



San Bernardino
Valley College

Research,
Planning &
Institutional
Effectiveness

Factors Affecting Student Persistence and Satisfaction: Additional Insights from the Healthy Minds Study, 2022

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Executive Summary

Multiple factors, such as mental health and campus climate, affect students' confidence that they can persist and their overall satisfaction. This report considers these multiple factors together to parse out exactly *which* factors are more likely to affect students' feelings of persistence and their overall satisfaction at San Bernardino Valley College (SBVC).

Specifically, student data from the Healthy Minds Study (spring 2022) were analyzed to examine the effects of mental health (i.e., psychological well-being, depression, anxiety, eating disorders), campus climate, campus belonging, feelings of being valued by others, fair and equitable treatment on campus, safety on campus, and financial stress, on influencing students' feelings of persistence and overall satisfaction.

Perceived Persistence

Overall, when the multiple factors were modeled together, students who were more likely to feel confident that they can finish their degree at SBVC (i.e., students' perceived persistence) indicated that they had greater mental health (i.e., greater levels of psychological well-being and lower levels of depression) and felt like they belong on campus.

However, when these factors were modeled separately, in addition to greater mental health and campus belonging, students who were more likely to perceive persistence were also more likely to:

- View the campus climate as more positive (i.e., more friendly, cooperative, welcoming, respectful, and comfortable)
- Consider SBVC as a place where they can perform up to their full potential
- Feel more valued by others (i.e., faculty, other students, staff members, and administrators)
- Feel like they were treated more fairly and equitably in classrooms and classroom settings
- Experience less financial stress in their current situation

Overall Satisfaction

When the multiple factors were modeled together, students' overall satisfaction with SBVC was more nuanced than students' feelings of persistence. Students who were more satisfied with their overall experience at SBVC indicated that they were more likely to feel like they belong on campus, had better mental health (i.e., higher levels of psychological well-being and lower levels of anxiety), were more likely to feel valued by others (particularly by faculty members), experienced a more positive campus climate, and were more likely to feel safe on campus.

In modeling these factors separately, students who were more likely to be satisfied with their overall experience at SBVC were also more likely to:

- Have better mental health (i.e., greater levels of psychological well-being, lower levels of depression and anxiety)
- View the campus climate as more positive
- Are more likely to feel like they belong at SBVC, less likely to have considered leaving SBVC due to feeling isolated or unwelcome, and believe that they can perform up to their full potential at SBVC



- Feel valued by others, particularly faculty members but also by administrators
- Feel like they were treated more fairly and equitably in classrooms and classroom settings
- Be less concerned about their personal safety on campus
- Experience less stress about their current financial situation

Recommendations

Based on these results, here are suggested next steps to improve students' perceived persistence and overall satisfaction at SBVC.

1. Enhance mental health support. The availability and accessibility of mental health services should be increased, and mental health awareness should be promoted, in order to improve psychological well-being.
2. Foster a more positive campus climate. Programs that create a welcoming environment for students should continue to be developed and supported. Additionally, community building can foster a sense of belonging among not just for students but also for faculty and staff.
3. Implement more transparent and equitable practices. Particularly in the classroom, students need to understand the policies to enhance perceived fairness and equity. Any disparities in treatment or outcomes should be regularly assessed, such as by disaggregating student data to examine disproportionate impact.
4. Alleviate financial stress. This includes the availability and accessibility of financial aid and scholarships, as well as continuing or implementing policies that support the affordability of college, such as free textbooks, available technology, and food and housing support.

In a [prior report on the Healthy Minds Study](#), certain groups of students were more likely to experience mental health issues, feel that they did not belong at SBVC, and feel less confident that they can finish their degree at SBVC. This indicates that although these recommendations are suggested for all students, specific groups of students may need targeted support based on who is likely to be more affected by, for example, worse mental health or a more negative campus climate. By addressing these disparities, SBVC can work towards ensuring that all students have an equal opportunity to succeed and thrive in their academic journey.



Factors Affecting Student Persistence and Satisfaction

About

The Healthy Minds Study was administered at SBVC on issues of student mental health and campus climate during spring 2022. This current report focuses on the students as a whole at SBVC rather than disaggregating them by student groups. A full report on this survey disaggregated by student groups can be found here: https://www.valleycollege.edu/about-sbvc/offices/office-research-planning/reports/healthy_minds_2022_report.pdf

This survey asked students about their:

- mental health (i.e., psychological well-being, depression, anxiety, eating disorders)
- campus climate
- campus belonging
- feelings of being valued by others
- fair and equitable treatment on campus
- safety on campus
- financial stress
- confidence that they can finish their degree (i.e., students' perceived persistence)
- overall satisfaction (i.e., satisfaction with their overall experience at SBVC).

These analyses investigated student persistence and overall satisfaction as the outcome variables, with the other listed constructs as the predictor variables. Although, for instance, we may want to know how students' mental and physical health may predict students' perceived persistence, all results are correlational since the survey data was collected at one time point. Thus, no causal inferences can be made from this report.

In these statistical analyses, the standardized beta (β) or the correlation coefficient (r) measures the strength and direction of the relationship between the predictor and outcome variable. Specifically, it indicates the change in the outcome variable in standard deviation units for one standard deviation increase in the predictor variable. To interpret standardized betas and correlation coefficients, the greater the number, the stronger the relation between the predictor and outcome variable, and whether the number is positive or negative indicates the direction of the relationship (i.e., positive number: as one variable increases, the other variable also increases; negative number: as one variable increases, the other variable decreases).

Additionally, the p -value indicates the extent to which the results are due to randomness or error. The smaller this percentage, the more likely that the results are "true". The standard across multiple fields is a p -value of less than 5% (i.e., $p < .05$), which indicates that there is a less than 5% chance that the results are due to randomness or error, so these results are "statistically significant".

This report investigates all the listed predictor variables (e.g., mental health, campus climate, campus belonging) separately first, then altogether to examine which predictor variables were more likely to affect students' perceived persistence and overall satisfaction.



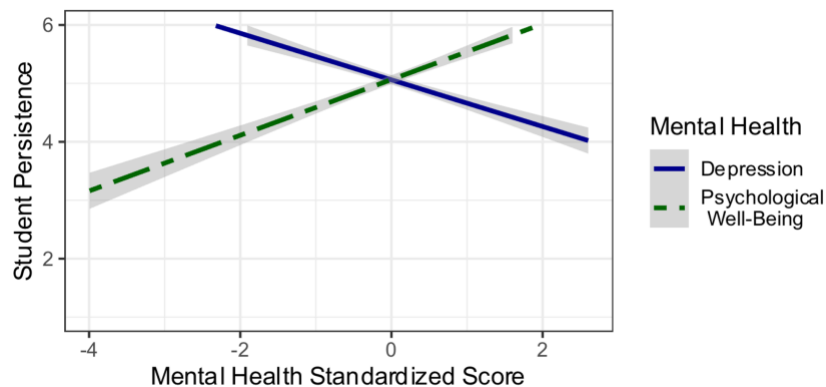
Mental Health

There were various measures of mental health, including psychological well-being, depression, anxiety, and eating disorders. Only the statistically significant measures of mental health are modeled in the figures below.

Perceived Persistence

A multiple linear regression was modeled with psychological well-being, depression, anxiety, and eating disorders as the predictor variables and persistence as the outcome variable. Results demonstrated that psychological well-being ($\beta = .36, p < .001$) and depression ($\beta = -.22, p < .001$) significantly predicted persistence. Specifically, students with greater psychological well-being and lower levels of depression were more confident that they can finish their degree at SBVC (Figure 1).

Figure 1. Mental Health on Student Persistence

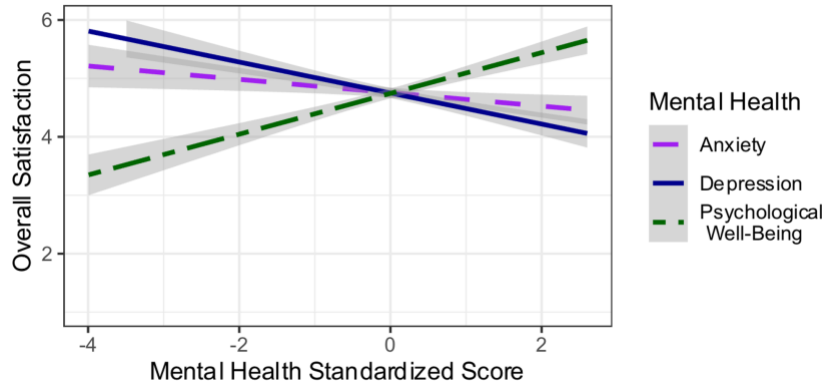


Overall Satisfaction

A multiple linear regression was modeled with psychological well-being, depression, anxiety, and eating disorders as the predictor variables and overall satisfaction as the outcome variable. Results demonstrated that psychological well-being ($\beta = .25, p < .001$), depression ($\beta = -.22, p < .001$), and anxiety ($\beta = .18, p = .002$) significantly predicted overall satisfaction. Specifically, students with greater psychological well-being and lower levels of depression and anxiety were more satisfied with their overall experience at SBVC (Figure 2).



Figure 2. Mental Health on Overall Satisfaction



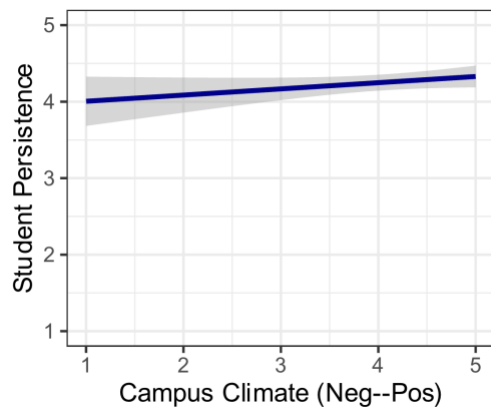
Overall Campus Climate

In the survey, campus climate was defined to students as “your view of how things generally work in your campus environment (e.g., common attitudes, practices, or behaviors.” For these items, participants were asked to evaluate the overall climate over the past 12 months using a 5-point Likert scale on the following dimensions: hostile—friendly, uncooperative—cooperative, not welcoming—welcoming, disrespectful—respectful, and uncomfortable—comfortable. Although these are distinct dimensions, the responses were averaged across all five dimensions to obtain an overall campus climate score for each student due to the five dimensions being significantly correlated with each other, and with persistence and overall satisfaction.

Perceived Persistence

Overall campus climate was significantly correlated with persistence ($r = .12, p = .004$; Figure 3). The results suggested that as students’ perceptions of overall campus climate were more positive, their persistence increased.

Figure 3. Overall Campus Climate on Student Persistence

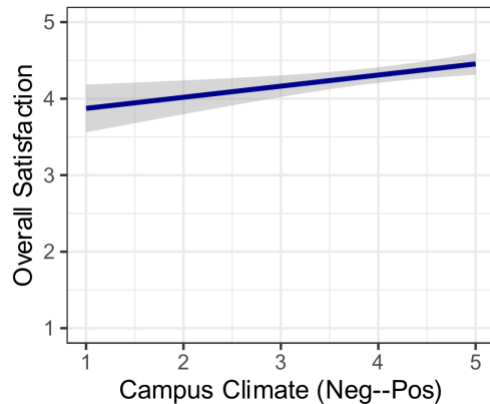




Overall Satisfaction

Overall campus climate was also significantly correlated with overall satisfaction ($r = .23, p < .001$; Figure 4). The results suggested that as students' perceptions of overall campus climate were more positive, overall satisfaction increased.

Figure 4. Overall Campus Climate on Overall Satisfaction



Campus Belonging

In the survey, campus belonging was measured by asking students to consider their experiences over the past 12 months and indicate the extent to agree or disagree to the following items:

- I feel valued as an individual at this school.
- I feel I belong at this school.
- I have considered leaving this school because I felt isolated or unwelcome.
- This school is a place where I am able to perform up to my full potential.
- I have found one or more communities or groups where I feel I belong at this school.

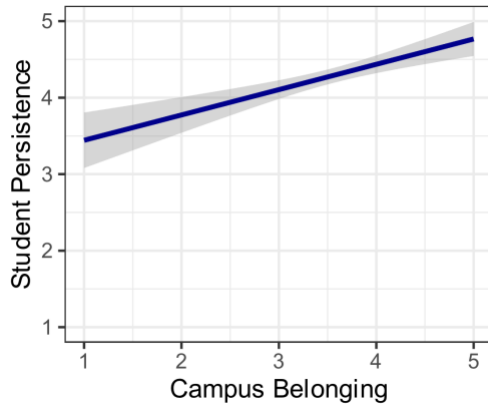
Perceived Persistence

Although all five items were significantly correlated with persistence, when modeled together in a multiple linear regression, results suggested that students considering SBVC as a place where they can perform up to their full potential significantly predicted persistence ($\beta = .14, p = .02$).

Overall campus belonging, in which all five items were averaged together, was significantly correlated with persistence ($r = .27, p < .001$; Figure 5), suggesting that as campus belonging increased, so did persistence.



Figure 5. Campus Belonging on Student Persistence

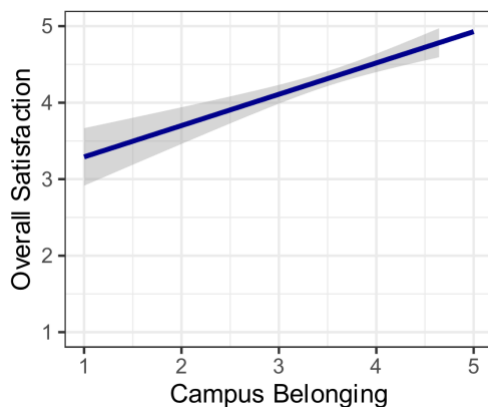


Overall Satisfaction

Similarly, all five items were significantly correlated with overall satisfaction, but when modeled in a multiple linear regression together, students who felt like they belong at SBVC ($\beta = .17, p = .02$), then students who considered leaving SBVC due to feeling isolated or unwelcome ($\beta = .12, p = .002$) and SBVC being a place where students believe that they can perform up to their full potential ($\beta = .12, p = .03$) significantly predicted overall satisfaction.

Overall campus belonging was significantly correlated with overall satisfaction ($r = .40, p < .001$; Figure 6), suggesting that as campus belonging increased, so did overall satisfaction.

Figure 6. Campus Belonging on Overall Satisfaction



Feeling Valued by Others

In the survey, feeling valued by others was measured by asking students to agree or disagree with feeling valued and listened to by (1) faculty, (2) other students, (3) staff members, and (4) administrators.

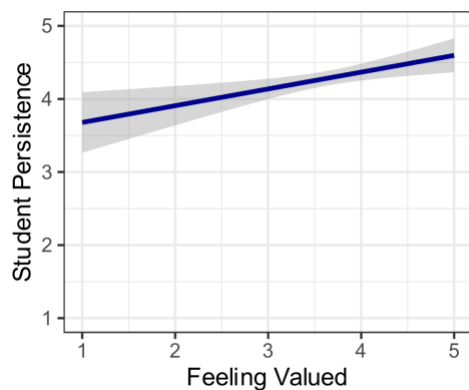


Perceived Persistence

All four items were significantly correlated with persistence, and when modeled together in a multiple linear regression, feeling valued by a particular group did significantly explain why students persist. However, due to being strongly correlated with each other, these four items were averaged together for a composite variable of feeling valued by others.

Feeling valued by others was significantly correlated with persistence ($r = .21, p < .001$; Figure 7), suggesting that as students felt more valued by others, they were more likely to persist.

Figure 7. Feeling Valued on Student Persistence

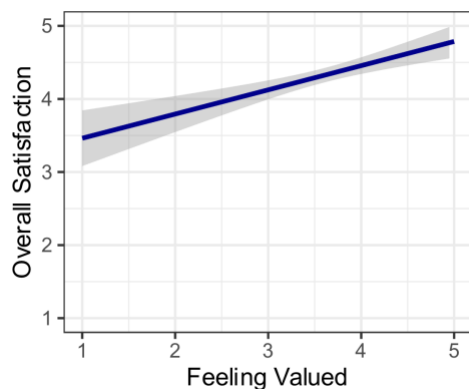


Overall Satisfaction

Interestingly, although feeling valued by a particular group did not affect persistence, feeling valued by faculty members ($\beta = .20, p = .002$), in particular, but administrators ($\beta = .13, p = .04$) as well, significantly explained higher levels of overall satisfaction.

Largely, feeling valued by others was significantly correlated with overall satisfaction ($r = .37, p < .001$; Figure 8), suggesting that as students felt more valued by others, they were more likely to be satisfied with their overall experience at SBVC.

Figure 8. Feeling Valued on Overall Satisfaction





Fair and Equitable Treatment

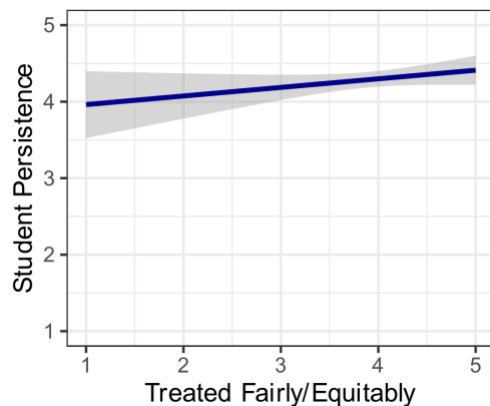
In the survey, fair and equitable treatment measured by asking students the extent to which they felt like they were treated fairly and equitably (1) on campus in general, (2) in classrooms and classroom settings (e.g., labs), and (3) in out-of-classroom campus spaces (e.g., workshops).

Perceived Persistence

Although all three items were significantly correlated with persistence, students who felt like they were treated more fairly and equitably in *classrooms and classroom settings* ($\beta = .22, p = .03$) significantly explained higher levels of persistence.

Feeling like they were treated fairly and equitably overall, in which all three items were averaged together, was significantly correlated with persistence ($r = .18, p < .001$; Figure 9), suggesting that as students felt that they were being treated more fairly and equitably, they also felt that they were more likely to persist.

Figure 9. Fair and Equitable Treatment on Student Persistence

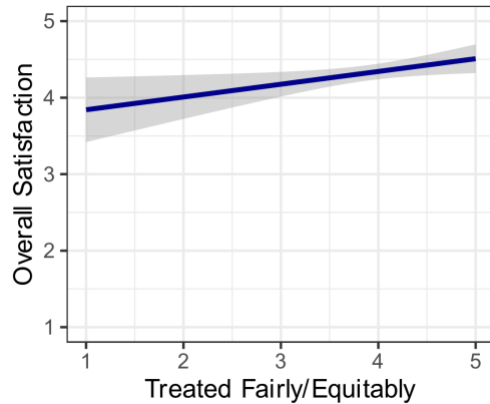


Overall Satisfaction

All three items of feeling treated fairly and equitably were also all significantly correlated with overall satisfaction. However, similar to persistence, students who felt like they were treated more fairly and equitably in *classrooms and classroom settings* ($\beta = .24, p = .01$) significantly explained higher levels of overall satisfaction.



Figure 10. Fair and Equitable Treatment on Overall Satisfaction



These results emphasize the importance of faculty members treating students fairly and equitably in classrooms and classroom settings as having influence in students' persistence and overall satisfaction, above students' other experiences on campus.

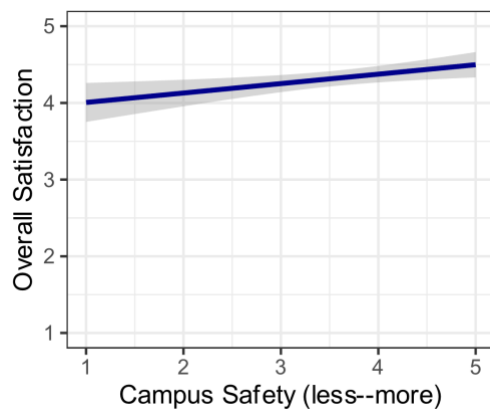
Campus Safety

Campus safety was measured by asking students about their experiences in the past 12 months and asking them to evaluate the extent to which they have been concerned about their personal safety on campus.

Overall Satisfaction

Campus safety was not significantly correlated with student persistence, but campus safety was significantly correlated with overall satisfaction ($r = .18, p < .001$; Figure 11), suggesting that as campus safety increased, so did overall satisfaction (but not student persistence).

Figure 11. Campus Safety on Overall Satisfaction





Financial Stress

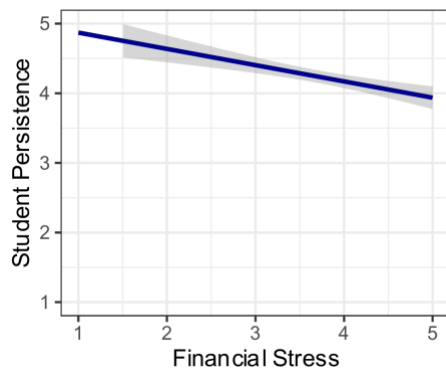
Financial stress was measured by asking students to indicate how stressful their financial situation was (1) while growing up (i.e., past financial stress) and (2) right now (i.e., current financial stress).

Perceived Persistence

Although both past and current financial stress were significantly correlated with persistence, when modeled in a multiple linear regression, current financial stress significantly predicted persistence ($\beta = -.16, p = .01$), such that greater financial stress in students' current situation was more likely to explain students' lower levels of persistence.

Overall financial stress, in which students' past and current financial stress were averaged together, was significantly correlated with persistence ($r = -.15, p < .001$; Figure 12), suggesting that as financial stress increased, students were less likely to persist.

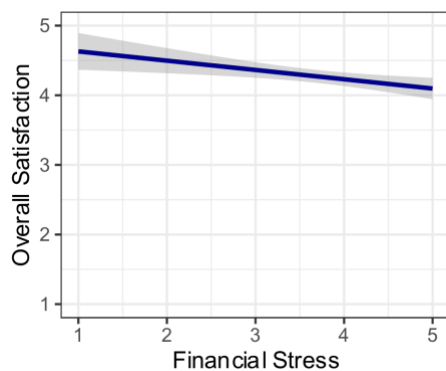
Figure 12. Financial Stress on Student Persistence



Overall Satisfaction

Only students' current financial stress was significantly correlated with overall satisfaction ($r = -.12, p = .001$; Figure 13), such that as students' were more stressed about their current financial situation, they were less likely to be satisfied with their overall experience at SBVC.

Figure 13. Current Financial Stress on Overall Satisfaction





Final Model

Note: the greater the β , the more that the factor explains student persistence or overall satisfaction.

To examine the factors that explain more about students' feelings of being able to persist, a multiple linear regression was modeled with the predictor variables that were statistically significant in this report for student persistence and overall satisfaction.

Perceived Persistence

First, for the outcome variable of student persistence, the predictor variables were depression, psychological well-being, campus climate, campus belonging, feeling valued by others, fair and equitable treatment, a safe campus, and financial stress.

Results suggest that psychological well-being ($\beta = .28, p < .001$), depression ($\beta = -.14, p = .006$), and campus belonging ($\beta = .12, p = .04$) significantly predicted student persistence.

This suggests that in particular, students with greater mental health (i.e., greater levels of psychological well-being and lower levels of depression) and students who were more likely to feel like they belong on campus indicated that they were more likely to feel confident that they could continue at SBVC.

Overall Satisfaction

Next, for the outcome variable of overall satisfaction, the predictor variables were depression, *anxiety*, psychological well-being, campus climate, campus belonging, feeling valued by others, fair and equitable treatment, a safe campus, and financial stress.

Interestingly, more predictor variables significantly predicted overall satisfaction, which are stated in order of effect size, including campus belonging ($\beta = .21, p < .001$), psychological well-being ($\beta = .18, p < .001$), feelings valued by others ($\beta = .17, p = .03$), anxiety ($\beta = .14, p = .02$), campus climate ($\beta = .10, p = .01$), and campus safety ($\beta = .07, p = .04$).

These results indicated that students' overall satisfaction with SBVC was more nuanced than students' feelings of persistence. Students who were more satisfied with their overall experience at SBVC were more likely to feel like they belong on campus, had better mental health (i.e., higher levels of psychological well-being and lower levels of anxiety), were more likely to feel valued by others (particularly by faculty members), experienced a more positive campus climate, and were more likely to feel safe on campus.



Disaggregating the Data

In a [prior report on the Healthy Minds Study](#), certain groups of students were more likely to experience mental health issues, feel that they did not belong at SBVC, and feel less confident that they could finish their degree at SBVC.

These groups include non-cisgender, LGBTQ+, disabled, non-White, lower socioeconomic status, and younger students, who indicated more symptoms of depression or anxiety. Additionally, non-cisgender, LGBTQ+, African American/Black, Asian American/Asian, younger students, and those of lower SES reported lower levels of belonging, often due to negative campus experiences and racial issues. Non-cisgender, LGBTQ+, disabled, and lower SES students also expressed less confidence in their ability to complete their degree at SBVC.

These results suggest that targeted interventions are necessary to improve mental health support, foster a sense of belonging, and enhance perceived persistence. By addressing these disparities, SBVC can work towards ensuring that all students have an equal opportunity to succeed and thrive in their academic journey.