

**Academic Leadership
Learning Collaborative**



First-Year Student Retention: 2009
Significant Differences in Profiles and
Engagement Experiences of Retained
Versus Non-Retained Students

Custom Analysis
March 2010

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To Help Sustain and Enhance Success, It Is Important To Identify Traits and Experiences of First-Year Students Who Are Retained Versus Those Who Are Not—*This Report is 2nd in a Series of NSSE Analyses Focused on First-Year Retention*

What factors impact student success/retention their first year at JSC?



What traits characterize students who succeed during their first year?



How can JSC enhance first-year student retention and success?

Research findings presented in this report represent statistically significant differences identified between 2009 NSSE responses of retained versus non-retained students ($p < .05$), unless identified otherwise – *Recommendations for identifying and better supporting students at risk of retention are highlighted accordingly.*

Eduventures Approached This Research Investigation Using the Following Methodology

<p style="text-align: center;">Phase I</p> <p style="text-align: center;">Develop Research Objective</p>	<p style="text-align: center;">Phase II</p> <p style="text-align: center;">Identify Research Questions</p>	<p style="text-align: center;">Phase III</p> <p style="text-align: center;">Retrieve and Analyze Data*</p>	<p style="text-align: center;">Phase IV</p> <p style="text-align: center;">Report Results and Recommendations*</p>
<ul style="list-style-type: none"> • Objective: Identify statistically significant differences between demographics and engagement experiences of retained and non-retained first-year students. 	<ul style="list-style-type: none"> • What factors impact student success/retention their first year at JSC? • What traits characterize students who succeed during their first year? • How can JSC enhance first-year student retention and success? 	<ul style="list-style-type: none"> • Retrieve, merge, and analyze 2009 NSSE data with Spring and Fall 2009 student information data/snapshots (N=136): Test (ANOVA, cross-tabulations) for statistically significant differences between retained and non-retained student experiences regarding: <ul style="list-style-type: none"> – Level of Academic Challenge – Active and Collaborative Learning – Student-Faculty Interaction – Enriching Educational Experiences – Supportive Campus Environment 	<ul style="list-style-type: none"> ✓ There are select and statistically significant demographic and academic differences between retained and non-retained first-year students. ✓ On average, non-retained students score significantly lower with regard to NSSE's Academic Challenge. ✓ Based on identified differences, there are opportunities for JSC to better target and engage first-year students.

*Note: Only responses in which statistically significant differences emerged between retained (n=115) and non-retained (n=21) first-year students are reported, unless noted otherwise; While differences emerged as being statistically significant, it is important to take into account the small sample size of non-retained students when interpreting results.

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There Are Select Demographic and Academic Differences Between Retained and Non-Retained First-Year Students

Profiling First-Year Students at Risk of Retention*		
Indicator	Finding(s)	Recommendation(s)
Demographics	<ul style="list-style-type: none"> Non-retained, first-year students are significantly more likely to have been part-time and/or out-of-state students ($p < .05$). 	<ul style="list-style-type: none"> ✓ To help target students who may be particularly at risk of retention early-on in their freshman year, consider flagging those who are enrolled as part-time/out-of-state; in addition, consider assessing a larger sample of full-time beginners to better understand their potential motivations for leaving.
Academics	<ul style="list-style-type: none"> Non-retained students were more likely to negatively perceive their educational experience. Non-retained students were less likely than their counterparts to think their JSC experience contributed to thinking critically and analytically, analyzing quantitative problems, using computing and IT, working effectively with others, and learning effectively on their own 	<ul style="list-style-type: none"> ✓ To improve positive experiences of students at-risk of attrition, consider focusing on key areas in which non-retained students expressed significantly lower perceptions of their experience than their counterparts, such as thinking critically and analytically, analyzing quantitative problems, using computing and IT, working effectively with others, and learning effectively on their own.
Other	<ul style="list-style-type: none"> Not all students who leave do so because they are dissatisfied: The majority (75%) of non-retained students provided a positive evaluation of their educational experience. 	<ul style="list-style-type: none"> ✓ While this suggests there may be factors beyond JSC's control that are impacting first-year retention (e.g., personal, financial, family-related), JSC may want to further investigate whether there are opportunities to better provide/promote social, financial, and personal support services. ✓ Strengthen or create an exit interview process to help consistently collect data from non-retained students to better inform retention strategies.

*All differences reported in this table are statistically significant ($p < .05$), unless indicated otherwise.

Several of these findings reflect prior research findings that emerged from JSC's 2008 NSSE analysis; where relevant, similarities and differences to prior findings are highlighted accordingly throughout the report.

On Average, Non-Retained Students Score Significantly Lower With Regard to NSSE's Academic Challenge Benchmarks

Engagement Experiences of Retained Versus Non-Retained First-Year Students		
Benchmark	Significant Differences in Engagement (p<.05)	Recommendation(s)
Level of Academic Challenge	<ul style="list-style-type: none"> Compared to non-retained students, retained students report they are more frequently challenged to work harder than they thought they could to meet an instructor's standards or expectations. Compared to non-retained students, retained students also reported their courses more often emphasized synthesizing and organizing ideas, experiences or information. 	<ul style="list-style-type: none"> ✓ Address perceived lack of academic challenge by focusing on those areas in which non-retained students report their experience did not contribute to: Thinking analytically and critically, analyzing quantitative problems, using computing/IT, working effectively with others, and learning effectively on their own.
Student-Faculty Interaction	<ul style="list-style-type: none"> Non-retained students report receiving prompt feedback from faculty on their academic performance significantly less frequently than retained students. 	<ul style="list-style-type: none"> ✓ Ensure that faculty have the professional development necessary to target and approach at-risk first-year students who may not seek their feedback otherwise. ✓ Refer to the one-page tip sheet in the AL-LC's <i>Creating a Retention Management Culture</i> Collaborative Report (2009) for strategies to enhance student-faculty engagement.
Enriching Educational Experiences	<ul style="list-style-type: none"> Compared to non-retained students, retained students are more likely to plan on participating in community service or volunteer work. 	<ul style="list-style-type: none"> ✓ Promote participation in community service or volunteer work among non-involved first-year students, who may be at risk of retention.

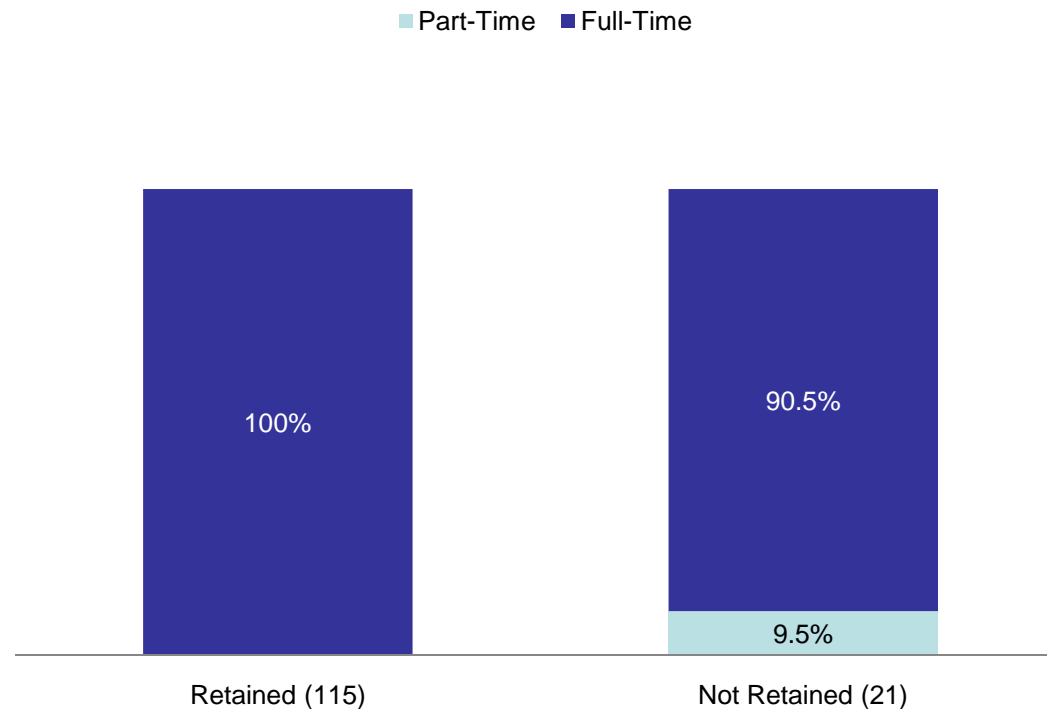
Moreover, a comparison between JSC's benchmark scores and those of its NSSE peers shows that JSC's mean retained student scores are comparable to the national average; *while JSC was below the NSSE mean for Student-Faculty Interaction in 2008, data from 2009 shows that it is now above the average.*

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Profiling Freshmen At Risk of Retention (Significant Differences Between Retained and Non-Retained Student Demographics and Academics)

While Non-Retained, First-Year Students Are Significantly More Likely To Have Been Part-Time Students ($p < .05$), the Vast Majority of Non-Retained Students Were Full-Time

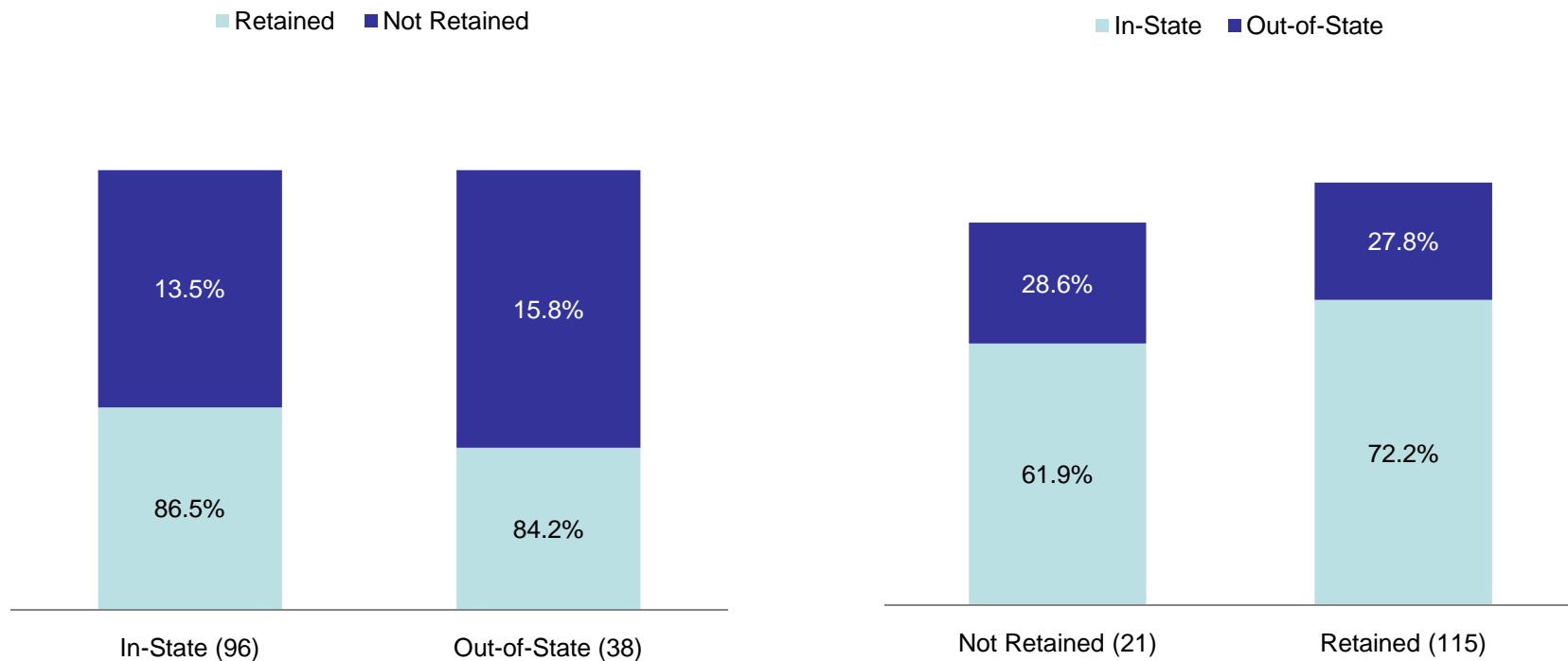
Enrollment Status



To help target students who may be particularly at risk of retention early-on in their freshman year, consider flagging those who are enrolled part-time; in addition, consider assessing a larger sample of full-time beginners to better understand their potential motivations for leaving.

A Slightly, But Significantly, Higher Percentage of Non-Retained, First-Year Students Were Out of State Residents

Residency



*Two of the 21 non-retained students did not respond

In addition to flagging part-time students for first-year retention efforts, include also those who are out-of-state.

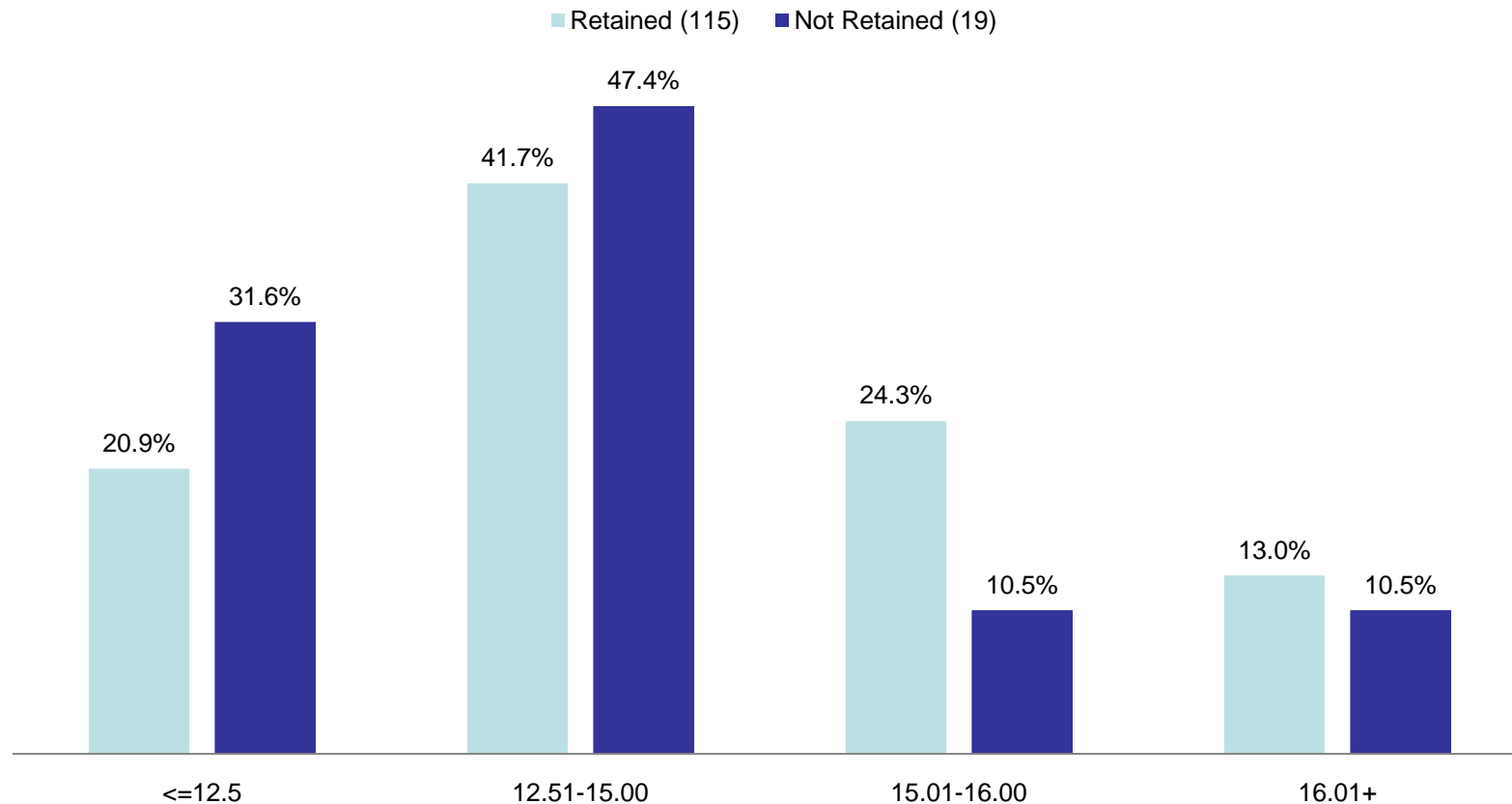
On Average, Non-Retained First-Year Students Earned Slightly Lower High School GPAs, College GPAs, and Spring Term Credits; However, These Differences Were *Not* Found to be Significant

Academic Traits	H.S. GPA		Spring 2009 Term GPA		Spring Term Credits	
	<i>Not Retained</i>	<i>Retained</i>	<i>Not Retained</i>	<i>Retained</i>	<i>Not Retained</i>	<i>Retained</i>
Mean	81.6	83.0	2.7	2.9	14.0	14.5
Minimum	70.0	70.0	0.0	1.1	9.0	3.0
Maximum	88.0	94.0	3.9	4.0	19.0	19.0
N	15	96	19	115	19	115

This table is for comparative purposes; differences among retained and non-retained students for these categories are *not* statistically significant (this is likely a function of sample size).

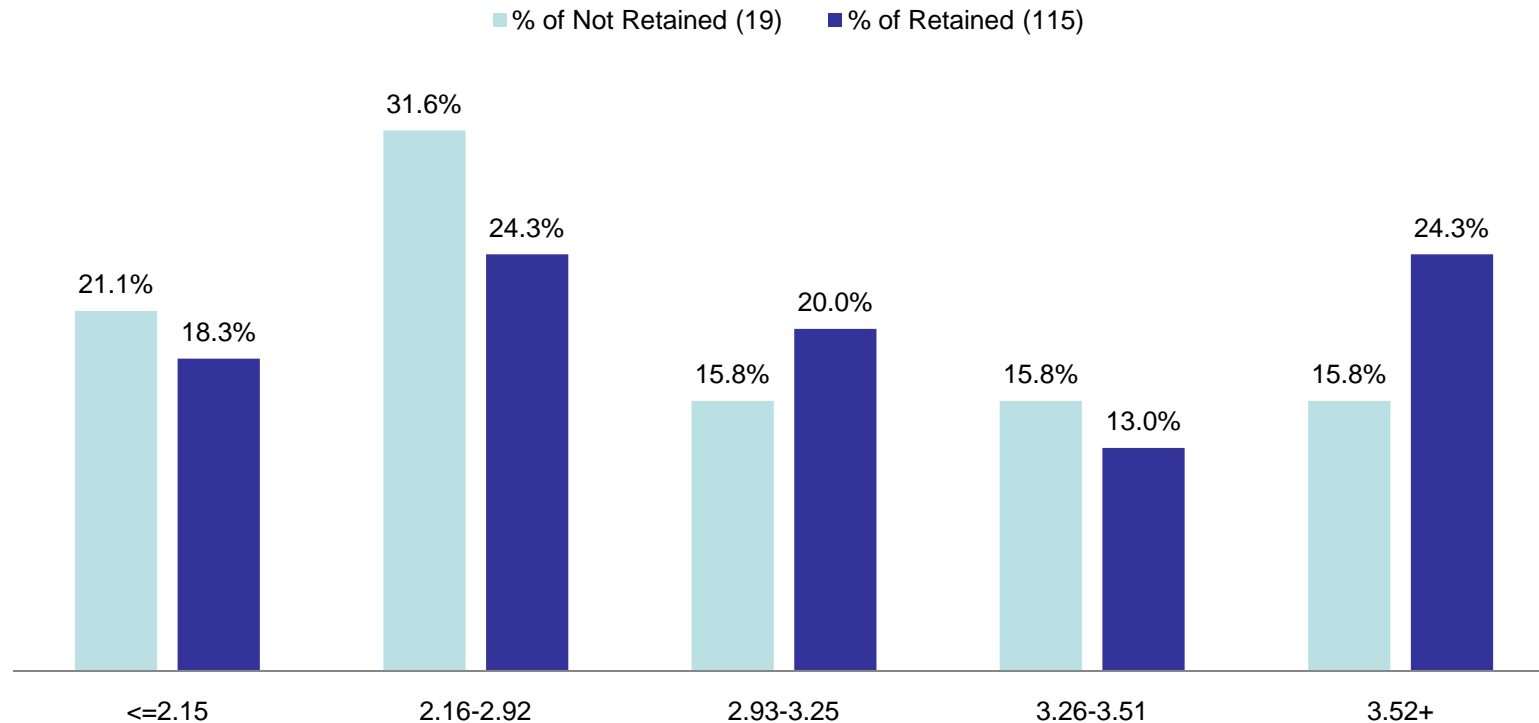
In Their Spring Term, Non-Retained Students Earned Fewer Credits, On Average, Than Retained Students; However, These Differences are *Not* Statistically Significant

Spring Term Credits



Half of Non-Retained Students Had a Spring GPA of Less Than 2.93; However, Differences Between GPA Ranges Were *Not* Found To Be Statistically Significant

Spring 2009 GPA, by range



These differences suggest that non-retained students may require greater academic support – *JSC may want to take steps to enhance awareness and/or availability of existing academic support services and improve faculty identification of/intervention with students who appear to be experiencing academic difficulty.*

By Spring of Their Freshman Year, Non-Retained Students Were Significantly Less Likely Than Their Counterparts to Think Their JSC Experience Contributed to Thinking Critically and Analytically, Analyzing Quantitative Problems, Using Computing and Information Technology, Working Effectively with Others, and Learning Effectively on Their Own

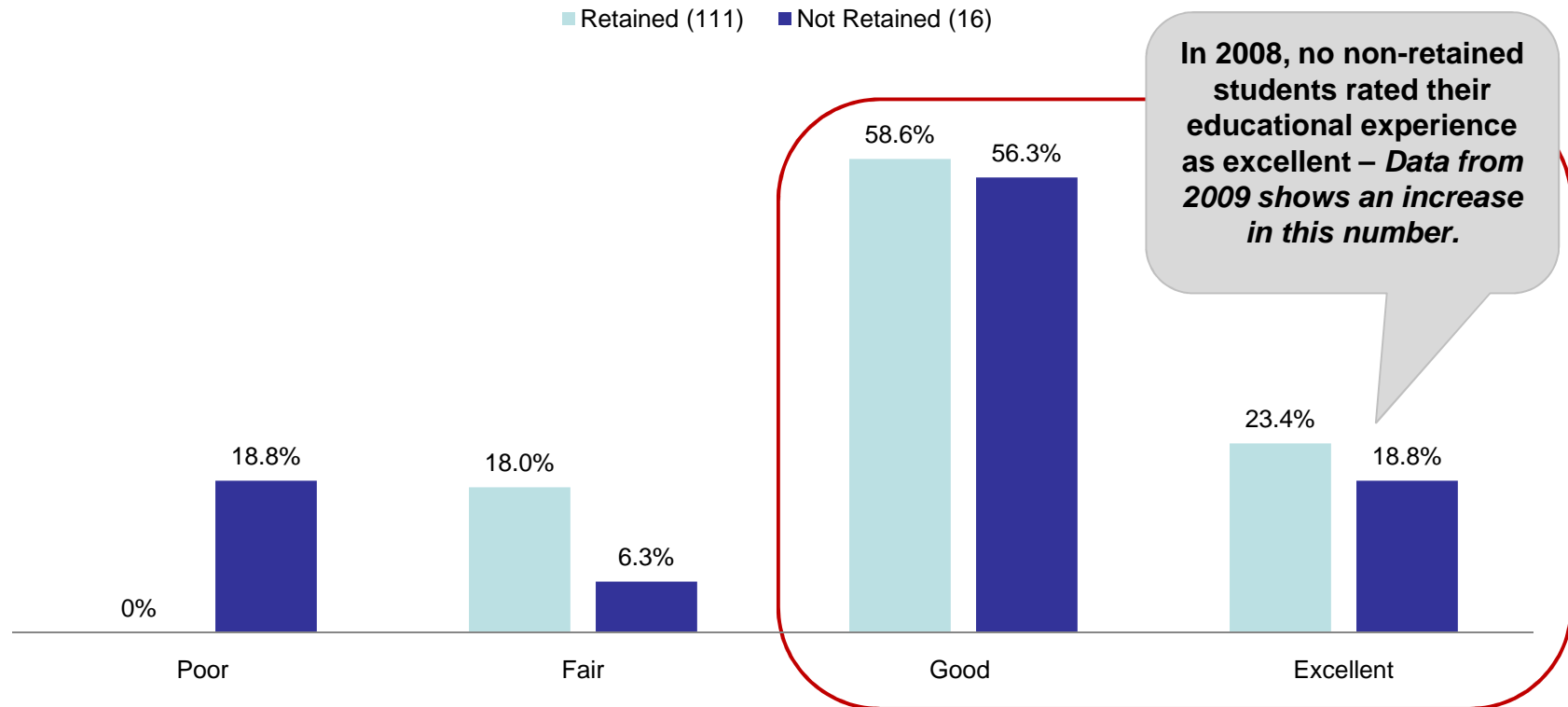
Perceived Institutional Contribution (Mean)	Not Retained	Retained
Acquiring a broad general education	2.75	2.96
Acquiring job or work-related knowledge and skills	2.25	2.69
Writing clearly and effectively	2.75	3.04
Speaking clearly and effectively	2.44	2.67
Thinking critically and analytically	2.63	3.13
Analyzing quantitative problems	2.25	2.71
Using computing and information technology	2.25	2.85
Working effectively with others	2.38	2.91
Voting in local, state (provincial), or national (federal) elections	2.67	2.71
Learning effectively on your own	2.47	2.95
Understanding yourself	2.53	2.85
Understanding people of other racial and ethnic backgrounds	2.20	2.55
Solving complex real-world problems	2.27	2.62
Developing a personal code of values and ethics	2.33	2.64
Contributing to the welfare of your community	2.33	2.38
Developing a deepened sense of spirituality	1.87	2.01

Note: Circled item identifies a statistically significant difference ($p < .05$); other items are included in this table to provide opportunities for comparison

Scale: 4=Very Much; 1=Very Little

While Many Non-Retained First-Year Students Exhibit Dissatisfaction With Their Overall Experience, There Are Some Who May be Leaving for Other Reasons

How would you evaluate your entire educational experience at this institution?

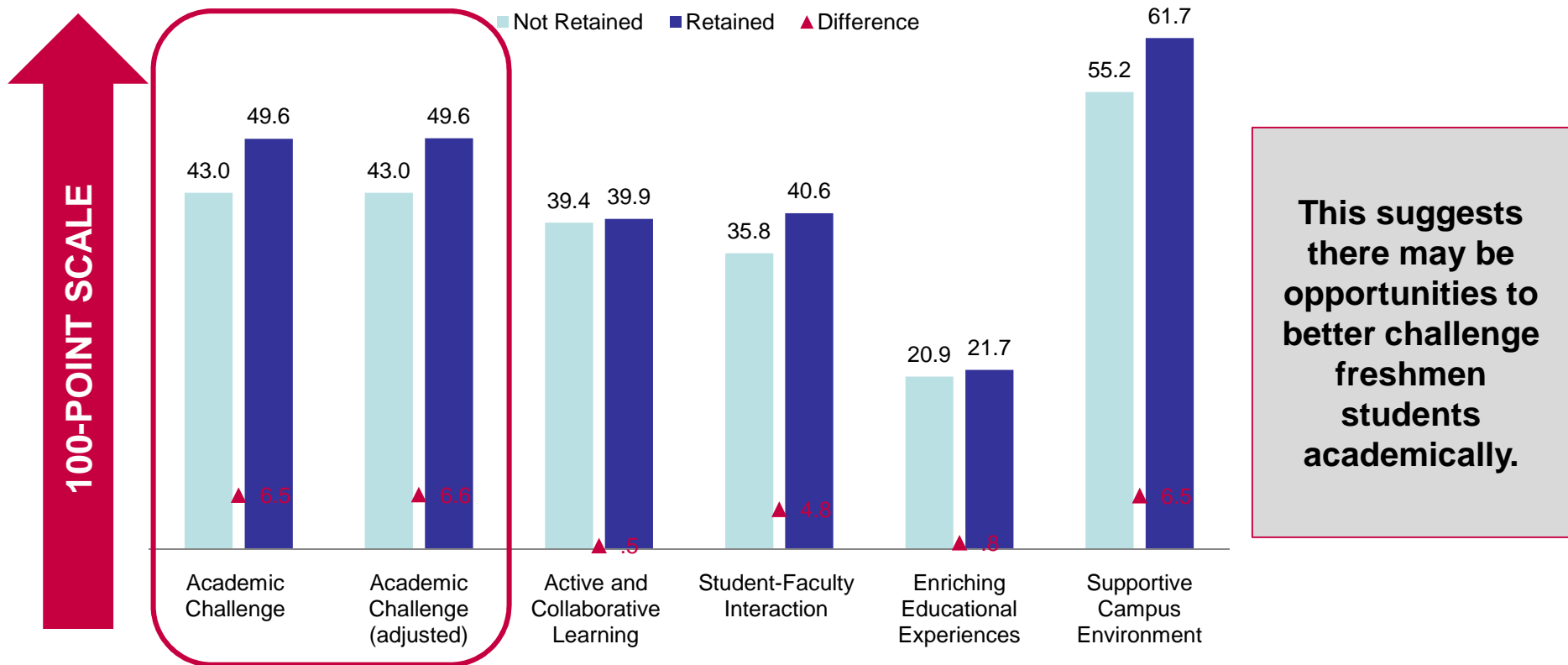


Three-quarters (75%) of non-retained, first-year students provided a positive evaluation of their entire educational experience so far – ***While this suggests there may be factors beyond JSC’s control that are impacting first-year retention (e.g., personal, financial, family-related), JSC may want to further investigate whether there are opportunities to better provide/promote social, financial, and personal support services to enhance retention.***

**Benchmarking Engagement Experiences of
Freshmen Who Are Retained Versus Those Who Are Not
(Significant Differences Between Retained and Non-Retained
Student Engagement Experiences, by NSSE Benchmark)**

On Average, Non-Retained Students Score Significantly Lower Than Retained Students With Regard to NSSE’s Academic Challenge Benchmarks

NSSE Benchmark Scores (Mean)*



This suggests there may be opportunities to better challenge freshmen students academically.

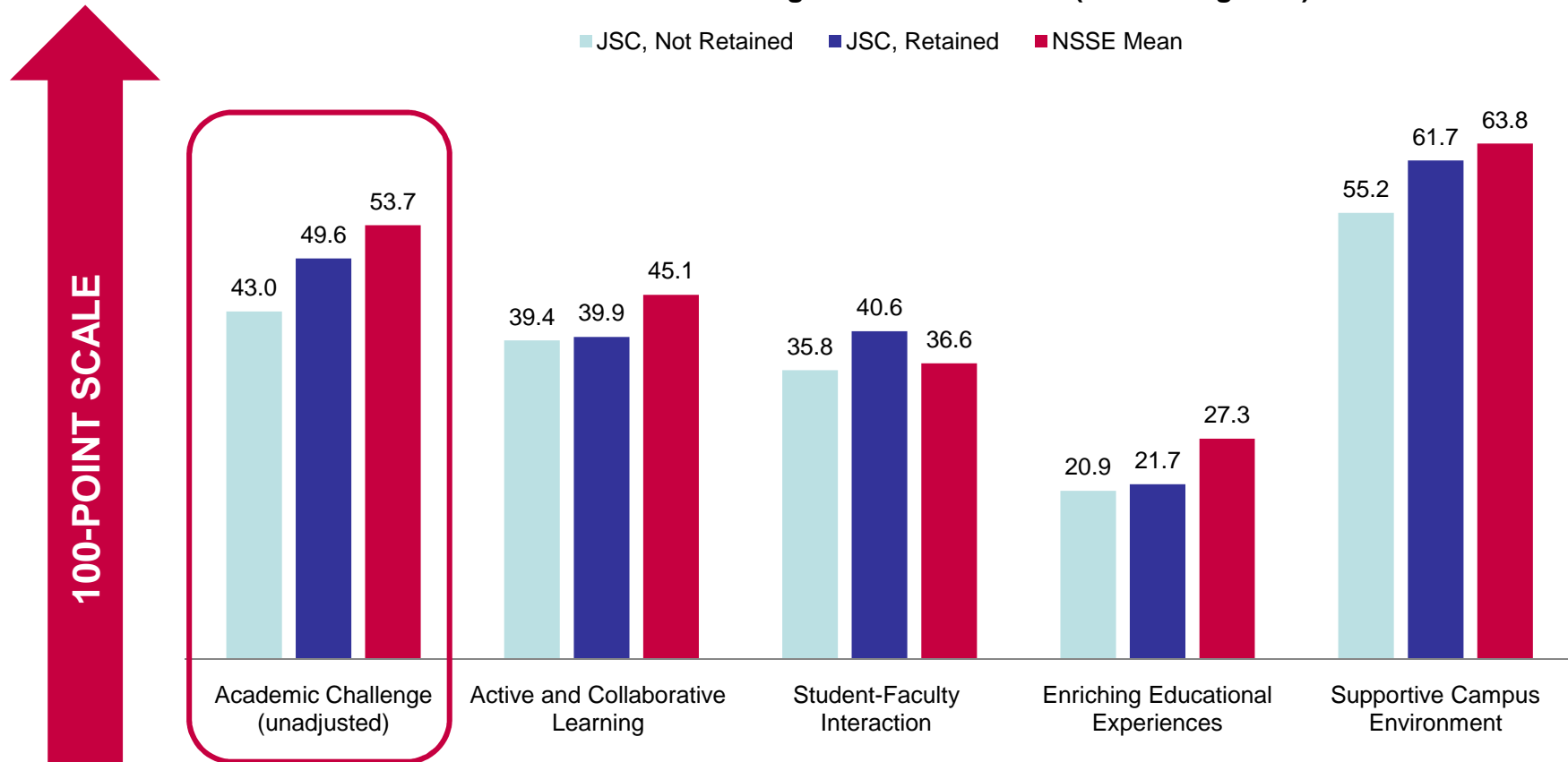
*NSSE Methodology Regarding Benchmark Scores: According to NSSE (2009), “Student-level benchmark scores are the student’s average responses to items within the group, after all items have been placed on a 100-point scale. Student-level benchmark scores are created for randomly sampled first-year and senior students that answered three-fifths or more of the items within the group...The benchmark score for an institution is the *weighted mean* of these student-level scores. For more detailed information about how benchmarks are calculated, visit the NSSE Web site at www.nsse.iub.edu/html/2008_inst_report.htm.”

**Note: *Academic Challenge (adjusted)* benchmark is the same as *Level of Academic Challenge*, but adjusted for part-time enrollment status.

**Note: Circled item identifies a statistically significant difference ($p < .05$); other items are included in this table to provide opportunities for comparison.

A Comparison Between JSC's Benchmark Scores and Those of Its NSSE Peers Shows That JSC's Mean Retained Student Scores Are Comparable to the National Average

Johnson State College's Mean Benchmark Scores vs. NSSE's Mean Benchmark Scores for Master's Colleges and Universities (Small Programs)



While JSC was below the NSSE mean for Student-Faculty Interaction in 2008, data from 2009 shows that it is now above the average.

*Although JSC's mean scores for both non-retained and retained students are slightly lower than the average, it is important to keep in mind the small sample size: For JSC, sample sizes are between 77 and 88. For NSSE, the sample size is between 6,131 and 7,094.

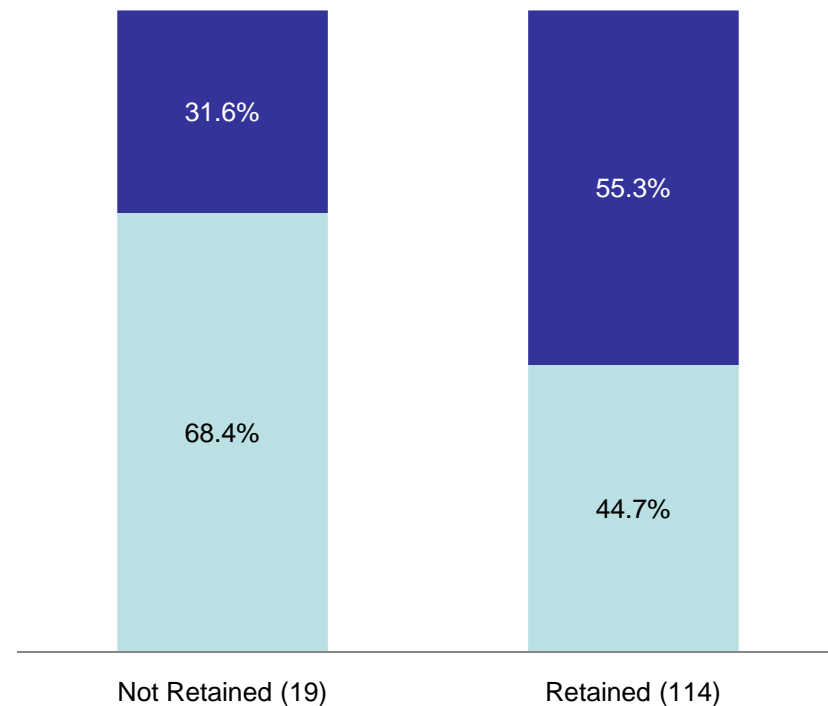
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Non-Retained Students Perceive They Are Significantly Less Challenged Than Retained Students

[About how often have you:] **Worked harder than you thought you could to meet an instructor's standards or expectations** [?]

■ Never/Sometimes ■ Often/Very Often

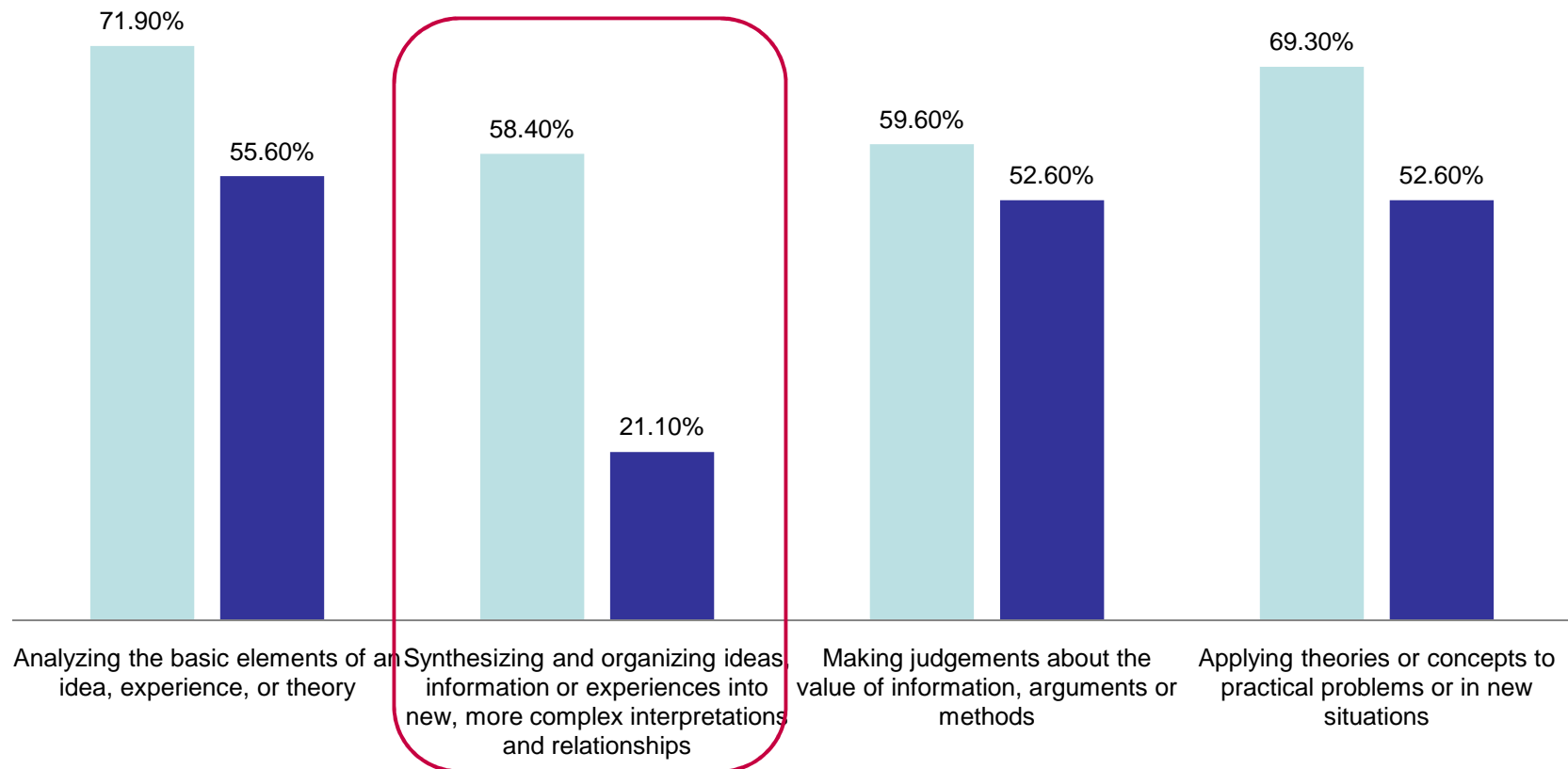
Compared to non-retained students, retained students report they are more frequently challenged to work harder than they thought they could to meet an instructor's standards or expectations. On a scale of 1 to 4 (1=Never; 4=Very Often), the mean response to the item "Worked harder than you thought you could to meet an instructor's standards or expectations" for non-retained students is 2.16 (n=19), versus a mean of 2.61 for retained students (n=114), ($p < .05$). Findings from 2008 data show the same trend.



Compared to Retained Students, Non-Retained Students are Significantly Less Likely to Report Their Coursework Emphasized Synthesizing/Organizing Ideas

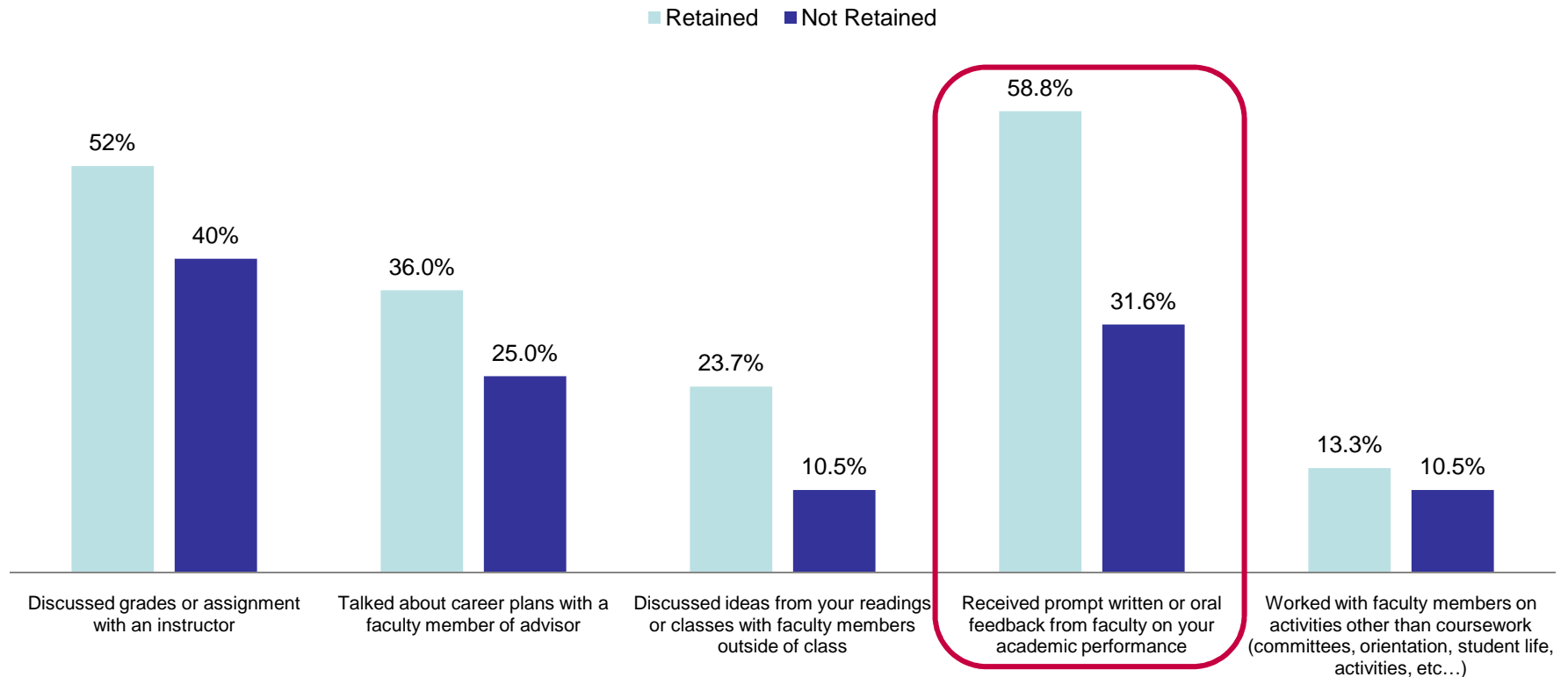
To what extent did your coursework emphasize the following?
(Often/Very Often)

■ Retained ■ Not Retained



Non-Retained Students Report Receiving Prompt Feedback From Faculty on Their Academic Performance Significantly Less Frequently Than Retained Students

In your experience at your institution during the current school year, about how often have you done each of the following?
(Often/Very Often)



Non-retained students from 2008 were also significantly less likely to report that they received prompt feedback from faculty, suggesting this may be an area which JSC should target for improvement.

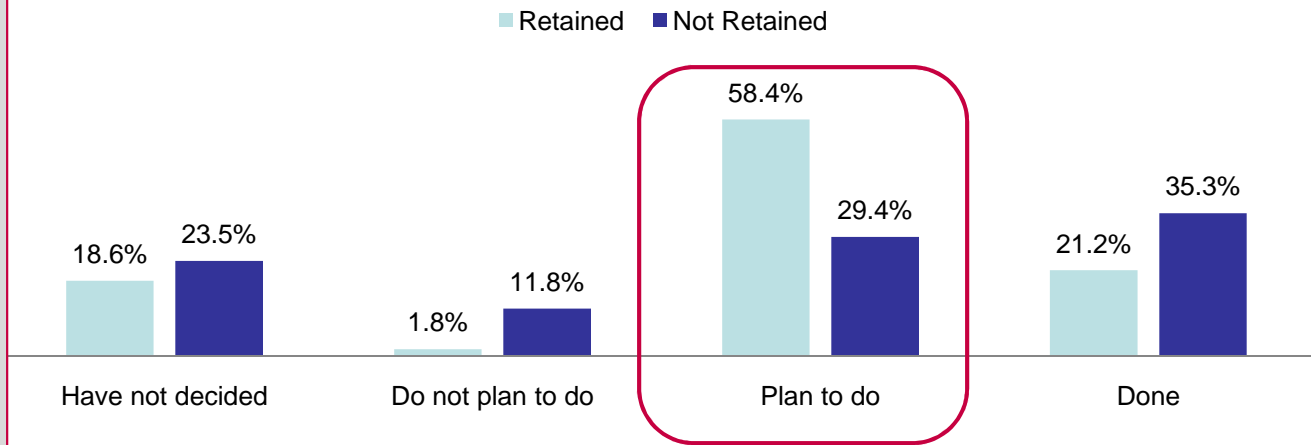
Note: Circled item identifies a statistically significant difference ($p < .05$); other items are included in this table to provide opportunities for comparison

A Significantly Higher Number of Retained Students Plan on Participating in Community Service or Volunteer Work During Their Time at JSC

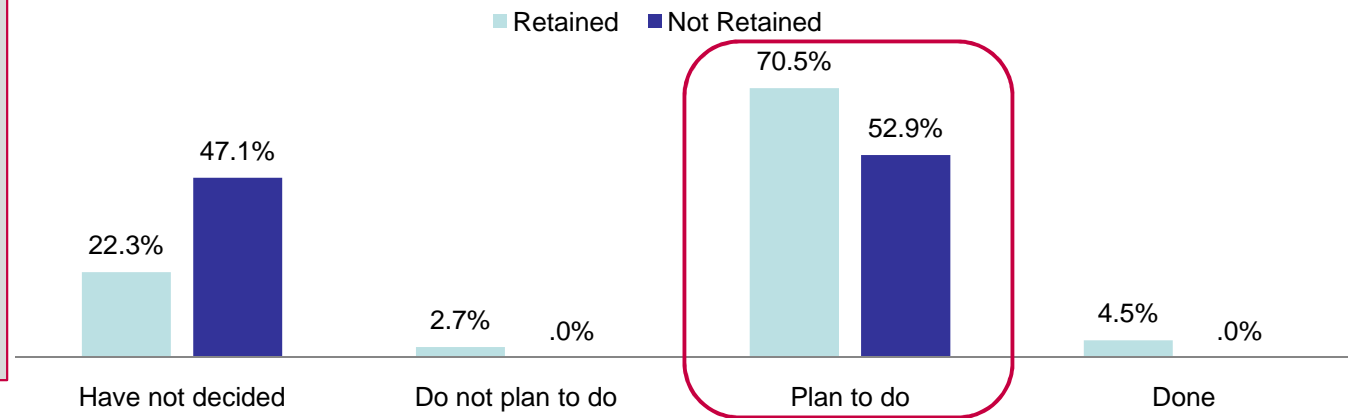
Nearly 80% of retained students either plan to do, or have done, community service or volunteer work. This represents a significant difference from non-retained students, only 60% of whom plan to do, or have done, community service.

In addition, fewer non-retained students reported participating in, or planning on participating in, an internship, clinical or related experience; however, these differences are *not* statistically significant.

Participation in community service or volunteer work

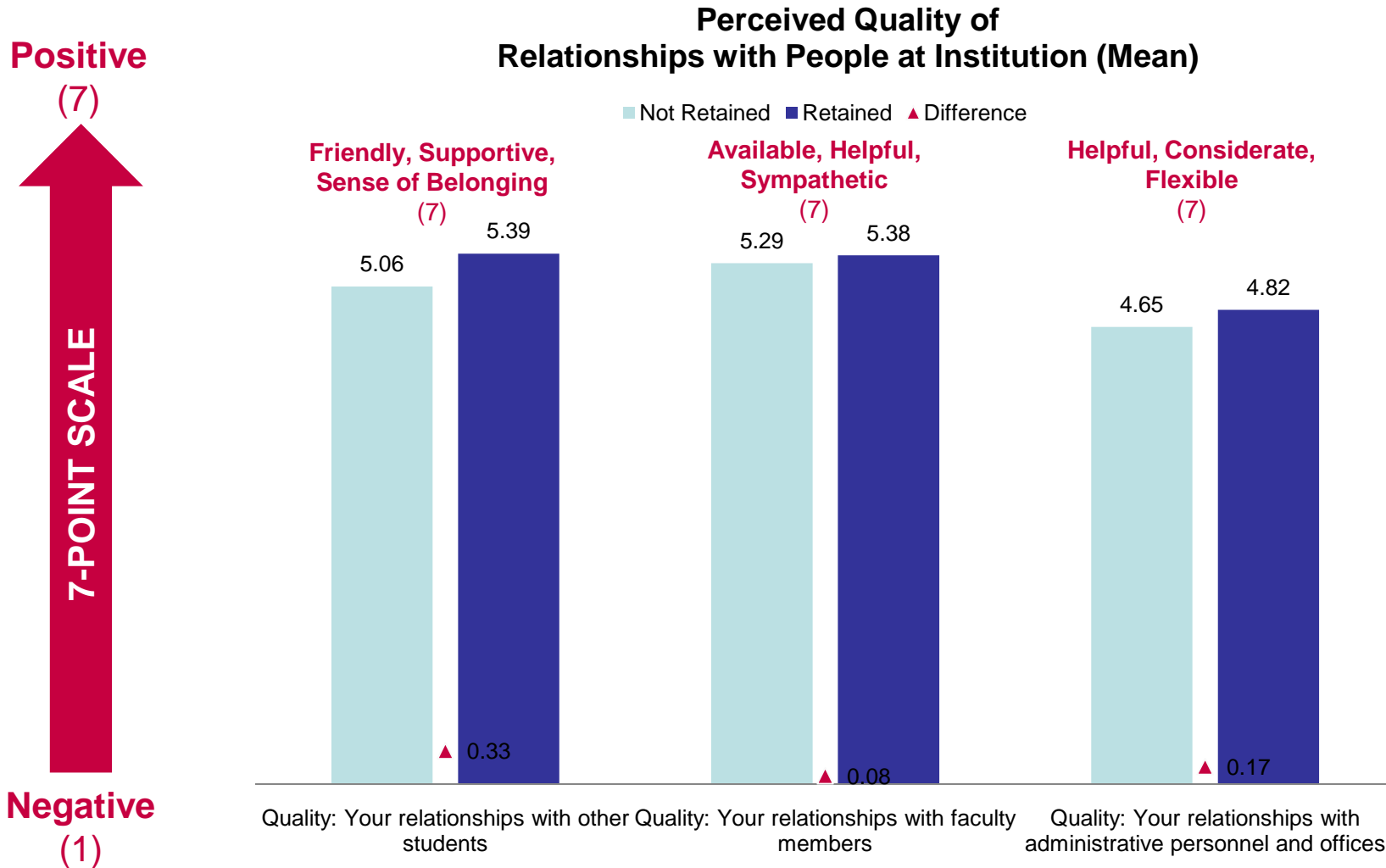


Participation in a practicum, internship, field experience, co-op experience, or clinical assignment



Research Findings: Supportive Campus Environment

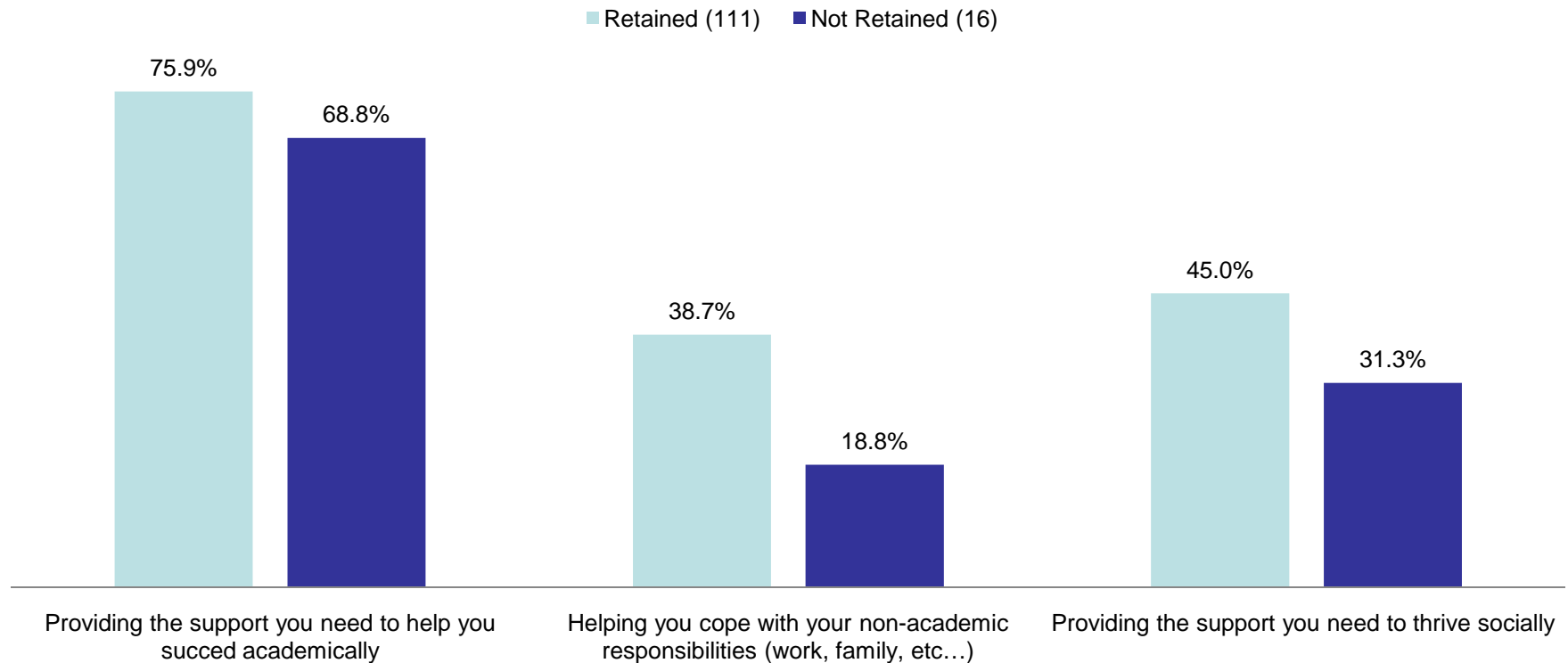
Non-Retained Students Provide Lower Ratings For the Quality of Their Relationships With People at the Institution; However, Differences Are Not Statistically Significant



This marks an improvement from 2008, in which non-retained students provided significantly lower ratings for the quality of their relationships with faculty.

Although Non-Retained Students Are Less Likely To Perceive That JSC Provides Academic, Social and Non-Academic Support, These Differences are Not Significant

To what extent does your institution emphasize each of the following?
(Quite a Bit/Very Much)



In addition to the quality of relationships with faculty members, these findings show an improvement from 2008, in which non-retained students were significantly less likely to report that they received the support they needed to thrive socially.