



# INSTITUTIONAL RESEARCH

AMERICAN RIVER COLLEGE

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## Spring 2020 Student Experience Survey for ARC's African American, Latinx, and Native American Disproportionately Impacted (DI) Project Teams: **Exploratory Analyses Part 1: On the Relationship between Student Experiences and Student Achievement**

### Scope:

The following report presents Part 1 of a three-part set of exploratory analyses into the Spring 2020 Student Experience Survey for ARC's African American, Latinx, and Native American DI Project Teams<sup>1</sup>. **Part 1 will focus on the relationship between student experiences as measured by the Likert Scale section of this survey and a set of student achievement metrics to determine if student experiences and perceptions are associated and predictive of student achievement outcomes.** Part 2 will focus on the relationship between the remainder of the Student Experience Survey (Non-Likert) and the same set of student achievement metrics, and will also represent an initial look into intersectionality. Part 3 will focus further on intersectionality, and on how student experiences differ for various student demographic groups.

### Key Finding:

**ARC's African American, Latinx, and Native American students' experiences and perceptions were significantly associated and predictive of their student achievement outcomes (n = 885).**

**Specifically, ARC's African American, Latinx, and Native American students' experiences and perceptions (as measured by the Likert Scale section of the Spring 2020 Student Experience Survey conducted by ARC's DI Project Teams) were significantly associated with Student Success (success rates in courses) and Student Drops (withdrawal rates from courses), and were predictive of Persistence (continued enrollment from the Spring 2020 semester to the Fall 2020 semester).**

### Likert Scale Section of the Student Experience Survey

The Likert Scale Section of the Student Experience Survey represented the first question group of the survey and included 34 survey questions. As shown in the table below, these questions covered such topics as feeling a sense of belonging or community, feeling that professors care, questions focused on

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<sup>1</sup> Preliminary results of the Student Experience Survey were reported in the African American, Latinx, and Native American DI project team reports. These reports include descriptions of the survey methodology and can be found [here](#). Comparisons of student achievement between the Spring 2020 survey respondents and the Spring 2020 ARC student population suggests that survey respondents had more positive outcomes relative to ARC's African American, Latinx, and Native American Spring 2020 student populations.

issues of culture, race, ethnicity, and tribal membership, gender identity and sexual orientation, and questions about feeling safe, accepted, included, and being financially and housing secure.

The following table lists the 34 Likert Scale questions that were investigated in this report. Students were asked “From your experience at ARC during the current academic year, to what extent do you agree or disagree with the following statements: “(Rate from Strongly Agree to Strongly Disagree)

I see myself as a part of the college community.
I would feel comfortable asking a professor for help if I did not understand course-related material.
I have at least one professor who cares about my academic success at ARC.
I feel comfortable contributing to class discussions.
I am invested in course materials because I can relate them to my real-life experiences.
I believe that my professors care about my learning because they regularly ask about my understanding of course materials.
I am able to understand course materials because my professors use different teaching tools to help me learn (e.g. videos, group activities, readings, writing exercises, etc.).
When I interact with professor(s) at this college, I feel they care about how I am doing.
I see teachers who look like me adequately represented in my classrooms.
I see other students with the same cultural, ethnic, or racial (or Native American) background in my classes.
It has been easy for me to make friends at ARC.
I feel comfortable discussing racially sensitive topics on campus with members of other races, cultures, or ethnicities.
There is a space on campus where I can go to feel 'at home' where students of my same identity value me.
This college is committed to fostering an environment in which students of color can be successful.
The college's efforts at community building are effective (e.g. connecting diverse students and staff).
I see students who look like me represented on ARC's website.
This college is committed to diversity and inclusion (e.g. making sure everyone feels included).
When there were incidents of cultural, ethnic, or racial discrimination at ARC, the college reacted quickly and appropriately.
People of my cultural, ethnic, or racial (or Native American) group are more likely to experience discrimination on campus than others.
I sense cultural, ethnic, or racial tensions on campus.
I feel awkward in situations at ARC in which I am the only person of my cultural, ethnic, or racial (or tribal) group.
In consideration of my cultural, ethnic, or racial (or my tribal) identity, I feel safe (e.g. physical security) on the ARC campus.
Being a member of my cultural, ethnic, or racial (or my Native American) group, I feel socially accepted (e.g. no discrimination) on campus.
Being a member of my cultural, ethnic, or racial (or Native American) group, I feel included in informal activities with other students.
Being a member of my cultural, ethnic, or (or Native American) racial group, I am able to the find academic support I need to do well.
Being a member of my cultural, ethnic, or racial (or Native American) group, I am being taken seriously by professors.

In consideration of my gender identity, I feel safe (e.g. physical security) on the ARC campus.
With my gender identity, I feel socially accepted (e.g. no discrimination) on campus.
I feel comfortable (e.g. emotional or mental ease) to openly share my sexual orientation at ARC.
In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester.
Thinking about my financial circumstances (e.g. personal income), I feel confident about my ability to pay for my college education.
In my daily experience at ARC, I regularly worry about my financial circumstances (e.g. personal income).
My current housing situation allows me to have a safe place to live so I can focus on my education at ARC.
I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.).

### Student Achievement Metrics<sup>2</sup>

The following student achievement metrics were computed to assess the relationship between student experiences and student achievement:

**Student Success Rates** were computed for each survey respondent as the percentage of successful grade notations received (A, B, C, Credit, Pass) divided by all grade notations received (including W's but excluding Excused Withdrawals (EWs)) at ARC.

**Student Drop Rates** were computed for each survey respondent as the percentage of W grade notations received divided by all grade notations received (excluding EWs) at ARC.

**Persistence** was computed as continued enrollment in the Fall 2020 semester (excluding survey respondents who had been awarded a degree or certificate during the 2019-2020 academic year).

### Results

To illustrate the relationship between student experiences and student achievement, Likert Scale survey responses were recoded into two categories: Strongly Agree/Agree vs Strongly Disagree/Disagree. The number of Strongly Agree/Agree vs Strongly Disagree/Disagree responses (n) for each category are provided. All statistical tests were performed on the full original dataset. Only those correlations significant at the  $p < .05$  level on the full original dataset are included in the graphs that follow.

### Student Success Rates

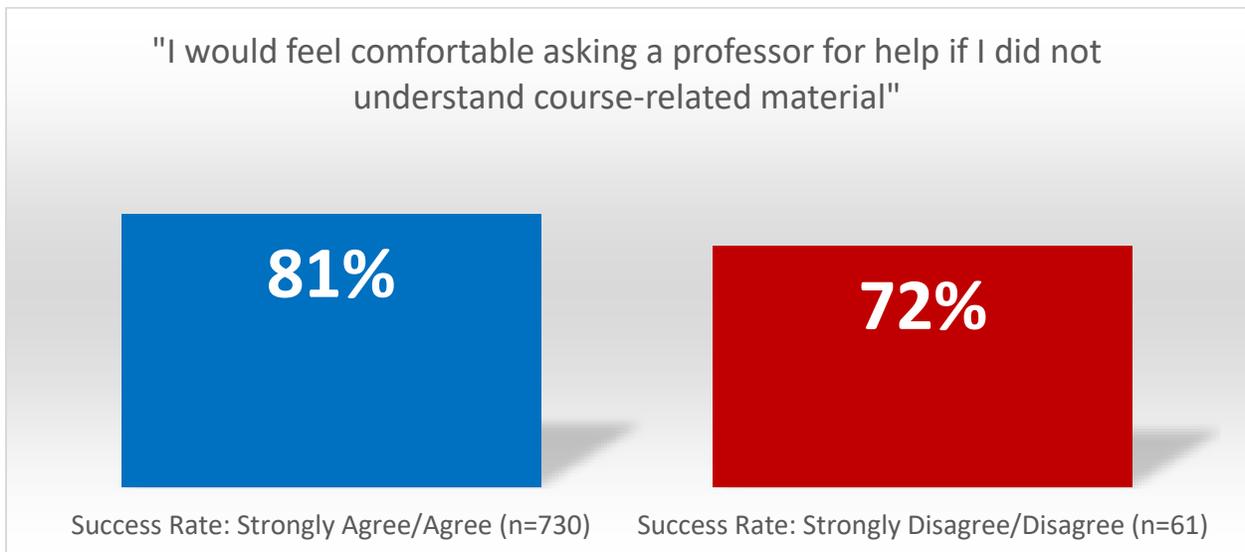
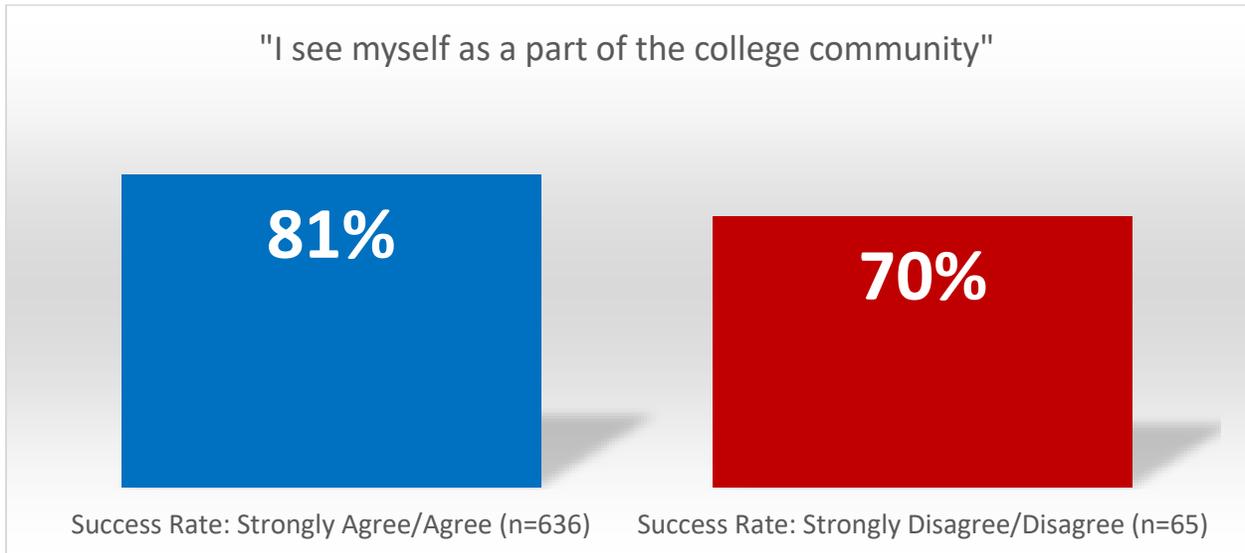
Student success rates were significantly associated with a variety of questions from the Likert scale section of the Student Experience Survey. Specifically, sense of belonging or community, feeling comfortable asking questions, the feeling that professors care, being able to find academic support,

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<sup>2</sup> Note: The student achievement metrics reported here should not be directly compared to metrics typically reported on the ARC website or on college, district, or state data dashboards as these metrics differ in important ways. Specifically, these "individualized" student achievement metrics reported here represent student achievement at the student level, rather than at a course or section level. In addition, these metrics were unweighted and could reflect performance over a varying number of terms. (e.g., Student X's success rate could have been computed based on 1 semester and 12 total units, while Student Y's success rate could have been computed based on 4 semesters and 60 total units. Both students were given equal weight in the analyses in this report to reflect each student's "career" success and drop rate at ARC.

being taken seriously by professors, being financially and housing secure, and confidence in completing one's educational goal, were all associated with **higher student success rates**.

Each graph below displays the average student success rate for students who either strongly agreed or agreed with a particular survey statement vs. students who either strongly disagreed or disagreed with that statement. The average success rate was **higher** for students who agreed compared to students who disagreed.



"I have at least one professor who cares about my academic success at ARC"

**81%**

Success Rate: Strongly Agree/Agree (n=737)

**73%**

Success Rate: Strongly Disagree/Disagree (n=32)

"Being a member of my cultural, ethnic, or racial group, I am able to find the academic support I need to do well"

**81%**

Success Rate: Strongly Agree/Agree (n=646)

**73%**

Success Rate: Strongly Disagree/Disagree (n=45)

"Being a member of my cultural, ethnic, or racial group, I am being taken seriously by professors"

**82%**

Success Rate: Strongly Agree/Agree (n=645)

**78%**

Success Rate: Strongly Disagree/Disagree (n=38)

"In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester"

**83%**

Success Rate: Strongly Agree/Agree (n=467)

**76%**

Success Rate: Strongly Disagree/Disagree (n=242)

"Thinking about my financial circumstances (e.g. personal income), I feel confident about my ability to pay for my college education"

**83%**

Success Rate: Strongly Agree/Agree (n=356)

**76%**

Success Rate: Strongly Disagree/Disagree (n=297)

"My current housing situation allows me to have a safe place to live so I can focus on my education at ARC"

**81%**

Success Rate: Strongly Agree/Agree (n=696)

**73%**

Success Rate: Strongly Disagree/Disagree (n=63)

"I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.)"

82%

Success Rate: Strongly Agree/Agree (n=699)

71%

Success Rate: Strongly Disagree/Disagree (n=55)

By contrast, cultural, ethnic, or racial (or Native American) discrimination, cultural, ethnic, or racial tension, and worries about personal finances, were associated with **lower student success rates**

Each graph below displays the average student success rate for students who either strongly agreed or agreed with a particular survey statement vs. students who either strongly disagreed or disagreed with that statement. The average success rate was **lower** for students who agreed compared to students who disagreed.

"People of my cultural, ethnic, or racial (or Native American) group are more likely to experience discrimination on campus than others"

78%

Success Rate: Strongly Agree/Agree (n=299)

83%

Success Rate: Strongly Disagree/Disagree (n=241)

"I sense cultural, ethnic, or racial tensions on campus"

**77%**

**81%**

Success Rate: Strongly Agree/Agree (n=166)

Success Rate: Strongly Disagree/Disagree (n=459)

"In my daily experience at ARC, I regularly worry about my financial circumstances (e.g. personal income)"

**79%**

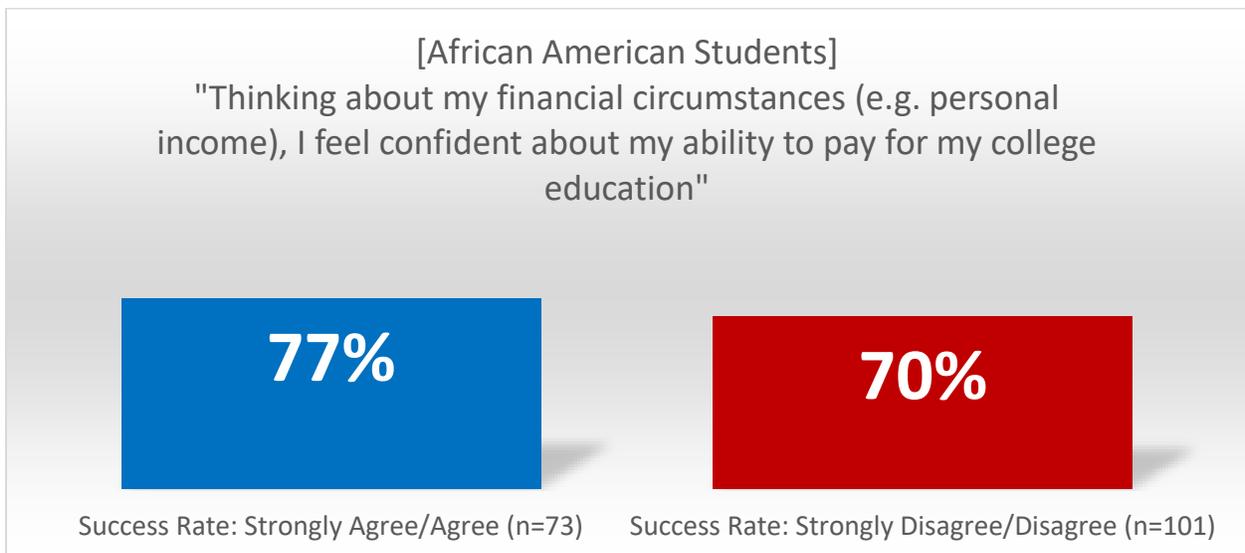
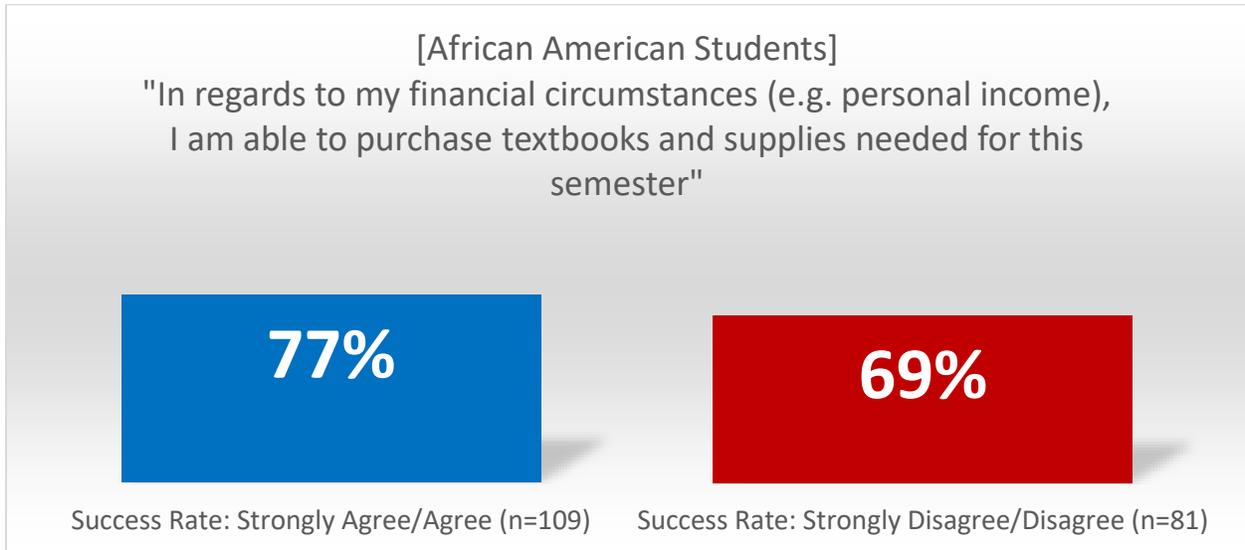
**82%**

Success Rate: Strongly Agree/Agree (n=473)

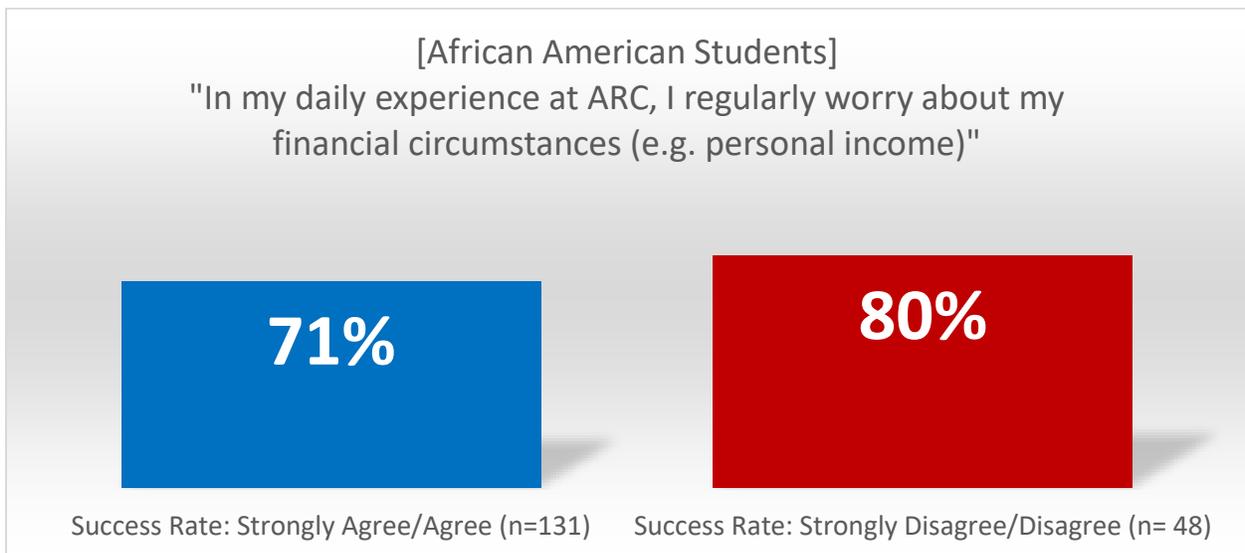
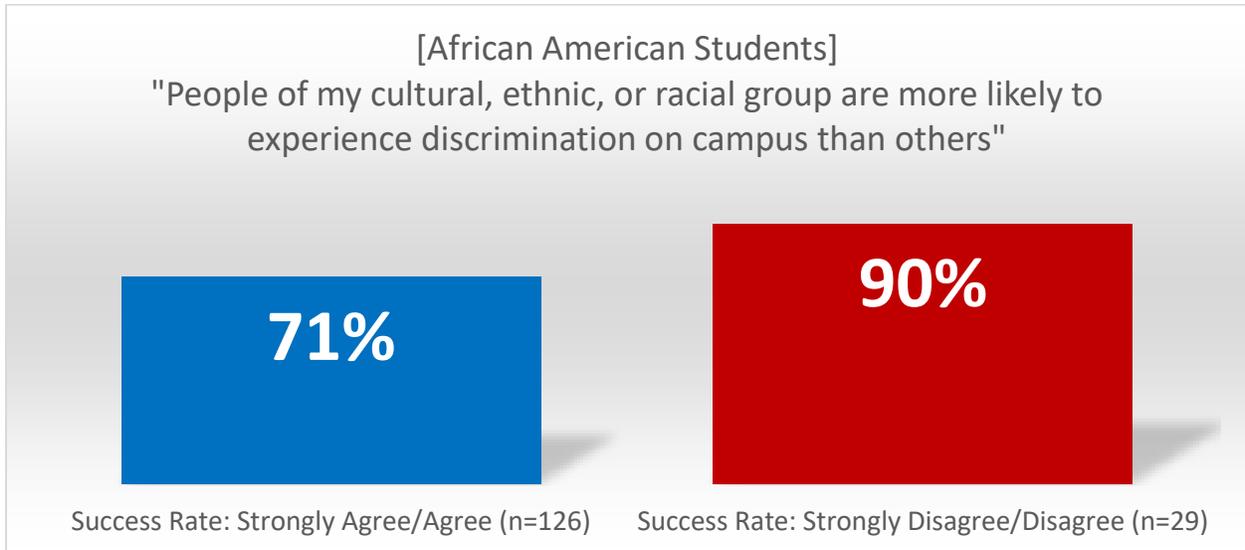
Success Rate: Strongly Disagree/Disagree (n=189)

Student Success Rates: African American Students

For **African American** students (n = 229), stronger agreement on questions about being financially secure were associated with **higher student success rates**

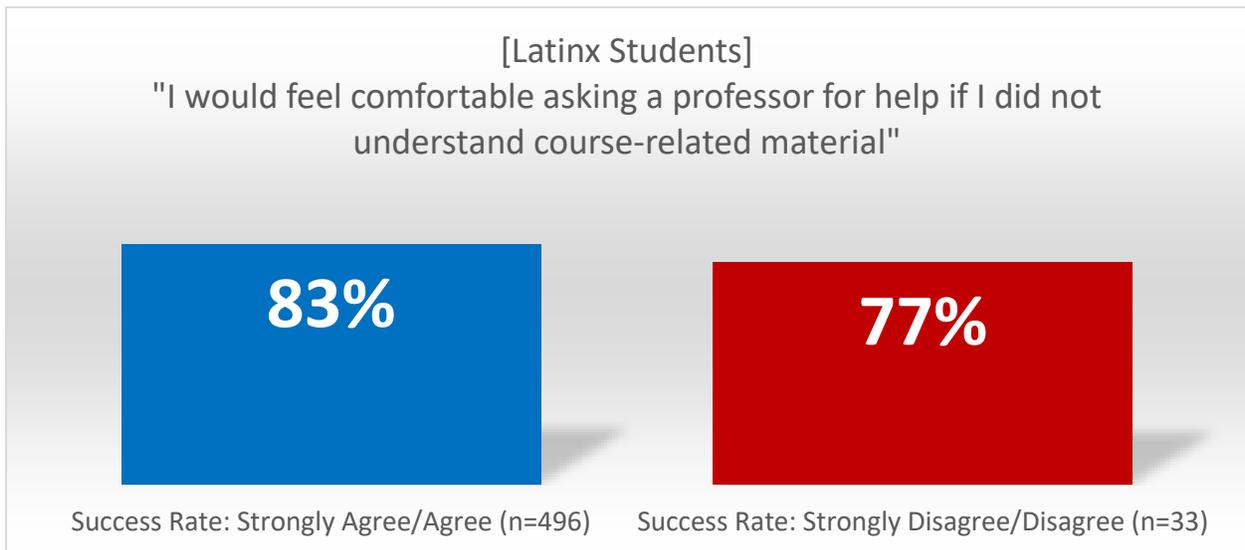
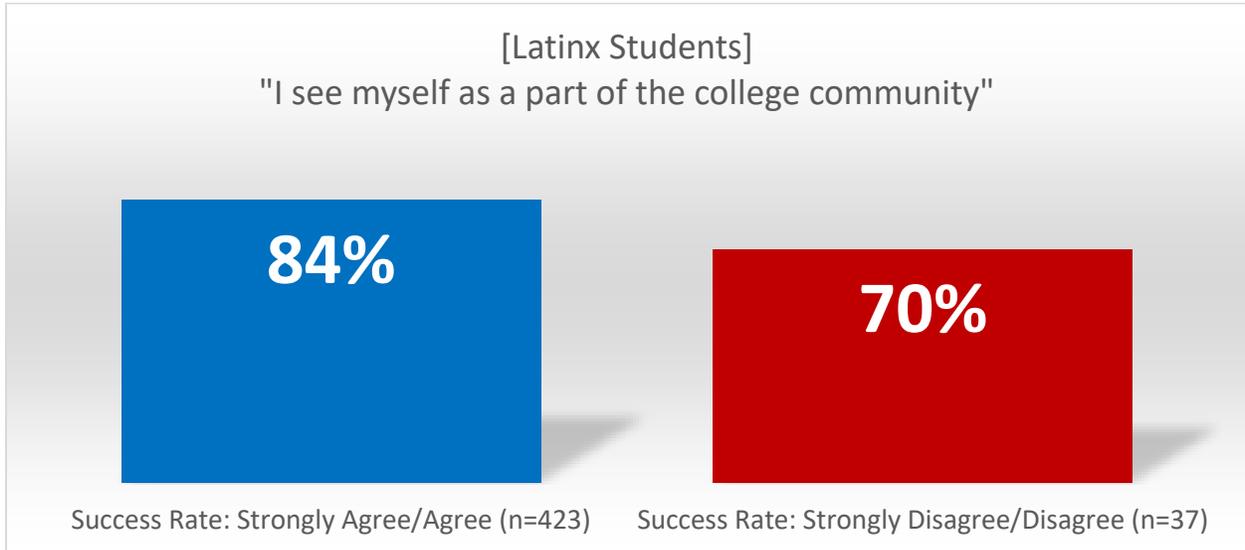


By contrast, stronger agreement on questions about cultural, ethnic, or racial discrimination and worries about personal finances, were associated with **lower student success rates**



Student Success Rates: Latinx Students

For **Latinx** students (n = 591), stronger agreement on many survey questions, including questions about sense of belonging or community, feeling comfortable asking questions, the feeling that professors care, being financially secure, and confidence in completing one's educational goal, were associated with **higher student success rates**



[Latinx Students]

"I have at least one professor who cares about my academic success at ARC"

84%

Success Rate: Strongly Agree/Agree (n=498)

78%

Success Rate: Strongly Disagree/Disagree (n=14)

[Latinx Students]

"In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester"

84%

Success Rate: Strongly Agree/Agree (n=333)

80%

Success Rate: Strongly Disagree/Disagree (n=137)

[Latinx Students]

"Thinking about my financial circumstances (e.g. personal income), I feel confident about my ability to pay for my college education"

84%

Success Rate: Strongly Agree/Agree (n=264)

80%

Success Rate: Strongly Disagree/Disagree (n=169)

[Latinx Students]

"I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.)"

84%

Success Rate: Strongly Agree/Agree (n=470)

72%

Success Rate: Strongly Disagree/Disagree (n=30)

Student Success Rates: Native American Students

For **Native American** students (n = 65), stronger agreement on many survey questions, including questions about feeling comfortable asking questions, the feeling that professors care about their learning, care about how they are doing, being financially and housing secure, and confidence in completing one's educational goal, were associated with **higher student success rates**

[Native American Students]

"I would feel comfortable asking a professor for help if I did not understand course-related material"

84%

Success Rate: Strongly Agree/Agree (n=49)

67%

Success Rate: Strongly Disagree/Disagree (n=9)

[Native American Students]

"I believe that my professors care about my learning because they regularly ask about my understanding of course materials"

86%

Success Rate: Strongly Agree/Agree (n=40)

63%

Success Rate: Strongly Disagree/Disagree (n=9)

[Native American Students]

"When I interact with professor(s) at this college, I feel they care about how I am doing"

84%

Success Rate: Strongly Agree/Agree (n=52)

59%

Success Rate: Strongly Disagree/Disagree (n=6)

[Native American Students]

"In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester"

89%

Success Rate: Strongly Agree/Agree (n=25)

73%

Success Rate: Strongly Disagree/Disagree (n=24)

[Native American Students]

"Thinking about my financial circumstances (e.g. personal income), I feel confident about my ability to pay for my college education"

89%

Success Rate: Strongly Agree/Agree (n=19)

77%

Success Rate: Strongly Disagree/Disagree (n=27)

[Native American Students]

"My current housing situation allows me to have a safe place to live so I can focus on my education at ARC"

86%

Success Rate: Strongly Agree/Agree (n=47)

61%

Success Rate: Strongly Disagree/Disagree (n=7)

[Native American Students]

"I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.)"

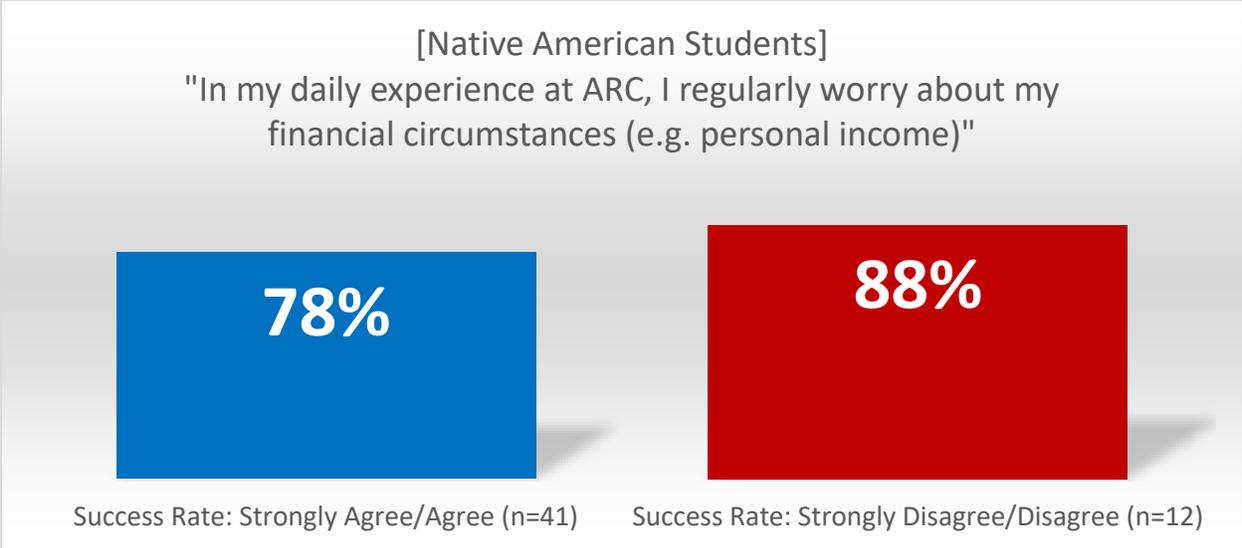
84%

Success Rate: Strongly Agree/Agree (n=49)

62%

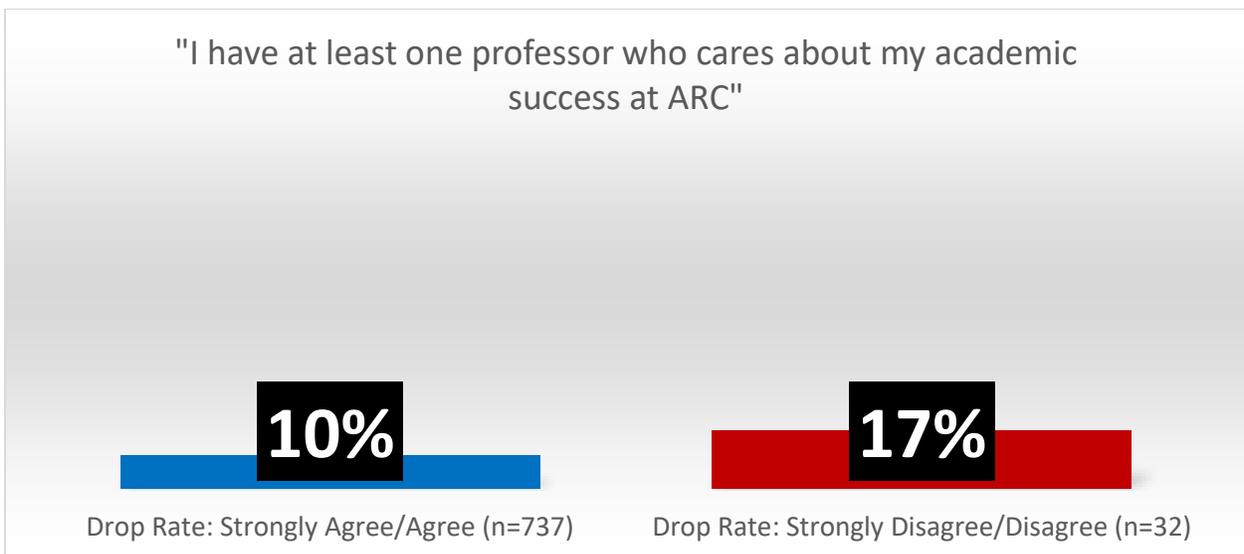
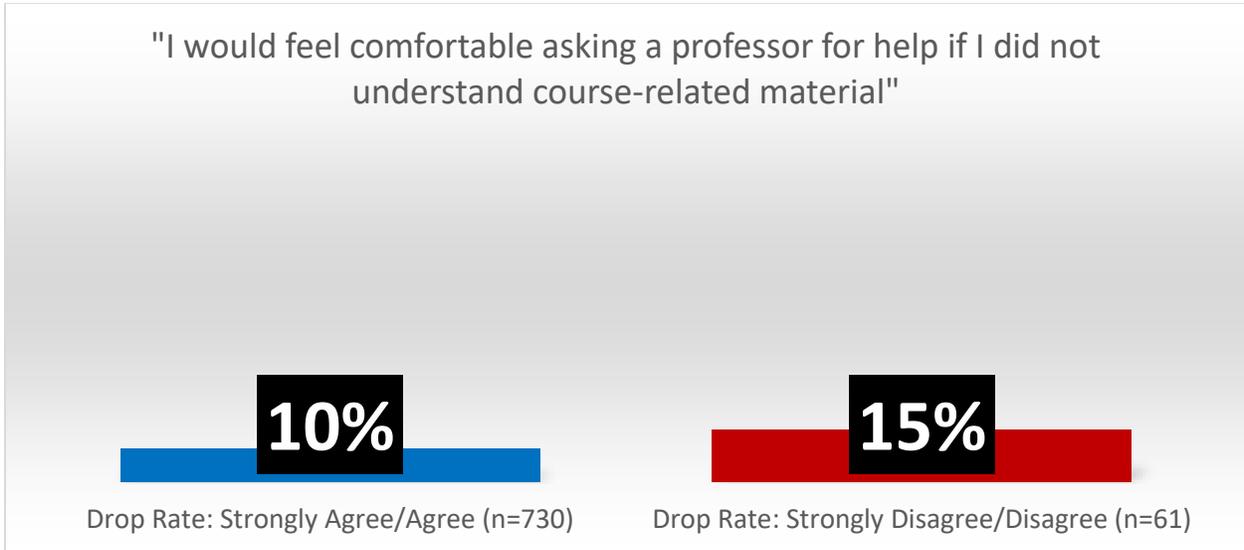
Success Rate: Strongly Disagree/Disagree (n=5)

By contrast, stronger agreement on worries about personal finances were associated with **lower student success rates**



Student Drop Rates (Withdrawals)

Feeling comfortable asking questions, the feeling that professors care, being taken seriously by professors, being financially secure, and confident in completing one's educational goal, were associated with **lower student drop rates (withdrawals)**



"Being a member of my cultural, ethnic, or racial group, I am being taken seriously by professors"



Drop Rate: Strongly Agree/Agree (n=645)



Drop Rate: Strongly Disagree/Disagree (n=38)

"In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester"

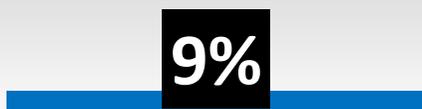


Drop Rate: Strongly Agree/Agree (n=467)



Drop Rate: Strongly Disagree/Disagree (n=242)

"Thinking about my financial circumstances (e.g. personal income), I feel confident about my ability to pay for my college education"



Drop Rate: Strongly Agree/Agree (n=356)



Drop Rate: Strongly Disagree/Disagree (n=297)

"I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.)"



Stronger agreement on questions about cultural, ethnic, or racial (or Native American) discrimination, and worries about personal finances, were associated with **higher student drop rates (withdrawals)**

"People of my cultural, ethnic, or racial group are more likely to experience discrimination on campus than others"



"In my daily experience at ARC, I regularly worry about my financial circumstances (e.g. personal income)"

**11%**

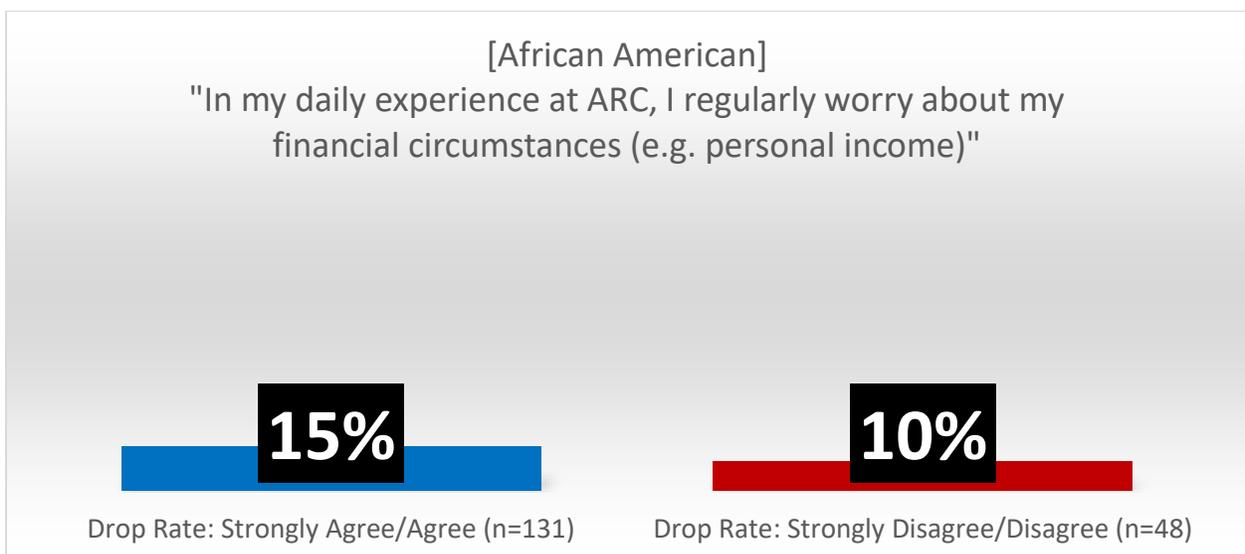
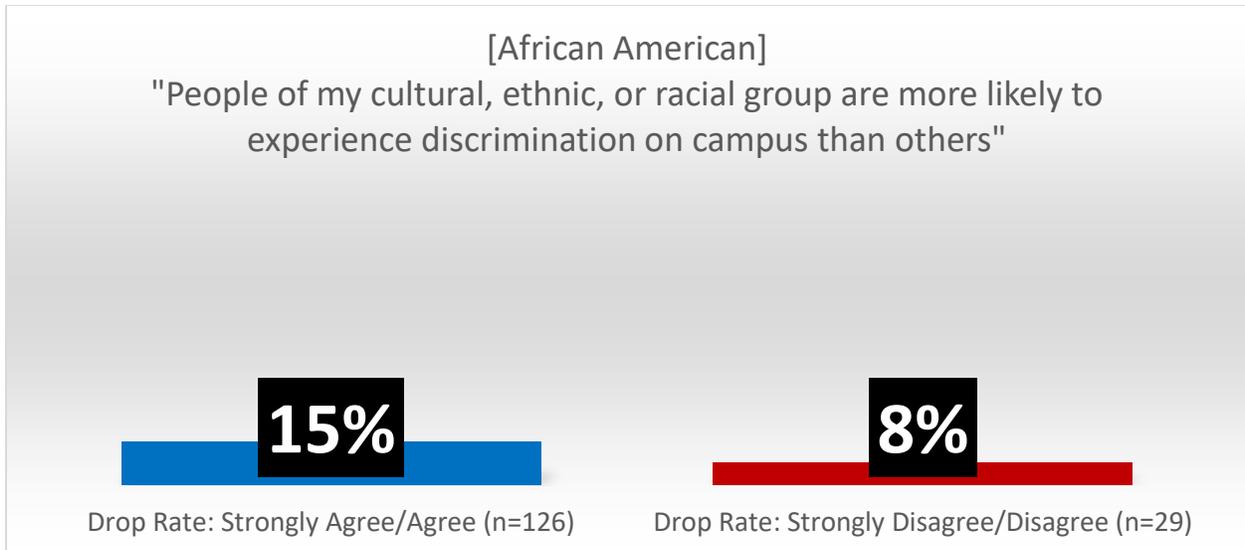
Drop Rate: Strongly Agree/Agree (n=473)

**9%**

Drop Rate: Strongly Disagree/Disagree (n=189)

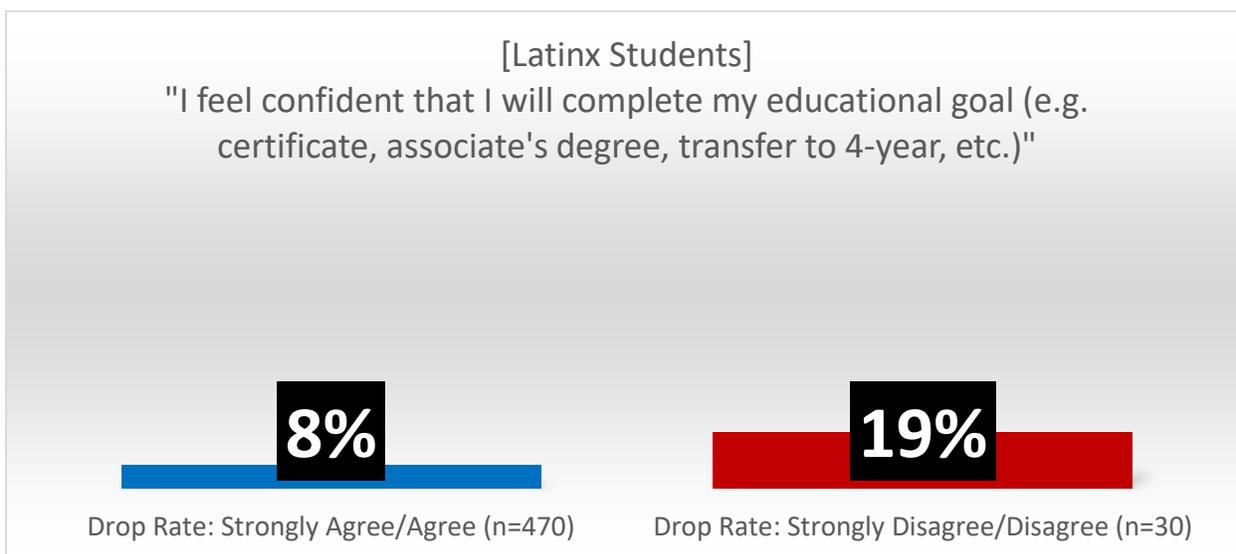
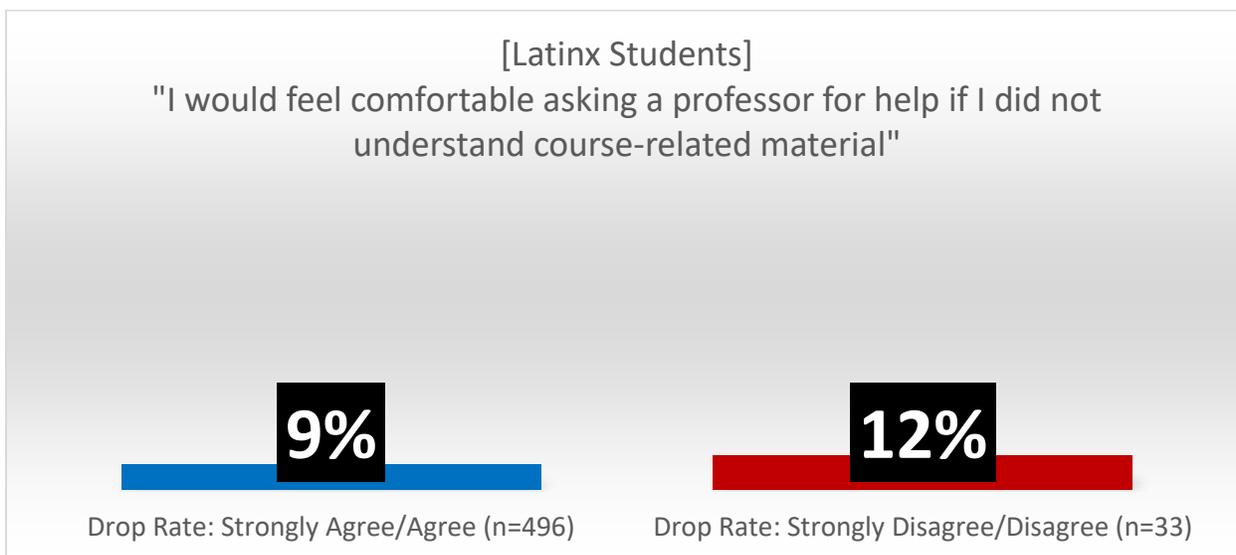
Student Drop Rates (Withdrawals): African American Students

For **African American** students, stronger agreement on questions about cultural, ethnic, or racial discrimination and worries about personal finances, were associated with **higher student drop rates (withdrawals)**



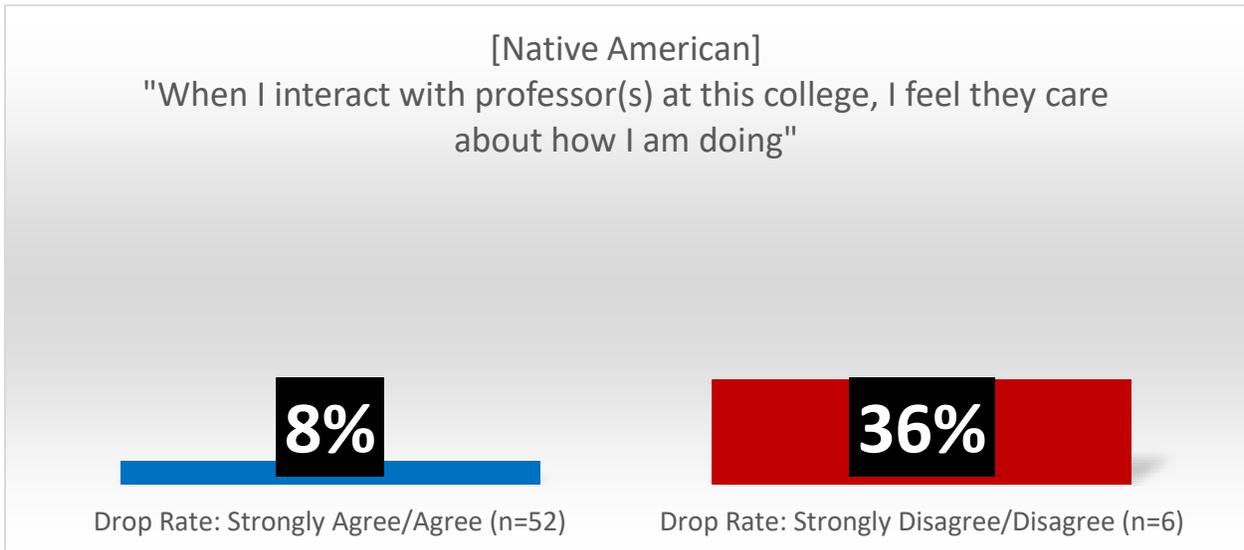
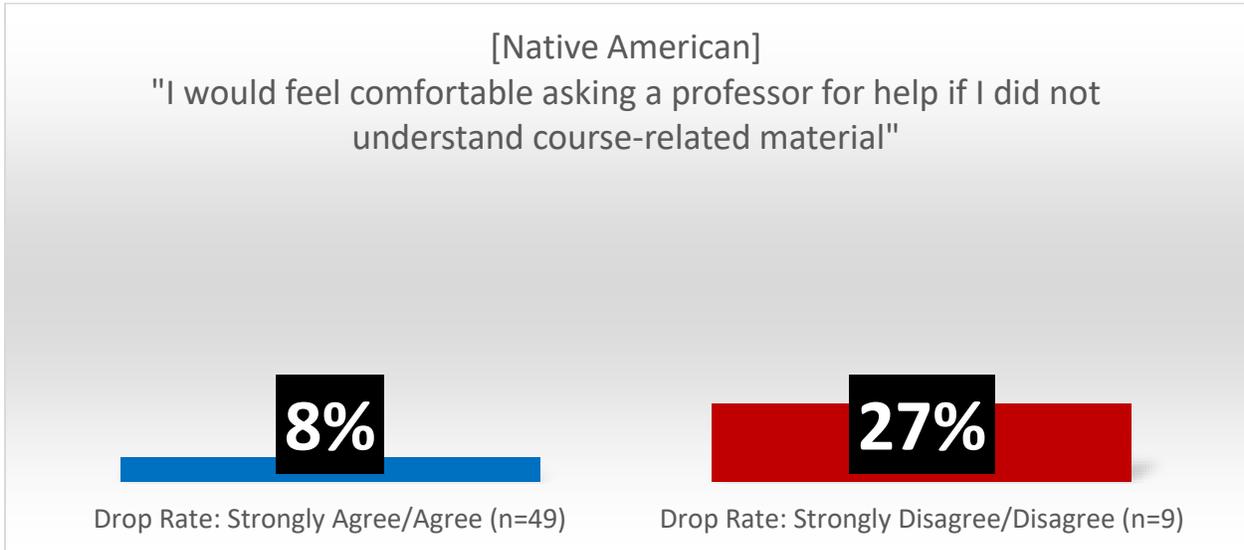
Student Drop Rates (Withdrawals): Latinx Students

For **Latinx** students, stronger agreement on questions about feeling comfortable asking questions and confidence in completing one's educational goal, were associated with **lower student drop rates (withdrawals)**



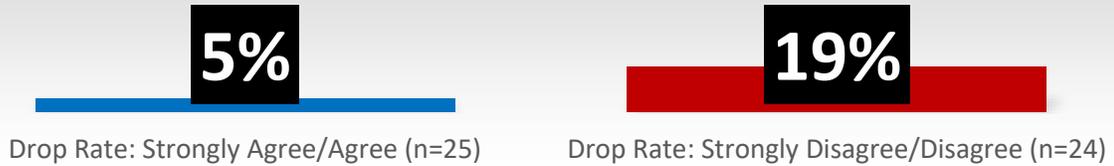
Student Drop Rates (Withdrawals): Native American Students

For **Native American** students, stronger agreement on many survey questions, including questions about feeling comfortable asking questions, the feeling that professors care about how they are doing, being financially secure, and confidence in completing one's educational goal, were associated with **lower student drop rates (withdrawals)**



[Native American]

"In regards to my financial circumstances (e.g. personal income), I am able to purchase textbooks and supplies needed for this semester"



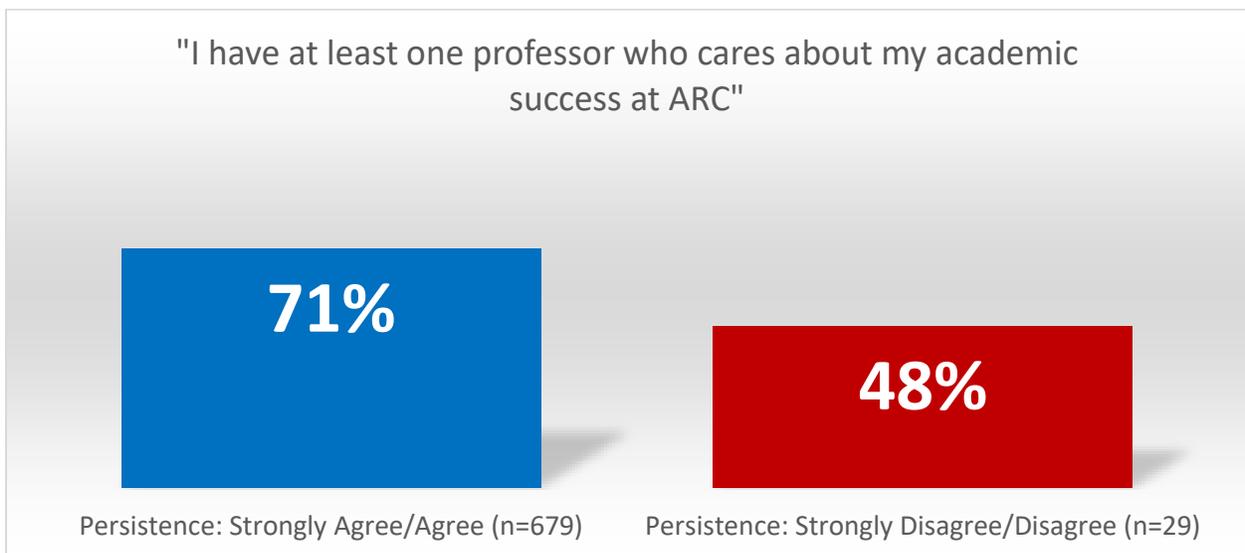
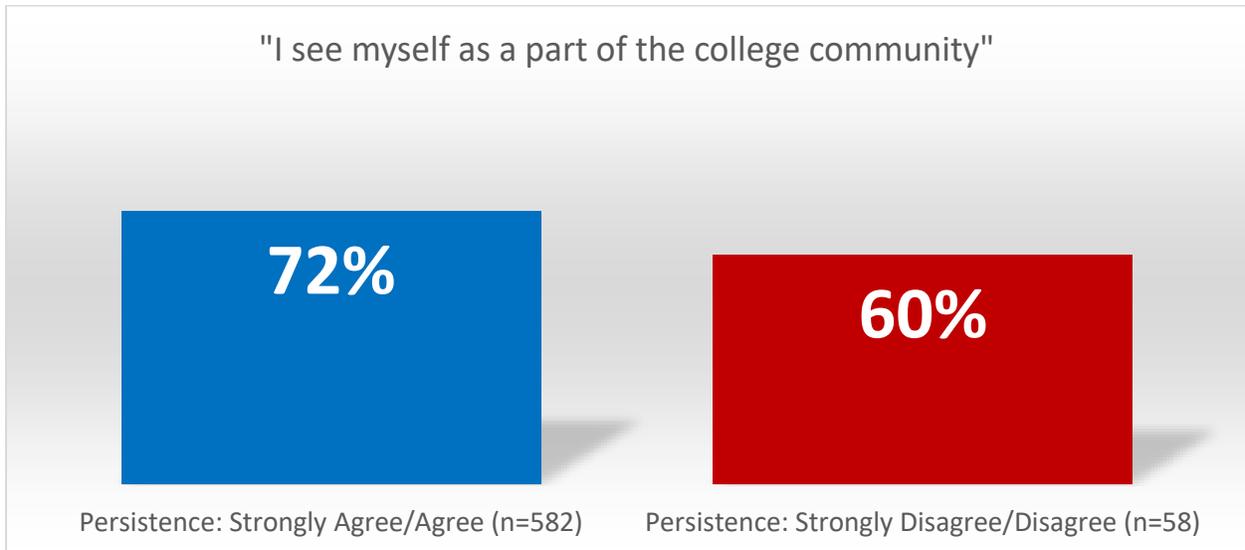
[Native American]

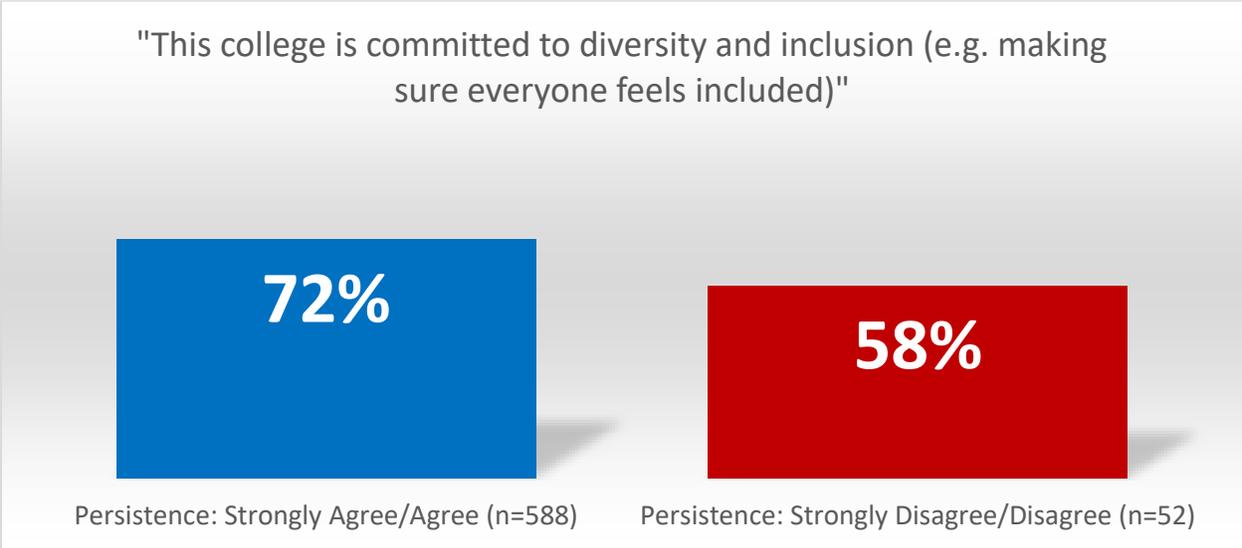
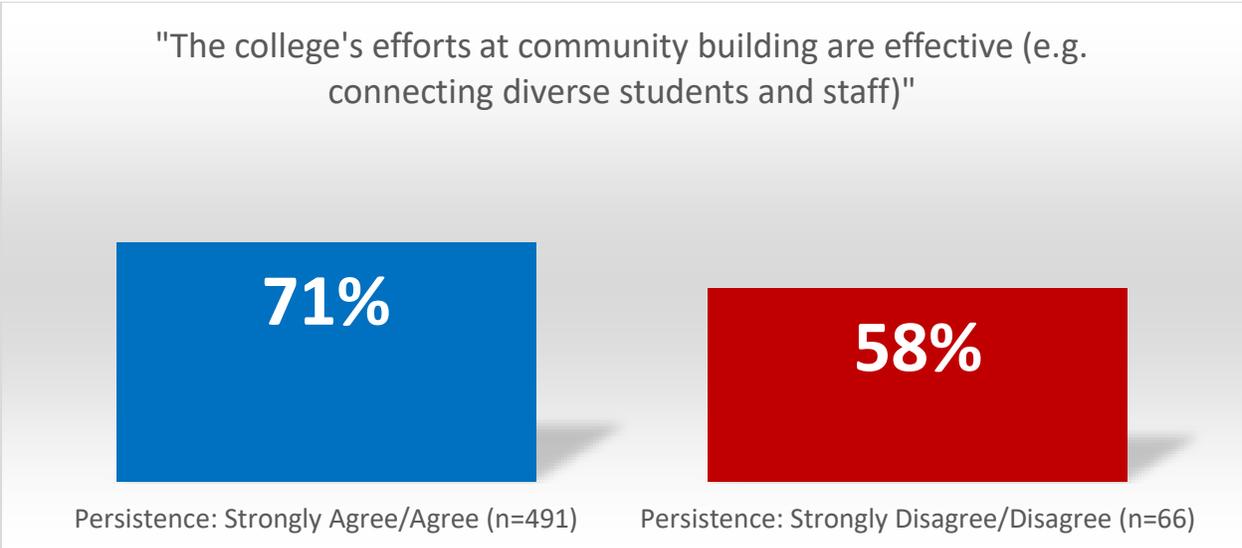
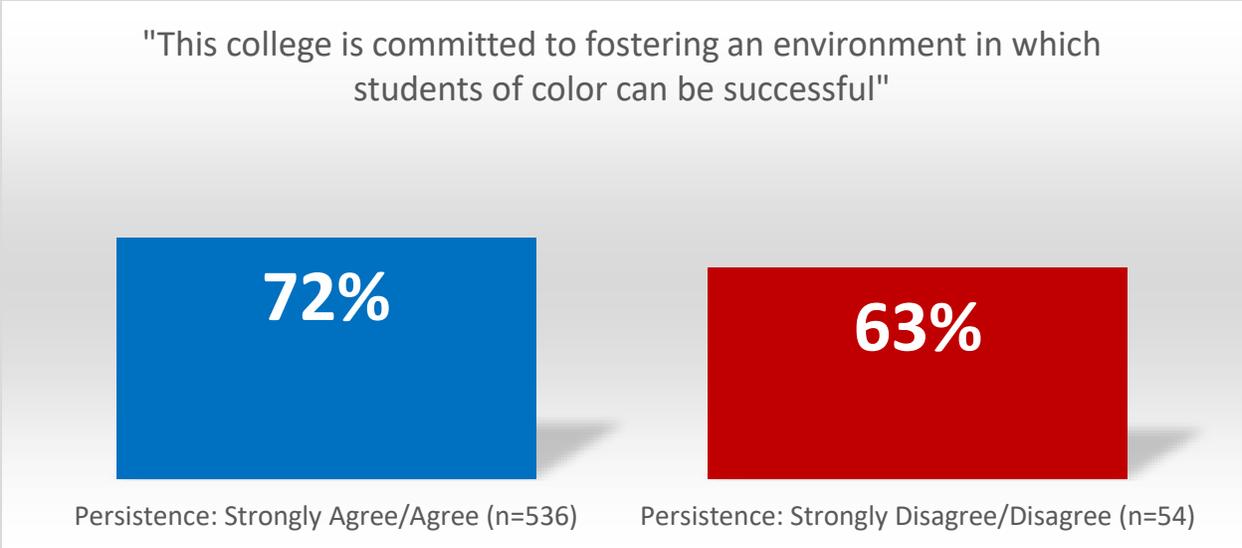
"I feel confident that I will complete my educational goal (e.g. certificate, associate's degree, transfer to 4-year, etc.)"



## Persistence

Stronger agreement on many survey questions, including questions about sense of belonging or community, the feeling that professors care, the college fosters an environment where students of color can be successful, the college's efforts at community building are successful, the college is committed to diversity and inclusion, feeling safe in regards to one's cultural, ethnic, or racial (or tribal) identity, feeling socially accepted in regards to one's cultural, ethnic, or racial (or Native American Group) identity, were associated with **higher Persistence (continued enrollment from the Spring 2020 semester to the Fall 2020 semester, excluding 2019-2020 degree or certificate earners)**





"In consideration of my cultural, ethnic, or racial identity, I feel safe (e.g. physical security) on the ARC campus"

**71%**

Persistence: Strongly Agree/Agree (n=600)

**56%**

Persistence: Strongly Disagree/Disagree (n=49)

"Being a member of my cultural, ethnic, or racial group, I feel socially accepted (e.g. no discrimination) on campus"

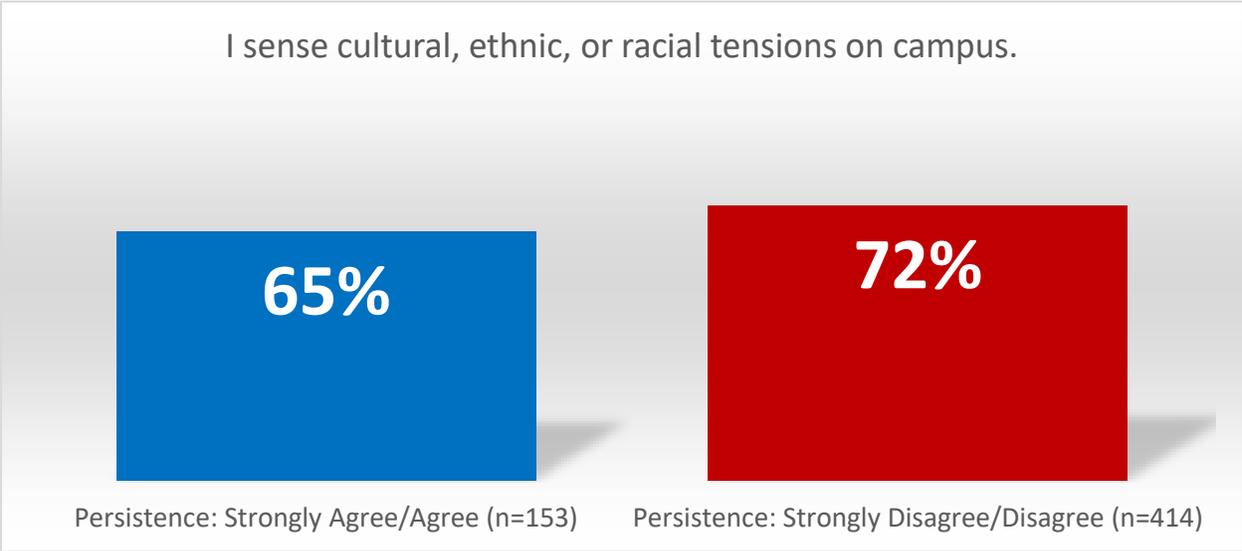
**71%**

Persistence: Strongly Agree/Agree (n=574)

**59%**

Persistence: Strongly Disagree/Disagree (n=56)

Stronger agreement on cultural, ethnic, or racial tensions were associated with **lower Persistence**

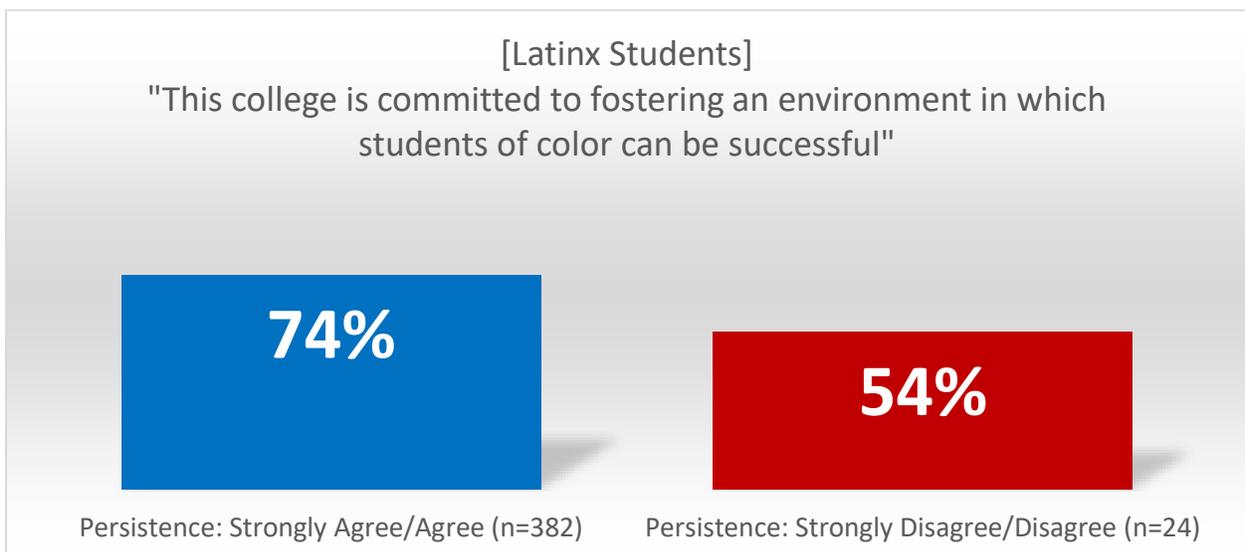
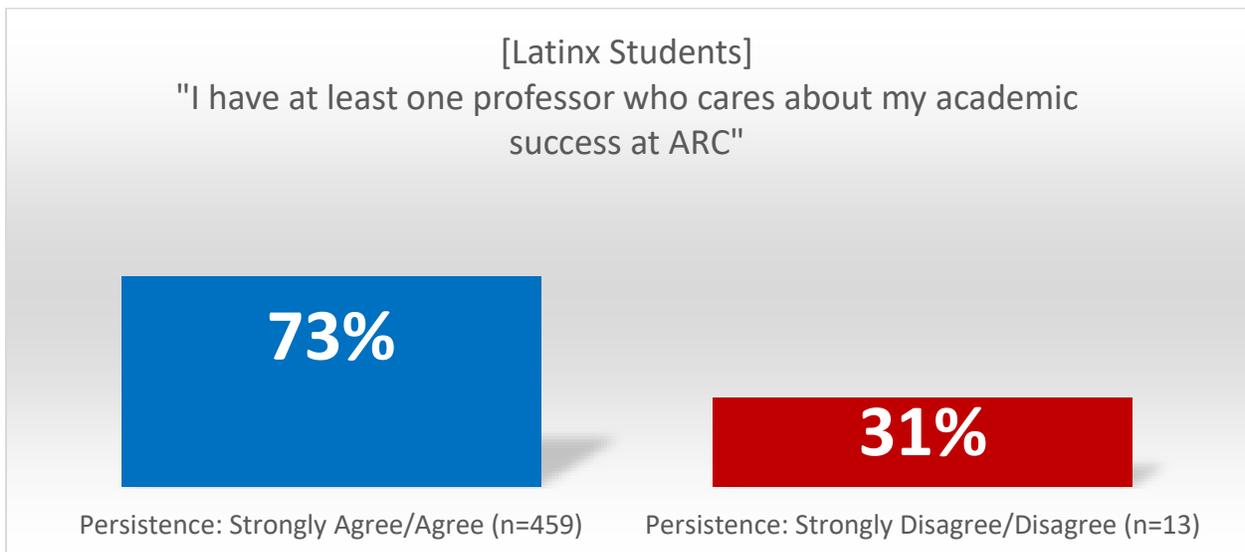


Persistence: African American Students

For **African American** students, no significant associations were found between agreement on survey questions from the Likert Scale section of this survey and **Persistence**<sup>3</sup>

Persistence: Latinx Students

For **Latinx** students, stronger agreement on many survey questions, including questions about the feeling that professors care, the college fosters an environment where students of color can be successful, the college's efforts at community building are successful, the college is committed to diversity and inclusion, feeling safe in regards to one's cultural, ethnic, or racial identity, were associated with **higher Persistence**



<sup>3</sup> Note that the next report (Part 2) does include significant associations between persistence and Non-Likert scale questions from the Student Experience Survey for African American Students. For example, for African American Students, persistence was positively associated with being affiliated with EOP&S, and negatively associated with reporting mistreatment by professors because of one's Culture or Cultural Identity.

[Latinx Students]

"The college's efforts at community building are effective (e.g. connecting diverse students and staff)"

73%

Persistence: Strongly Agree/Agree (n=352)

56%

Persistence: Strongly Disagree/Disagree (n=25)

[Latinx Students]

"This college is committed to diversity and inclusion (e.g. making sure everyone feels included)"

74%

Persistence: Strongly Agree/Agree (n=419)

53%

Persistence: Strongly Disagree/Disagree (n=17)

[Latinx Students]

"In consideration of my cultural, ethnic, or racial identity, I feel safe (e.g. physical security) on the ARC campus"

73%

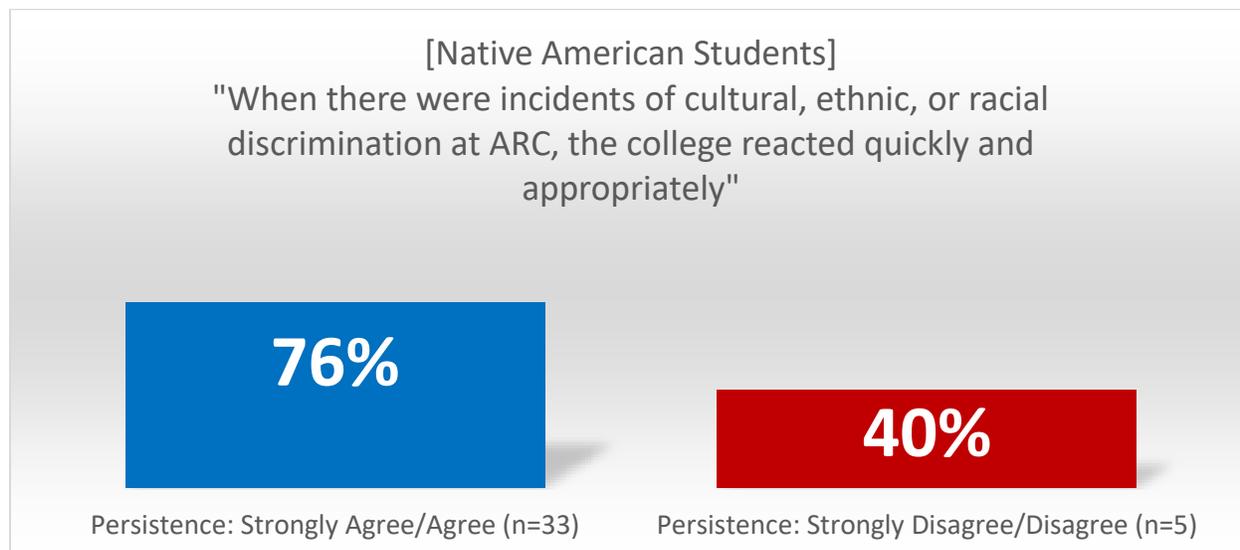
Persistence: Strongly Agree/Agree (n=420)

47%

Persistence: Strongly Disagree/Disagree (n=17)

#### Persistence: Native American Students

For **Native American** students, stronger agreement on the college acting quickly and appropriately to addressing discrimination was associated with **higher Persistence**



#### Conclusion

ARC's African American, Latinx, and Native American students' experiences and perceptions were significantly associated and predictive of their student achievement outcomes.

Specifically, factors such as a sense of belonging, feeling comfortable asking questions, feeling that professors care, perceptions of cultural, ethnic, racial or tribal discrimination or tensions, views of the college's commitment to equity, inclusion, and safety, being financially and housing secure and confident in reaching one's educational goals, were significantly associated with student achievement metrics, including Student Success Rates, Student Drop Rates, and Persistence Rates.

As this data is correlational in nature, these associations do not prove a causal relationship between student experiences and student achievement. However, they do suggest that student experiences and perceptions may play a role in and can predict student achievement outcomes.

These associations also provide evidence for the validity of the Student Experience Survey instrument. Significant associations were revealed for some survey items and not others, so the findings did not simply reflect a more positive overall view of the students' experiences being related to more positive student achievement outcomes. In addition, the specific survey items associated with student achievement outcomes varied both by the specific student achievement metric (Success Rate, Drop Rate, Persistence) and by the specific DI group (African American, Latinx, Native American), suggesting that different factors may be related to succeeding in class, withdrawing from a class, and continuing to enroll in the following semester, and that these factors may differ between ARC's traditionally disproportionately impacted student groups.