## **Global Program Applicants GPA**

## Data Overview:

This analysis includes 5120 study abroad program applications of WSB students over the last 8 academic years. The data was analyzed in terms of first-generation status as well as student ethnicity to explore the possible effects their cumulative GPA has on study abroad acceptance status. Further, the application data was compared with all 15,773 WSB students going back to 2015.

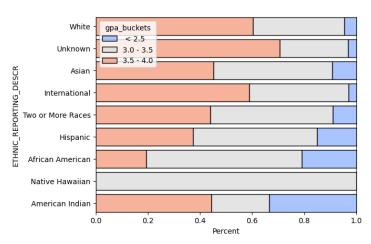
## **Key Findings:**

- Introducing a 3.0 GPA requirement for studying abroad would impact our African American students the heaviest since they have the lowest average GPA at a 3.05.
- Of all students who applied to study abroad, all but Hispanic students have a higher denial ratio
  than those of White applicants. When looking at Federal race/ethnicity categories, all but
  Hispanic students have a higher denial ratio than White applicants.
  - More specifically ~25% African American, 12.5% Asian and Hispanic applicants have a GPA below a 3.0.
- 60% of African American students who applied to study abroad had a GPA between a 3.0-3.5.
- In the last 3 years the gap between URSOC and non-URSOC students has widened. URSOC have an average cumulative GPA that is 0.2 points lower than non-URSOC students.
- There is a significant negative correlation of being an URSOC and GPA. This was found in all BBA students and further when narrowing down to just students who applied to study abroad.

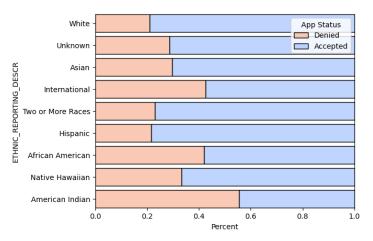
The following table is broken down by different interest groups. Out of all accepted applications, these are the percentages and number of applicants below a 3.0 GPA and percentage of students below a 3.0 that were accepted into a study abroad program. Applicants with GPAs below a 3.0 are seen roughly 2 times more in underrepresented students of color (URSOC) and first-generation (FGEN) students compared to non-URSOC students.

Identity group	Pct. of applicants below 3.0	Pct. of accepted below 3.0	Number of applicants
Non-URSOC	3.78%	2.26%	3013
URSOC	7.02%	3.75%	698
First Generation	7.1%	4.14%	338
All	4.39%	2.53%	3711

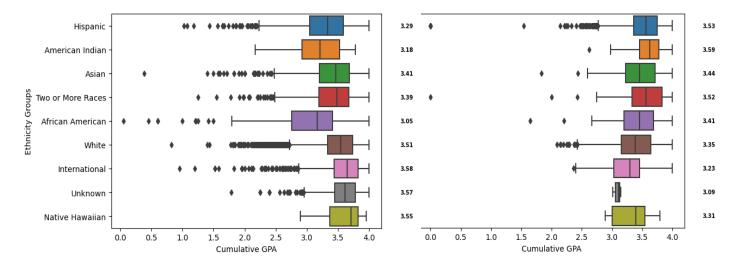
Breaking down URSOC into their respective ethnicities, we can see the proportions of students denied in the percentage bars to the right. For all groups except Hispanic students, the denial ratio is higher than those of White students which is 20% denials to 80% accepted. Of all URSOCs combined, their average denial rate is 30% to 70% accepted.



Further, the figure on the right by ethnicity breaks down the proportions of students within each groups GPA range. Roughly 25% African American applicants have a GPA of below a 3.0. Around 66% of White students are in the 3.5-4.0 bucket. For the other groups, most students fall into the 3.0-3.5 bucket.



The two box plots below show the average cumulative GPA of all BBA students (left) and all study abroad program applicants (right) broken down by ethnicity groups. The average GPAs of all BBA students is generally lower than those of who have applied to study abroad, so introducing a 3.00 GPA minimum requirement would affect them more and potentially turn them away from applying to study abroad programs. The numbers on the right of each chart are the average cumulative GPAs for each category.

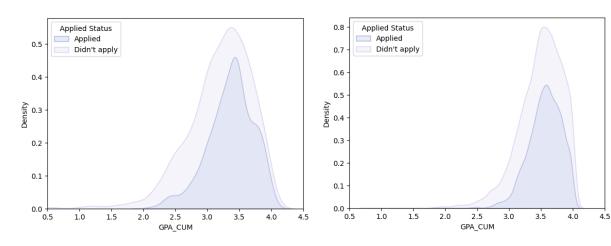


The following table accompanies the plots above, by comparing the different BBA URSOC groups average GPA to those students who applied to study abroad and were denied or accepted and their GPAs. All groups except Unknown and International denied students GPAs average around 0.10 points lower than those accepted.

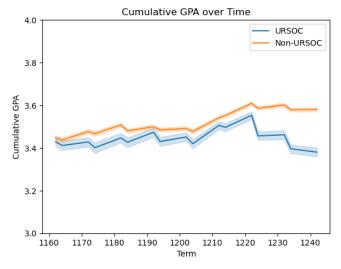
Ethnic group	All BBA students	Applicants denied	Applicants accepted
African American	3.05	3.18	3.31
American Indian	3.18	3.24	3.42
Hispanic	3.29	3.26	3.40
Two or More Races	3.39	3.35	2.46
Asian	3.41	3.39	3.47
Native Hawaiian	3.55	3.01	3.13

Unknown	3.57	3.61	3.58
International	3.58	3.63	3.53
White	3.51	3.49	3.54

The following plots show the cumulative GPA density separated by students who did and did not apply to go abroad for URSOC (left) and non-URSOC (right). The density curve difference for URSOC who applied to go abroad and URSOC who did not apply is wider than the difference in curves for non-URSOC who did and did not apply. There is also a significant part of the curve of URSOC students who did not apply that goes below a 3.0 GPA.



The following plot shows that the average cumulative GPA of all BBA URSOC is decreasing over time. This decline has consistently been occurring the last 2 years, which was when classes resumed being fully in person following COVID. It currently is hovering around a 3.35, while non-URSOC have stayed around 3.6 the last 2 years. With application counts only increasing, we can assume this trend will continue to apply to even more students.



To further examine GPA discrepancies, two linear regression models were implemented to compare different student identities. The first was student study abroad applicants regressed onto targeted minority status and application acceptance status. Both variables were significant and had negative effects on student GPA. Of student applicants, targeted minority identifiers are predicted to have 0.17 GPA lower than those who are not. Using study abroad program denials as a predictor, they estimate a student's GPA 0.063 points lower than those applicants who were accepted into their program.

The second model was performed on all students in the BBA. While there is a lot of variances in our data, the GPA differences between most students of color groups and non-URSOC was significant. All ethnic groups except International and Native Hawaiian are expected to have a lower GPA than White students. The table below shows the expected GPA point differences between these ethnic groups and White students.

Ethnic group	GPA difference	Predicted GPA
African American	-0.46	3.05
American Indian	-0.33	3.18
Hispanic	-0.22	3.29
Two or More Races	-0.114	3.39
Asian	-0.095	3.41
Native Hawaiian **	0.039	3.55
International	0.074	3.58
White		3.51

<sup>\*\*</sup> not significant

For first generation study abroad applicants 27% of them are denied in comparison to 22% of non first generation students denied, so there is a slight gap between the two groups. Of all BBA students, the average cumulative GPA of FGEN students is 3.35 and non FGEN students average a 3.50 GPA. To further look into the effects of being a FGEN student, we ran a linear regression model on all BBA students to see if there is a significant impact of FGEN status on GPA. The model concluded there was and by being a FGEN student, their GPA is estimated to be 0.15 points lower than those who are not FGEN students.