SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Spring 2020 ESSREP Demographic Survey: Results

A Report from the Environmental and Social Sustainability Lab (2020)

THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

About the Environmental and Social Sustainability Lab

The Environmental and Social Sustainability (ESS) Lab is a collaborative community of scholars working to build scientific understanding of environmental and social sustainability in an interdisciplinary context. Housed within the School of Environmental and Natural Resources within The College of Food, Agriculture, and Environmental Sciences, we are staffed by a core group of affiliated faculty members, students, and research staff representing a broad range of social science expertise. Our mission is to support a viable socio-ecological future through applied social science research, and to serve as a hub of sustainability research at Ohio State.

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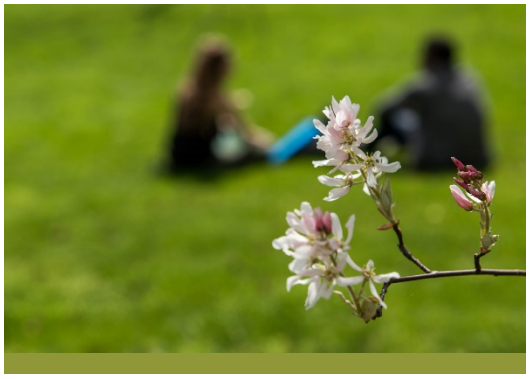

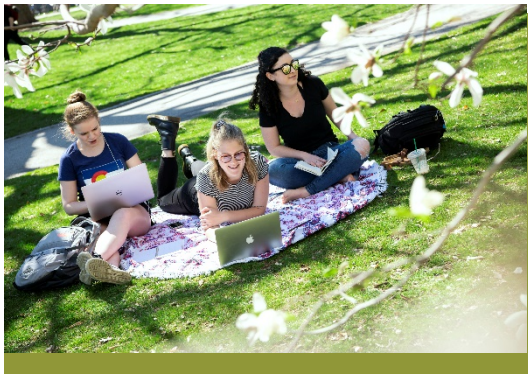

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Methodology and Design

The 2020 ESSREP Demographic Survey was organized and administered by the Environmental and Social Sustainability (ESS) Lab manager during Spring 2020. The purpose of this survey is to measure the baseline characteristics of the student subject pool including student environmental engagement, values, personality, and demographic information every semester. In a later section, we compre results from this survey to the Campus Sustainability Survey from the previous fall (AU 2019), in order to contexualize the ESSREP subject pool within the wider campus population.

Survey Design:

The scales used in this survey were intended to measure student's values, personality, and demographic information for descriptive purposes. Specifically, we used value orientation and culture scales by De Groot & Steg, (2008), as well as Schwartz (1992). We asked students to fill out the OCEAN, big-five personality assessment (O'keefe et.al. 2012), and to answer how often they engage in sustainability-related behaviors (items lab-generated or based on Brick et.al. 2017). The values data and OCEAN assessment are not reported in this document; contact the ESS Lab (ESSL@OSU.edu) or lab manager (Slagle.44@osu.edu) for more information. At the end of the survey, we asked students several demographic items such as their gender, age, political orientation, and living situation (self-generated). In our analysis, data was entered into the statistical program SPSS by IBM version 25, and analyzed to produce a short descriptive report of the ESSREP subject pool's characteristics such as student's majors (e.g. if they are mostly SENR majors), courses taken, and current environmental engagement.

Survey Implementation:

This survey was advertised on the ESSREP Sona webpage to members of the subject pool and was then administered online via a Qualtrics link. Interested students were navigated to the front page of the survey, where they were asked to grant consent before continuing with the rest of the survey. In the Spring of 2020, there were 480 students in the ESSREP study pool of which 313 signed up to take the survey. 306 of those 313 students who signed up actually took the survey, generating a completion rate of 97.8%. Each student received identical questionnaires, and students were identified only as a random number (generated by SONA) when taking the survey in Qualtrics in order to improve anonymity. The average completion time was 9 minutes and 54 seconds (SD= 11 minutes) for which participating students received 0.25 research credits, in line with subject pool policies.

Section 1: Sample Characteristics

The data reported below was collected via the 2020 ESSREP Demographic Survey from a sample group of 306 undergraduate students in the ESSREP study pool. This report focuses on the demographic information regarding this sample (e.g. age, gender, race, and political orientation) to garner a better understanding of represenntation within the ESSREP study pool. The data (ex. percentages) for each demographic category was adjusted for missing variables and responses that did not follow correct formatting; consequently, some categories' responses are below the 306 participants count due to unfilled or omitted responses.

Age: The ages of the participants in this sample ranged from 18 to 54 years old. The average age of this sample was 20.78 years old (see figure 2.1 for more detail).

Gender: Around 2/3 (66.4%) of participants in this sample identify themselves as female while a little less than 1/3 (31.2%) identify as male. Only 1.6% of the participants identify themselves as gender non-conforming (this percentage may be too high as several participants marked "other" for gender but put "male" or "female" in the text response).

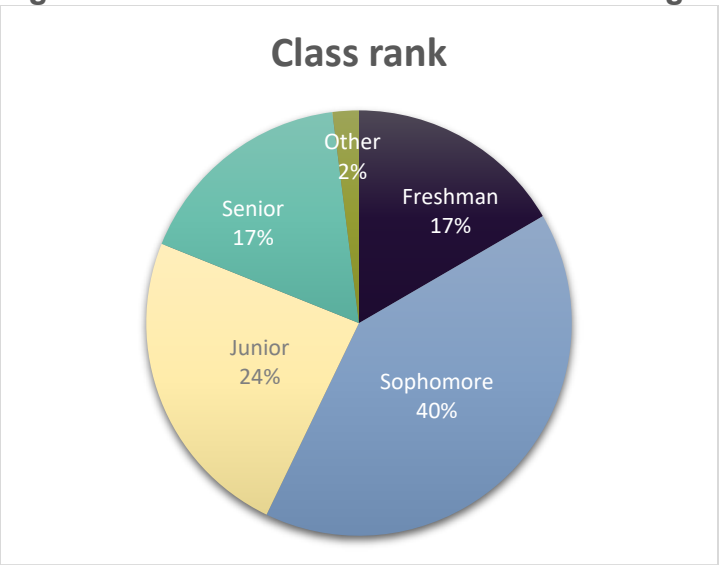
Race: The majority of participants in this sample identified as white (73%) with a minority of students identified as black/African American (4.7%), Asian (19.3%), Native Hawaiian/Pacific Islander (0.3%), and other (2.7% which included Arab, Latino and Biracial).

International: 33 participants (11%) in the sample said they were international students. Of these 33, 31 said they were from China, 1 said they were from India, and the remaining 1 did not provide an answer.

Living in Ohio: The large majority (70.1%) of this sample are long time Ohio residents, responding that they have lived in the state for 7 or more years. Participants that have lived in the state for 1 to 2 years were the second most represented group at 15.6%.

Class Rank: Sophomore students made up the majority of this sample at 40.5% (see Figure 1.1). Of the students who answered "other," one was a high school senior while the others were 5th year students.

Figure 1.1: Distribution of Class Rank amongst SP20 Sample



Sustainability Courses Taken: A majority of the respondents have taken little to no courses on sustainability, with just under half of participants (48.2%) reporting they have taken 1-2 courses and 22.7% reporting they have taken none. About 13% have taken 3-4 courses, 10% have taken 5-6 courses, and around 6% have taken 7 or more courses on the topic.

GPA: The grade point average of this sample ranged from 2.00 to 4.00 (M= 3.48, SD= 0.41).

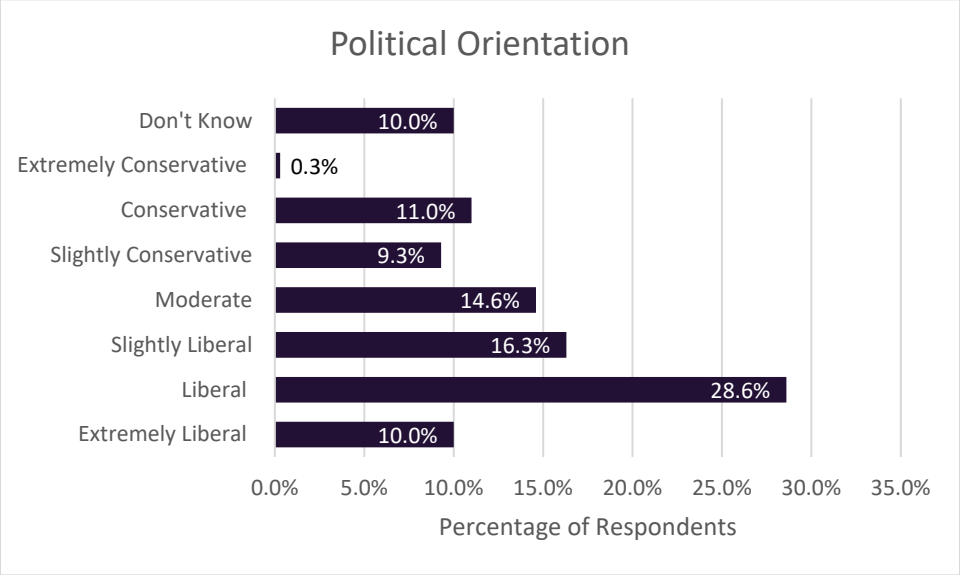
Living Situation: The majority of participants in this sample either live in residence halls (38.5%) or off-campus housing with other roommates (31.9%). One in six respondents reported that they live with family (16.6%), while 12.0% reported they live off-campus alone. Only 1% of respondents reported they live with a significant other.

Percentage of Income for Housing: The average percentage of income that went towards housing payments among the participants was 43.8% (SD= 34.6). Around 1/5 (20.8%) of participants answered that 10% of their income went towards housing payments while 17.8% answered 100% of income. 13.1% of participants answered 30% of income.

Community: Over half of the participants (52.7%) answered that they were raised in a suburban environment. 20.3% responded that they were raised in an urban environment while 12.3% responded that they were raised in a small town/village. About one in seven participants were raised in a rural environment (4.3% in non-agricultural; 10.3% in agricultural).

Political Orientation: At 28.6%, participants who answered "Liberal" made up the largest percentage of this sample (see Figure 1.2 below).

Figure 1.2: Distribution of Political Orientation amongst SP20 Sample



Political Party: About 40% of participants in this sample identified themselves as Democrat (see Figure 2.4 for detail and comparisons in Section 2). Participants who answered "other" wrote in answers such as "don't know" or "democratic socialist."

Major by college/school: See Table 1 below.

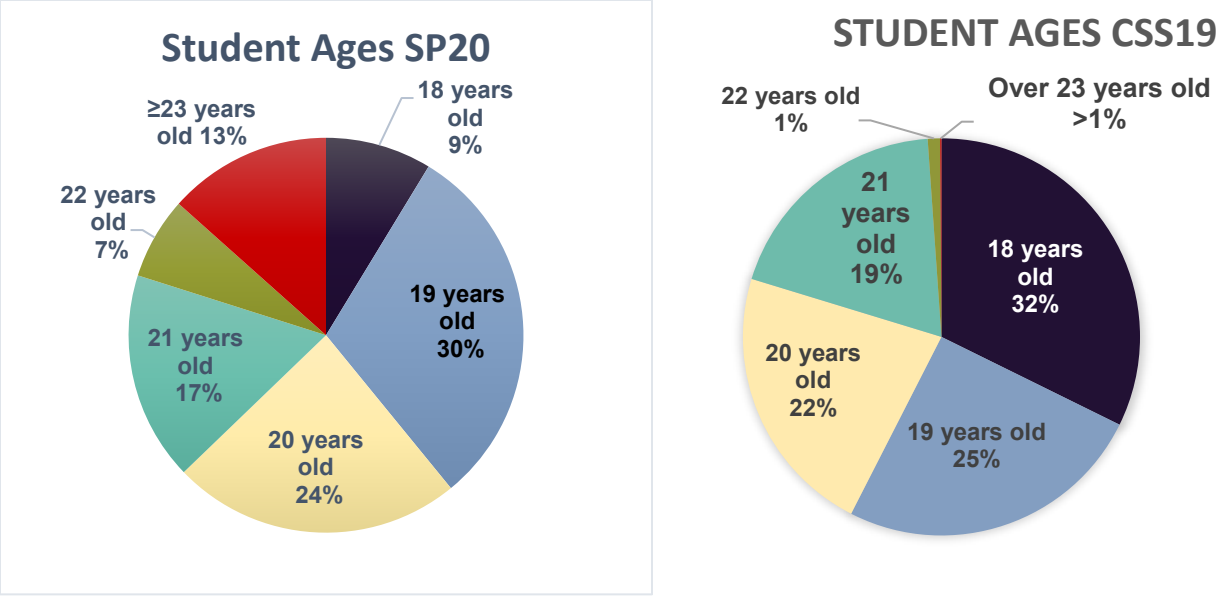
Table 1: Comparison of Major Distribution Between SP20 Sample and AU19 Enrollment

School/College	Percent of Respondents	Enrollment AU19 (Registrar)
Arts and Sciences	32.2%	37.5%
Business	19.9%	15.2%
Architecture	0.3%	1.2%
Engineering	9.3%	16.9%
Agriculture	2.0%	3.3%
Education and Human Ecology	4.0%	6.6%
SENR	28.2%	1.7%
Health and Rehabilitation Sciences	0.7%	4.2%
Public Health	0.7%	0.7%
Public Affairs	1.3%	0.7%
Nursing, Dental, and Medical	0.0%	2.6%
Pharmacy	0.0%	1.0%
Social Work	0.0%	0.9%
Exploration/Undecided	1.3%	4.9%
Total N	301	46,818

Section 2: Demographic Comparison to AU19 Survey

In order to understand how the demographics of the ESSREP pool compare to the rest of the OSU undergraduate population, we compared the data collected above (SP20) to the data collected from the 2019 Campus Sustainability Survey (CSS19). Regarding gender, both samples were over 2/3 female (compared with 51% at Ohio State in the Fifteenth Day Enrollment report). The age distribution between the two samples was quite different, however; the SP20 sample had a far greater percentage of respondents over 23 years old than that of the CSS19 sample (see Figure 2.1 below). Consequently, class rank in the CSS19 sample was more evenly distributed than the SP20 sample but slightly skewed towards freshman (class rank in the SP20 sample was skewed heavily toward sophomores and juniors). Intentional sampling differences likely drive the skew towards freshmen in the CSS19 data.

Figure 2.1: Side by Side Comparison of Age Distribution between SP20 and CSS19 Samples

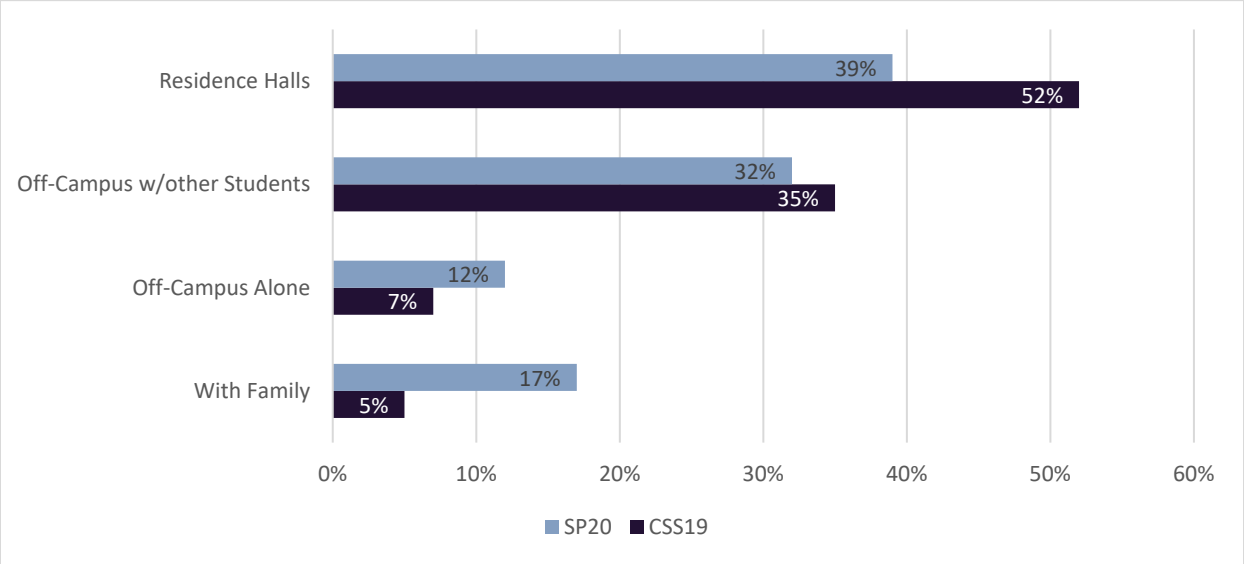


The average GPA between the two samples was very similar (SP20: M = 3.48, SD = 0.41; CSS19: M = 3.44, SD = 0.51). Additionally, the racial representation of both samples was predominantly white (SP20: 73%; CSS19: 71%), though the remaining racial composition differed between the two: SP20 sample had more Asian representation (SP20: 19.3%; CSS19: 8.0%) and slightly more black/African American representation (SP20: 4.7%; CSS19: 3.0%). Both samples had no representation of American Indian/Alaska Native and very small representation of Native Hawaiian/Pacific Islander. The SP20 survey did not include a Hispanic or biriacial option while the CSS19 did; consequently, these two demographics could not be accurately compared between the samples.

The SP20 sample had nearly 4 times as many international students as the CSS19 sample (SP20: 11.0%; CSS19: 3.0%).

In considering living situation, both samples had a majority of their participants living in either residence halls or a house/apartment with other students (see Figure 2.2 below)

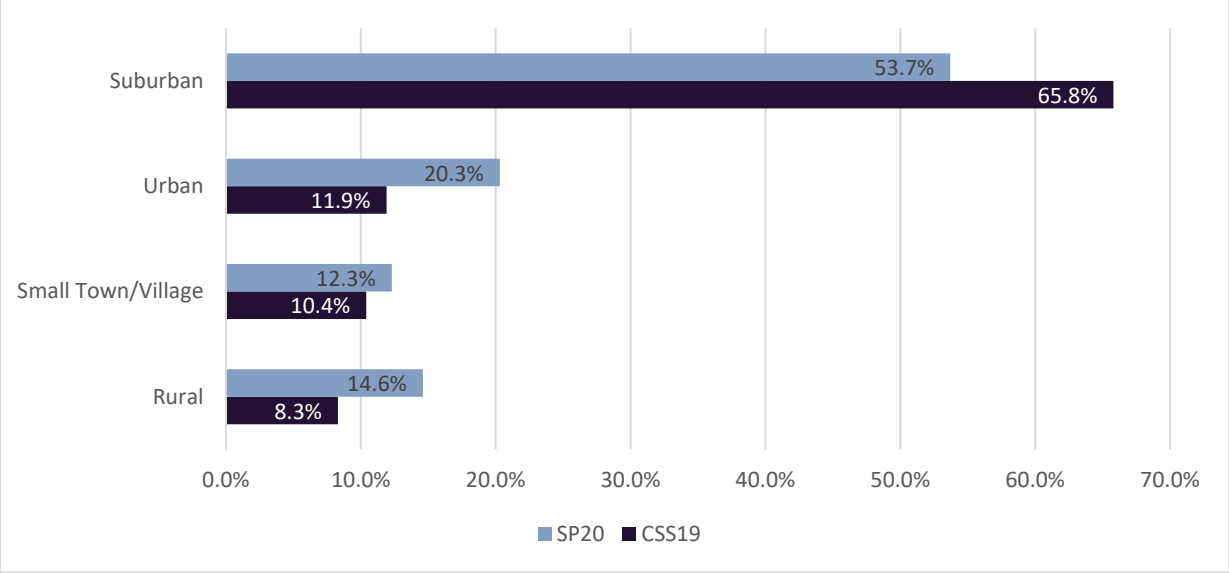
Figure 2.2: Living Situation Distribution Between SP20 and CSS19 Samples



The average percentage of personal earnings or savings that goes towards living expenses amongst participants was just over 40% for both samples (SP20: M = 43.8% , SD = 34.6; CSS19: M = 41.4%, SD = 32.4).

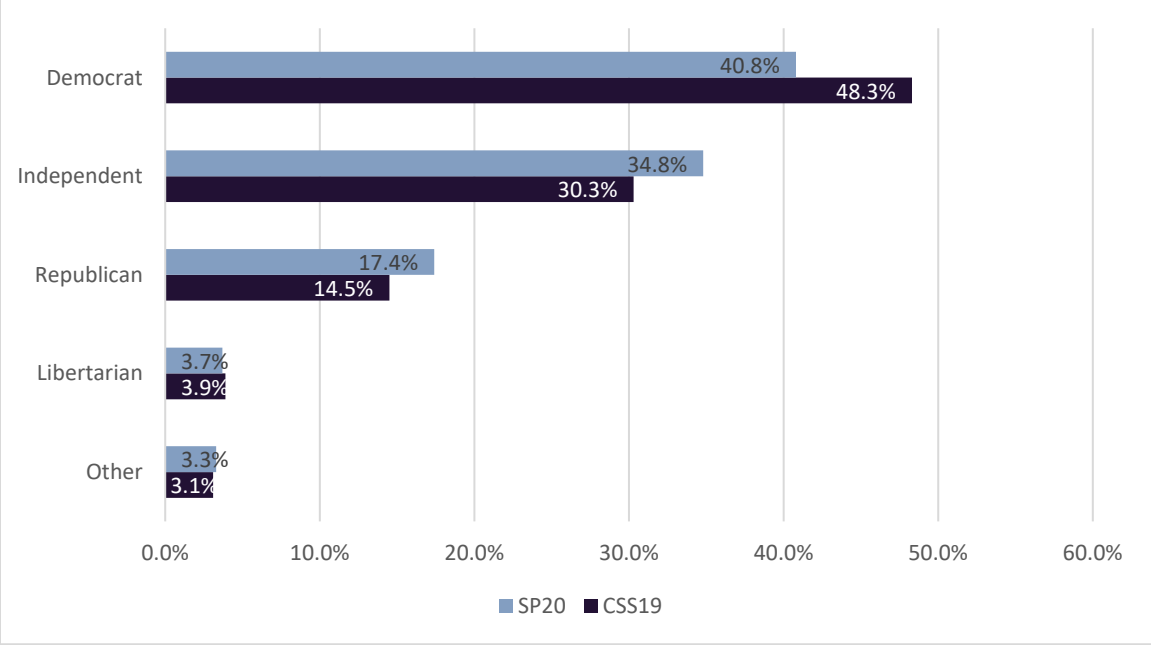
In considering where students grew up, the SP20 data set had a greater representation of students from urban settings and less representation of students from suburban settings than the CSS19 data set (See Figure 2.3 below).

Figure 2.3: Environment Raised In Distribution Between SP20 and CSS19 Samples



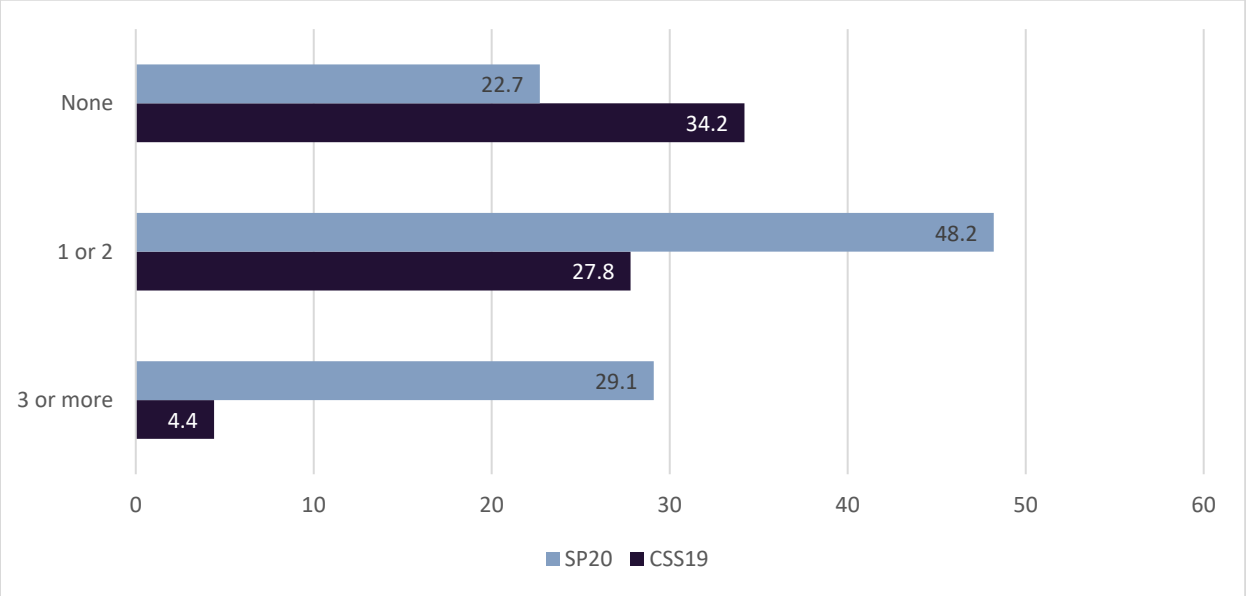
Regarding political affiliation, the two samples had fairly similar distributions of representation amongst political parties (see Figure 2.4 below).

Figure 2.4: Political Party Distribution between SP20 and CSS19 Samples



Lastly, the SP20 sample proved to have much more exposure to sustainability coursework than the CSS19 sample, which is not suprising considering the disproportionately large percentage of ENR students in the SP20 sample (see Figure 2.5 below).

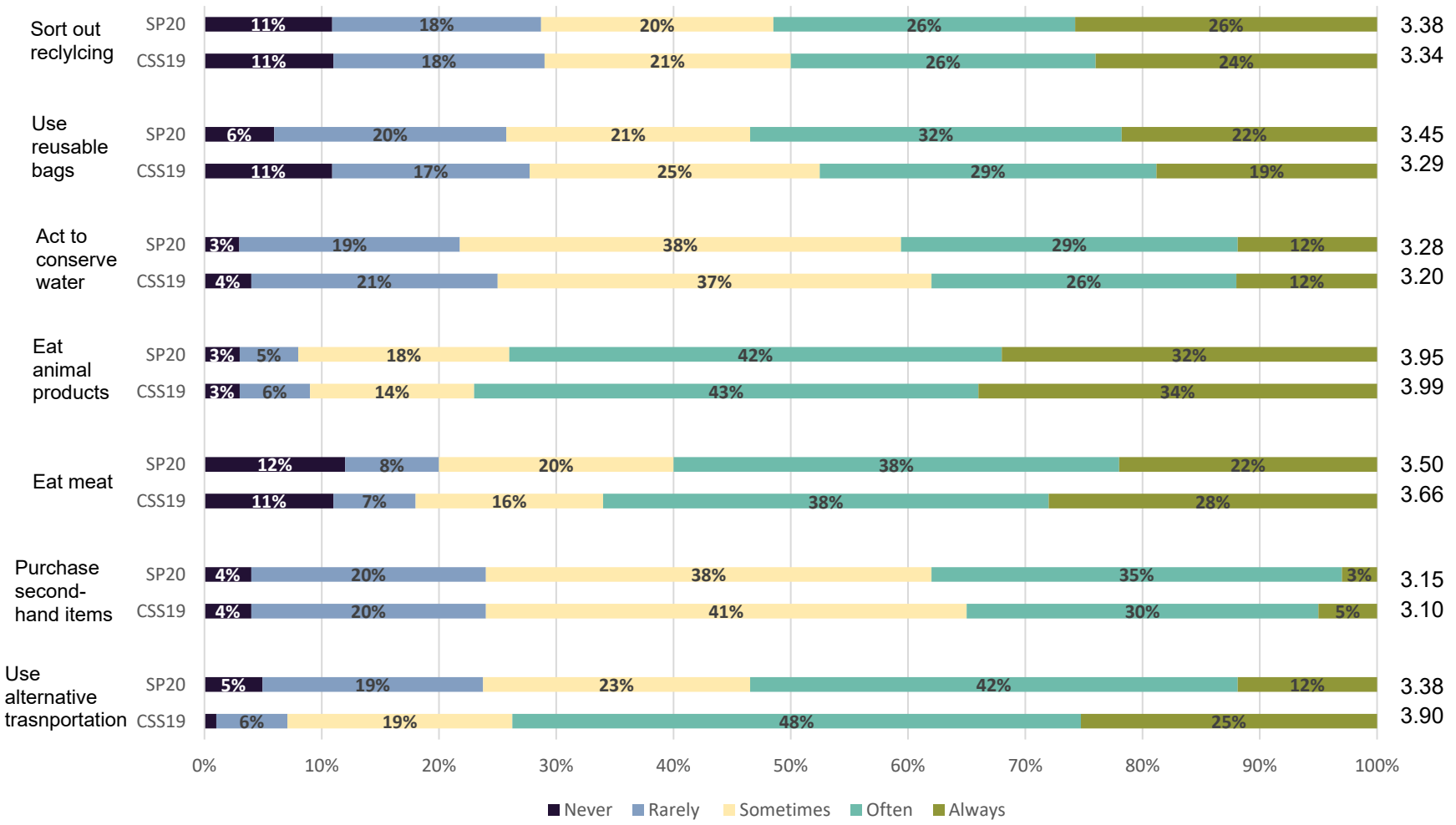
Figure 2.5: Sustainability Courses Taken Distribution Between SP20 and CSS19 Samples



Section 3: Sustainable Behavior Comparison to AU19 Report

Seven sustainable behaviors were assessed in both the SP20 and the CSS19 samples. These behaviors were chosen under the assumption that they lack general consensus and thus might reflect significant variation. Figure 3.1 below compares the responses to each of the seven behavior questions between the two samples. The distributions of responses to each question are quite similar between the two samples except for one: alternative transportation. A higher percentage of the CSS19 sample used alternative modes of transportation more often than that of the SP20 sample (this can be seen by CSS19's higher mean value for this response).

Figure 3.1: Distribution of Responses to Sustainable Behaviors



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