 2.2 and 2.3 hours in off- and on-campus jobs each week. The average number of hours spent volunteering was nearly identical between groups (1.2 hours per week off campus and 1.5 or more hours each week on campus). Both groups reported similar participation in events (average = 1.5 non-honors vs 1.6 honors) or campus organizations (average = 1.5 non-honors vs 1.7 honors).

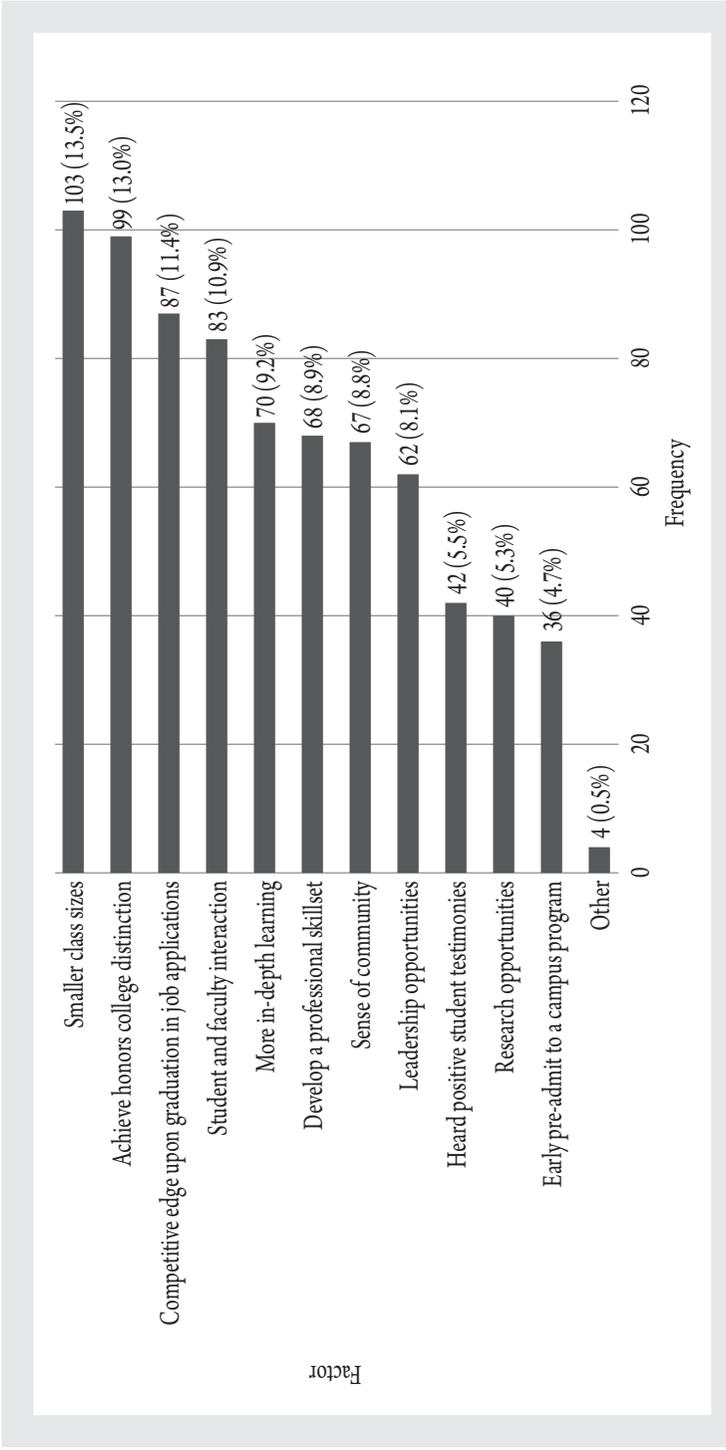
## Comparisons across Academic Colleges

### *Perceptions of Honors*

Having found similar extracurricular involvement and employment between honors and non-honors students, we investigated differences in responses by academic college. When these questions were analyzed by academic college rather than pursuit of honors, we discovered a few interesting trends (Table 2). In perceptions of honors and likeliness to participate, not all academic colleges are created equal (Table 2A). Students from academic colleges with lower overall honors enrollment were less aware of honors opportunities ( $P < 0.001$ ), were less familiar with honors requirements ( $P < 0.001$ ), and reported a lower desire to participate ( $P < 0.001$ ). While there were no differences in perceptions across academic colleges about the perceived difficulty of honors courses ( $P = 0.107$ ), students from academic colleges with low honors enrollment reported a lesser belief that they would benefit from honors ( $P < 0.001$ ). Taken together, these data imply that unless a critical mass of honors participation is achieved in an academic college, students will be less likely to know about the opportunities.

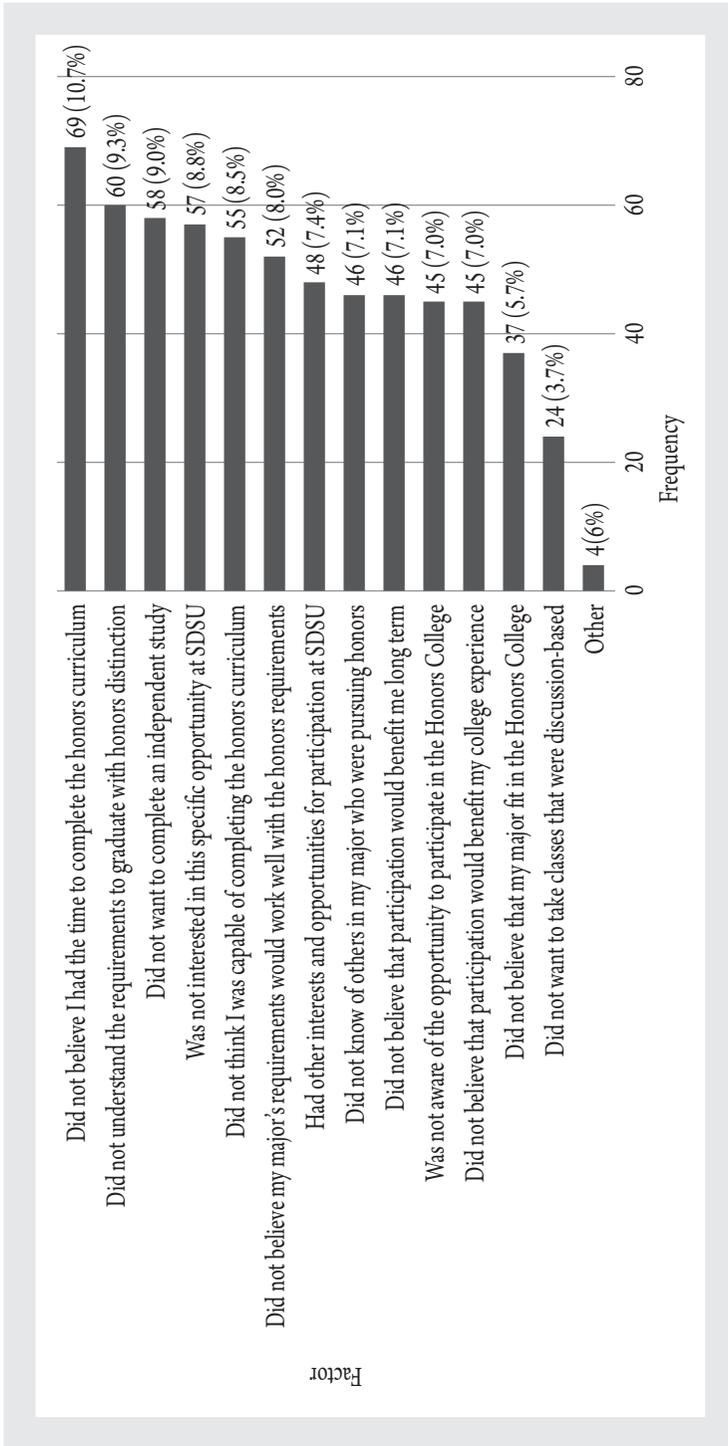
Students from academic colleges varied greatly in their perceptions of whether honors fit with their academic program (Table 2B). Students from CAFES were least likely to believe that pursuing honors distinction was appropriate for and fit with their major, and they were least likely to believe that students from their major should pursue honors distinction. Students

**FIGURE 1. FACTORS IN STUDENTS' DECISIONS TO PURSUE HONORS DISTINCTION (N = 134)**



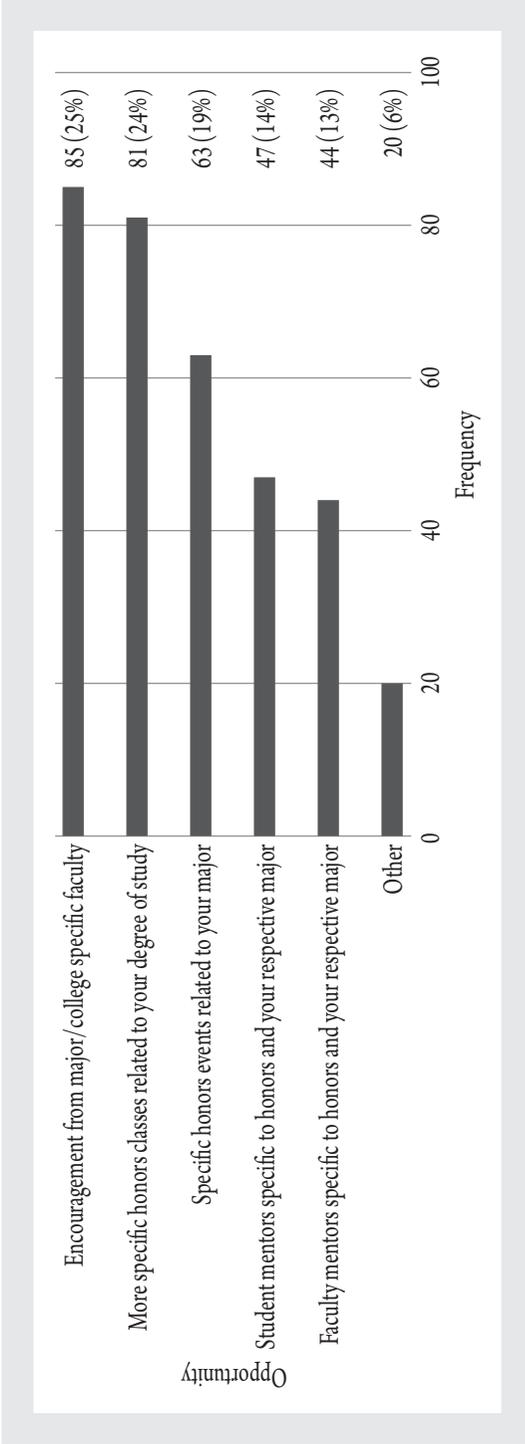
Notes: Students were able to select multiple factors. Numbers shown in parentheses represent the percentage of overall responses. Data from participants who reported not to be pursuing honors distinction were omitted from this figure.

**FIGURE 2. FACTORS IN STUDENTS' DECISION NOT TO PURSUE HONORS DISTINCTION (N = 162)**



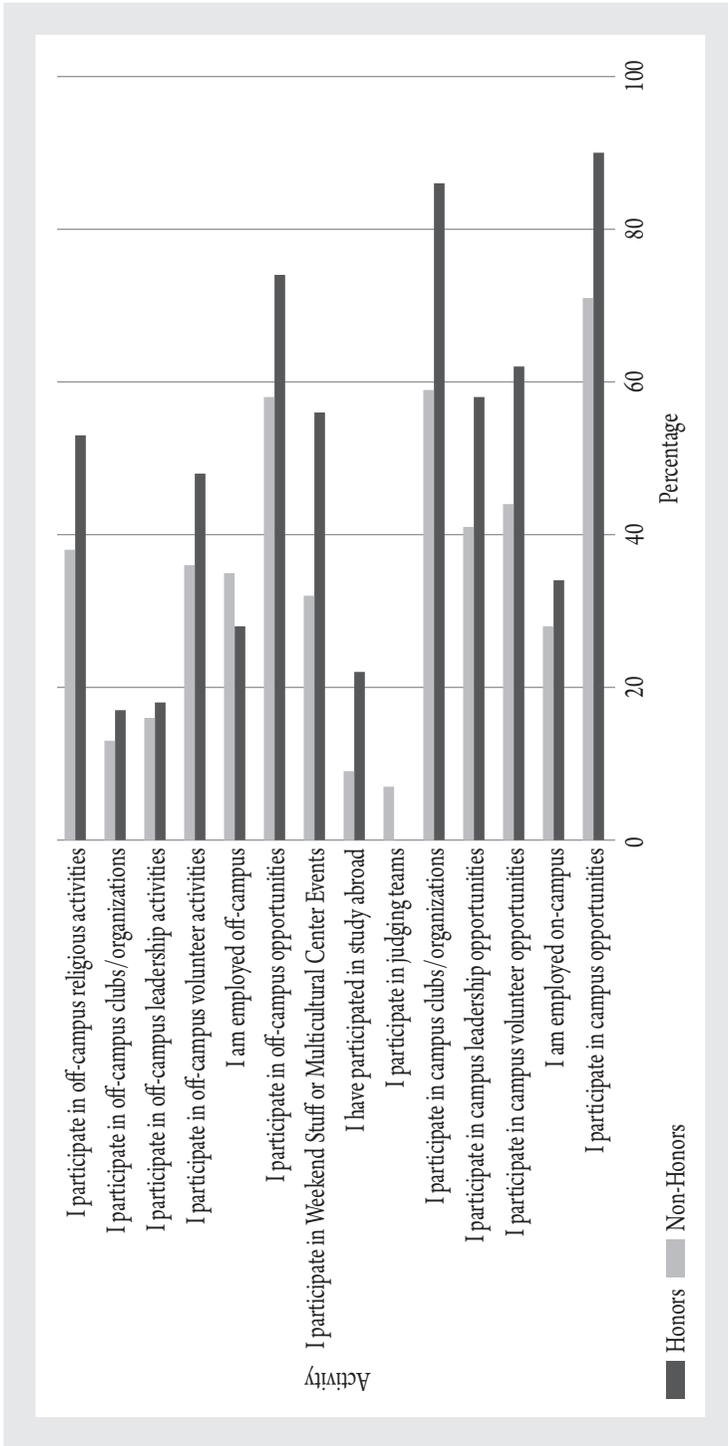
Notes: Students were able to select multiple factors. Numbers shown in parentheses represent the percentage of overall responses. Data from participants who reported pursuing honors distinction were omitted from this figure.

**FIGURE 3. OPPORTUNITIES THAT WOULD INCREASE THE LIKELIHOOD OF STUDENT PARTICIPATION IN THE HONORS COLLEGE (N = 159)**



Notes: Students were able to select multiple factors. Numbers shown in parentheses represent the percentage of overall responses.

**FIGURE 4. PERCENT OF HONORS VS. NON-HONORS STUDENTS PARTICIPATING IN CAMPUS AND NON-CAMPUS ACTIVITIES**



from colleges that emphasize pre-professional tracks like Nursing or Natural Sciences (home to pre-med and other pre-health related professions) were the most likely to agree with these statements while those from the Pharmacy pre-professional track were moderate in their views.

While students from low-honors-enrollment colleges did not differ in their reported beliefs about the difficulty of honors courses, they did report a significantly reduced belief that they could complete the honors curriculum. The survey results showed no significant differences across academic colleges in students' preferences for classroom-based attributes (Table 2C) such as discussion-based courses ( $P = 0.116$ ) or small class sizes ( $P = 0.393$ ), so any differences in those categories can be attributed to differences in perspectives between honors and non-honors students. However, statistically significant differences ( $P = 0.0047$ ) occurred in preference for clear right or wrong answers, with students from Nursing having the greatest desire for clear-cut answers and students from Arts, Humanities, and Social Sciences expressing the least desire.

### *Reasons for Choosing or Not Choosing Honors*

We evaluated the top four reasons why students chose to pursue or not pursue honors (Figures 1 & 2) to identify potential differences across academic colleges. Achieving honors distinction and increased competitiveness for jobs were two factors that differed among colleges ( $P < 0.05$ ). Achieving honors distinction was a factor influencing students' decisions to pursue honors ( $P = 0.0102$ ) for 79% of CAHSS students (15/19) and 74% of CNS students (17/23) but only 44% of CAFES students (19/43) and 39% of CEHS students (17/44). Competitiveness for jobs was also a more important factor ( $P = 0.0185$ ) for CAHSS students (79%, 15/19) and CNS students (65%, 15/23) than CAFES students (47%, 20/43) or CEHS students (36%, 16/44).

Among non-honors students, fewer than five students responded to the survey from five academic colleges: CAHSS, CNS, CON, CPAHP, and COE. Our analysis among colleges therefore focused on only students from CAFES and CEHS. None of the top four factors influencing students' decisions not to pursue honors distinction were different between colleges ( $P > 0.52$ ). We additionally assessed the two leading factors that non-honors students said would increase their likelihood of participating in honors (Figure 3). Students from CEHS would be more likely to participate in the honors college if faculty in their college or major encouraged this participation (53%, 40/76) than students from CAFES (33%, 29/87;  $P = 0.0199$ ). Increased availability

of honors classes in the students' major would be more likely to increase honors college participation for 24% of all students (Figure 3), but differences between colleges were not found ( $P = 0.76$ ).

## Summary

Generally, students indicate greater interest in pursuing honors distinction if the program more closely aligns with their academic interests. Previously, there have been a few efforts at SDSU to bridge the gap between honors and agricultural sciences. These efforts have taken the form of classes, programs, and recruitment activities. The SDSU Honors College piloted a program that pairs agriculture with honors inside as well as outside the classroom. This project focused on the grand challenges as defined by the United States Department of Agriculture (USDA): hunger/food security, sustainable energy, childhood obesity, climate change, and food safety/food waste. The honors college developed and offered interdisciplinary courses, research grants, and community outreach relating to the grand challenges (Nichols et al., 2019); this effort resulted in students and faculty from every academic college becoming involved in addressing the grand challenges in one form or another.

A similar approach to integrating agriculture into honors was described by D. J. Fairbanks (1990), who did a study of 36 different universities to see how they combined honors and agriculture. The reason for this study was Fairbanks's personal belief that honors education is underutilized in creating awareness of the challenges that agriculturalists face, especially when honors programs across the country attract some of the best and brightest students. In the conclusion of his article, he states, "Honors education is also a way of reaching these same students for recruitment purposes. In addition, honors education provides an excellent opportunity for highly motivated students with majors in the agricultural sciences to develop discussion, writing, and research skills, as well as obtain an enriched general university education" (Fairbanks, 1990, p. 186).

Finally, the journal of the North American Colleges and Teachers of Agriculture (NACTA) hosts articles that discuss piloted programs connecting agriculture to honors programs across the country. P. A. Lyvers Peffer and A. Ottobre from Ohio State University talk about the components of the honors course Introduction to Animal Science that is offered at their university and the perceptions of the class. The course was created to meet the general education needs of honors students while also fulfilling a core class for students studying

**TABLE 2. STUDENT PERCEPTIONS OF THE HONORS COLLEGE AT SDSU AMONG STUDENTS FROM EACH OF THE ACADEMIC COLLEGES**

Table 2A. Student Knowledge of and Interest in the Honors College										
Statement	n	Agriculture, Food, and Environmental Sciences	Arts, Humanities, and Social Sciences	Education and Human Sciences	Engineering	Pharmacy and Allied Health Professions	Natural Sciences	Nursing	F-test	P
I am familiar with the requirements to graduate with honors distinction at SDSU.	291	2.9 <sup>ab</sup>	3.8 <sup>ac</sup>	2.7 <sup>b</sup>	4.2 <sup>ac</sup>	4.3 <sup>c</sup>	4.2 <sup>c</sup>	4.7 <sup>c</sup>	9.82	<.0001
I believe that I could complete the honors curriculum.	288	3.5 <sup>a</sup>	4.0 <sup>ab</sup>	3.5 <sup>a</sup>	4.1 <sup>ab</sup>	4.2 <sup>ab</sup>	4.6 <sup>b</sup>	4.6 <sup>ab</sup>	5.25	<.0001
I have the desire to invest the necessary time to take honors courses.	268	2.8 <sup>a</sup>	4.0 <sup>b</sup>	2.8 <sup>a</sup>	3.7 <sup>ab</sup>	4.0 <sup>b</sup>	4.7 <sup>b</sup>	4.3 <sup>b</sup>	12.81	<.0001
I believe that certain honors classes may be too difficult.	268	3.1	3.0	3.3	2.4	3.5	2.7	3.2	1.77	.107
I have the desire to complete the necessary independent study to graduate with honors.	268	2.8 <sup>a</sup>	3.7 <sup>bc</sup>	2.8 <sup>a</sup>	3.2 <sup>abc</sup>	3.1 <sup>abd</sup>	4.5 <sup>c</sup>	3.8 <sup>abc</sup>	8.31	<.0001
I believe that I would benefit from participating in the Honors College.	267	3.2 <sup>a</sup>	4.3 <sup>b</sup>	3.3 <sup>a</sup>	4.1 <sup>ab</sup>	4.0 <sup>ab</sup>	4.7 <sup>b</sup>	4.4 <sup>b</sup>	9.45	<.0001
I was aware of the opportunity to participate in the Honors College at SDSU.	266	3.4 <sup>a</sup>	4.1 <sup>ac</sup>	3.4 <sup>a</sup>	4.4 <sup>ac</sup>	4.3 <sup>ac</sup>	4.6 <sup>bc</sup>	4.6 <sup>bc</sup>	5.91	<.0001

Table 2B. Student Perception of Honors Requirements and Academic Program Compatibility

Statement	n	Agriculture, Food, and Environmental Sciences	Arts, Humanities, and Social Sciences	Education and Human Sciences	Engineering	Pharmacy and Allied Health Professions	Natural Sciences	Nursing	F-test	P
I believe that pursuing graduation with honors distinction is appropriate for any major on campus.	285	3.3 <sup>a</sup>	4.1 <sup>ab</sup>	3.8 <sup>b</sup>	3.6 <sup>ab</sup>	3.7 <sup>ab</sup>	4.3 <sup>b</sup>	4.4 <sup>b</sup>	4.46	.0003
I believe that my majors requirements fit well with completing the honors curriculum.	287	2.9 <sup>a</sup>	3.8 <sup>bc</sup>	3.3 <sup>abd</sup>	3.7 <sup>abc</sup>	3.6 <sup>abc</sup>	4.3 <sup>c</sup>	4.2 <sup>cd</sup>	7.54	<.0001
I believe that more students in my major should pursue graduation with honors distinction.	286	3.0 <sup>a</sup>	3.9 <sup>b</sup>	3.3 <sup>a</sup>	3.3 <sup>ab</sup>	3.5 <sup>ab</sup>	4.1 <sup>b</sup>	3.9 <sup>ab</sup>	5.32	<.0001

Table 2C. Student Classroom Preferences for Learning

Statement	n	Agriculture, Food, and Environmental Sciences	Arts, Humanities, and Social Sciences	Education and Human Sciences	Engineering	Pharmacy and Allied Health Professions	Natural Sciences	Nursing	F-test	P
I prefer classes that have specific right or wrong answers over classes that are more analytical or application-based.	268	3.2 <sup>ab</sup>	2.5 <sup>a</sup>	3.2 <sup>ab</sup>	3.4 <sup>ab</sup>	3.3 <sup>ab</sup>	3.2 <sup>ab</sup>	4.1 <sup>b</sup>	3.21	.0047
I prefer classes that are discussion-based and student-led.	268	2.8	3.4	3.0	3.4	2.6	2.8	2.9	1.54	.166
I prefer smaller class sizes.	267	3.9	4.2	3.9	4.1	4.4	4.2	4.2	1.05	.393

Notes: Within rows, Colleges with different superscripts were statistically different ( $P < 0.05$ ). Students preferences were reported using a five-point Likert scale.

animal science (Lyvers Peffer & Ottobre, 2011). Students participated in lectures, read a literary work related to animal science and analyzed the science within it as well as pursuing laboratory activities and a research study (Lyvers Peffer & Ottobre, 2011). At the completion of the course, students were given a post-survey to determine their perceptions of the class. Overall, the class was voted to be useful for teaching basic animal science concepts, and the students said that they generally enjoyed the active learning techniques used such as discussion and team-based learning (Lyvers Peffer & Ottobre, 2011).

## IMPLICATIONS

The current study provides baseline information on student perceptions of and affinity for the honors college that can be used as a starting point for future research on interventions to engage students from academic backgrounds that have been historically underrepresented in honors such as agricultural, food, and environmental sciences students as well as education and human science students. Agricultural student preferences for classroom learning did not appear to enhance or detract from their choice to participate in honors compared to their peers from other academic colleges. However, students from agricultural programs reported less knowledge of and interest in honors as well as less favorable perceptions of honors requirements and program compatibility than peers from some colleges. This study provides the first step toward identifying a remedy or intervention for this issue. One such intervention should involve engaging agricultural instructors and advisors in the recruitment of top students into honors. Future research in this area should focus on student-centered ideas for creating value in honors for students from all academic colleges.

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## REFERENCES

- Bott-Knutson, R. C., Larson, B., Van Heek, N., Nichols, T. J., & Stluka, S. (2019). Community partnerships help undergraduate students to meet the 'grand challenges' of today. *Collaborations: A Journal of Community-Based Research and Practice*, 2(1), 1–7.

- Cull, W. L., O'Connor, K. G., Sharp, S., & Tang, S.-F. S. (2005). Response rates and response bias for 50 surveys of pediatricians. *Health Services Research, 40*(1), 213–26. <<https://doi: 10.1111/j.1475-6773.2005.00350.x>>
- Fairbanks, D. J. (1990). Politics, science, and hunger: An interdisciplinary approach to honors education in agriculture. *Journal of Agronomy Education, 19*(2), 184–86.
- Gee, E. G., & Blemings, K. P. (2015). Access, not exclusion: Honors at a public institution. *Journal of the National Collegiate Honors Council, 16*(2), 177–80.
- Kotschevar, C. M., Ngorsuraches, S., & Bott-Knutson, R. C. (2018). The value of honors: A study of alumni perspectives on skills gained through honors education. *Journal of the National Collegiate Honors Council, 19*(2), 137–55.
- Lyvers Peffer, P. A., & Ottobre, A. (2011). Student perceptions of an introductory animal sciences course for high-ability students. *NACTA Journal, 55*(3), 2–7.
- Moritz, B. (2011). Can the elitism of honors help students at non-elite schools? *Journal of the National Collegiate Honors Council, 12*(2), 65–67.
- The National Research Council. 2009. Human capacity development: The road to global competitiveness and leadership in food, agriculture, natural resources, and related sciences. <[http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR\\_Library/human-capacity-development-the-road-to-global-competitiveness-and-leadership-in-food-agriculture-natural-resources-and-related-sciences/file](http://www.aplu.org/members/commissions/food-environment-and-renewable-resources/CFERR_Library/human-capacity-development-the-road-to-global-competitiveness-and-leadership-in-food-agriculture-natural-resources-and-related-sciences/file)>. March 15, 2018.
- Nichols, T. J., & Chang, K.-L. (2013). Factors influencing honors college recruitment, persistence, and satisfaction at an upper-Midwest land grant university. *Journal of the National Collegiate Honors Council, 14*(2), 105–27.
- Nichols, T. J., Larson, B., Stluka, S., Van Heek, N., & Bott-Knutson, R. C. (2019). Collaborative, holistic, honors approach to meeting agriculture's grand challenges. *NACTA Journal, 63*(2), 282–87.
- Pattillo, B., & Tkacik, M. (2015). Opportunities in honors for underserved students. *Journal of the National Collegiate Honors Council, 16*(2), 133–36.

- Polk, D. M. (2014). Forces for positive change: Preparing leaders for the 21st century in an undergraduate honors program. *Journal of Leadership Education*, 13(2), 140–51.
- Robinson, J. S., & Garton, B. L. (2008). An assessment of the employability skills needed by graduates in the College of Agriculture, Food, and Natural Resources at the University of Missouri. *Journal of Agricultural Education*, 49(4), 96–105.
- Saleh, A., & Bista, K. (2017). Examining factors impacting online survey response rate in educational research: Perceptions of graduate students. *Journal of MultiDisciplinary Evaluation*, 13(29), 63–74.
- Scott, R. I., & Smith, P. J. (2016). Demography of honors: The national landscape of honors education. *Journal of the National Collegiate Honors Council*, 17(1), 73–91.
- Scott, R. I., Smith, P. J., & Cognard-Black, A. J. (2017). Demography of honors: The census of U.S. honors programs and colleges. *Journal of the National Collegiate Honors Council*, 18(1), 189–224.
- Sellick, S. A. (2013). Agriculture honors programs in APLU member institutions. *Agricultural Education, Communications and Technology Undergraduate Honors Theses 2*.
- United States Department of Agriculture. 2014. Challenge areas. <<https://nifa.usda.gov/challenge-areas>>. March 15, 2018.

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