

Effect of Socioeconomic Status on Classroom Behavior of College Aged Individuals

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Abstract

The relationship between socioeconomic status and a variety of variables (GPA, success, educational attainment, classroom behavior, etc.) has been well established through psychology, sociology, and economic based research. However, there is a distinct gap in knowledge for college-aged individuals and their behavior within the classroom and its relationship to socioeconomic status. In order to address this gap, a survey was developed and made available to Oklahoma State University students. Due to study limitations, statistical significance is limited and does not apply to socioeconomic variables. However, statistically significant relationships were found with college controls and peer behavior both having an affect on classroom behavior.

Effect of Socioeconomic Status on Classroom behavior of College Aged Individuals

Throughout self-lead research inspired by another Honors class, I discovered the extensively studied relationships between socioeconomic status (or class) and GPA, success, classroom behavior (high school or younger), health, educational achievement, political participation, and many more. However, there was a distinct gap in the research regarding the classroom behavior of college-aged individuals. This gap in research is the focus of my study. By conducting my own survey, I was able to focus on behaviors that were self-determined to be indicators of general classroom and classroom-related behavior.

Literature Review

For the purpose of this study, emphasis will be placed on the determined relationships between socioeconomic status and GPA, classroom behavior, educational attainment, and success.

GPA

Sackett et al. (2009) found that socioeconomic status is related to test scores, test scores tend to be good predictors of academic performance, and, when controlling for SES, the estimated test score and grade correlation decreases. Basically, the influence of socioeconomic status on grades is only prevalent when looking at the impact of socioeconomic status on other grade predictors (such as test scores). There is no direct relationship between socioeconomic status and grades.

The importance of the above established relationship to this study is the existence of the relationship between socioeconomic status and results of classroom behaviors. To further

explain, I am operating under the understanding that students with higher GPAs *most likely* have positive classroom behaviors and students with lower GPAs *most likely* have negative classroom behaviors, as defined by me. This is a generalization that is difficult to overcome as each individual involved has their own perceptions of what is positive and negative based on the consequences of each action. To give an example, if a student were to skip a class and maintain their grade in the course, they may not think of the behavior as negative because there were no negative consequences. In the same vein, a student who skips a class and then misses an in-class assignment may think of the behavior as negative because there was an immediate negative consequence. The same can be said for positive behaviors. If a student were to attend a professor's office hours and receive help they did not determine as substantial, that behavior will not be associated as a positive behavior while a student that did receive substantial help will associate it as a positive behavior.

Classroom Behavior and Related Behaviors

College

Walpole (2003) discusses differences in patterns of activities for students from low and high socioeconomic status backgrounds. Essentially, there conclusions were that students from low socioeconomic backgrounds were less involved in interactions that took place with other students (clubs, volunteer associations, organizations, athletics, etc.). However, low socioeconomic status students did tend to work more while in school and be more likely to work than their high socioeconomic status counterparts. Based on Walpole's study, low socioeconomic status students report overall less time spent on studying and lower GPAs than their counterparts. This study begins to emphasize the priority differences of people from different socioeconomic backgrounds. Essentially, students from low socioeconomic background are focusing more on

economic output while students from high socioeconomic backgrounds tend to focus more on academic output.

Non-College

Nye et al. (1958) looked at “delinquent” behavior of college students and its relationship to socioeconomic status. This paper, from 1958, was not able to reject their null that there was no relationship between delinquent behavior and socioeconomic status. However, their data did show that college students were basically equally as likely to commit delinquent acts regardless of their socioeconomic status. Instead, the act itself was what changed. “Lower class boys” were more likely to commit car theft and similar acts while “upper class boys” were more likely to commit destruction of personal property and similar acts. While this paper doesn’t specifically address classroom behavior, it does help to form the background for college student behavior.

Classroom behavior, even though not looked at exclusively for undergraduate college-aged students, has an equally important relation to this study as it determines an existing relationship between socioeconomic status and behaviors at younger levels, when parents are generally more involved in a child’s education and learning. This is included because it helps form the generalizations that have the potential to hold true with this survey/study. Students from lower socioeconomic statuses tended to have more negative classroom behaviors and more issues with learning material. As discussed in Soto et al. (2011), behaviors and personality traits do change as an individual ages, with a general consensus that behaviors and traits become “better” as an individual ages. However, these changes take years, and possibly decades, to become fully realized within the individual. Looking at studies for behaviors of children across schooling age allows us to develop general ideas of the relationship between behavior and socioeconomic status that may hold true for college-aged individuals. The similarities to previous behavior may

be especially apparent with undergraduate students as they have only recently left their original environments that led to their original behaviors.

Educational Attainment

Walpole (2003) also mentions the relationship they found between educational attainment and socioeconomic background. They found that students from low socioeconomic backgrounds tend to have lower attainment after a bachelor's degree than high socioeconomic counterparts. High socioeconomic background students, at the time of this study, "were more likely to have earned an M.A., M.D., or J.D. by 1994" than their low socioeconomic background counterparts (Walpole, 2003). In Israel, Dar & Getz (2007), found that there was a difference in university and academic college enrollment based on socioeconomic status. Their study found that among students who are academically able, higher socioeconomic status students "opt for prestigious professions, such as medicine and law, or natural and social sciences, while those of lower SES choose economics and management, computer science, paramedical professions, and engineering" (Dar & Getz, 2007). Essentially, students from lower socioeconomic status backgrounds tend to choose more majors with practical applications than students from higher socioeconomic status backgrounds.

It has been well established that higher educational attainment (such as Bachelor's, Master's, and Doctorate degrees) is most often completed by individuals from higher socioeconomic statuses. This helps to better explain the potential relationship between socioeconomic status and classroom behavior of an individual as it is understood that a Bachelor's degree must be obtained before moving on to additional instruction. I am also working under the assumption that in order to obtain a bachelor's degree, an individual needs to have more positive classroom behaviors than negative classroom behaviors. At the same time, it

already introduces an important limitation of this study: it is only happening at a single four-year university. Due to this, there may be a higher proportion of students from higher socioeconomic statuses than would be present if the sample included multiple universities that weren't all public, four-year institutions.

Success

It has been relatively well documented that parents in higher socioeconomic statuses tend to have children that remain in the same status or move up (middle class to upper-middle class). Burger & Mortimer (2021) studied three generations. They too found that there was a continuity in the relationship between parental socioeconomic status and their children's future orientations. This held across generations. To be specific in this case, Burger & Mortimer found that household income of generation one was positively associated with adolescent optimism for generation two. Adolescent optimism for generation two was then responsive to educational attainment for generation 3. Basically, households that are educationally underprivileged have generational impacts as children become parents that don't place a high value on education. This then continues on to the next generation, so on and so forth. The same is said for households that were educationally privileged. Children who were educationally privileged become parents who place a higher value on education. This continues throughout future generations as well.

Success is another important relationship in regards to my study. As previously mentioned with educational attainment, higher success rates (as defined by moving up into a higher socioeconomic status, not moving into a lower socioeconomic status, financial stability, or lack of debt, etc.) tend to be correlated with a higher socioeconomic status. This further develops the understanding that higher socioeconomic statuses tend to be correlated with more "positive"

outcomes than “negative” outcomes. This further highlights the gap that exists with undergraduate classroom behaviors.

My survey is an attempt to address this gap and determine if there is a relationship between socioeconomic status and classroom behavior or if it is irrelevant to an individual’s behavior once they are out of the home and are discovering their own opinions, behaviors, and abilities while navigating their, most likely, changing socioeconomic and social status.

Methods

For this study, I developed a survey comprised of 63 total questions split into 5 sections: demographic information, college behavior, classroom behavior, peer behavior, and scenario-based questions. Some of the questions were only shown to students dependent upon answers to previous questions in the demographic, college behavior, and scenario-based sections. For demographic information, this included questions about third and fourth parent/guardians in the household that were only shown if the respondent answered “3” or “4” for the question. The survey was completed and taken through Qualtrics. It was originally sent out to a list of 400 randomly generated emails provided by the IRB (all relevant materials included in Appendix D). The survey was then sent out on the Honors Listserv as well as to some Economics courses within Spears. All respondent results remain anonymous with no way to track answers back to a single individual. The total number of respondents was 210. However, there were a few respondents that did not answer all the questions as answers were not required past their consent due to IRB regulations. Appendix A includes the full list of survey questions. Examples of questions are:

Demographic Information: How many siblings were you raised with? What type of school did you attend for the majority of your K-12 education? What was your family's socioeconomic status throughout your childhood? What was your family's income throughout your childhood?

College Behavior: What college are you in? Do you have a job on or off campus?

Classroom Behavior: In a month, how often have you skipped a class? In a month, how many assignments/quizzes have been turned in late? In a month, how often do you attend office hours?

Peer behavior: Same questions as Classroom behavior but focused on the behavior of the respondent's peer group.

Scenario-based: Thomas forgot about an assignment. He asked his friend to send over the assignment to copy so he had something to turn in. Does this sound like something you have done? Does this sound like something you would do?

The demographic section was focused on discovering respondents perceived socioeconomic status and their actual socioeconomic status as determined by the questions asked. Respondents were asked about: income, parents/guardians in the household, education of parent/guardians, number of siblings, place of childhood (urban, suburban, rural), type of schooling (public, private, online), and how many bedrooms were in the childhood home. College behavior was focused on determining non-classroom behavior such as how many classes the respondent was enrolled in, whether or not they had a job, etc. Classroom behavior focused on utilization of campus resources as well as in-class behavior such as late and missing assignments. Peer-behavior questions were included due to the significant impact peers can have on an individual's

behavior. These questions were the same questions as classroom behavior but were geared towards the behavior of the respondent's peer group. Finally, scenario-based questions were included in an attempt to keep students honest about their actions with more sensitive scenarios such as cheating and plagiarism.

The survey was open to respondents for roughly 2-3 weeks. Once the survey was completed, the data was downloaded in CSV format and imported into R Studio (R). Once in R, codes were run to create the variables to be used in statistical analysis and then to run the two main regressions for this study. A complete list of codes is included in Appendix B. It is important to note that I took the longer route due to insufficient understanding of R shortcuts and variety of questions that didn't allow for a single loop.

When developing the codes for R, I first focused on creating categorical variables for demographic questions to determine socioeconomic status and for questions that would show the positive and negative classroom behaviors. For the sake of simplicity, more positive behaviors were given higher categorical values while more negative behaviors were given lower categorical variables. To give an example, as the frequency of attending office hours increased, so did the categorical value (0 for never, 1 for once every other week, up to 4 for every day). On the other side, as the frequency of missing/skipping classes increased, the categorical value decreased (0 for once every day, 1 for once every couple of days, up to 4 for never). This was done so that when behaviors were combined into one scale through summation, higher numbers were always associated with positive behaviors. The following comprise positive behaviors with "Once every day" being set to 4: visiting the library, attending office hours, visiting the Writing Center, attending LASSO tutoring session, going to the MLSC, working with a study group, and attending SI sessions with the same variables for peer behavior. Similar positive behaviors

include hours spent studying and hours enrolled for the semester. The following comprise the negative behaviors with “Never” being set to 4: skipping class, missing assignments, turning in late assignments, and phone activity in the classroom with the same variables existing and being categorized for peer behavior effects.

Other categorical variables were used to attempt to determine actual socioeconomic status as opposed to perceived socioeconomic status. For demographic questions, answers were given categorical values where answers related to generally higher socioeconomic statuses were given higher categorical values. For example, the highest income bracket was given a value of 4 while the lowest income bracket was given a value of 0. The cutoffs for this question were based off of US data for quintile income distribution.

Binary dummy variables were created for the college the respondent was involved in, place of childhood, and schooling. For place of childhood, the variables included in the final regression were suburban and rural. For schooling, the variable included was the private binary variable. There were very few responses that mentioned online schooling; for the sake of this study, they were included with public schooling. In the case of colleges, Ferguson College of Agriculture was the college excluded for the sake of the dummy variables. Global Studies is also excluded as none of the 210 respondents were part of that college. There were respondents that had missing information as they were not required to answer all questions per IRB regulations. Those respondents were excluded from the regression data.

All the peer behavior questions were scaled the same as the classroom behavior questions and were added into one variable for inclusion in the regressions (peerbehav). Two separate regressions were run to focus on perceived socioeconomic status’ effect (based on class) and actual socioeconomic status’ effect (based on the demographic questions mentioned earlier).

The two regressions were built to focus on effect of socioeconomic influence on classroom behavior to address the gap in existing research. The two regressions were income (1) and class (2), where income represents the actual influence and class represents the perceived influence of socioeconomic status.

$$(1) \text{ Classroom behavior} = \alpha + \beta_1 \text{income} + \beta_n X_n + u$$

$$(2) \text{ Classroom behavior} = \alpha + \beta_1 \text{class} + \beta_n X_n + u$$

In the case of the above regressions, regression 1 determined socioeconomic status was via a cumulative value of multiple questions focused on familial income, number of parents within the home, place of childhood, number of siblings, parental education, etc. This was done because people tend to incorrectly identify as middle-class when asked for socioeconomic status. For regression 2, the socioeconomic status variable was based on a singular question answered by respondents: What was your family's socioeconomic class for the majority of your childhood? For both regressions, $\beta_n X_n$ represent the additional variables included, such as dummy variables for college and the categorical summation of peer behavior.

After viewing the results of those regressions, additional regressions were run that removed the controls for which college students were enrolled in and looked separately at the positive and negative behaviors.

Results

For survey data with no analysis or regression, response tables for each question included in the final analysis can be found in Appendix C. The results of regression one and two are shown in table 1 below.

	mincome	mclass
(Intercept)	19.439*** (3.846)	19.298*** (2.672)
income	-0.361 (0.562)	
numberpar	0.227 (1.338)	
pareduc	0.432 (0.435)	
siblings	0.028 (0.446)	
urban	-2.292 (1.480)	
suburban	-0.812 (1.112)	
private	-0.647 (1.346)	0.058 (1.201)
Engineering	0.881 (1.401)	0.644 (1.282)
University	12.459 (6.608)	10.583 (6.206)
Education	-1.120 (1.813)	-1.283 (1.639)
Arts	0.072 (1.265)	-0.224 (1.161)
Spears	-2.654 (1.574)	-3.269* (1.374)
Honors	1.679 (1.651)	1.543 (1.436)
hours	0.363 (0.633)	0.600 (0.582)
job	1.223 (1.654)	1.532 (1.496)
jobhours	-0.800 (0.656)	-0.841 (0.600)
peerbehav	0.385*** (0.106)	0.413*** (0.093)
class		-0.149 (0.474)
R-squared	0.199	0.203
N	177	199
Significance: *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$		

Table 1. Regressions 1 (mincome) and 2 (mclass)

As can be seen in the table above, the socioeconomic variables do not exhibit any statistical significance. However, it is important to note the statistically significant values attached to the peer behavior (*peerbehav*) variable and the Spears dummy variable for *mclass* and *mincome*. The Spears dummy variable for *mincome* is significant at the 10% level, which can be seen in Appendix B after the list of codes for variable creation. Implications of these results will be discussed later on.

In response to the lack of statistical significant in the variable of interest in the above models, additional regressions were run to attempt to establish statistical significance. The first change made was the removal of college controls for both regression 1 and 2. The results and comparison to the original regression for regressions 1 and 2 are shown below in table 2. Unfortunately, table 2 showcases the continued lack of statistical significance for the main variable of interest. However, statistical significance remains for the peer behavior variable with removal of college controls.

After this, additional regressions were run that separated out positive and negative behaviors. In order to do this, two new variables were created: *posbehavsum* and *negbehavsum*. *Posbehavsum* is the variable representing the sum of all the positive actions a respondent could take and the positive action scenarios. This includes going to the library, attending office hours, going to the WC, attending LASSO center session, participating in a study group, hours spent studying, and the positive action scenarios. For this variable, 0 still represents the most negative actions while the new number for the most positive actions is 29. *Negbehavsum* is the variable representing the sum of all the negative actions a respondent could take and the negative action scenarios. This includes having late to assignments, skipping class, missing work, and the negative scenarios. In this case, 0 still means the most negative actions while the most positive is

now 22. Tables 3 and 4 showcase the results of these regressions with the college control exclusions.

	mincome	mincome2	mclass	mclass2
(Intercept)	19.439*** (3.846)	21.694*** (3.630)	19.298*** (2.672)	20.094*** (2.438)
income	-0.361 (0.562)	-0.230 (0.563)		
numberpar	0.227 (1.338)	-0.137 (1.328)		
pareduc	0.432 (0.435)	0.402 (0.434)		
siblings	0.028 (0.446)	0.301 (0.442)		
urban	-2.292 (1.480)	-2.024 (1.488)		
suburban	-0.812 (1.112)	-1.451 (1.075)		
private	-0.647 (1.346)	-0.955 (1.354)	0.058 (1.201)	0.024 (1.220)
Engineering	0.881 (1.401)		0.644 (1.282)	
University	12.459 (6.608)		10.583 (6.206)	
Education	-1.120 (1.813)		-1.283 (1.639)	
Arts	0.072 (1.265)		-0.224 (1.161)	
Spears	-2.654 (1.574)		-3.269* (1.374)	
Honors	1.679 (1.651)		1.543 (1.436)	
hours	0.363 (0.633)	0.060 (0.632)	0.600 (0.582)	0.464 (0.586)
job	1.223 (1.654)	1.005 (1.577)	1.532 (1.496)	1.735 (1.442)
jobhours	-0.800 (0.656)	-0.682 (0.623)	-0.841 (0.600)	-0.906 (0.571)
peerbehav	0.385*** (0.106)	0.402*** (0.103)	0.413*** (0.093)	0.446*** (0.092)
class			-0.149 (0.474)	-0.231 (0.478)
R-squared	0.199	0.142	0.203	0.137
N	177	177	199	199

Significance: *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$

Table 2. Summary of regression 1 and 2 with comparison to regressions removing college controls.

	mincome3	mincome5	mincome4	mincome6
	posbehavsum	posbehavsum	negbehavsum	negbehavsum
(Intercept)	6.067* (2.893)	7.059** (2.602)	11.881*** (2.160)	13.183*** (2.063)
income	-0.280 (0.441)	-0.255 (0.432)	-0.150 (0.298)	-0.075 (0.302)
numberpar	-0.184 (1.055)	-0.219 (1.022)	0.383 (0.709)	0.124 (0.712)
pareduc	0.249 (0.338)	0.234 (0.330)	0.251 (0.231)	0.258 (0.234)
siblings	0.080 (0.351)	0.165 (0.339)	-0.091 (0.234)	0.069 (0.235)
urban	-0.635 (1.167)	-0.543 (1.144)	-1.396 (0.783)	-1.225 (0.794)
suburban	-0.256 (0.877)	-0.448 (0.825)	-0.659 (0.587)	-1.155* (0.573)
private	-0.679 (1.059)	-0.705 (1.040)	-0.107 (0.713)	-0.287 (0.725)
Engineering	0.463 (1.117)		-0.314 (0.743)	
University	3.130 (5.178)		8.715* (3.492)	
Education	-1.063 (1.393)		-0.739 (0.939)	
Arts	-0.000 (0.994)		-0.241 (0.672)	
Spears	-0.744 (1.238)		-1.880* (0.836)	
Honors	1.028 (1.252)		1.078 (0.872)	
hours	0.439 (0.496)	0.329 (0.482)	-0.196 (0.332)	-0.331 (0.336)
job	-0.068 (1.299)	0.101 (1.208)	1.063 (0.873)	0.712 (0.843)
jobhours	-0.129 (0.517)	-0.176 (0.478)	-0.627 (0.348)	-0.467 (0.334)
pospeerbehav	0.494*** (0.103)	0.514*** (0.099)		
negpeerbehav			0.412*** (0.099)	0.408*** (0.099)
R-squared	0.185	0.170	0.223	0.151
N	178	178	179	179

Significance: *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$

Table 3. Summary of regressions with positive and negative behaviors separated both with and without college controls for *mincome*.

	mclass3	mclass5	mclass4	mclass6
	posbehavsum	posbehavsum	negbehavsum	negbehavsum
(Intercept)	5.842** (1.867)	6.279*** (1.602)	12.308*** (1.582)	12.895*** (1.421)
class	-0.175 (0.364)	-0.228 (0.358)	0.019 (0.249)	-0.011 (0.252)
private	-0.114 (0.928)	-0.068 (0.919)	-0.065 (0.625)	-0.060 (0.636)
Engineering	0.125 (1.010)		-0.233 (0.674)	
University	3.008 (4.767)		6.894* (3.285)	
Education	-1.230 (1.240)		-0.635 (0.848)	
Arts	-0.310 (0.896)		-0.187 (0.611)	
Spears	-1.553 (1.061)		-1.838* (0.728)	
Honors	0.952 (1.081)		0.977 (0.755)	
hours	0.605 (0.448)	0.566 (0.438)	-0.073 (0.302)	-0.097 (0.305)
job	0.561 (1.156)	0.852 (1.085)	0.902 (0.786)	0.840 (0.761)
jobhours	-0.359 (0.463)	-0.470 (0.430)	-0.465 (0.317)	-0.435 (0.303)
pospeerbehav	0.523*** (0.092)	0.550*** (0.088)		
negpeerbehav			0.388*** (0.085)	0.387*** (0.086)
R-squared	0.218	0.196	0.180	0.108
N	201	201	202	202

Significance: *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$

Table 4. Summary of regressions with positive and negative behaviors separated both with and without college controls for *mclass*.

Discussion

Due to lack of statistical significance, I am unable to determine whether or not a relationship exists between socioeconomic status and classroom behaviors of college-aged individuals. While the socioeconomic variables do not exhibit statistical significance in the regressions, I will still interpret their meanings at this time. For regression one, the intercept is the first step to understanding the results. This intercept is saying that, holding all other shown variables constant at 0, the base behavior of a respondent has a score of roughly 19.49 out of 59 for classroom behaviors. To put this into context, 59 would be the highest value for the most positive classroom behaviors (with no negative behaviors) while 0 represents the most negative classroom behaviors (with no positive behaviors). This essentially means that a respondent, when holding all variables at 0, has more negative classroom behaviors than positive classroom behaviors when ranked on a categorical scale. For the next variable in question, *income*, the implication is that for each additional income bracket a family had during the college student's childhood, the respondent will exhibit .361 more negative behaviors. Essentially, if the respondent was from the highest income bracket included in this study (\$373,894 or more), the student exhibits roughly 1.444 more negative behaviors than a student in the lowest income bracket included (0.361×4). The coefficients for other variables are interpreted similarly. However, only variables with statistical significance will be focused on for the rest of this discussion.

The significant variables in regression 1 are the dummy variables for Spears and University (10%) and the summation variable for peer behavior (less than 1%). For regression 2, the coefficient for Spears (5%), University (10%), and peer behavior (less than 1%). For our respondents in the context of regression 1, this means that if they were a student with the

University college, they exhibited about 12 more positive behaviors; if they were a student in Spears, they exhibited about 2.6 more negative behaviors; and for each additional positive behavior of their peers, they exhibited 0.38 more positive behaviors. In the context of regression 2, if a respondent was a student with the University college, they exhibited about 10 more positive behaviors; if they were a student in Spears, they exhibited roughly 3.2 more negative behaviors; and for each additional positive behavior of their peers, they exhibited roughly 0.413 more positive behaviors.

For the adjustments made that removed the college controls for regression 1 and 2, the statistical significance did not change for peer behavior. For the additional adjustments that separated positive and negative behaviors, there were changes in statistical significance for adjustments made to regression 1 when accounting for negative behaviors only (*mincome*). For *mincome4* in table 3, there is statistical significance for the urban dummy variable (10%), University (5%), Spears (5%), job hours (10%), and negative peer behavior (less than 1%). For *mincome6*, statistical significance was present for the suburban dummy variable (5%) and peer behavior (less than 1%). For adjustments made to regression 2, there was a loss in statistical significance for Spears and University when accounting for positive behaviors (*mclass3*). For *mclass4*, when accounting only for negative behaviors, there was statistical significance for University (5%), Spears (5%), and negative peer behavior (less than 1%). For *mclass6*, there was still statistical significance for negative peer behavior (less than 1%).

Limitations

Unfortunately, it is obvious that there are many limitations to this study. Some of them are as follows: location of study, similarity of respondents, sample size, and potential dishonesty on behalf of the respondents. There are most likely additional limitations that have not been

discussed at this point. However, I believe those mentioned and discussed below have the most impact and significance on this study as well as future studies and their necessary adjustments.

Location of Study

This study took place on the campus of a four-year university. Due to the sample being confined in both physical location and online presence with the university, the respondents are likely already part of higher socioeconomic statuses as it is well-understood that students of four-year universities tend to be from higher socioeconomic statuses when compared to two-year universities, vocational schools, or non-attendees of additional schooling after high school. For future studies, if this were to be replicated in any way, the pool of respondents would need to be expanded to additional universities. Even including other Oklahoma universities (University of Oklahoma, University of Tulsa, University of Central Oklahoma, Oklahoma City University, Southwestern Oklahoma State University, Rose State, Tulsa Community College, etc.) would allow for a better pool of respondents as it would include public and private institutions as well as community colleges. Expansion outside of Oklahoma would present an even better pool of respondents.

Similarity of Respondents

As previously mentioned, many of the respondents were involved with the Honors College (94%). There is a general understanding that students within the same college, when as specialized as the Honors College, tend to have similar personalities, character traits, and behaviors both in and outside of the classroom. This creates an unintentional issue in my data as the results are not truly representative of a random sample of students at the university. Out of 24,649 students at the university (according to the Oklahoma State University website) there are

just over 2,000 students enrolled in the Honors College (according to the Honors College website). That works out to about 8.1% of the student body whereas my survey had 188 of the 210 respondents as involved in the Honors College (about 94%). Another issue is with students self-identifying their socioeconomic status. A true representation of the population would have 20% in each category (Lower, Lower-middle, Middle, Upper-middle, and Upper Class). However, my sample is very unevenly split with 4.7% selecting lower class, 14.7% lower-middle, 30.4% middle, 45.2% upper-middle, 4.2% upper, and .04% choosing to not answer this question. Clearly, my data has a heavy emphasis on middle and upper-middle class. While this can partly be explained with the understanding that attendees of four-year institutions tend to be from higher socioeconomic backgrounds, there should still, theoretically, be a more equitable split in the data.

Sample Size

The sample size of my study is only 210 respondents, with not all results being valid. This is an extremely small sample size. This could lead to false statistical significance as well as no statistical significance. As previously mentioned, OSU has about 24,649 students. My sample includes less than 1% of the student population. If this study were to be repeated, sample size would have to be bigger. This could most likely be done by allowing it to be included on the various survey systems the university has (such as Management SONA system and Psychology Systems). By including it on additional research platforms within the university that encourage participation, a wider sample could be taken. However, it is important to note that a bias would still exist since those two systems are normally limited to related courses. The addition of incentives could encourage survey participation as well that may result in a more representative sample.

Potential Dishonesty and Lack of Knowledge

As is an issue with every survey, there is no way to guarantee complete honesty or accuracy on behalf of the respondents. Even though steps were taken to attempt to circumvent potential dishonesty, there is no way to determine whether or not respondents were being truly honest. Due to this, there may be instances of false positive behavior averages as well as false negative behavior averages as respondents either subconsciously or consciously wanted to give a “good” or “average” impression. As far as I know, there is no way to guarantee true honesty when collecting data in this manner. There is just the understanding and hope that the average respondent will be more honest than dishonest with as many of the responses as possible.

There is another issue with the idea that the respondents may not have known the answers to the questions asked. In particular, the income and class questions may have been a random guess on the part of the respondent rather than true knowledge of the answer. Many surveys have shown that the majority of people tend to relate themselves to the middle, or working, class rather than their accurate class. This is because upper- and lower-class stereotypes tend to showcase the extremes: Jeff Bezos and poverty-stricken families. Since individuals or families don't relate to either of these extremes, they tend to lump themselves in with what they see as the “middle of the road,” which is middle class in this case. In my opinion, there is also an inherent misunderstanding in what all is used to determine class classifications. Most people don't understand what is taken into account whenever a population is split into socioeconomic statuses, which only leads to lack of accuracy in surveys when asked about socioeconomic status.

Next Steps and Potential Applications

As mentioned, there are many limitations to this study. However, I believe if actions could be taken to address and counteract the limitations (sample size and location of study to be specific) with additional variables to account for institutional differences, there could be significant results tying classroom behavior to socioeconomic status. At the same time, the statistically significant relationship between peer behavior and classroom behavior of respondents is essential to understanding potential programs that could be put in place to encourage positive classroom behaviors that could lead to potential successes regardless of socioeconomic background.

Another way this study should be expanded is connecting classroom behaviors with GPA. In order to guarantee anonymity with the variety of questions I was asking, GPA was not a question that was asked as part of my survey. Understanding the relationship between classroom behavior and GPA is essential for determining useful programs to encourage collegiate success and completion regardless of socioeconomic background.

Even though my variable of interest turned out to not be the focus of my discussion, the additional understanding of various relationships is essential to the expansion of knowledge and in determining future studies to address gaps in the research.

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Appendix A

Complete list of Survey Questions

BACKGROUND/DEMOGRAPHIC INFORMATION QUESTIONS

The following questions will ask about your background before coming to OSU. Please answer to the best of your ability. If you prefer not to answer, please choose the option "Prefer not to answer."

1. What was your family's socioeconomic class for the majority of your childhood?
 - a. Lower class
 - b. Lower-middle class
 - c. Middle class
 - d. Upper middle class
 - e. Upper class
 - f. I prefer not to answer/I don't know/Unsure
2. What was your family's average income when you were growing up?
 - a. \$32,048 or less
 - b. \$32,048 - \$53,413
 - c. \$53,413 - \$106,827
 - d. \$106,827 - \$373,894
 - e. \$373,894 or more
 - f. I prefer not to answer/I don't know/Unsure
3. How many parents/guardians were in your household (including step-parents/guardians)?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. I prefer not to answer
4. What was the profession of parent/guardian 1? (FILL IN THE BLANK)
5. What was the profession of parent/guardian 2? (FILL IN THE BLANK)

6. What was the highest level of education completed by parent/guardian 1?

- a. High school
- b. Associate's degree
- c. Bachelor's degree
- d. Master's degree
- e. Doctorate
- f. I prefer not to answer

7. What was the highest level of education completed by parent/guardian 2?

- a. High school
- b. Associate's degree
- c. Bachelor's degree
- d. Master's degree
- e. Doctorate
- f. I prefer not to answer

8. How many siblings were you raised with (in the same household)?

- a. 0
- b. 1
- c. 2
- d. 3
- e. 4+
- f. Prefer not to answer

9. Where did you live for the majority of your childhood?

- a. Urban
- b. Suburban
- c. Rural
- d. I prefer not to answer/I don't know/Unsure

10. What type of school did you attend for the majority of your K-12 education?

- a. Public
- b. Private
- c. I prefer not to answer/I don't know/Unsure

11. How many bedrooms did the house you lived in for the majority of your childhood have?

- a. 1
- b. 2
- c. 3
- d. 4+
- e. I prefer not to answer/I don't know/Unsure

CLASSROOM BEHAVIOR QUESTIONS

The following questions will ask for background information related to your time at OSU. Please answer to the best of your ability.

12. What is your major? (FILL IN THE BLANK)

13. What college are you in?

- a. Education and Human Sciences
- b. Ferguson College of Agriculture
- c. Global Studies and Partnerships
- d. Spears School of Business
- e. Arts and Sciences
- f. Engineering, Architecture and Technology
- g. University College
- h. I prefer not to answer/I don't know/Unsure

14. Are you in the Honor's College?

- a. Yes
- b. No
- c. I prefer not to answer/I don't know/Unsure

15. How many hours are you taking?

- a. Less than 12
- b. 12-15
- c. 15-18
- d. 18+
- e. I prefer not to answer/I don't know/Unsure

16. Do you have a job on or off campus?
- a. Yes
 - b. No
 - c. I prefer not to answer/I don't know/Unsure
17. In a week, how many hours do you spend working?
- a. Less than 10
 - b. 10-20
 - c. 20-30
 - d. 30-40
 - e. 40+
 - f. I prefer not to answer/I don't know/Unsure

CLASSROOM QUESTIONS

The following questions will ask about your classroom related behavior. Please answer to the best of your ability.

18. In a month, how often do you go to the library?
- a. Never
 - b. Once every other week
 - c. Once a week
 - d. Once every couple of days
 - e. Once every day
19. In a month, how often do you go to a professor's office hours (for all classes combined)?
- a. Never
 - b. Once every other week
 - c. Once a week
 - d. Once every couple of days
 - e. Once every day
20. In a month, how often do you go to the Writing Center?
- a. Never
 - b. Once every other week
 - c. Once a week

- d. Once every couple of days
- e. Once every day

21. In a month, how often do you attend a LASSO center session?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

22. In a month, how often do you attend a study group for classes?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

23. In a month, how often do you attend SI sessions for your class (if applicable)?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day
- f. Not applicable/None of my classes offer SI sessions

24. In a week, how many hours do you spend studying?

- a. 0-3
- b. 3-6
- c. 6-9
- d. 9+

25. In a month, how often have you skipped a class?

- a. Never
- b. Once every other week
- c. Once a week

- d. Once every couple of days
- e. Once every day

26. In a month, how many assignments/quizzes have you missed? (NOT including late work)

- a. 0
- b. 1-3
- c. 4-6
- d. 7-9
- e. 9+

27. In a month, how many assignments/quizzes have been turned in late?

- a. 0
- b. 1-3
- c. 4-6
- d. 7-9
- e. 9+

28. In a class period, how often are you on your phone, on average?

- a. Never
- b. 1-2 times
- c. 2-4 times
- d. 4-6 times
- e. 6+ times

PEER BEHAVIOR QUESTIONS

The following questions will ask about your peers' behaviors. Please reflect on the behavior of your closest peer(s) (that you spend the most time with in and/or out of class).

29. In the last month, how often do your close peers go to the library?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

30. In a month, how often do your close peers go to a professor's office hours (for all classes combined)?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

31. In a month, how often do your close peers go to the Writing Center?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

32. In a month, how often do your close peers attend a LASSO center session?

- a. Never
- b. Once every other week
- b. Once a week
- d. Once every couple of days
- e. Once every day

33. In a month, how often do your close peers attend a study group for classes?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

34. In a month, how often do your close peers attend SI sessions for your class (if applicable)?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days

- e. Once every day
- f. Not applicable/None of my classes offer SI sessions

35. In a week, how many hours do your close peers spend studying?

- a. 0-3
- b. 3-6
- c. 6-9
- d. 9+

36. In a month, how often have your close peers skipped a class?

- a. Never
- b. Once every other week
- c. Once a week
- d. Once every couple of days
- e. Once every day

37. In a month, how many assignments/quizzes have your close peers missed? (NOT including late work)

- a. 0
- b. 1-3
- c. 4-6
- d. 7-9
- e. 9+

38. In a month, how many assignments/quizzes have been turned in late?

- a. 0
- b. 1-3
- c. 4-6
- d. 7-9
- e. 9+

39. In a class period, how often are your peers on their phone, on average?

- a. Never
- b. 1-2 times
- c. 2-4 times

- d. 4-6 times
- e. 6+ times

SCENARIO QUESTIONS

For the following questions, you will be asked about scenarios. Please answer to the best of your ability.

40. Thomas forgot about an assignment. He asked his friend to send over the assignment to copy so he had something to turn in. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

41. Amanda needs help with part of the homework. She decides to email the TA for help. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

42. Claire went to the Professor's office hours to clarify something after the lecture. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

43. Brody heard someone had the answers to the quiz in class. He found the answers and memorized them before the quiz. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

44. Laney was struggling with the content in her class. She decided to book an appointment with a LASSO tutor. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

45. Jordan was on the way to class when they heard their classmates talking about cheating on an exam. They decided to anonymously tell the TA. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

46. Tracy was in class when the professor asked a question. She answered the question in class. Does this sound like something you have done?

- a. Have done
- b. Have not done

If I have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

47. Peter gave his friend answers to the homework assignment before it was due. Does this sound like something you have done?

- a. Have done
- b. Have not done

If you have not done this, does this sound like something you would do?

- a. Would do
- b. Would not do

Thank you for your participation in this survey. If you are ready to submit your results, please click "yes" below.

Appendix B

List of R codes used in Data Analysis

```
Data$class=NA
```

```
Data$class[Data$Q2=="Lower class"]=1
```

```
Data$class[Data$Q2=="Lower-middle class"]=2
```

```
Data$class[Data$Q2=="Middle class"]=3
```

```
Data$class[Data$Q2=="Upper-middle class"]=4
```

```
Data$class[Data$Q2=="Upper class"]=5
```

```
Data$income=NA
```

```
Data$income[Data$Q3=="$32,048 or less"]=1
```

```
Data$income[Data$Q3=="$32,048 - $53,413"]=2
```

```
Data$income[Data$Q3=="$53,413 - $106,827"]=3
```

```
Data$income[Data$Q3=="$106,827 - $373,894"]=4
```

```
Data$income[Data$Q3=="$373,894 or more"]=5
```

```
Data$numberpar=NA
```

```
Data$numberpar=Data$Q4
```

```
Data$pareduc<-NA
```

```
Data$pareduc<-ifelse(Data$Q9=="Doctorate (PhD, MD, DO, OD, etc.)",5,ifelse(Data$Q10=="Doctorate (PhD, MD, DO, OD, etc.)",5,ifelse(Data$Q9=="Master's degree",4,ifelse(Data$Q10=="Master's degree",4,ifelse(Data$Q9=="Bachelor's degree",3,ifelse(Data$Q10=="Bachelor's degree",3,ifelse(Data$Q9=="Associate's degree",2,ifelse(Data$Q10=="Associate's degree",2,ifelse(Data$Q9=="High school",1,ifelse(Data$Q10=="High school",1,0))))))))))
```

```
Data$siblings=NA
```

```
Data$siblings[Data$Q13=="0"]=0
```

```
Data$siblings[Data$Q13=="1"]=1
```

Data\$siblings[Data\$Q13=="2"]=2

Data\$siblings[Data\$Q13=="3"]=3

Data\$siblings[Data\$Q13=="4+"]=4

Data\$urban<-NA

Data\$urban<-ifelse(Data\$Q14=="Urban (In the city)",1,0)

Data\$suburban<-NA

Data\$suburban<-ifelse(Data\$Q14=="Suburban (Outside of the city but still close)",1,0)

Data\$private<-NA

Data\$private<-ifelse(Data\$Q15=="Private",1,0)

Data\$public<-NA

Data\$public<-ifelse(Data\$Q15=="Public",1,0)

COLLEGE BEHAVIOR

Data\$Engineering=NA

Data\$University=NA

Data\$Education=NA

Data\$Arts=NA

Data\$Spears=NA

Data\$Ag=NA

Data\$Global=NA

Data\$Engineering<-ifelse(Data\$Q19=="Engineering, Architecture and Technology",1,0)

Data\$University<-ifelse(Data\$Q19=="University College",1,0)

Data\$Education<-ifelse(Data\$Q19=="Education and Human Sciences",1,0)

Data\$Arts<-ifelse(Data\$Q19=="Arts and Sciences",1,0)

Data\$Spears<-ifelse(Data\$Q19=="Spears School of Business",1,0)

Data\$Ag<-ifelse(Data\$Q19=="Ferguson College of Agriculture",1,0)

Data\$Global<-ifelse(Data\$Q19=="Global Studies and Partnerships",1,0)

Data\$Honors=NA

Data\$Honors<-ifelse(Data\$Q20=="Yes",1,0)

Data\$hours=NA

Data\$hours[Data\$Q21=="Less than 12"]=1

Data\$hours[Data\$Q21=="45275"]=2

Data\$hours[Data\$Q21=="16-18"]=3

Data\$hours[Data\$Q21=="18+"]=4

Data\$job=NA

Data\$job<-ifelse(Data\$Q22=="Yes",1,0)

Data\$jobhours=NA

Data\$jobhours[Data\$Q23=="Less than 10"]=1

Data\$jobhours[Data\$Q23=="45219"]=2

Data\$jobhours[Data\$Q23=="20-30"]=3

Data\$jobhours[Data\$Q23=="30-40"]=4

Data\$jobhours[Data\$Q23=="40+"]=5

Data\$jobhours[is.na(Data\$jobhours)] <-0

CLASSROOM BEHAVIOR

Data\$library=NA

Data\$library[Data\$Q37=="Never"]=0

Data\$library[Data\$Q37=="Once every other week"]=1

Data\$library[Data\$Q37=="Once a week"]=2

Data\$library[Data\$Q37=="Once every couple of days"]=3

Data\$library[Data\$Q37=="Once every day"]=4

Data\$office=NA

Data\$office[Data\$Q39=="Never"]=0

Data\$office[Data\$Q39=="Once every other week"]=1

Data\$office[Data\$Q39=="Once a week"]=2

Data\$office[Data\$Q39=="Once every couple of days"]=3

Data\$office[Data\$Q39=="Once every day"]=4

Data\$WC=NA

Data\$WC[Data\$Q38=="Never"]=0

Data\$WC[Data\$Q38=="Once every other week"]=1

Data\$WC[Data\$Q38=="Once a week"]=2

Data\$WC[Data\$Q38=="Once every couple of days"]=3

Data\$WC[Data\$Q38=="Once every day"]=4

Data\$lasso=NA

Data\$lasso[Data\$Q40=="Never"]=0

Data\$lasso[Data\$Q40=="Once every other week"]=1

Data\$lasso[Data\$Q40=="Once a week"]=2

Data\$lasso[Data\$Q40=="Once every couple of days"]=3

Data\$lasso[Data\$Q40=="Once every day"]=4

Data\$MLSC=NA

Data\$MLSC[Data\$Q41=="Never"]=0

Data\$MLSC[Data\$Q41=="Once every other week"]=1

Data\$MLSC[Data\$Q41=="Once a week"]=2

Data\$MLSC[Data\$Q41=="Once every couple of days"]=3

Data\$MLSC[Data\$Q41=="Once every day"]=4

Data\$studgr=NA

Data\$studgr[Data\$Q42=="Never"]=0

Data\$studgr[Data\$Q42=="Once every other week"]=1

Data\$studgr[Data\$Q42=="Once a week"]=2

Data\$studgr[Data\$Q42=="Once every couple of days"]=3

Data\$studgr[Data\$Q42=="Once every day"]=4

Data\$hrstudy=NA

Data\$hrstudy[Data\$Q44=="0-3"]=0

Data\$hrstudy[Data\$Q44=="44991"]=1

Data\$hrstudy[Data\$Q44=="45086"]=2

Data\$hrstudy[Data\$Q44=="9+"]=3

Data\$skip=NA

Data\$skip[Data\$Q45=="Never"]=4

Data\$skip[Data\$Q45=="Once every other week"]=3

Data\$skip[Data\$Q45=="Once a week"]=2

Data\$skip[Data\$Q45=="Once every couple of days"]=1

Data\$skip[Data\$Q45=="Once every day"]=0

Data\$miss=NA

Data\$miss[Data\$Q46=="0"]=4

Data\$miss[Data\$Q46=="44929"]=3

Data\$miss[Data\$Q46=="45022"]=2

Data\$miss[Data\$Q46=="45116"]=1

Data\$miss[Data\$Q46=="9+"]=0

Data\$late=NA

Data\$late[Data\$Q47=="0"]=4

Data\$late[Data\$Q47=="44929"]=3

Data\$late[Data\$Q47=="45022"]=2

Data\$late[Data\$Q47=="45116"]=1

Data\$late[Data\$Q47=="9+"]=0

Data\$phone=NA

Data\$phone[Data\$Q48=="Never"]=4

Data\$phone[Data\$Q48=="1-2 times"]=3

Data\$phone[Data\$Q48=="2-4 times"]=2

Data\$phone[Data\$Q48=="4-6 times"]=1

Data\$phone[Data\$Q48=="6+ times"]=0

PEER BEHAVIOR

Data\$plibrary=NA

Data\$plibrary[Data\$Q50=="Never"]=0

Data\$plibrary[Data\$Q50=="Once every other week"]=1

Data\$plibrary[Data\$Q50=="Once a week"]=2

Data\$plibrary[Data\$Q50=="Once every couple of days"]=3

Data\$plibrary[Data\$Q50=="Once every day"]=4

Data\$poffice=NA

Data\$poffice[Data\$Q51=="Never"]=0

Data\$poffice[Data\$Q51=="Once every other week"]=1

Data\$poffice[Data\$Q51=="Once a week"]=2

Data\$poffice[Data\$Q51=="Once every couple of days"]=3

Data\$poffice[Data\$Q51=="Once every day"]=4

Data\$pWC=NA

Data\$pWC[Data\$Q52=="Never"]=0

Data\$pWC[Data\$Q52=="Once every other week"]=1

Data\$pWC[Data\$Q52=="Once a week"]=2

Data\$pWC[Data\$Q52=="Once every couple of days"]=3

Data\$pWC[Data\$Q52=="Once every day"]=4

Data\$plasso=NA

Data\$plasso[Data\$Q53=="Never"]=0

Data\$plasso[Data\$Q53=="Once every other week"]=1

Data\$plasso[Data\$Q53=="Once a week"]=2

Data\$plasso[Data\$Q53=="Once every couple of days"]=3

Data\$plasso[Data\$Q53=="Once every day"]=4

Data\$pMLSC=NA

Data\$pMLSC[Data\$Q55=="Never"]=0

Data\$pMLSC[Data\$Q55=="Once every other week"]=1

Data\$pMLSC[Data\$Q55=="Once a week"]=2

Data\$pMLSC[Data\$Q55=="Once every couple of days"]=3

Data\$pMLSC[Data\$Q55=="Once every day"]=4

Data\$pstudgr=NA

Data\$pstudgr[Data\$Q56=="Never"]=0

Data\$pstudgr[Data\$Q56=="Once every other week"]=1

Data\$pstudgr[Data\$Q56=="Once a week"]=2

Data\$pstudgr[Data\$Q56=="Once every couple of days"]=3

Data\$pstudgr[Data\$Q56=="Once every day"]=4

Data\$phrstudy=NA

Data\$phrstudy[Data\$Q58=="0-3"]=0

Data\$phrstudy[Data\$Q58=="44991"]=1

Data\$phrstudy[Data\$Q58=="45086"]=2

Data\$phrstudy[Data\$Q58=="9+"]=3

Data\$pskip=NA

Data\$pskip[Data\$Q59=="Never"]=4

Data\$pskip[Data\$Q59=="Once every other week"]=3

Data\$pskip[Data\$Q59=="Once a week"]=2

Data\$pskip[Data\$Q59=="Once every couple of days"]=1

Data\$pskip[Data\$Q59=="Once every day"]=0

Data\$pmiss=NA

Data\$pmiss[Data\$Q60=="0"]=4

Data\$pmiss[Data\$Q60=="44929"]=3

Data\$pmiss[Data\$Q60=="45022"]=2

Data\$pmiss[Data\$Q60=="45116"]=1

Data\$pmiss[Data\$Q60=="9+"]=0

Data\$plate=NA

Data\$plate[Data\$Q61=="0"]=4

Data\$plate[Data\$Q61=="44929"]=3

Data\$plate[Data\$Q61=="45022"]=2

Data\$plate[Data\$Q61=="45116"]=1

Data\$plate[Data\$Q61=="9+"]=0

Data\$pphone=NA

Data\$pphone[Data\$Q62=="Never"]=4

Data\$pphone[Data\$Q62=="1-2 times"]=3

Data\$pphone[Data\$Q62=="2-4 times"]=2

Data\$pphone[Data\$Q62=="4-6 times"]=1

Data\$pphone[Data\$Q62=="6+ times"]=0

SCENARIO BASED QUESTIONS

Thomas

Data\$Thomas1=NA

Data\$Thomas1[Data\$Q65=="Have done"]=0

Data\$Thomas1[Data\$Q65=="Have not done"]=1

Data\$Thomas2=NA

Data\$Thomas2[Data\$Q66=="Would do"]=0

Data\$Thomas2[Data\$Q66=="Would not do"]=1

Data\$Thomas2[is.na(Data\$Thomas2)] <-0

Amanda

Data\$Amanda1=NA

Data\$Amanda1[Data\$Q67=="Have done"]=1

Data\$Amanda1[Data\$Q67=="Have not done"]=0

Data\$Amanda2=NA

Data\$Amanda2[Data\$Q68=="Would do"]=1

Data\$Amanda2[Data\$Q68=="Would not do"]=0

```
Data$Amanda2[is.na(Data$Amanda2)] <-1
```

Claire

```
Data$Claire1=NA
```

```
Data$Claire1[Data$Q69=="Have done"]=1
```

```
Data$Claire1[Data$Q69=="Have not done"]=0
```

```
Data$Claire2=NA
```

```
Data$Claire2[Data$Q70=="Would do"]=1
```

```
Data$Claire2[Data$Q70=="Would not do"]=0
```

```
Data$Claire2[is.na(Data$Claire2)] <-1
```

Brody

```
Data$Brody1=NA
```

```
Data$Brody1[Data$Q72=="Have done"]=0
```

```
Data$Brody1[Data$Q72=="Have not done"]=1
```

```
Data$Brody2=NA
```

```
Data$Brody2[Data$Q71=="Would do"]=0
```

```
Data$Brody2[Data$Q71=="Would not do"]=1
```

```
Data$Brody2[is.na(Data$Brody2)] <-0
```

Laney

```
Data$Laney1=NA
```

```
Data$Laney1[Data$Q74=="Have done"]=1
```

```
Data$Laney1[Data$Q74=="Have not done"]=0
```

```
Data$Laney2=NA
```

```
Data$Laney2[Data$Q73=="Would do"]=1
```

```
Data$Laney2[Data$Q73=="Would not do"]=0
```

```
Data$Laney2[is.na(Data$Laney2)] <-1
```

Jordan

```
Data$Jordan1=NA
```

```
Data$Jordan1[Data$Q75=="Have done"]=1
```

```
Data$Jordan1[Data$Q75=="Have not done"]=0
```

```
Data$Jordan1[is.na(Data$Jordan1)] <-0
```

```
Data$Jordan2=NA
```

```
Data$Jordan2[Data$Q76=="Would do"]=1
```

```
Data$Jordan2[Data$Q76=="Would not do"]=0
```

```
Data$Jordan2[is.na(Data$Jordan2)] <-1
```

Tracy

```
Data$Tracy1=NA
```

```
Data$Tracy1[Data$Q77=="Have done"]=1
```

```
Data$Tracy1[Data$Q77=="Have not done"]=0
```

```
Data$Tracy2=NA
```

```
Data$Tracy2[Data$Q78=="Would do"]=1
```

```
Data$Tracy2[Data$Q78=="Would not do"]=0
```

```
Data$Tracy2[is.na(Data$Tracy2)] <-1
```

Peter

```
Data$Peter1=NA
```

```
Data$Peter1[Data$Q79=="Have done"]=0
```

```
Data$Peter1[Data$Q79=="Have not done"]=1
```

```
Data$Peter1[is.na(Data$Peter1)] <-0
```

```
Data$Peter2=NA
```

```
Data$Peter2[Data$Q80=="Would do"]=0
```

```
Data$Peter2[Data$Q80=="Would not do"]=1
```

```
Data$Peter2[is.na(Data$Peter2)] <-0
```

```
Data$scenariosum=(Data$Thomas1+Data$Thomas2+Data$Amanda1+Data$Amanda2+Data$Claire1+Data$Claire2+Data$Brody1+Data$Brody2+Data$Laney1+Data$Laney2+Data$Jordan1+Data$Jordan2+Data$Tracy1+Data$Tracy2+Data$Peter1+Data$Peter2)
```

```
Data$peerbehav<-NA
```

```
Data$peerbehav=(Data$phrstudy+Data$plasso+Data$plate+Data$plibrary+Data$pmis+Data$pMLSC+Data$ppoffice+Data$pphone+Data$pskip+Data$pstudgr+Data$pWC)
```

```
Data$behavsum<-NA
```

```
Data$behavsum=(Data$hrstudy+Data$lasso+Data$late+Data$library+Data$miss+Data$MLSC+Data$office+Data$phone+Data$skip+Data$studgr+Data$WC+Data$scenariosum)
```

```
Data$posbehavsum<-NA
```

```
Data$posbehavsum=(Data$hrstudy+Data$lasso+Data$library+Data$MLSC+Data$office+Data$studgr+Data$WC+Data$posscenariosum)
```

```
Data$negbehavsum<-NA
```

```
Data$negbehavsum=(Data$late+Data$miss+Data$phone+Data$skip+Data$negscenariosum)
```

```
mincome=lm(behavsum~income+numberpar+pareduc+siblings+urban+suburban+private+Engineering+University+Education+Arts+Spears+Honors+hours+job+jobhours+peerbehav, data=Data, na.action=na.omit)
```

```
mincome2=lm(behavsum~income+numberpar+pareduc+siblings+urban+suburban+private+hours+job+jobhours+peerbehav, data=Data, na.action=na.omit)
```

```
mincome3=lm(posbehavsum~income+numberpar+pareduc+siblings+urban+suburban+
private+Engineering+University+Education+Arts+Spears+Honors+hours+job+jobhours+pospee
rbehav, data=Data, na.action=na.omit)
```

```
mincome4=lm(negbehavsum~income+numberpar+pareduc+siblings+urban+suburban+
private+Engineering+University+Education+Arts+Spears+Honors+hours+job+jobhours+negpee
rbehav, data=Data, na.action=na.omit)
```

```
mincome5=lm(posbehavsum~income+numberpar+pareduc+siblings+urban+suburban+
private+hours+job+jobhours+pospeerbehav, data=Data, na.action=na.omit)
```

```
mincome6=lm(negbehavsum~income+numberpar+pareduc+siblings+urban+suburban+
private+hours+job+jobhours+negpeerbehav, data=Data, na.action=na.omit)
```

```
mclass=lm(behavsum~class+Engineering+University+Education+Arts+Spears+Honors+hours+j
ob+jobhours+peerbehav,data=Data, na.action=na.omit)
```

```
mclass2=lm(behavsum~class+private+hours+job+jobhours+peerbehav,data=Data,
na.action=na.omit)
```

```
mclass3=lm(posbehavsum~class+private+Engineering+University+Education+Arts+Spears+Ho
nors+hours+job+jobhours+pospeerbehav, data=Data, na.action=na.omit)
```

```
mclass4=lm(negbehavsum~class+private+Engineering+University+Education+Arts+Spears+Ho
nors+hours+job+jobhours+negpeerbehav, data=Data, na.action=na.omit)
```

```
mclass5=lm(posbehavsum~class+private +hours+job+jobhours+pospeerbehav, data=Data,
na.action=na.omit)
```

```
mclass6=lm(negbehavsum~class+private +hours+job+jobhours+negpeerbehav, data=Data,
na.action=na.omit)
```

```
> summary(mclass)
```

```
Call:
```

```
lm(formula = behavsum ~ class + private + Engineering + University +
  Education + Arts + Spears + Honors + hours + job + jobhours +
  peerbehav, data = Data, na.action = na.omit)
```

```
Residuals:
```

```
    Min       1Q   Median       3Q      Max
-14.155  -3.507  -0.022   3.553  13.832
```

```
Coefficients:
```

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	19.29798	2.67196	7.222	1.27e-11	***
class	-0.14936	0.47424	-0.315	0.7532	
private	0.05790	1.20111	0.048	0.9616	
Engineering	0.64367	1.28248	0.502	0.6163	
University	10.58256	6.20583	1.705	0.0898	.
Education	-1.28306	1.63901	-0.783	0.4347	
Arts	-0.22429	1.16067	-0.193	0.8470	
Spears	-3.26892	1.37422	-2.379	0.0184	*


```

Honors      1.54288    1.43625    1.074    0.2841
hours      0.59970    0.58237    1.030    0.3045
job        1.53178    1.49568    1.024    0.3071
jobhours  -0.84138    0.59978   -1.403    0.1623
peerbehav  0.41341    0.09341    4.426    1.63e-05 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 5.719 on 186 degrees of freedom
(11 observations deleted due to missingness)
Multiple R-squared:  0.203,    Adjusted R-squared:  0.1516
F-statistic: 3.948 on 12 and 186 DF,  p-value: 2.001e-05

```

```
> summary(mclass2)
```

```

Call:
lm(formula = behavsum ~ class + private + hours + job + jobhours +
    peerbehav, data = Data, na.action = na.omit)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-18.1252  -3.4963   0.1994   4.0465  13.4954

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 20.09446   2.43813   8.242 2.61e-14 ***
class       -0.23116   0.47798  -0.484   0.629
private      0.02380   1.22014   0.020   0.984
hours        0.46377   0.58575   0.792   0.429
job          1.73503   1.44227   1.203   0.230
jobhours    -0.90558   0.57087  -1.586   0.114
peerbehav   0.44590   0.09237   4.827 2.82e-06 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 5.857 on 192 degrees of freedom
(11 observations deleted due to missingness)
Multiple R-squared:  0.1372,    Adjusted R-squared:  0.1102
F-statistic: 5.086 on 6 and 192 DF,  p-value: 7.198e-05

```

```
> summary(mclass3)
```

```

Call:
lm(formula = posbehavsum ~ class + private + Engineering + University +
    Education + Arts + Spears + Honors + hours + job + jobhours +
    pospeerbehav, data = Data, na.action = na.omit)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-10.893  -2.449  -0.371   3.026  11.319

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  5.84245   1.86705   3.129  0.00203 **
class       -0.17528   0.36430  -0.481  0.63097
private     -0.11393   0.92785  -0.123  0.90241
Engineering  0.12547   1.00995   0.124  0.90126
University  3.00781   4.76709   0.631  0.52884
Education   -1.22980   1.23997  -0.992  0.32257
Arts        -0.31004   0.89593  -0.346  0.72969
Spears     -1.55294   1.06073  -1.464  0.14486
Honors      0.95242   1.08114   0.881  0.37948
hours       0.60507   0.44824   1.350  0.17868

```

```

job          0.56066    1.15596    0.485    0.62823
jobhours    -0.35876    0.46293   -0.775    0.43934
pospeerbehav 0.52329    0.09174    5.704 4.47e-08 ***

```

```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Residual standard error: 4.423 on 188 degrees of freedom

(9 observations deleted due to missingness)

Multiple R-squared: 0.2185, Adjusted R-squared: 0.1686

F-statistic: 4.379 on 12 and 188 DF, p-value: 3.757e-06

```
> summary(mclass4)
```

Call:

```
lm(formula = negbehavsum ~ class + private + Engineering + University +
    Education + Arts + Spears + Honors + hours + job + jobhours +
    negpeerbehav, data = Data, na.action = na.omit)
```

Residuals:

```

      Min       1Q   Median       3Q      Max
-9.3607 -1.8906  0.1917  2.1402  5.6980

```

Coefficients:

```

            Estimate Std. Error t value Pr(>|t|)
(Intercept) 12.30839    1.58214    7.780 4.60e-13 ***
class         0.01913    0.24938    0.077  0.9389
private      -0.06470    0.62515   -0.103  0.9177
Engineering  -0.23304    0.67438   -0.346  0.7301
University    6.89385    3.28465    2.099  0.0372 *
Education    -0.63455    0.84807   -0.748  0.4553
Arts         -0.18743    0.61100   -0.307  0.7594
Spears       -1.83757    0.72788   -2.525  0.0124 *
Honors        0.97693    0.75491    1.294  0.1972
hours        -0.07282    0.30224   -0.241  0.8099
job           0.90218    0.78648    1.147  0.2528
jobhours     -0.46464    0.31692   -1.466  0.1443
negpeerbehav 0.38770    0.08505    4.558 9.24e-06 ***

```

```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Residual standard error: 3.025 on 189 degrees of freedom

(8 observations deleted due to missingness)

Multiple R-squared: 0.1796, Adjusted R-squared: 0.1275

F-statistic: 3.448 on 12 and 189 DF, p-value: 0.0001329

```
> summary(mclass5)
```

Call:

```
lm(formula = posbehavsum ~ class + private + hours + job + jobhours +
    pospeerbehav, data = Data, na.action = na.omit)
```

Residuals:

```

      Min       1Q   Median       3Q      Max
-11.9194 -2.3244 -0.3108  2.9927 11.8630

```

Coefficients:

```

            Estimate Std. Error t value Pr(>|t|)
(Intercept)  6.27943    1.60204    3.920 0.000123 ***
class        -0.22834    0.35830   -0.637 0.524693
private      -0.06751    0.91913   -0.073 0.941521
hours         0.56596    0.43844    1.291 0.198286
job           0.85197    1.08520    0.785 0.433364
jobhours     -0.46985    0.42988   -1.093 0.275763
pospeerbehav 0.54984    0.08782    6.261 2.41e-09 ***

```

```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 4.416 on 194 degrees of freedom
(9 observations deleted due to missingness)
Multiple R-squared:  0.1958, Adjusted R-squared:  0.1709
F-statistic: 7.872 on 6 and 194 DF, p-value: 1.336e-07
```

```
> summary(mclass6)
```

```
Call:
lm(formula = negbehavsum ~ class + private + hours + job + jobhours +
    negpeerbehav, data = Data, na.action = na.omit)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-9.3802 -1.8251  0.3551  2.4766  6.3300
```

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 12.89533    1.42102   9.075 < 2e-16 ***
class       -0.01084    0.25210  -0.043  0.966
private     -0.05952    0.63605  -0.094  0.926
hours       -0.09707    0.30524  -0.318  0.751
job          0.83975    0.76147   1.103  0.271
jobhours    -0.43469    0.30256  -1.437  0.152
negpeerbehav 0.38736    0.08580   4.515 1.1e-05 ***
```

```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 3.105 on 195 degrees of freedom
(8 observations deleted due to missingness)
Multiple R-squared:  0.1083, Adjusted R-squared:  0.08087
F-statistic: 3.948 on 6 and 195 DF, p-value: 0.00095
```

```
> summary(minincome)
```

```
Call:
lm(formula = behavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + Engineering + University + Education +
    Arts + Spears + Honors + hours + job + jobhours + peerbehav,
    data = Data, na.action = na.omit)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-15.2618 -3.3246  0.4783  3.5645 14.3999
```

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 19.43888    3.84631   5.054 1.18e-06 ***
income      -0.36126    0.56170  -0.643 0.521045
numberpar   0.22691    1.33831   0.170 0.865580
pareduc     0.43156    0.43493   0.992 0.322589
siblings    0.02832    0.44610   0.063 0.949462
urban       -2.29234    1.48025  -1.549 0.123462
suburban    -0.81217    1.11216  -0.730 0.466305
private     -0.64711    1.34599  -0.481 0.631341
Engineering  0.88147    1.40065   0.629 0.530039
University  12.45867    6.60830   1.885 0.061213 .
Education   -1.11958    1.81295  -0.618 0.537760
Arts         0.07192    1.26543   0.057 0.954747
Spears      -2.65427    1.57434  -1.686 0.093765 .
Honors       1.67877    1.65118   1.017 0.310835
```

```

hours      0.36288    0.63333    0.573 0.567477
job        1.22331    1.65408    0.740 0.460650
jobhours  -0.80005    0.65646   -1.219 0.224748
peerbehav  0.38519    0.10558    3.648 0.000357 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 5.798 on 159 degrees of freedom
(33 observations deleted due to missingness)
Multiple R-squared:  0.199, Adjusted R-squared:  0.1134
F-statistic: 2.324 on 17 and 159 DF, p-value: 0.003467

```

```
> summary(mincome2)
```

```

Call:
lm(formula = behavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + hours + job + jobhours + peerbehav,
    data = Data, na.action = na.omit)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-18.9432  -3.5972   0.1431   3.7880  14.3762

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  21.69400    3.63026    5.976 1.37e-08 ***
income       -0.22972    0.56307   -0.408 0.683822
numberpar    -0.13663    1.32827   -0.103 0.918195
pareduc      0.40179    0.43446    0.925 0.356414
siblings     0.30113    0.44156    0.682 0.496215
urban        -2.02413    1.48792   -1.360 0.175567
suburban     -1.45058    1.07479   -1.350 0.178978
private      -0.95477    1.35389   -0.705 0.481676
hours        0.06017    0.63237    0.095 0.924307
job          1.00470    1.57677    0.637 0.524885
jobhours     -0.68195    0.62305   -1.095 0.275313
peerbehav    0.40244    0.10324    3.898 0.000141 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 5.89 on 165 degrees of freedom
(33 observations deleted due to missingness)
Multiple R-squared:  0.1422, Adjusted R-squared:  0.08502
F-statistic: 2.487 on 11 and 165 DF, p-value: 0.006521

```

```
> summary(mincome3)
```

```

Call:
lm(formula = posbehavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + Engineering + University + Education +
    Arts + Spears + Honors + hours + job + jobhours + pospeerbehav,
    data = Data, na.action = na.omit)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-11.8461  -2.7130  -0.2339   2.9859  11.6130

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  6.066658    2.8932541    2.097  0.0376 *
income       -0.2797217    0.4413843   -0.634  0.5272
numberpar    -0.1835912    1.0546716   -0.174  0.8620
pareduc      0.2492676    0.3382570    0.737  0.4623
siblings     0.0796085    0.3509195    0.227  0.8208

```

```

urban      -0.6347197  1.1671166  -0.544  0.5873
suburban   -0.2559996  0.8768055  -0.292  0.7707
private    -0.6793924  1.0590556  -0.642  0.5221
Engineering 0.4626132  1.1172104  0.414  0.6794
University  3.1295517  5.1783195  0.604  0.5465
Education  -1.0634947  1.3934205  -0.763  0.4465
Arts       -0.0003357  0.9938118  0.000  0.9997
Spears     -0.7442389  1.2379707  -0.601  0.5486
Honors     1.0275192  1.2517877  0.821  0.4130
hours      0.4394403  0.4956560  0.887  0.3766
job        -0.0683142  1.2993081  -0.053  0.9581
jobhours   -0.1293425  0.5168786  -0.250  0.8027
pospeerbeh 0.4943674  0.1032972  4.786  3.85e-06 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 4.565 on 160 degrees of freedom
(32 observations deleted due to missingness)
Multiple R-squared:  0.1851, Adjusted R-squared:  0.09857
F-statistic: 2.138 on 17 and 160 DF,  p-value: 0.007785

```

```
> summary(mincome4)
```

```

Call:
lm(formula = negbehavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + Engineering + University + Education +
    Arts + Spears + Honors + hours + job + jobhours + negpeerbehav,
    data = Data, na.action = na.omit)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-9.1805 -1.8025  0.2874  2.1398  5.6865

```

```

Coefficients:
(Intercept) 11.88078  2.15954  5.502 1.45e-07 ***
income      -0.14967  0.29789 -0.502  0.6160
numberpar    0.38252  0.70906  0.539  0.5903
pareduc      0.25143  0.23112  1.088  0.2783
siblings    -0.09145  0.23431 -0.390  0.6968
urban       -1.39609  0.78314 -1.783  0.0765 .
suburban    -0.65944  0.58674 -1.124  0.2627
private     -0.10679  0.71312 -0.150  0.8811
Engineering -0.31366  0.74296 -0.422  0.6735
University   8.71489  3.49247  2.495  0.0136 *
Education   -0.73916  0.93937 -0.787  0.4325
Arts        -0.24080  0.67199 -0.358  0.7206
Spears     -1.87984  0.83612 -2.248  0.0259 *
Honors       1.07825  0.87208  1.236  0.2181
hours       -0.19596  0.33224 -0.590  0.5561
job          1.06279  0.87277  1.218  0.2251
jobhours    -0.62716  0.34751 -1.805  0.0730 .
negpeerbeh  0.41157  0.09933  4.144  5.51e-05 ***

```

```

---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 3.073 on 161 degrees of freedom
(31 observations deleted due to missingness)
Multiple R-squared:  0.2231, Adjusted R-squared:  0.1411
F-statistic: 2.72 on 17 and 161 DF,  p-value: 0.0005698

```

```
> summary(mincome5)
```

```
Call:
```

```
lm(formula = posbehavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + hours + job + jobhours + pospeerbehav,
    data = Data, na.action = na.omit)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-12.2570	-2.4472	-0.2318	2.8308	12.2052

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	7.05924	2.60200	2.713	0.00737	**
income	-0.25503	0.43201	-0.590	0.55577	
numberpar	-0.21907	1.02175	-0.214	0.83049	
pareduc	0.23351	0.33031	0.707	0.48059	
siblings	0.16502	0.33918	0.487	0.62723	
urban	-0.54261	1.14396	-0.474	0.63589	
suburban	-0.44813	0.82467	-0.543	0.58758	
private	-0.70453	1.03957	-0.678	0.49890	
hours	0.32949	0.48193	0.684	0.49512	
job	0.10087	1.20827	0.083	0.93357	
jobhours	-0.17602	0.47810	-0.368	0.71321	
pospeerbehav	0.51350	0.09906	5.184	6.26e-07	***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4.524 on 166 degrees of freedom
 (32 observations deleted due to missingness)
 Multiple R-squared: 0.1699, Adjusted R-squared: 0.1149
 F-statistic: 3.088 on 11 and 166 DF, p-value: 0.0008442

> summary(minincome6)

Call:

```
lm(formula = negbehavsum ~ income + numberpar + pareduc + siblings +
    urban + suburban + private + hours + job + jobhours + negpeerbehav,
    data = Data, na.action = na.omit)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-9.6029	-1.9193	0.2733	2.2357	6.8782

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	13.18283	2.06262	6.391	1.58e-09	***
income	-0.07517	0.30220	-0.249	0.8039	
numberpar	0.12396	0.71218	0.174	0.8620	
pareduc	0.25806	0.23387	1.103	0.2714	
siblings	0.06903	0.23485	0.294	0.7692	
urban	-1.22473	0.79396	-1.543	0.1248	
suburban	-1.15505	0.57314	-2.015	0.0455	*
private	-0.28676	0.72457	-0.396	0.6928	
hours	-0.33063	0.33613	-0.984	0.3267	
job	0.71151	0.84274	0.844	0.3997	
jobhours	-0.46741	0.33354	-1.401	0.1630	
negpeerbehav	0.40780	0.09947	4.100	6.45e-05	***

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

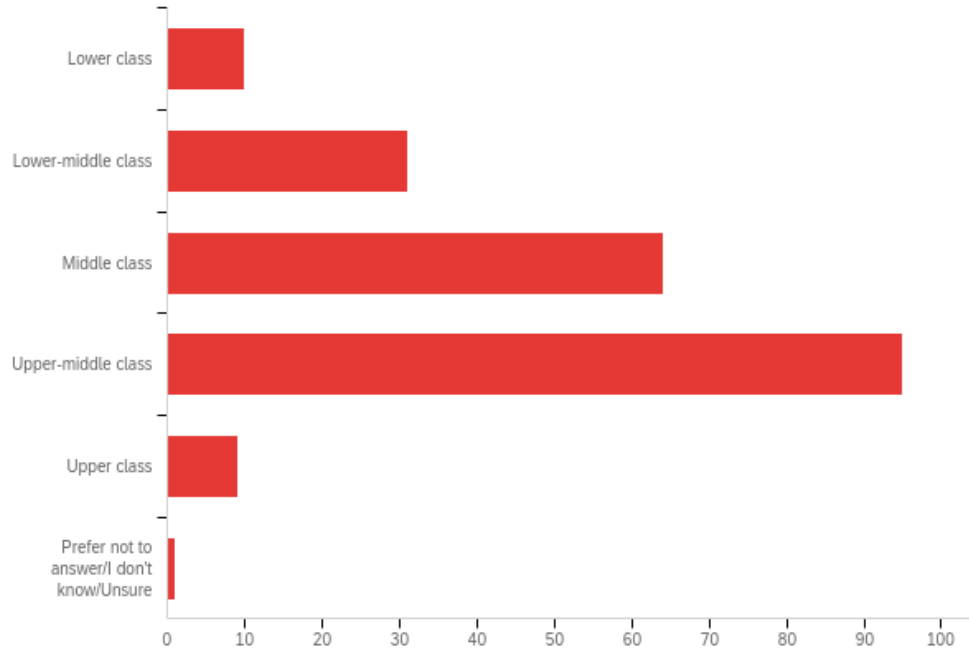
Residual standard error: 3.153 on 167 degrees of freedom
 (31 observations deleted due to missingness)
 Multiple R-squared: 0.1514, Adjusted R-squared: 0.09549
 F-statistic: 2.708 on 11 and 167 DF, p-value: 0.003084

Appendix C

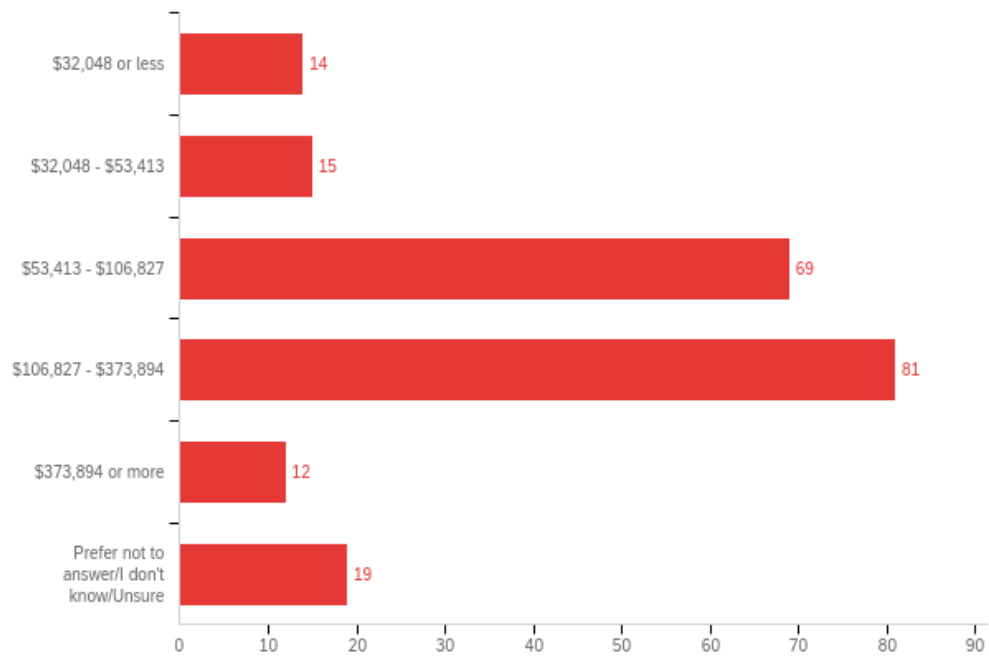
Survey Questions and Answer Distributions

Demographic

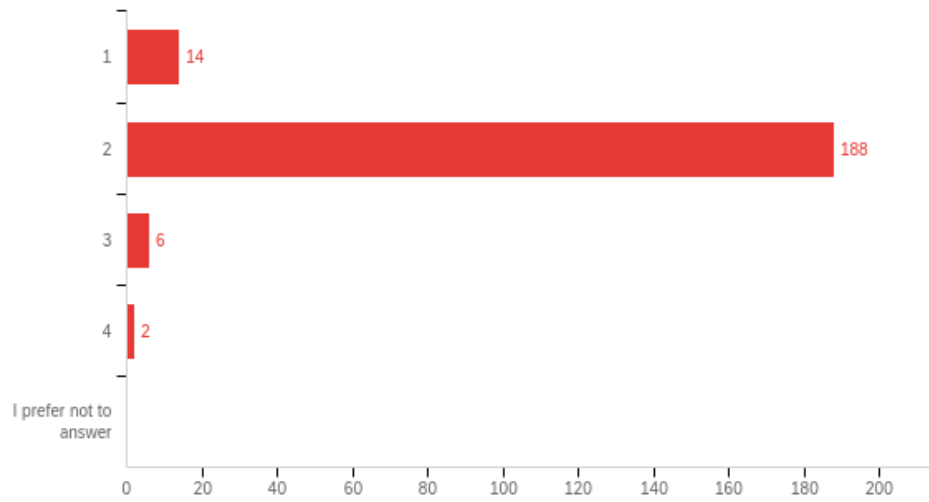
What was your family's socioeconomic class for the majority of your childhood?



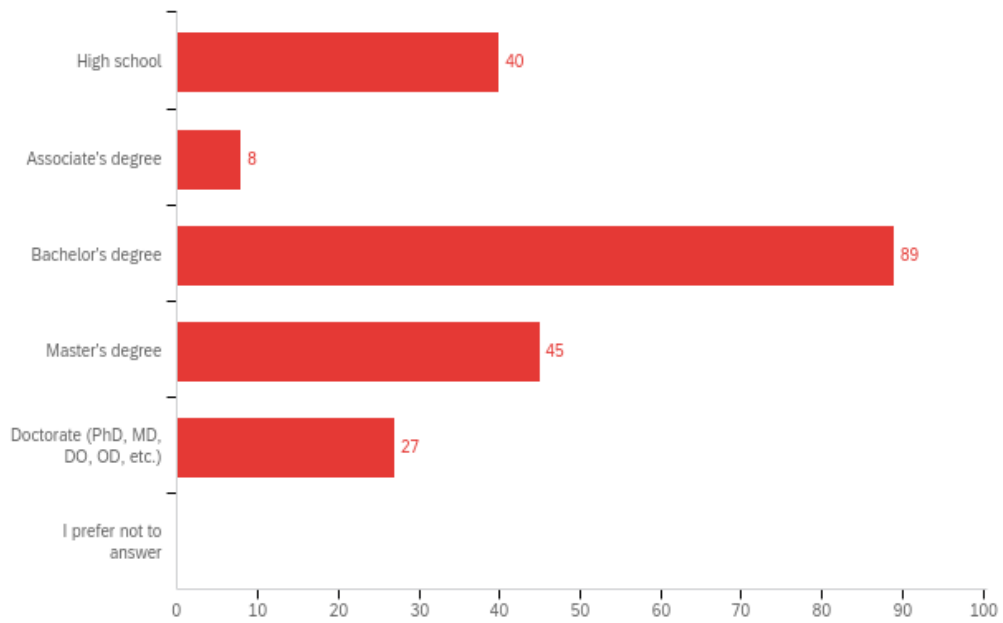
What was your family's average income when you were growing up?



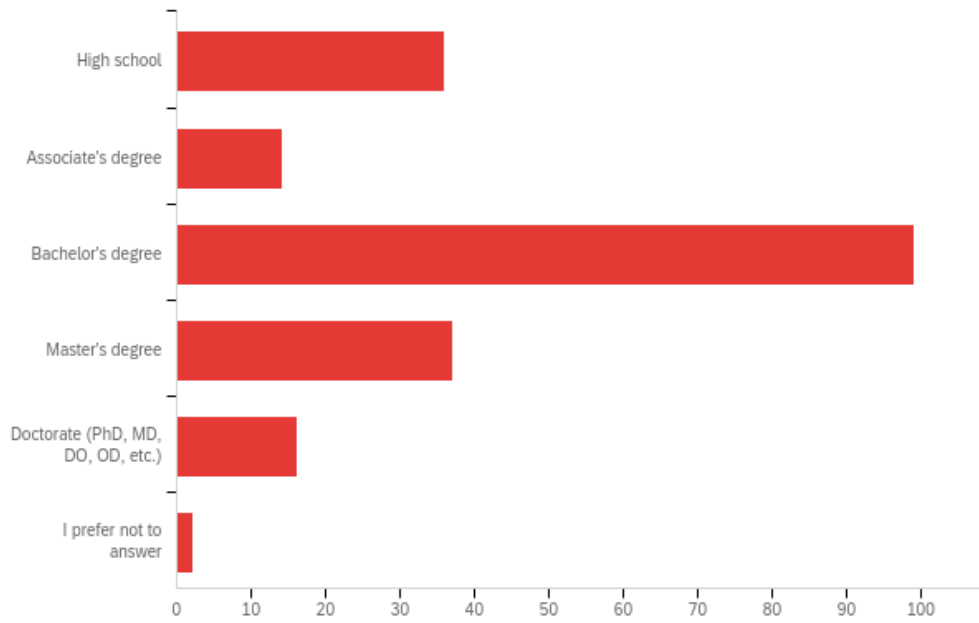
How many parents/guardians were in your household (including step-parents/guardians)?



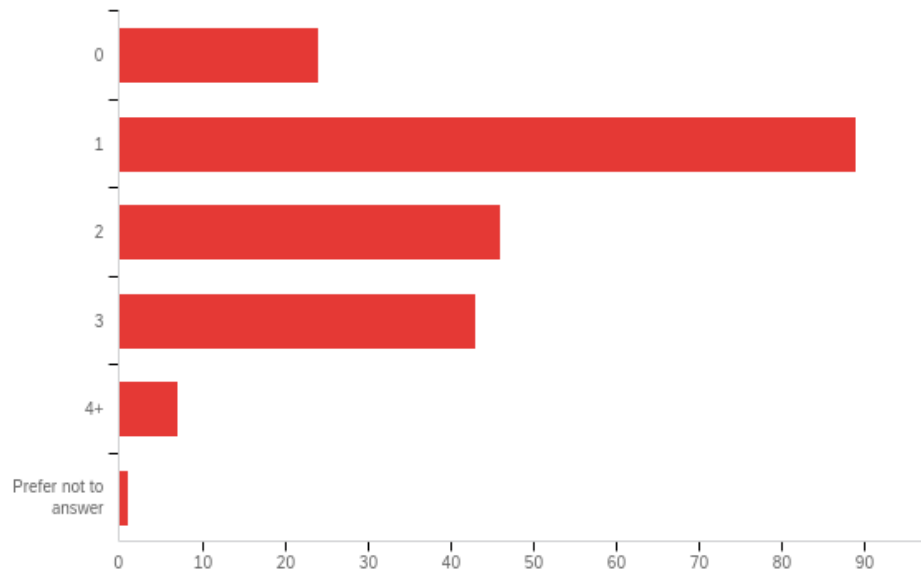
What was the highest level of education completed by parent/guardian 1?



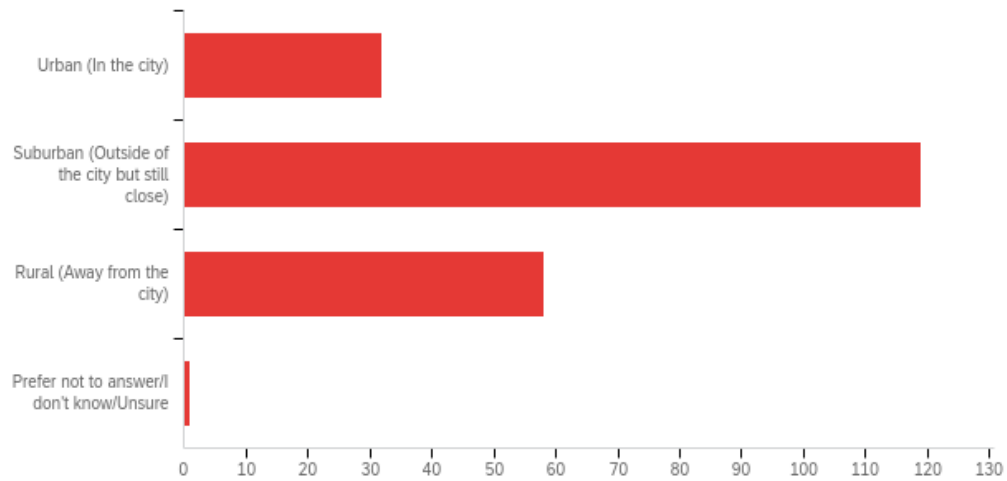
What was the highest level of education completed by parent/guardian 2?



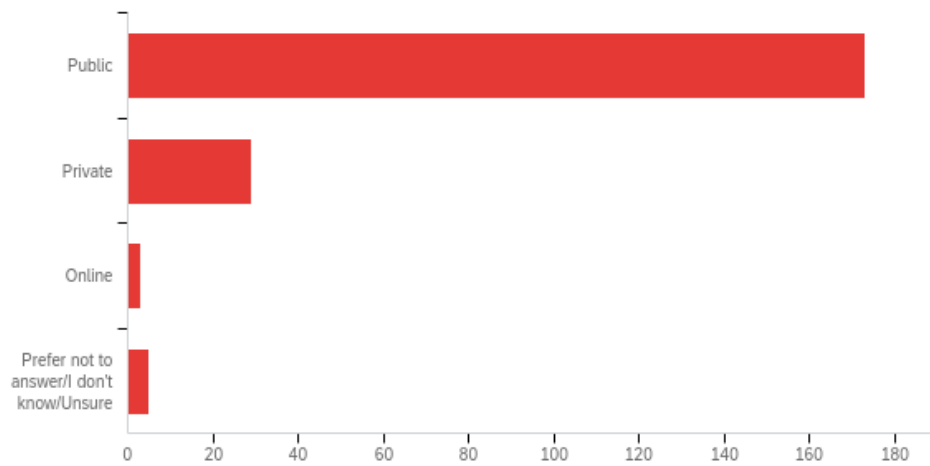
How many siblings were you raised with (in the same household)?



Where did you live for the majority of your childhood?

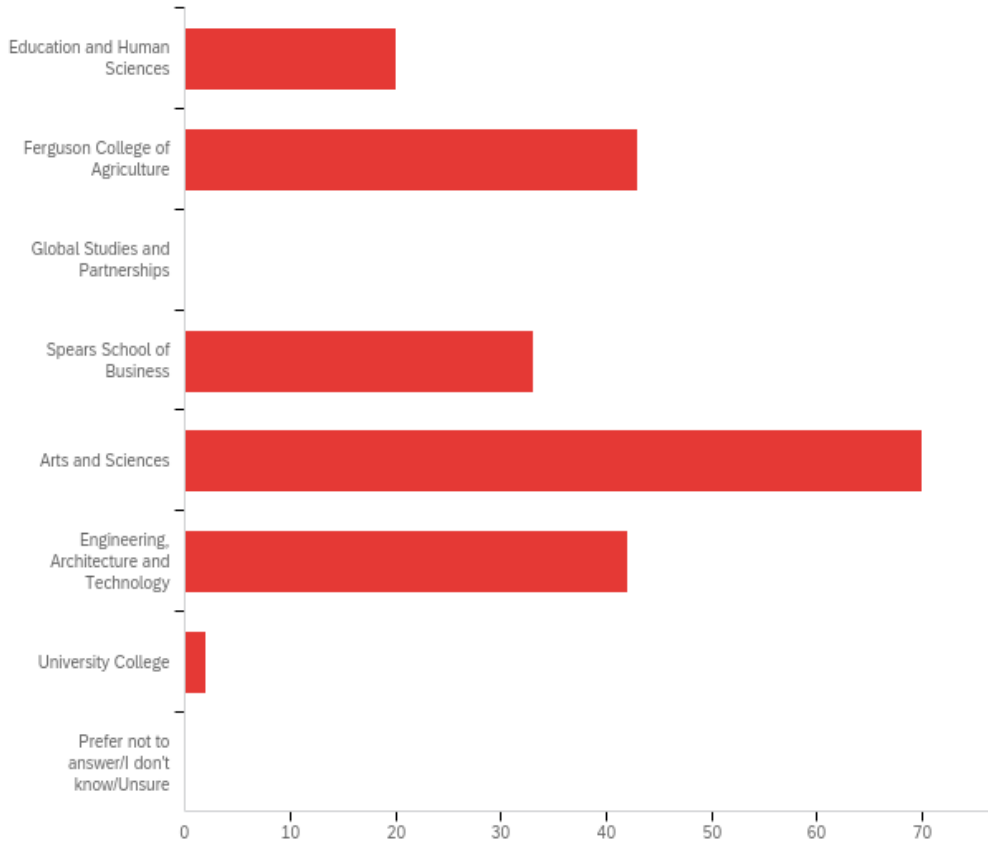


What type of school did you attend for the majority of your K-12 education?

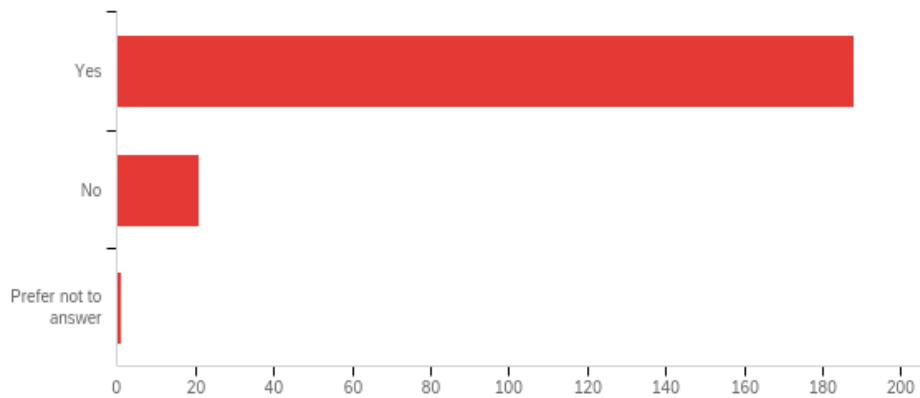


College Behavior

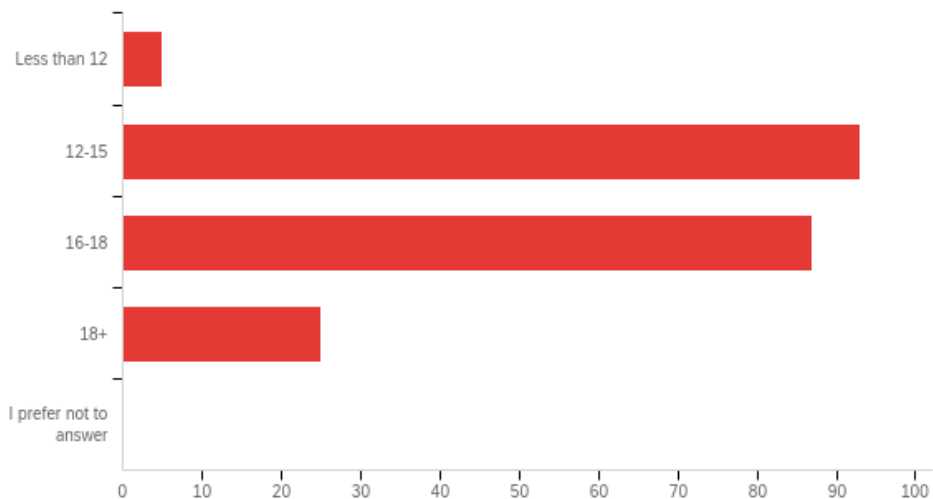
What college are you in?



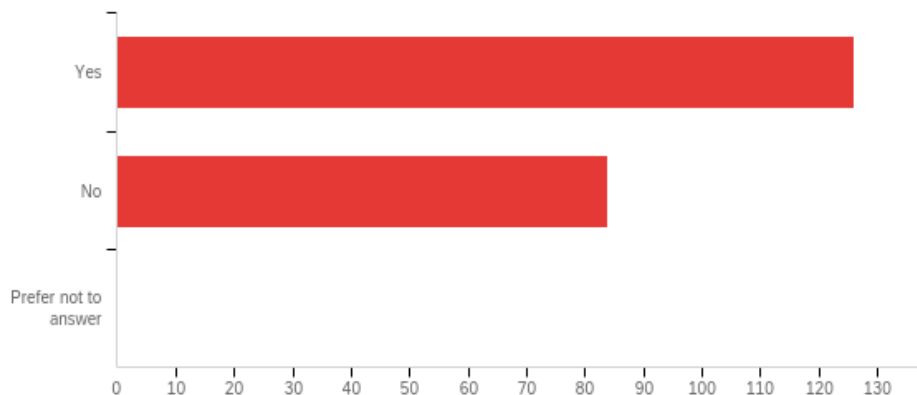
Are you in the Honor's College?



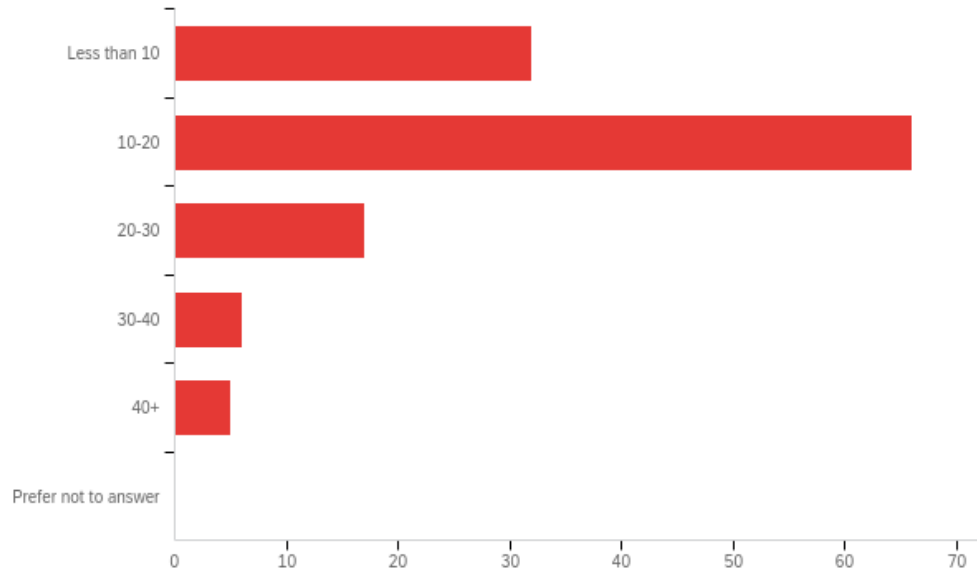
How many hours are you taking?



Do you have a job on or off campus?

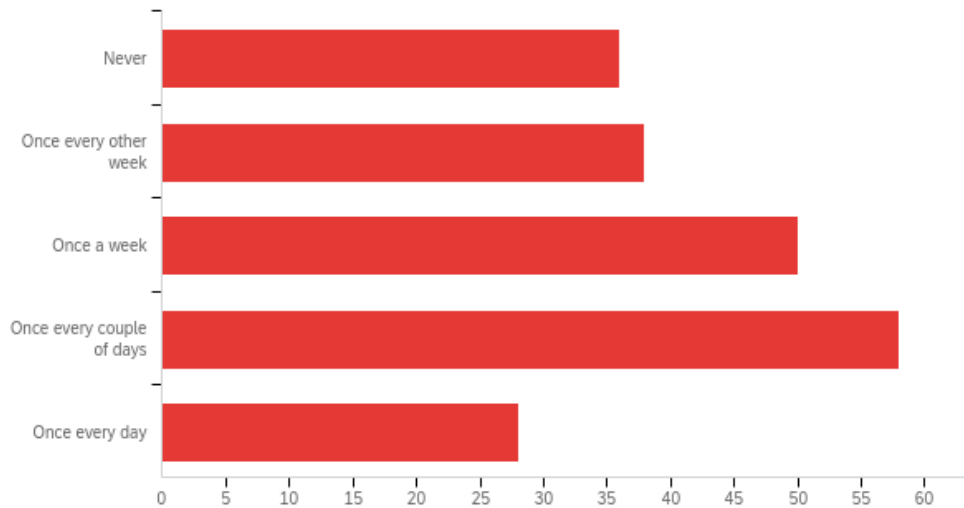


In a week, how many hours do you spend working?

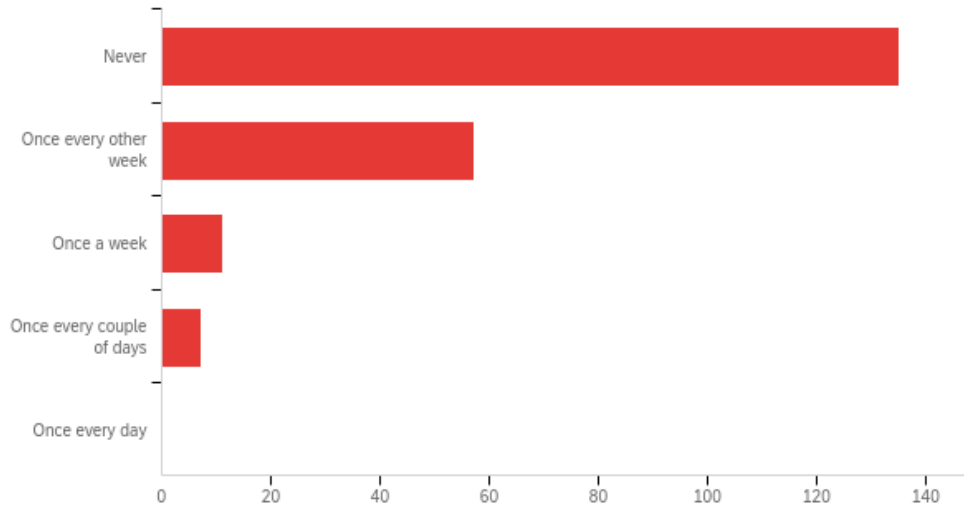


Classroom Behavior

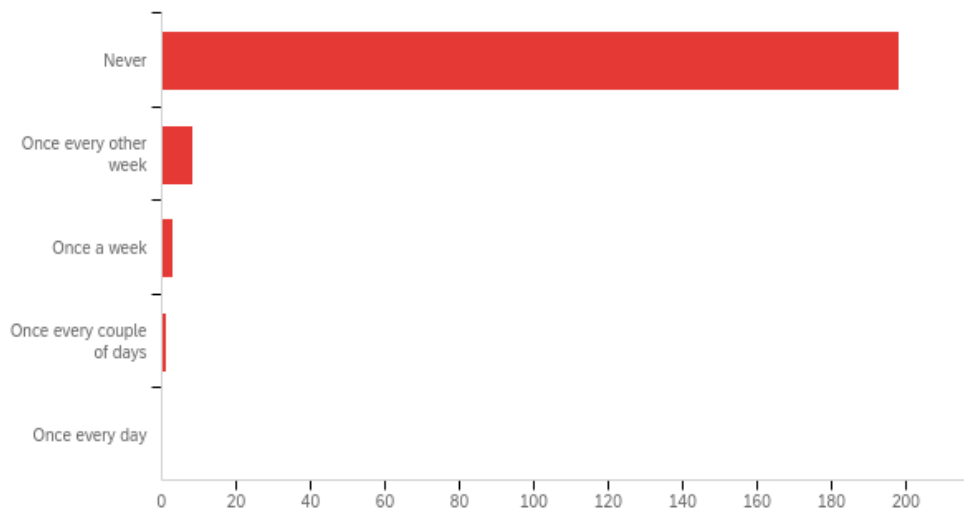
In a month, how often do you go to the library?



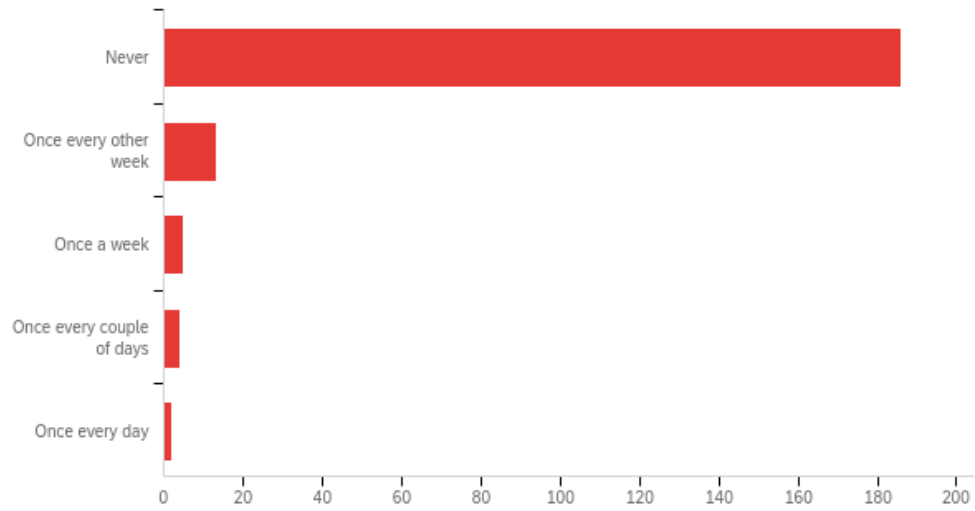
In a month, how often do you go to a professor's office hours (for all classes combined)?



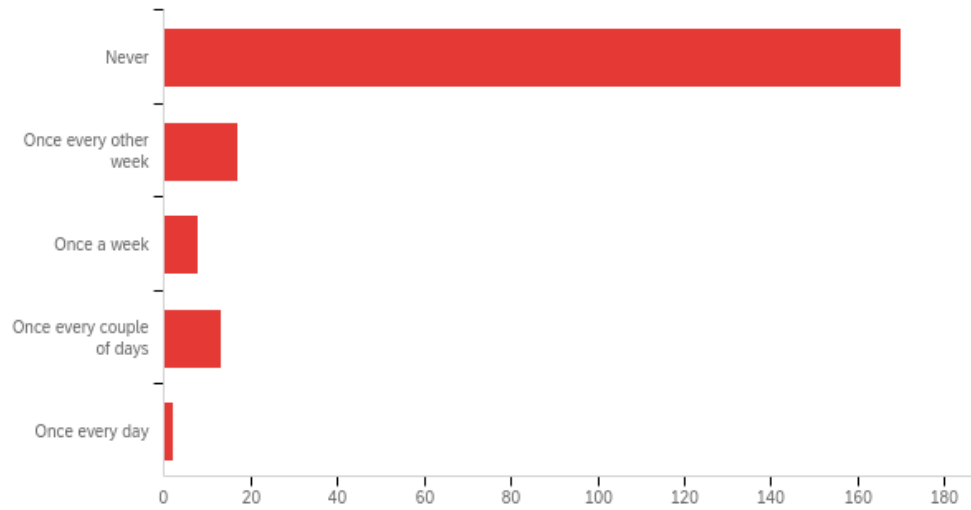
In a month, how often do you go to the Writing Center?



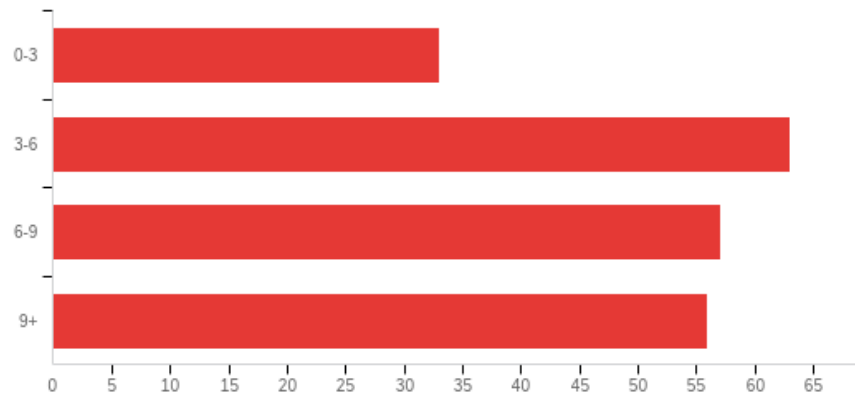
In a month, how often do you attend a LASSO center session?



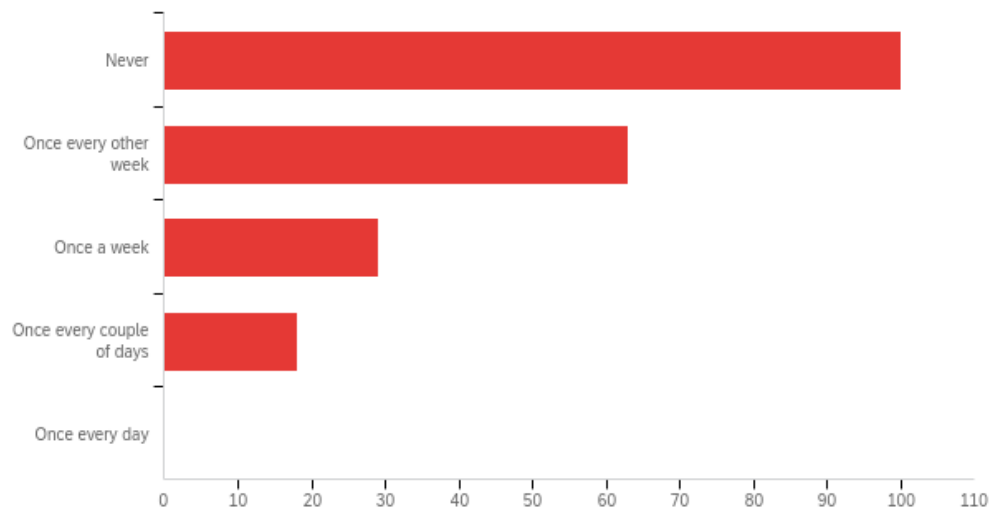
In a month, how often do you attend a study group for classes?



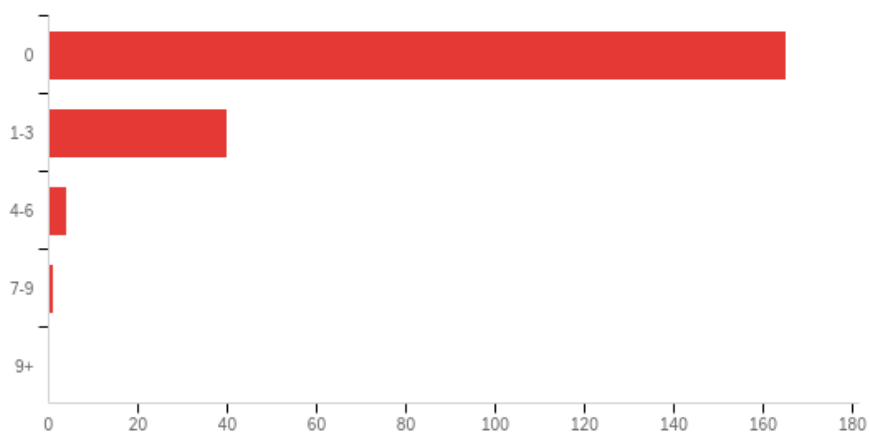
In a week, how many hours do you spend studying?



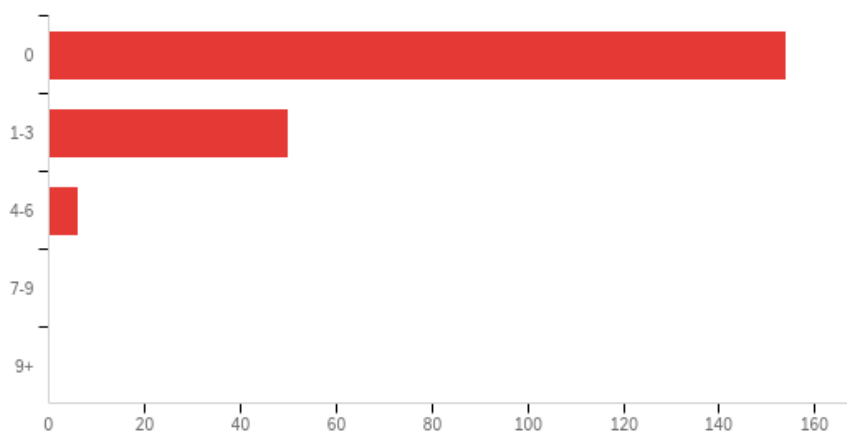
In a month, how often have you skipped a class?



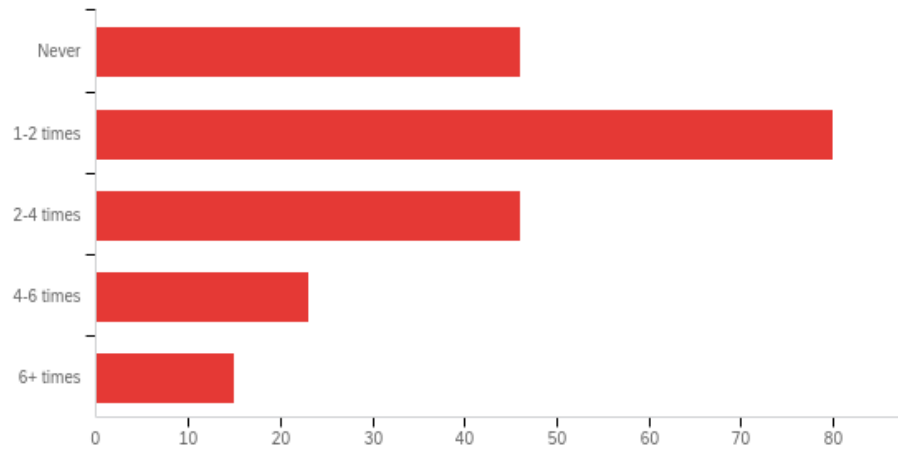
In a month, how many assignments/quizzes have you missed? (NOT including late work)



In a month, how many assignments/quizzes have been turned in late?

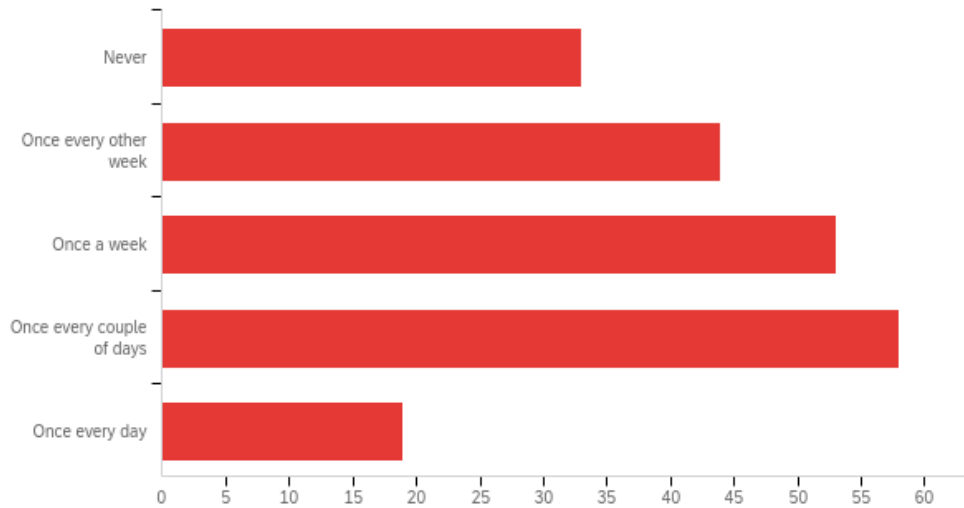


In a class period, how often are you on your phone, on average?

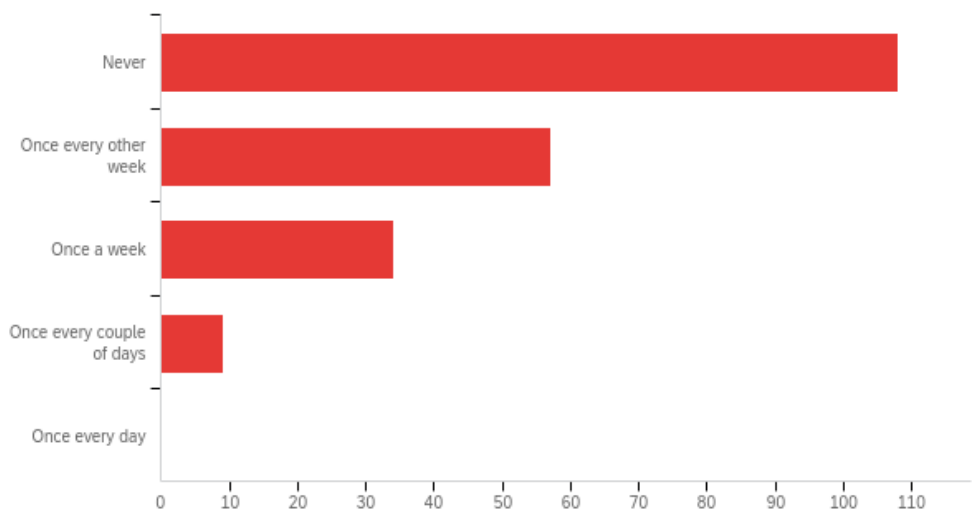


Peer Behavior

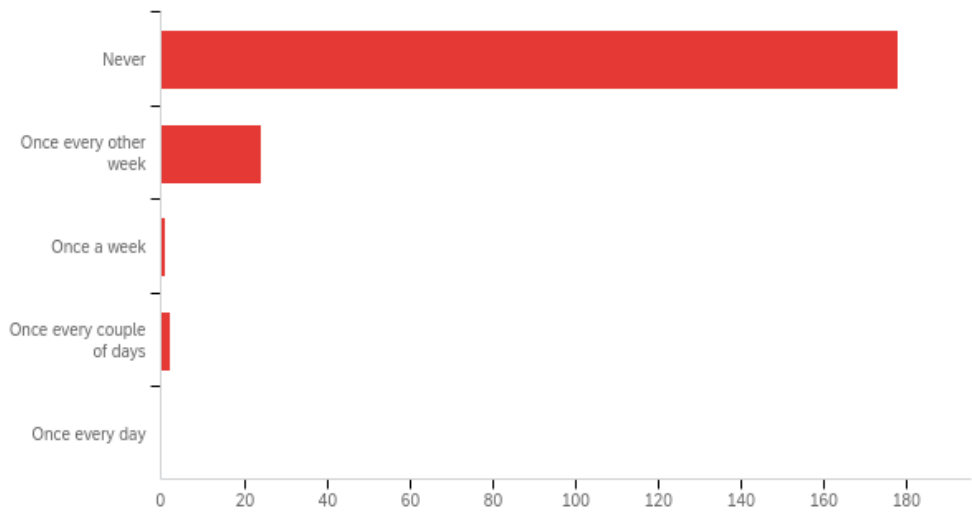
In the last month, how often do your close peers go to the library?



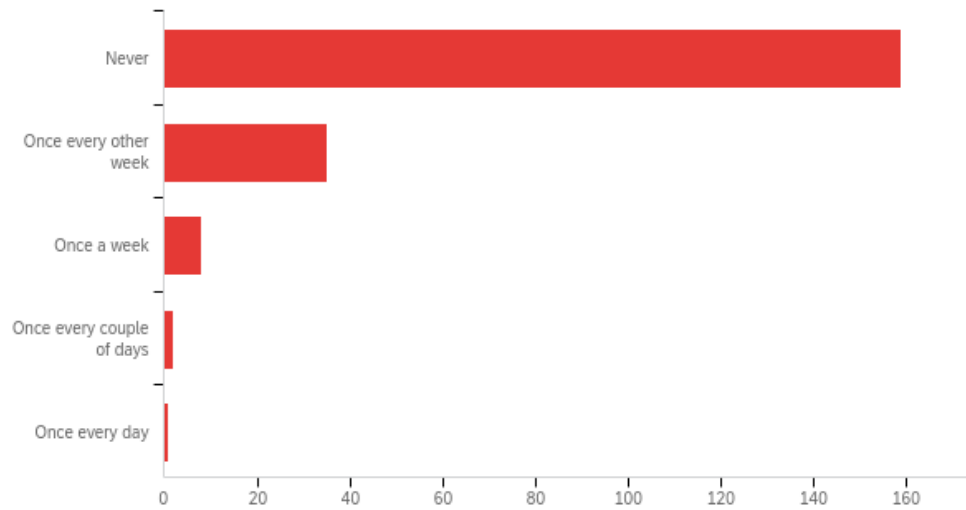
In a month, how often do your close peers go to a professor's office hours (for all classes combined)?



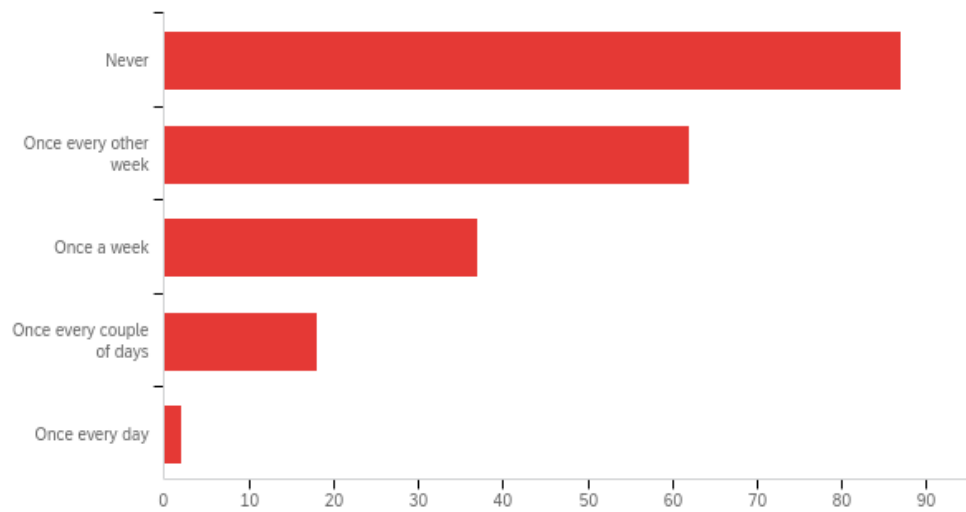
In a month, how often do your close peers go to the Writing Center?



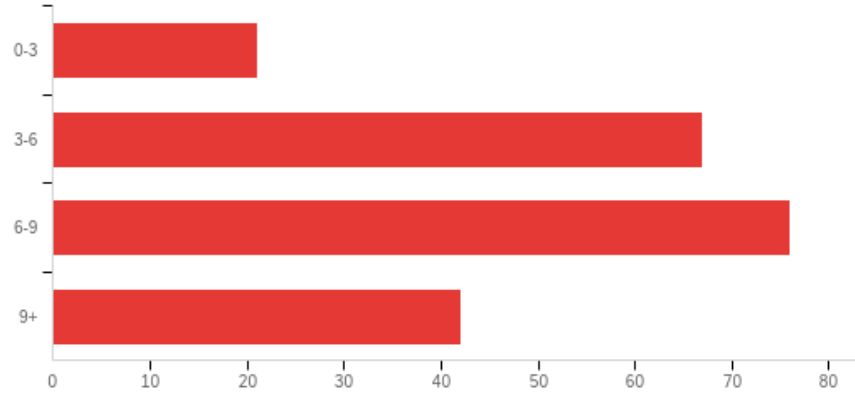
In a month, how often do your close peers attend a LASSO center session?



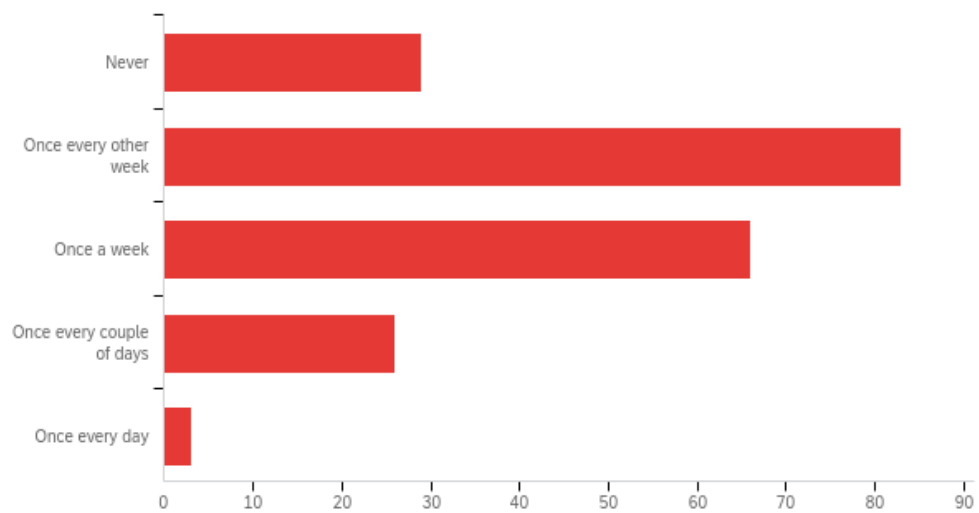
In a month, how often do your close peers attend a study group for classes?



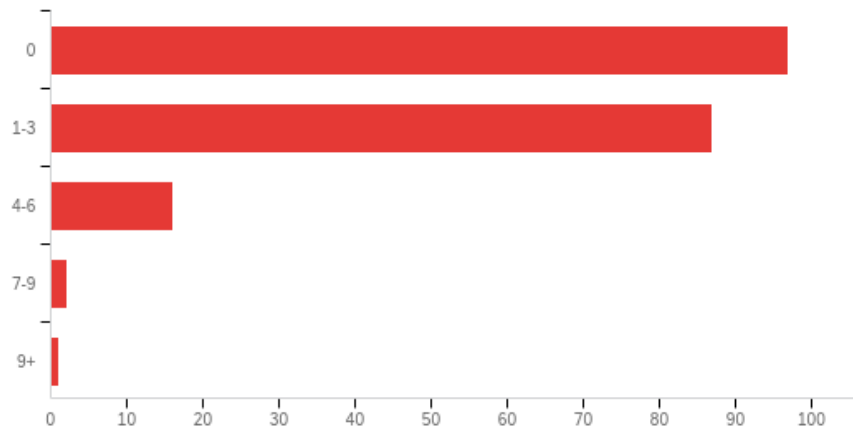
In a week, how many hours do your close peers spend studying?



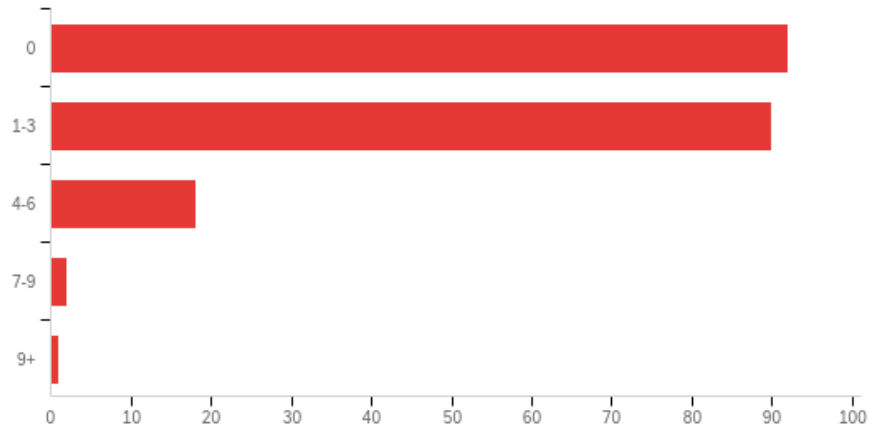
In a month, how often have your close peers skipped a class?



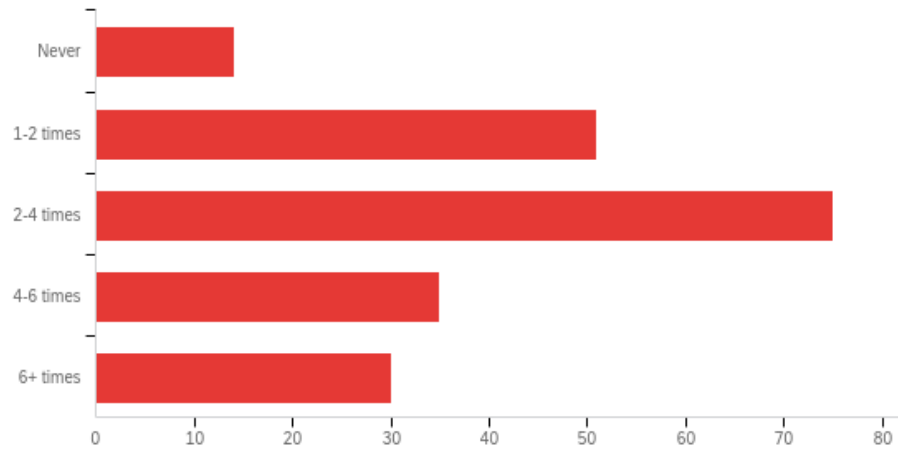
In a month, how many assignments/quizzes have your close peers missed? (NOT including late work)



In a month, how many assignments/quizzes have been turned in late?

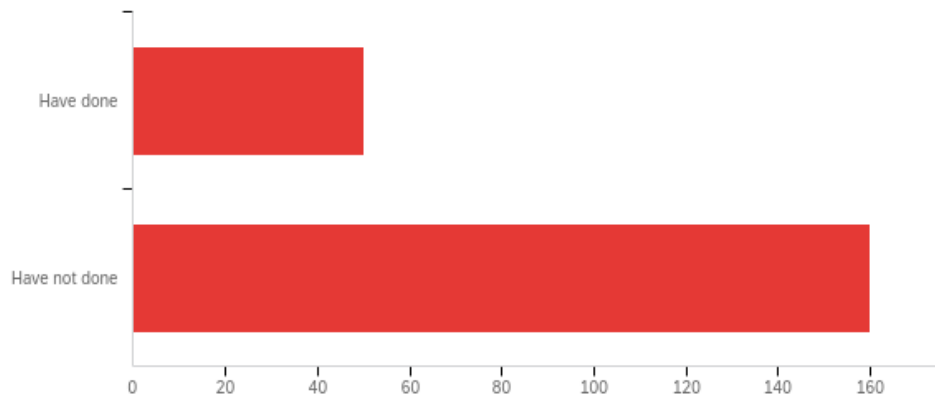


In a class period, how often are your peers on their phone, on average?

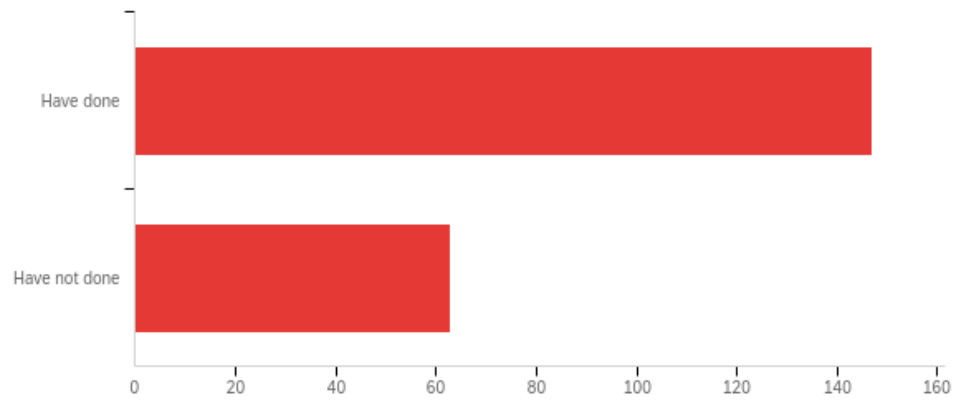


Scenario-Based

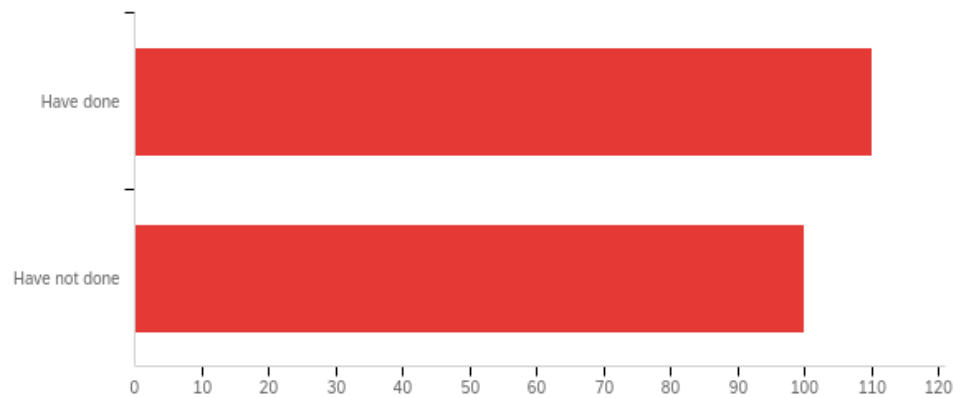
Thomas forgot about an assignment. He asked his friend to send over the assignment to copy so he had something to turn in. Does this sound like something you have done?



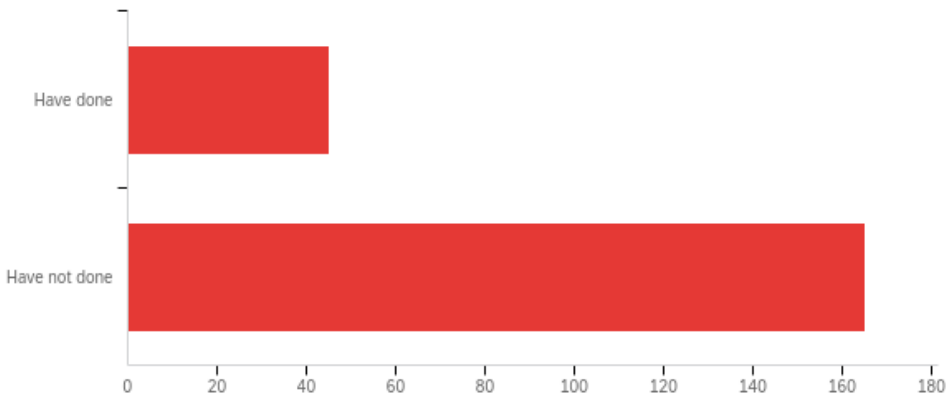
Amanda needs help with part of the homework. She decides to email the TA for help. Does this sound like something you have done?



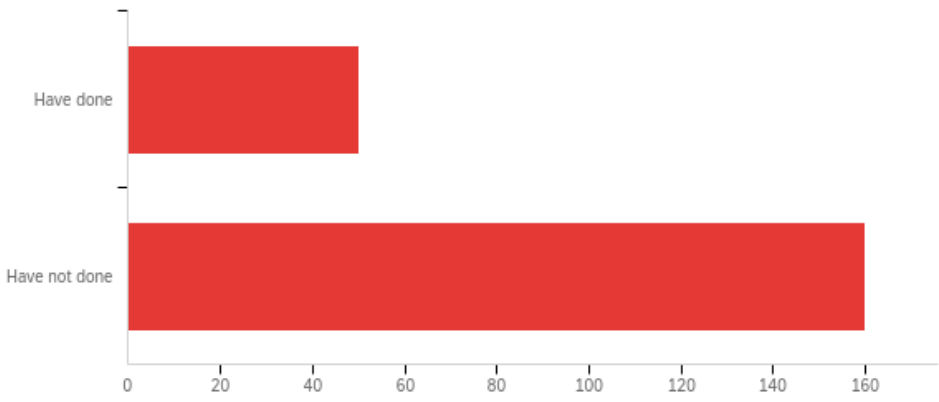
Claire went to the Professor's office hours to clarify something after the lecture. Does this sound like something you have done?



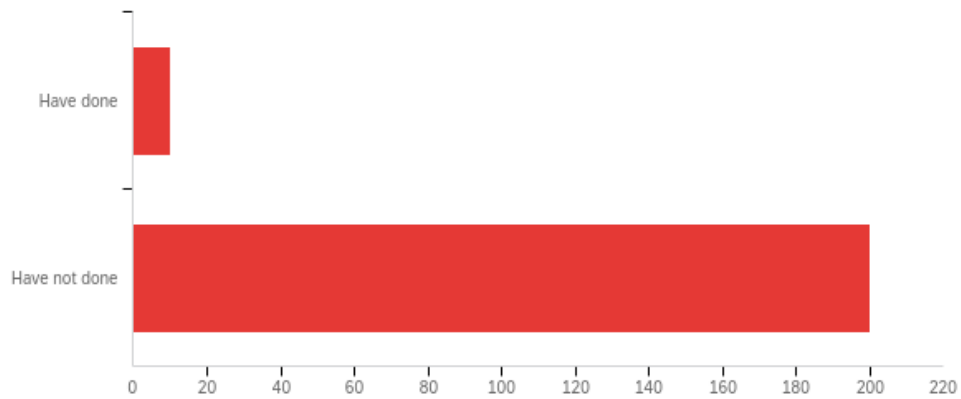
Brody heard someone had the answers to the quiz in class. He found the answers and memorized them before the quiz. Does this sound like something you have done?



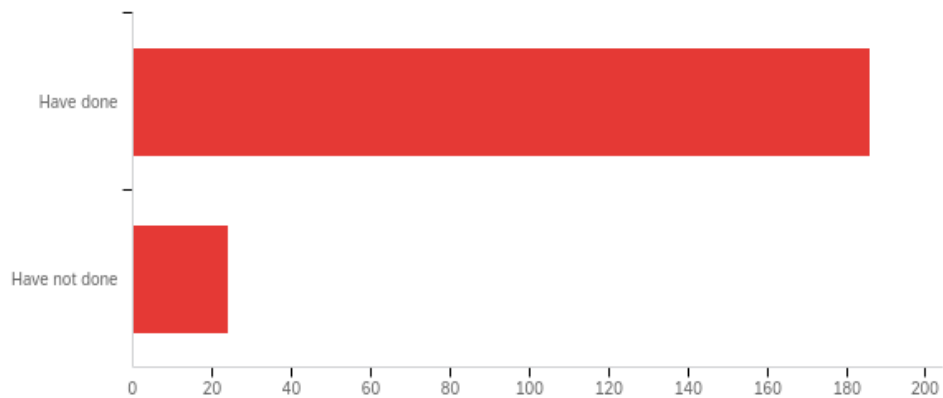
Laney was struggling with the content in her class. She decided to book an appointment with a LASSO tutor. Does this sound like something you have done?



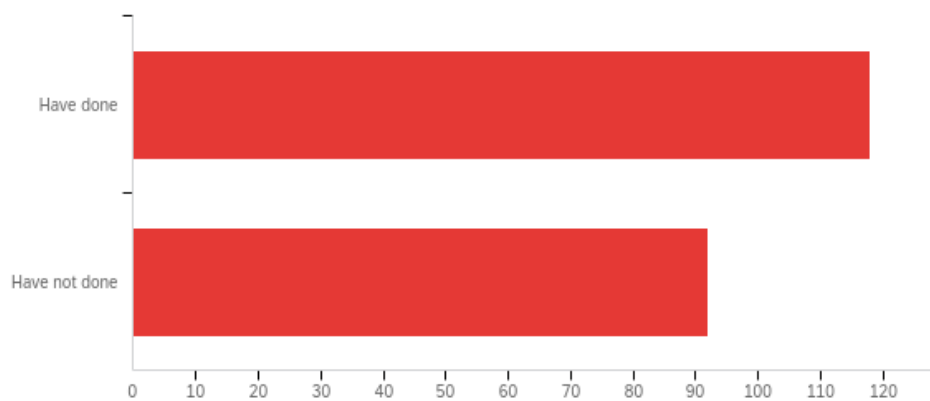
Jordan was on the way to class when they heard their classmates talking about cheating on an exam. They decided to anonymously tell the TA. Does this sound like something you have done?



Tracy was in class when the professor asked a question. She answered the question in class. Does this sound like something you have done?



Peter gave his friend answers to the homework assignment before it was due. Does this sound like something you have done?



Appendix D

IRB Materials

Informed Consent to Participate in Research

Study title: Effect of Socioeconomic Background on College-aged Students' Classroom Behavior

Researcher[s]: Research is being conducted by Alyvea Sloan under the supervision of Dr. Michael Morris. If you have any questions, please feel free to reach out to either of us.

We're inviting you to take a survey for research. This survey is completely voluntary. There are no negative consequences if you don't want to take it. If you start the survey, you can always change your mind and stop at any time. Stopping the survey will signify removal of consent to participate, and no data will be recorded for incomplete surveys.

What is the purpose of this study?

The purpose of this study is to establish the extent to which a relationship exists between socioeconomic background and classroom-behavior of college-aged individuals.

What will I do?

Questions will be asked about demographic background information, college behavior, classroom behavior, peer behavior, and scenario-based questions. If at any time you are unable or unwilling to answer personal questions, please select "Prefer not to answer" or stop the survey. If the survey is stopped, no data will be collected.

Risks

- Some questions may be personal or upsetting. You can skip them or quit the survey at any time.
- Online data being hacked or intercepted: Anytime you share information online there are risks. We're using a secure system to collect this data and data is password protected, but we can't completely eliminate this risk.
- Breach of confidentiality: There is a chance your data could be seen by someone who shouldn't have access to it. We're minimizing this risk in the following ways:
 - Data is anonymous. – **or** – All identifying information is removed and replaced with a study ID.
 - We'll store all electronic data on a password-protected computer.

Possible benefits: Results of this study may benefit current and future college students in developing classroom intervention and outside of classroom resources.

How long will it take? This survey should take 10-15 minutes to complete.

Costs: None

Future research: Your data won't be used or shared for any future research studies.

Who can see my data?

- We (the researchers) will have access to survey responses. This is so we can analyze the data and conduct the study.
- Agencies that enforce legal and ethical guidelines, such as
 - The Institutional Review Board (IRB) at UWM
 - The Office for Human Research Protections (OHRP)
- We may share our findings in publications or presentations. If we do, the results will be anonymous. If we quote you, we'll use pseudonyms (fake names).

Questions about the research, complaints, or problems: Contact Alyvea Sloan, alyvea.sloan@okstate.edu, or Dr. Michael Morris, michael.ds.morris@okstate.edu.

Questions about your rights as a research participant, complaints, or problems: Contact the OSU IRB (Institutional Review Board) at 405-744-3377

Agreement to Participate

Your participation is completely voluntary, and you can withdraw at any time.

To take this survey, you must be:

- At least 18 years old
- Undergraduate student at OSU

If you meet these criteria and would like to take the survey, click the button below to start.

Student Email

TO: undergrad@listerv.okstate.edu (appropriate listserv here)

FROM: Alyvea.sloan@okstate.edu

SUBJECT: Socioeconomic Background Influence on Classroom Behaviors Study

DATE: 02/16/2023

Good morning,

My name is Alyvea Sloan. I am a senior Economics major working on my Senior Honors Thesis.

My thesis is aiming to determine whether or not a relationship exists between socioeconomic background and classroom behavior of college-aged individuals. I am extremely interested in determining the extent of this relationship as it may be able to affect future program developments geared towards student success at the college level. The following survey asks questions about your socioeconomic background, classroom behaviors, and includes scenario-based questions about classroom behaviors. This survey is completely anonymous. While you will be asked for demographic information regarding parental income, education, career, and sibling information, you are free to select “prefer not to answer” on any of those questions. All responses will be kept anonymous and password protected.

If you wish to participate in this study, please use this link to access the survey:

https://okstatecoe.az1.qualtrics.com/jfe/form/SV_5jxfaTGHvF4DxTU

Thank you for your time and consideration,

Alyvea Sloan

Economics

Honors