

# STUDENT SATISFACTION & SENSE OF BELONGING

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RESEARCH BRIEF

### **Project Summary**

This study identified factors contributing to student satisfaction and sense of belonging, focusing on student perceptions and activities. Students admitted in Fall 2022 who completed the Continuing Student Survey in Spring 2024 were included in this study. Students who view JMU as rigorous, supportive, inclusive, and welcoming tend to report higher overall satisfaction with their experience and a greater likelihood of re-enrollment. Those who feel confident that their classes prepare them for their careers also express higher satisfaction and intent to return. Conversely, working more than ten hours per week negatively impacts overall satisfaction. Additionally, students engaged in volunteer work and extracurricular activities, especially in leadership roles, report a stronger sense of belonging. A connection between their major and career goals further enhances this sense of belonging. Overall, positive perceptions of JMU's environment correlate with greater satisfaction and commitment to the university.

## **Purpose**

The purpose of this project was to identify factors contributing to student satisfaction and sense of belonging, focusing on student perceptions and activities. This study focused specifically on students admitted in Fall 2022 who completed the Continuing Student Survey in Spring 2024. Satisfaction was measured by two questions, one assessing overall satisfaction with JMU and another asking, hypothetically, if a student was starting their college career over, would they choose JMU again. Sense of belonging was measured using a six-item scale with strong internal consistency ( $\alpha = .96$ ).

## **Highlights**

- Students with beliefs that JMU is rigorous, supportive, inclusive and welcoming were more likely to report being satisfied with their overall experience. Students agreeing to the statement “I know how my classes prepare me for my career” were moderately more likely to report being satisfied. Working a job on or off campus more than ten hours per week was negatively associated with overall satisfaction.
- Students with beliefs that JMU is rigorous, supportive, inclusive and welcoming were more likely to report they would attend JMU again. Students who agreed to the statements “I know how my classes prepare me for my career” and “I know how to gain experience to prepare me for my career” were more likely to indicate they would attend JMU again. Finally, students who reported doing volunteer work outside of a class were more likely to report they would attend JMU again.
- Extracurricular involvement, holding a leadership role on campus and volunteering were associated with higher sense of belonging scores. Students agreeing to the statement “I know how my major and career goals are related” indicated greater sense of belonging. Finally, students with beliefs that JMU is rigorous, supportive, inclusive and welcoming had higher sense of belonging scores.

## **Limitations**

The findings are not representative of all students, or all students admitted in Fall 2022. Additionally, there are other factors influencing satisfaction and sense of belonging that were not measured and could change our findings if the data were available.

## **Methods**

Data were collected through the Continuing Student Survey (CSS), administered by the Office of Planning Analytics & Institutional Research. The CSS was administered online through Qualtrics in February 2024 to all enrolled students with 45-70 credit hours. Only students admitted in Fall 2022 were included in the analysis.

Overall satisfaction with JMU was measured on a four-point scale (Very Dissatisfied to Very Satisfied). Another question asked of students was “If you could start over again, would you still choose JMU?” Responses ranged from Definitely Not to Definitely Yes on a four-point scale.

Sense of belonging was measured by summing students’ responses to six items assessing various dimensions of belonging.

All students who completed the survey were asked the questions about overall satisfaction and choosing JMU again. It should be noted that the sense of belonging questions were only given to a sub-sample of student respondents.

Three separate regression models were run, each with different outcome variables (overall satisfaction, starting again at JMU, sense of belonging). Several variables were considered for inclusion in the models including demographic variables, college, cumulative GPA, participation in high impact practices, career development perceptions, involvement in student activities and students' perceptions of the environment at JMU.

Students were asked about the amount of time they engage in extracurricular activities, partying, studying, working on campus and working off campus. Response categories were combined to 0-10 hours per week and more than 10 hours per week. Students were asked their level of agreement to whether they perceive JMU as rigorous, supportive, inclusive or welcoming. High impact practices were assessed by asking students whether they had participated in a list of nine different practices. Finally, career perceptions were measured using seven 4-point Likert-scale questions (Strongly disagree to Strongly agree) measuring students' belief that they can identify career options, choose between occupations, identify classes necessary for their career, connect their major to their career goals, and gain practical experience in their field and to prepare them for their career.

As an initial step, Least Absolute Shrinkage and Selection Operator (LASSO) regression was used to identify variables that would contribute most to the outcomes of interest. LASSO regression, also called L1 regularization, is a type of regularization regression that addresses multicollinearity and overfitting. The LASSO process penalizes model coefficients with a penalty equivalent to the absolute value of the magnitude of the coefficient. This reduces the size of model coefficients, and can shrink some coefficients to zero, effectively performing variable selection. Different LASSO models were run for each outcome of interest, and a set of final covariates was selected for each outcome.

## **Detailed Findings**

### *Overall Satisfaction*

There were 2,696 students included in this analysis. An overwhelming majority of students reported being satisfied or very satisfied with JMU (94.4%,  $n = 2,544$ ) while 5.6% ( $n = 152$ ) reported being dissatisfied or very dissatisfied. The following variables were included in a binary logistic regression model with overall satisfaction as the outcome:

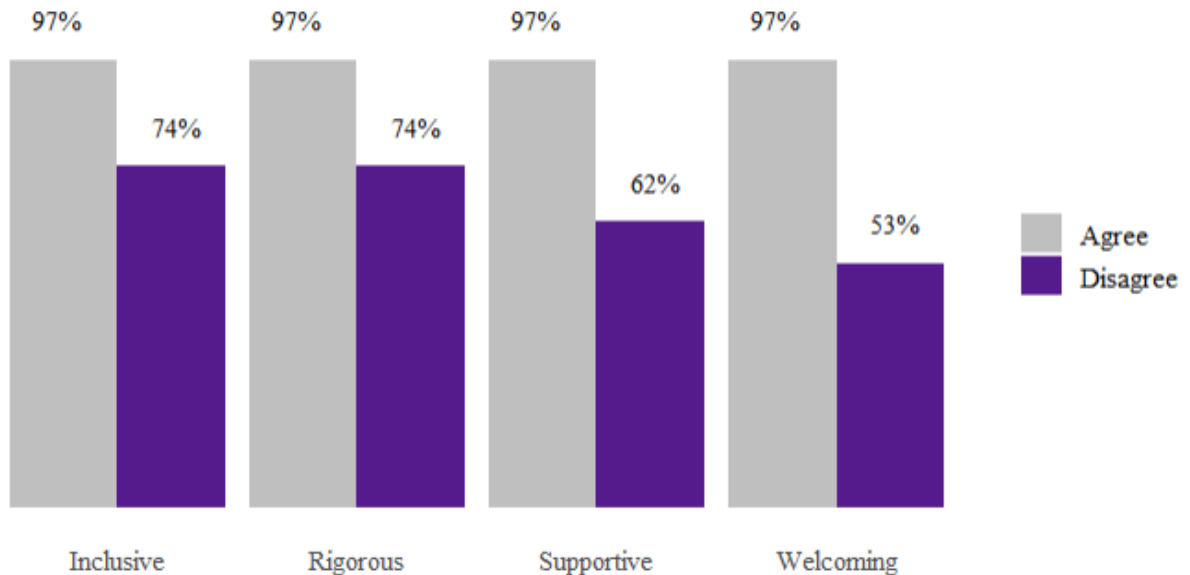
- Cumulative GPA
- Demographics: gender and residency
- Activities: hours working on campus and off campus job
- High impact practices: undergraduate research, internship, political participation
- Career perceptions: I know how my classes prepare me for my career, I know how my major and career goals are related
- JMU environment perceptions: rigorous, supportive, inclusive, welcoming

The model explained 32.5% of the outcome variance. Students with beliefs that JMU is rigorous (OR = 1.89, 95% CI, 1.39, 2.57), supportive (OR = 1.93, 95% CI, 1.42, 2.62), inclusive (OR = 1.47,

95% CI, 1.07, 2.00) and welcoming (OR = 2.46, 95% CI, 1.76, 3.44) had greater odds of being satisfied with their overall experience.

### **% of student satisfied with JMU**

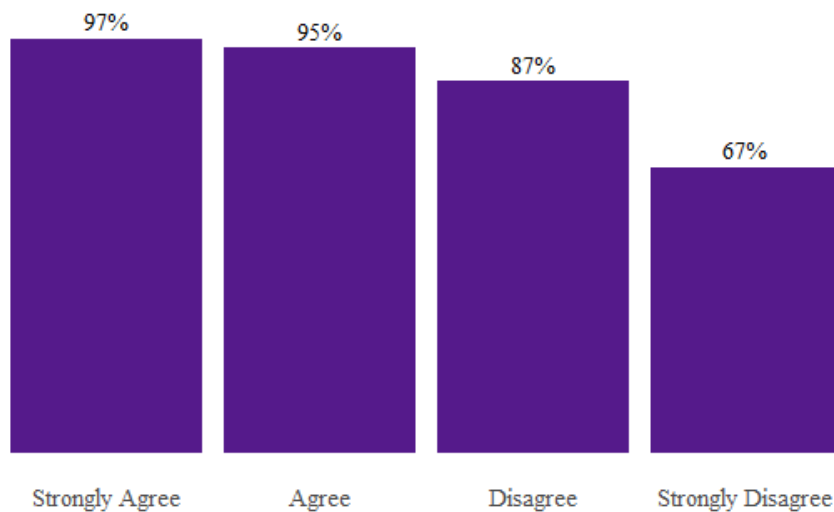
based on their agreement that JMU is...



Students with greater agreement to the statement “I know how my classes prepare me for my career” were moderately more likely to report being satisfied (OR = 1.34, 95% CI, 0.99, 1.80;  $p = 0.054$ ).

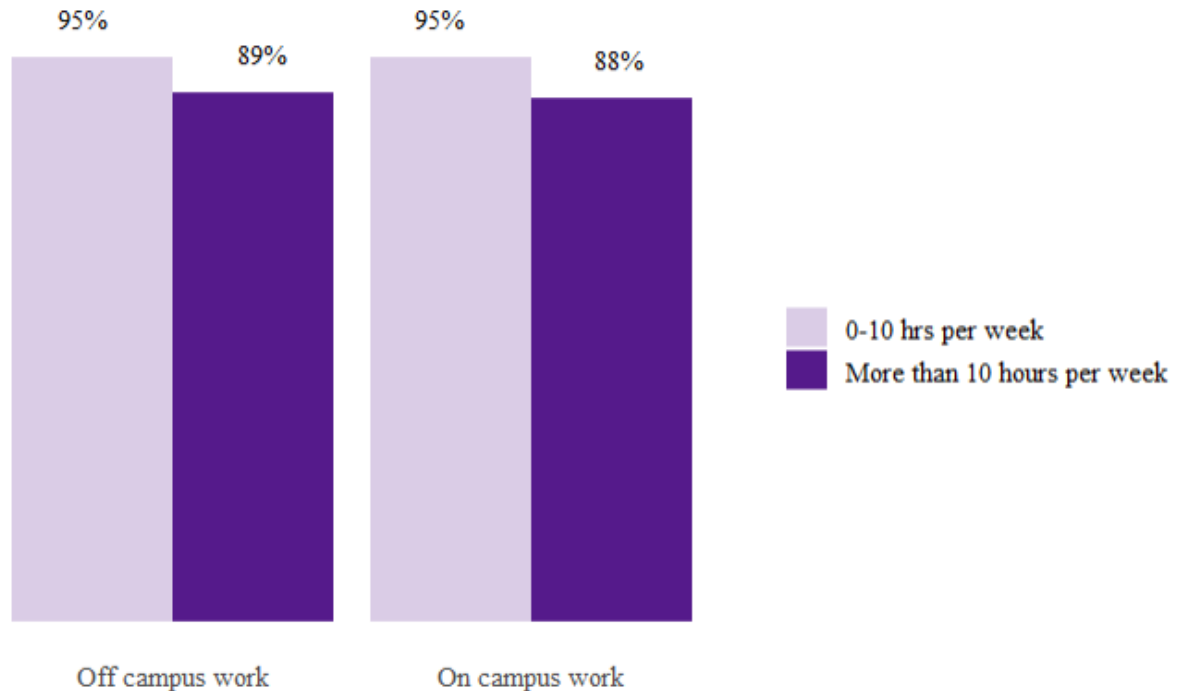
### **% of students satisfied with JMU**

based on responses to 'I know how my classes prepare me for my career'



Working a job on or off campus more than ten hours per week was negatively associated with overall satisfaction. Students working more than 10 hours a week on campus were 42% less likely than those working 0-10 hours per week to report overall satisfaction; students working more than 10 hours per week off campus were 37% less likely than those working 0-10 hours per week to report overall satisfaction.

#### **% of students satisfied with JMU by employment**



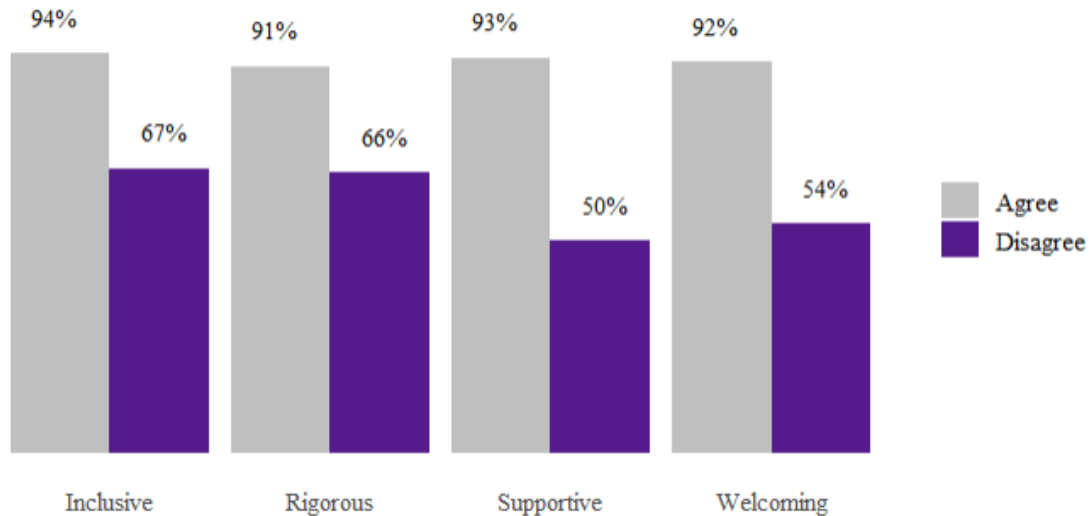
#### *Choosing JMU Again*

There were 2,696 students included in this analysis. Most students (88.2%,  $n = 2,377$ ) reported they would attend JMU again if their college career was starting over, while 11.8% ( $n = 319$ ) reported they would not choose JMU again. The following variables were included in a binary logistic regression model with overall satisfaction as the outcome:

- Cumulative GPA
- Demographics: race, first generation status and residency
- Activities: hours studying, working on campus and off campus job
- High impact practices: undergraduate research, internship, service-learning, political participation, study abroad
- Career perceptions: I know what kind of classes to take to prepare for my career, I know how my major and career goals are related, I know how to gain practical experience in my field of study, I know how to gain experience to prepare me for my career
- JMU environment perceptions: rigorous, supportive, inclusive, welcoming

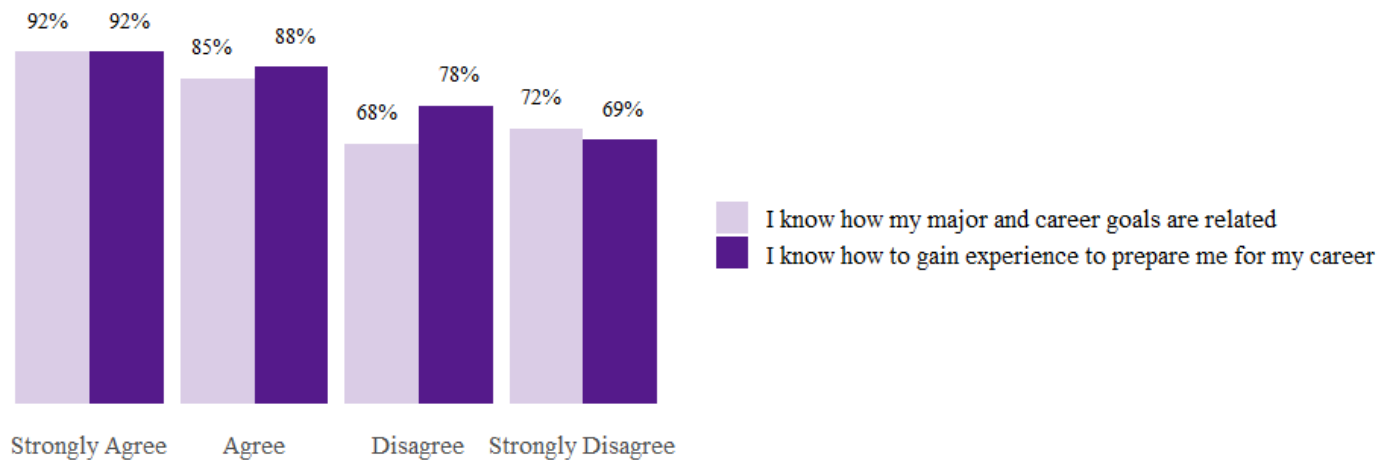
The model explained 24.0% of the variance in the outcome. Students with beliefs that JMU is rigorous (OR = 1.44, 95% CI, 1.15, 1.80), supportive (OR = 2.15, 95% CI, 1.70, 2.72), inclusive (OR = 1.62, 95% CI, 1.30, 2.02) and welcoming (OR = 1.52, 95% CI, 1.16, 1.98) had greater odds of saying they would choose JMU again if they were starting their college career over.

**% of students saying they would choose JMU again**  
based on their agreement whether JMU is...



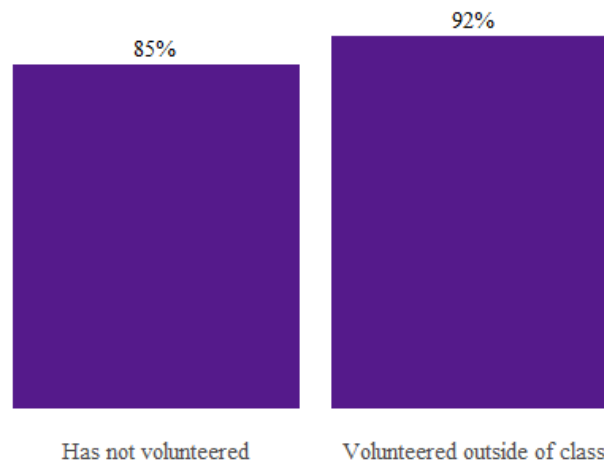
Students with greater agreement to the statements “I know how my classes prepare me for my career” (OR = 1.34, 95% CI, 1.02, 1.76) and “I know how to gain experience to prepare me for my career” (OR = 1.52, 95% CI, 1.08, 2.15) were more likely to say they would choose JMU again.

**% of students saying they would choose JMU again**  
based on responses to career perceptions questions



Students who reported engaging in volunteer experiences outside of a class were 52% more likely to say they would choose JMU again (OR = 1.52, 95%, 1.12, 2.07).

**% of students saying they would choose JMU again**  
by volunteer experience



### *Sense of Belonging*

Because the Sense of Belonging scale was only given to a subset of CSS participants, there were 659 students included in the analysis. Sense of Belonging scores ranged from 10 to 54, with a mean of 42.6 and standard deviation of 10.3.

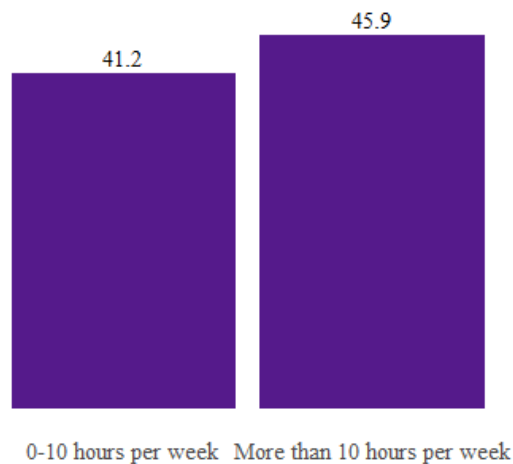
The following variables were included in a linear regression model with total sense of belonging score as the outcome:

- College
- Cumulative GPA
- Demographics: race, gender and residency
- Activities: hours studying, hours engaged in extra-curricular activities
- High impact practices: holding a leadership role on campus, work-based learning experience, volunteering,
- Career perceptions: all items
- JMU environment perceptions: rigorous, supportive, inclusive, welcoming

The model explained 45.9% of the variance in student sense of belonging. Factors positively associated with sense of belonging score included involvement in extra-curricular activities ( $\beta = 3.4$ , 95% CI (2.00, 4.70), holding (current or past) a leadership role on campus ( $\beta = 1.8$ , 95% CI, 0.40, 3.10), volunteering outside of a class ( $\beta = 1.4$ , 95% CI, 0.10, 2.80).

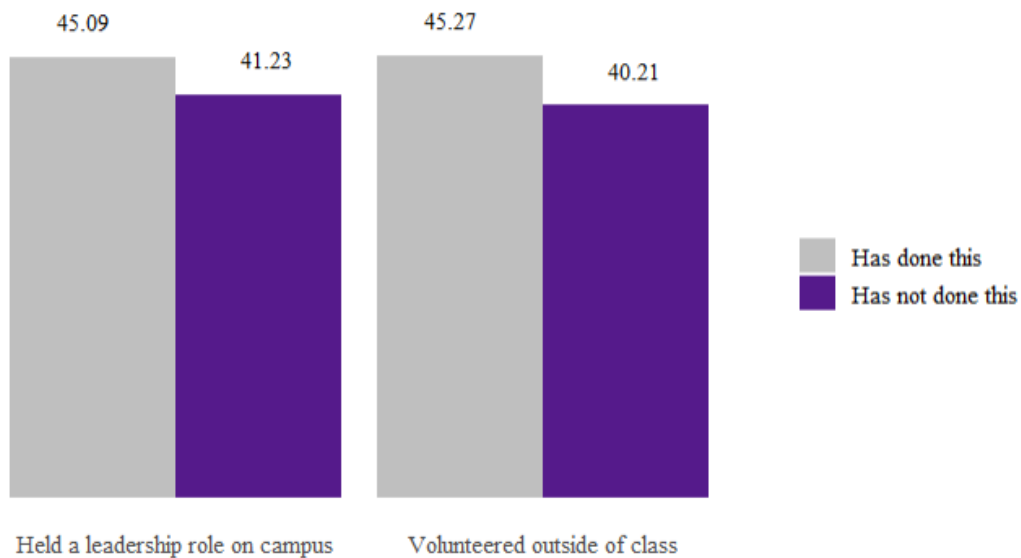
### Mean Sense of Belonging Score

by extra-curricular involvement



### Mean Sense of Belonging Score

by HIP involvement



Greater agreement to the statement “I know how my major and career goals are related” ( $\beta = 1.6$ , 95% CI, 0.24, 3.00) was significantly associated with sense of belonging, while greater agreement with the statement “I know how my classes prepare me for my career” was marginally significant ( $\beta = 1.2$ , 95% CI, -0.05, 2.50,  $p = 0.06$ ).

### Mean Sense of Belonging Score

based on responses to career perceptions questions



Additionally, students who believe that JMU is rigorous ( $\beta = 1.5$ , 95% CI, 0.32, 2.60), supportive ( $\beta = 4.3$ , 95% CI, 2.80, 5.70), inclusive ( $\beta = 2.2$ , 95% CI, 0.90, 3.50) and welcoming ( $\beta = 2.3$ , 95% CI 0.65, 3.90) had significantly higher scores for sense of belonging.

### Mean Sense of Belonging Score

based on their agreement whether JMU is...

