

**ISSAQ Fall 2023 Summary Report:
James Madison University**

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Table of Contents

Introduction 3

Methods..... 4

Results 7

Conclusions and Recommendations 18

References..... 22

Appendix A: ISSAQ Scores by Subgroup 23

Appendix B: ISSAQ 2.0 Basic Needs Items 27

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 **Introduction**

ISSAQ is a system for integrating noncognitive factors into student success initiatives in higher education. This is achieved through three operational capacities:

1. **Assessment:** Using the ISSAQ Student Survey (ISSAQ-SS), data are gathered on student noncognitive strengths and challenges. The assessment process also includes the provision of student-level score reports and access to resources and interventions that can foster the development of noncognitive skills.
2. **Training:** In order to facilitate the effective use of ISSAQ-SS data, DIA offers multiple ways to build knowledge and skills among staff, faculty, and administrators. These include working directly with advisors, coaches, and counselors to interpret score reports, providing faculty with ways to infuse noncognitive concepts into pedagogy, and recommending strategic actions to administrators based on results.
3. **Information Services:** In addition to standard reports, *Information Services* refers to customized data, reporting, and other media that foster institutional understanding of noncognitive skills and their relation to student success within an institutional context.

The goal of this report is to summarize results from the ISSAQ Student Survey (ISSAQ-SS) administration during summer and fall of 2023 at James Madison University (JMU). In doing so, the report will discuss four general topics. First, an overall analysis of ISSAQ scores will show population data for JMU. Second, subgroup analyses will compare JMU students according to key student characteristics, namely gender, race/ethnicity, first-generation status, and major. Third, ISSAQ's success indices will be used to outline the overall profile of JMU students' likelihood for academic success and retention. Fourth, data from supplemental questions regarding financial worry, basic needs, and career self-efficacy will be presented and discussed.

Overall, this summary report provides somewhat of a "state of the population" by examining overall data, relative characteristics, and attributes of students assessed during the summer and fall of 2023. This can hopefully provide a platform for discussion among key JMU staff as to adjustments that can be made in student success efforts based on ISSAQ data.

 **Methods****ISSAQ-SS Administration**

At JMU, ISSAQ-SS administration efforts are focused through Orientation. Specifically, students receive instructions and a link to complete the ISSAQ-SS as part of the Summer Springboard onboarding process. In total, 4,156 valid student survey responses were gathered between July 28th and August 17th, 2023. (While this report will summarize responses from this administration window, the survey is kept open perpetually with students who did not respond encouraged to do so through various outreach efforts.)

Where appropriate, JMU data are compared to the all other ISSAQ data gathered during the 2022-23 academic year. The population data were gathered from 8 colleges and universities across the United States. For these schools, data were collected through various first-year and orientation programs, and in total included 10,174 student responses. Additional comparisons will be made to 2022 JMU data ($n = 4,250$). Note that the 2022 sample is larger because it was taken from the full administration window, which ran from June through October.

ISSAQ factors

ISSAQ addresses 12 noncognitive factors related to students' academic success and likelihood for persistence. A more extensive review of those factors, the research supporting them, and the development of the ISSAQ-SS is available in the ISSAQ Validity Report (Markle & Holzman, 2022). Table 1 contains a description of each ISSAQ factor as well as example items used in the ISSAQ-SS.

The ISSAQ-SS data here are created through three stages of scoring. First, *item scoring* involves attributing a numeric value to each item response, ranging from 1 (strongly disagree) to 4 (strongly agree). In this stage, reverse -scored items are also considered, in which case scores are inverted (i.e., 4 for “strongly disagree” and 1 for “strongly agree”). The second stage, *raw scoring*, computes the mean across all item scores.

Next, *scale scoring* uses historical data and adjusts raw scores to have a mean of 5 and a standard deviation of 1. This standardization facilitates score comparisons across factors, populations, and time.

Table 1. ISSAQ Student Survey factors.

Factor	Description	Example Item
Organization	The behaviors and strategies that a student uses to organize their work and time.	<ul style="list-style-type: none"> • I tend to follow a schedule. • I use a calendar to keep track of things.
Quality Focus	A student's emphasis on high-quality work and avoidance of errors.	<ul style="list-style-type: none"> • I double check my work. • I work until something is done right.
Engagement	The increased expectations of college-level courses with regards to attendance, assignment completion, and involvement.	<ul style="list-style-type: none"> • I show up to class on time. • I pay attention in class.
Goal Commitment	A student's value and prioritization of a college degree goal.	<ul style="list-style-type: none"> • Getting a college degree is important to me. • I am determined to get a college degree.
Persistence	The maintenance of effort in the face of challenges.	<ul style="list-style-type: none"> • I believe that failure is not an option. • I finish what I start.
Effort Focus	The perception that success is rooted in effort, rather than innate ability.	<ul style="list-style-type: none"> • Working hard is more important than being smart. • I believe that "practice makes perfect."
Calmness	Resistance to stress.	<ul style="list-style-type: none"> • I often worry about things. (-) • I get stressed out easily. (-)
Coping Strategies	The use of adaptive and/or problematic coping strategies when dealing with stress.	<ul style="list-style-type: none"> • I take action to try and make the situation better. • I give up trying to deal with it. (-)
Self-Efficacy	An individual's belief that they will be successful in college.	<ul style="list-style-type: none"> • I tend to learn quickly. • I know I will do well in college.
Sense of Belonging	A feeling of connection to the people within a college or university.	<ul style="list-style-type: none"> • Faculty and staff remember my name. • A lot of my close friends come from this school.
Institutional Commitment	A student's attitude toward the college or university as a whole.	<ul style="list-style-type: none"> • This is one of the best schools in the nation. • I often tell people that I'm a student at this school.
Help Seeking	A student's attitudes toward asking assistance when problems arise.	<ul style="list-style-type: none"> • I am embarrassed when I have to ask for help. • When I need help, I don't care that others know.

Academic markers

Although ISSAQ focuses on the noncognitive aspects of student success, the relevance of noncognitive factors has often been discussed in relation to academic markers (e.g., Markle et al., 2013; Robbins et al., 2004). Given that many key decisions in higher education, such as college admissions and course placement, are based largely on measures such as high school grades, admissions tests (e.g., SAT, ACT), academic data are widely accepted as markers of success.

Several variables were used here to represent the academic domain of student potential. It should be noted that DIA does not seek to evaluate the value of academic markers relative to one another, instead agreeing with previous research that has supported the value of multiple academic variables in representing college readiness (e.g., Wiley, Wyatt, & Camara, 2011).

High School GPA. High school GPA data were gathered as part of the ISSAQ-SS. Students are asked to self-report their GPA using the following item: “Please indicate your High School GPA on a 4.0 scale. If your high school used a different scale, please estimate what your GPA would have been out of a 4.0. NOTE: Your response cannot exceed 4.0.” Where necessary, HSGPA data are standardized onto the ISSAQ scale (i.e., $M=5$, $SD=1$) across all ISSAQ-SS respondents.

SAT/ACT Scores. In the ISSAQ-SS, students are also asked to self-report any available ACT Composite or SAT Total score data. For SAT, given its varying score range over time, students are also asked to indicate the total possible points (i.e., 1600 or 2400) at the time they took the test. SAT scores are then adjusted to refer to the more prevalent 1600-point scale.

Analyses

This report contains four major phases of analyses. The first phase is descriptive, examining the demographic characteristics, academic preparation, and ISSAQ-SS scores in the JMU sample.

The second phase compares key subgroups within the JMU data using background information questions (BIQ's) administered through the ISSAQ-SS. These analyses will discuss four variables: gender, race/ethnicity, first-generation status, and major. Note that these variables are self-reported through ISSAQ and not gathered from JMU student information systems.

Third, the ISSAQ success indices will be presented as a means of discussing the likely success of the incoming JMU class. Two success indices – one focused on predicted academic success and another on predicted retention – are intended to guide JMU's overall student success efforts by understanding the proportion of students with a low, moderate, and high likelihood of success.

Finally, the fourth phase of this report will present results from supplemental ISSAQ-SS questions. In 2022, the ISSAQ-SS was revised to version 2.0, during which three domains of supplemental questions were added. Those items refer to financial worry, career self-efficacy, and basic needs. While these are not included in the broader ISSAQ success framework, data can still be informative for JMU's overall student success efforts.

Results

Phase 1: Demographic, Academic, and ISSAQ-SS Variables

Below are the descriptive statistics for the demographic (Tables 2 and 3), academic (Table 4), and ISSAQ-SS (Table 5) variables examined among the JMU sample, as well as the remaining population from the 2022-23 ISSAQ-SS administration.

In examining the demographic characteristics presented in Tables 2 and 3, four variables – all taken from ISSAQ-SS BIQ questions - are explored: gender, race/ethnicity, first-generation status, and intended field of study. A majority of respondents (56.5%) identified as female. In terms of race/ethnicity, the majority (73.4%) identified as White, with students identifying with multiple race/ethnicity categories comprising the second largest group (6.0%). The comparative ISSAQ sample is far more diverse racially/ethnically, with only 42.3% of those students identifying as white.

It is important to note that ISSAQ's definition of a first-generation college student is rather novel, using a new survey question implemented in 2022:

What is the highest level of education completed by anyone in your immediate family (i.e., parent, guardian, sibling)?

- Did not finish high school
- High school diploma
- Attended college but did not receive a degree
- College degree
- Graduate degree
- I don't know.

Students who responded that their parents received a college degree or graduate degree were designated as a continuing-generation college student, with other responses coded as first-generation. In total, 16.3% of the JMU population was classified as a first-generation student using this methodology.

Table 2. Demographic characteristics (% of sample).

Variable/Group	JMU	ISSAQ Pop.
<i>Gender</i>		
Female	56.5	55.0
Male	37.8	36.0
No Response	4.0	6.0
Non-conforming	0.6	1.6
Not listed	0.1	0.5
Transgender	0.5	0.8
<i>Race/Ethnicity</i>		
American Indian or Alaska Native	0.1	0.5
Asian	5.8	6.5
Black or African American	3.6	15.7
Hispanic or Latino	4.5	18.8
I identify with a group not listed here	0.7	1.2
I identify with more than one of these categories	6.0	7.9
Native Hawaiian or Other Pacific Islander	0.3	0.4
No Response	6.0	6.7
White	73.0	42.3
<i>First-Generation Status</i>		
Continuing Generation	87.7	69.9
First Generation*	12.3	30.1

In Table 3, JMU's response frequencies for intended field of study are compared to those of the general ISSAQ population. While there are slight differences in certain response categories, the JMU sample appears to be relatively similar to the overall ISSAQ population.

Table 3. Intended field of study (% of sample).

	JMU	ISSAQ Pop.
Allied Health and Nursing	13.5	10.1
Behavioral and Social Sciences	8.0	9.2
Business, Industry and Entrepreneurship	23.8	20.3
Education	4.5	4.5
Liberal and Creative Arts	7.4	8.2
No Response/Undecided	11	17
Other	7.4	10.0
Personal and Professional Development	0.3	0.2
Public Safety and Law	3.0	4.6
Sciences, Engineering and Mathematics	14.7	10.6
Technology and Computer Science	5.8	4.3
Wellness, Culinary Arts and Hospitality	0.9	0.7

Table 4 presents data on several academic preparation variables: HSGPA, ACT, and SAT. Here, Cohen's d (1992) is used as a standardized measure of effect size. Broad guidelines for interpreting score differences suggest any difference greater than $d = .2$ could be considered practically significant, albeit small. Differences approaching $.5$ could be considered both significant and sizable. Differences approaching $.8$ standard deviations could be considered large (Cohen, 1992). It should be noted that these are general guidelines, and many have criticized their use as steadfast rules (e.g., Correll et al., 2020).

Using these guidelines, the JMU sample reported a significantly higher HSGPA ($d=.50$) than the rest of the ISSAQ population, while SAT ($d=.12$) and ACT ($d=.09$) scores were similar.

Finally, ISSAQ-SS scores are presented in Table 5 and displayed in Figures 1 and 2. Again, these scores are standardized in reference to the overall ISSAQ population such that all scores have a mean of 5 and a standard deviation of 1. With regard to specific factors, there were six factors for which JMU scores were similar to the overall population (i.e., effect sizes $< .2$ SD's): Organization, Quality Focus, Coping Strategies, and Engagement.

Table 4. Academic preparation variables.

Group/Variable	n	Mean	SD	Min	Max
<i>JMU Fall '23 Sample</i>					
HSGPA	3812	3.8	0.2	2.3	4.0
ACT	285	26.2	3.9	13.0	34.0
SAT	2011	1189.8	127.5	520.0	1580.0
<i>JMU 22/23 Sample</i>					
HSGPA	3692	3.7	0.3	1.5	4.0
ACT	261	26.2	4.0	16.0	35.0
SAT	1836	1201.4	134.2	490.0	1580.0
<i>ISSAQ Population</i>					
HSGPA	8918	3.6	0.4	1.0	4.0
ACT	1361	25.7	5.3	10.0	36.0
SAT	2242	1167.7	182.8	400.0	1600.0

For six factors, differences between JMU students and the overall population were small, as JMU students reported slightly higher levels of Help Seeking ($d=.20$), Persistence ($d = .20$), Effort Focus ($d = .21$), Calmness ($d = .23$), Goal Commitment ($d = .31$), and Self-Efficacy ($d = .34$). Finally, there are two areas – Institutional Commitment ($d = .46$) and Sense of Belonging ($d = .52$) – where differences between JMU students and the overall population are quite large.

These findings are also presented in Figure 1, which compares the ISSAQ-SS scores for the JMU sample to the overall ISSAQ population, as well as results from JMU collected throughout the 2022-23 academic year. This graphic has the advantage of also displaying the standardized effect size (Cohen's d) between the most recent JMU sample and the total 2022-23 ISSAQ population using the gold dots plotted on the secondary y-axis.

Table 5. ISSAQ-SS scores for the Fall 2023 JMU sample.

	Mean	SD	Min	Max
Organization	5.15	0.98	1.34	6.52
Quality Focus	5.16	1.02	-0.44	6.53
Engagement	5.11	0.96	-0.52	6.30
Goal Commitment	5.21	0.83	-0.58	6.45
Persistence	5.46	1.04	-0.04	6.62
Effort Focus	5.24	1.18	-1.21	6.68
Calmness	5.17	1.12	3.26	7.43
Coping Strategies	5.14	0.93	1.29	7.71
Self-Efficacy	5.30	0.94	0.96	6.65
Sense of Belonging	5.53	0.86	1.75	7.21
Institutional Commitment	5.53	0.92	0.85	6.51
Help Seeking	4.85	0.97	1.36	7.02

One challenge in interpreting these overall scores is the insufficiency of measures of central tendency. A simple mean score can be misinterpreted to represent the entire sample, and while it is a reasonable representation, a single number cannot accurately portray the wide array of scores demonstrated by students. As such Figure 1 contains a “box-and-whisker” plot of the ISSAQ-SS data from JMU.

A box-and-whisker plot contains a great deal of information. The “box” contains three lines, with the top of the box representing the 75th percentile, the middle line of the box representing the 50th percentile (or median), and the bottom of the box representing the 25th percentile. The “X” in the middle of the box represents the mean score. The “whiskers” represent the full range of data, with any dots outside the whiskers representing scores that are deemed to be outliers.

One of the major points of emphasis of ISSAQ is that, while mean scores can suggest broad points of strategic institutional learning (which will be discussed later in this report), work with individual students is quite different. For each variable – regardless of overall score - there are students for whom that factor is a strength, and others for whom that factor is an opportunity for growth.

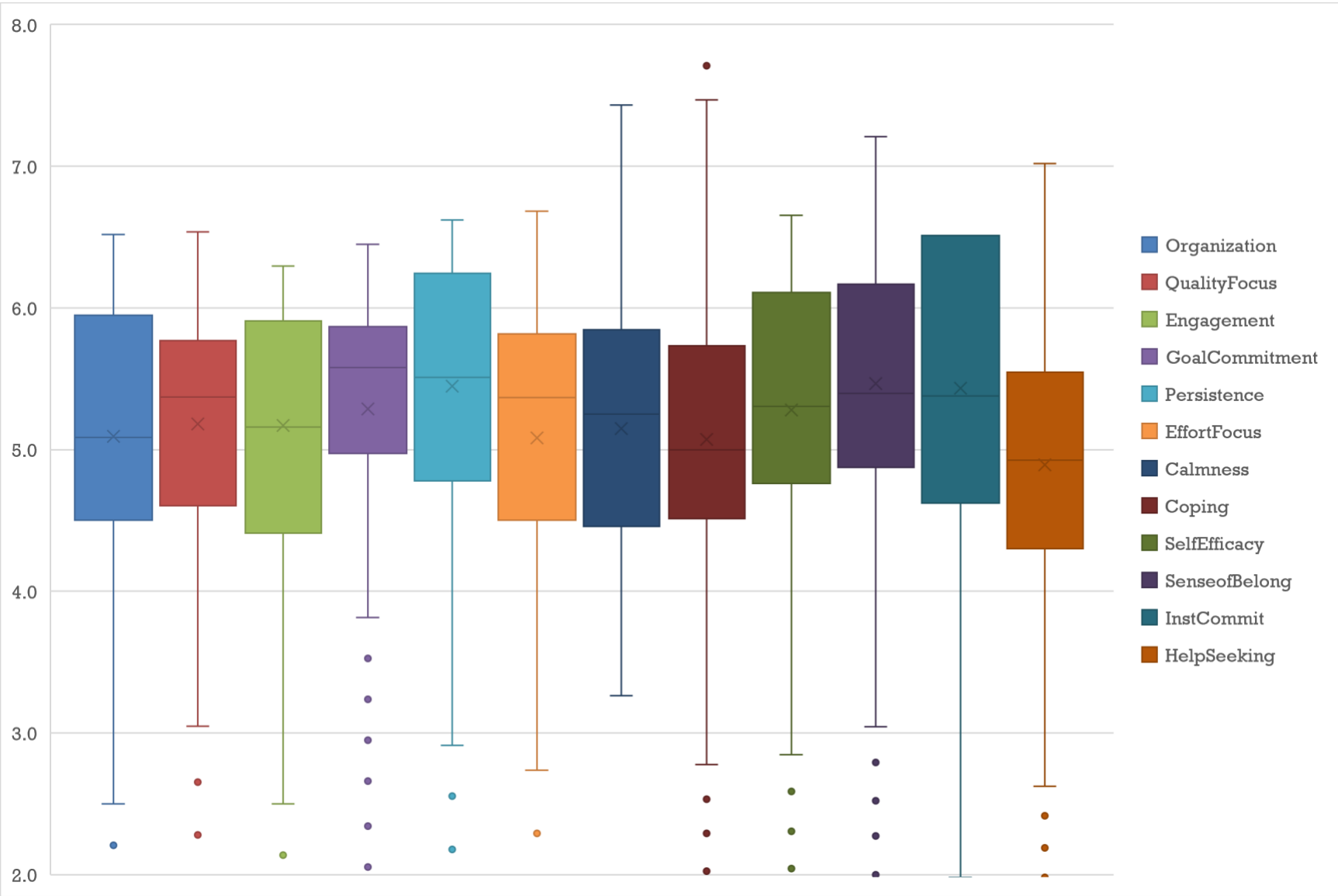


Figure 2. Box and whisker plot of JMU ISSAQ-SS scores.

Take, for example, Sense of Belonging. Sense of Belonging has received a great deal of attention in recent years as a key indicator of success, particularly amidst lessons learned during the pandemic. Indeed, among ISSAQ users, JMU is held up as an example of strong Sense of Belonging and student connection, supported by the high average score and large positive difference compared to the ISSAQ population.

Yet there is still a population that demonstrates relatively low Sense of Belonging. As the bottom edge of the “box” shows, the 25th percentile score in Sense of Belonging was 4.88, indicating that more than 25% of students scored below the national average in Sense of Belonging. Thus, while the factor may be an overall strength for JMU, there are still students who could benefit from outreach in this area.

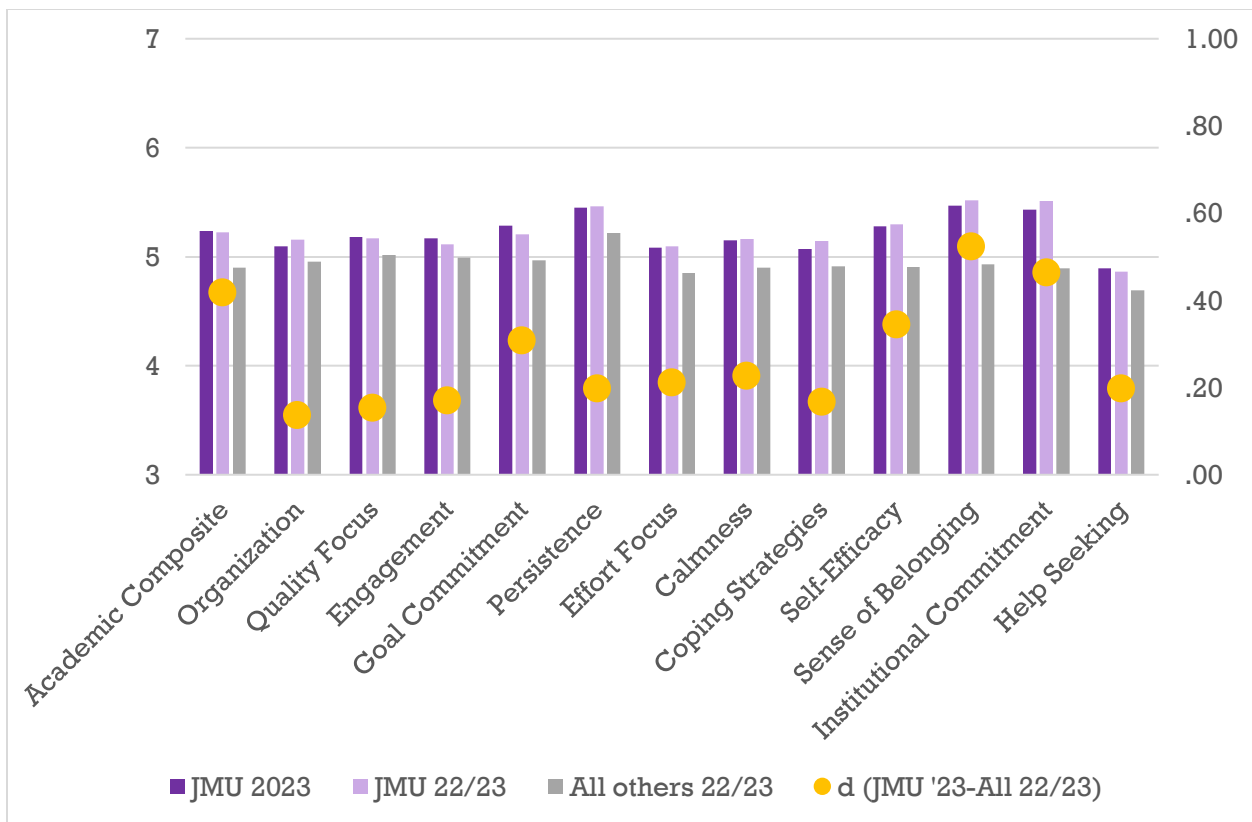


Figure 1. JMU ISSAQ scores vs. Comparison ISSAQ Population.

Phase 2: Subgroup Comparisons

Appendix A contains Figures 5-8, which display ISSAQ-SS scores by four key subgroups: gender, race/ethnicity, first-generation status, and intended field of study. While examining each possible score comparison – given the numbers of

ISSAQ factors and potential subgroups – is beyond the scope of this report, there are several key findings that should be highlighted.

Figure 5 shows several differences according to gender in ISSAQ scores. Overall, there are notable differences in many factors according to gender identity. For example, female respondents showed higher rates of Organization and Engagement, though lower rates of Calmness, compared to male respondents. Moreover, those students who identified as non-conforming, transgender, or an identity not listed on the survey scored notably lower in Persistence, Effort Focus, and Calmness.

Figure 6, which shows scores disaggregated by racial/ethnic identity, actually shows more similarity, particularly when compared to those findings broken down by gender. While there is some variance among these subgroups, there do not appear to be consistent patterns of one group displaying consistently higher or lower scores.

Figure 7 compares responses from first-generation and continuing generation college students. Here, differences are essentially negligible. The only effect size showing any significant difference between the two groups – that for Sense of Belonging – was small ($d = .21$).

Figure 8, which displays differences by intended field of study, is perhaps the most difficult to interpret, given the large number of subgroups. Again, perhaps the most important interpretation here is that there is notable variance among fields of study in many noncognitive factors.

Interpretations here are limited because a “top-down” approach – one in which singular, synthetic findings across the population are sought – may not be most appropriate. Instead, what can best be stated here is that certain characteristics show variance, while others do not.

These results can perhaps be most helpful by being shared with various constituencies within JMU who work with subgroups to promote further investigation. For example, specific academic programs may want to know how their students compare in various noncognitive areas when compared to others. Such information could be used to develop program-specific interventions.

Phase 3: ISSAQ Success Indices

The ISSAQ Success Indices are designed to be broad, holistic indicators of a student’s likelihood of academic success (i.e., GPA) and retention. These metrics integrate ISSAQ’s Academic Composite and the 12 ISSAQ factor scores. Based on previous studies of ISSAQ data, each variable is weighted to optimally predict student outcomes. Figure 3 shows the frequency distribution for each success index for the current JMU sample, last year’s sample, as well as the 2022-23 comparative

ISSAQ population. The three scores are designed to indicate students who (a) require intensive support (*Support*), (b) would benefit from engaging with traditional advising and support functions to improve their success (*Engage*), and (c) would benefit from adaptive supports that enhance learning and development, such as undergraduate research, leadership positions, or other forms of involvement on campus (*Guide*).

Overall, JMU students demonstrated a strong likelihood of success, with far fewer students receiving Support scores compared to the overall population. Interestingly, the distribution of responses varies according to the outcome of interest. For Academic Success, the percentage of students receiving a Guide score was similar, with more JMU students receiving an Engage score. For retention, however, the rates of Engage scores were similar, with a higher rate of Guide scores. The implications for these findings – namely the need for a holistic mechanism for student support that is sensitive to these three categories of student - will be discussed in the conclusions of this report.

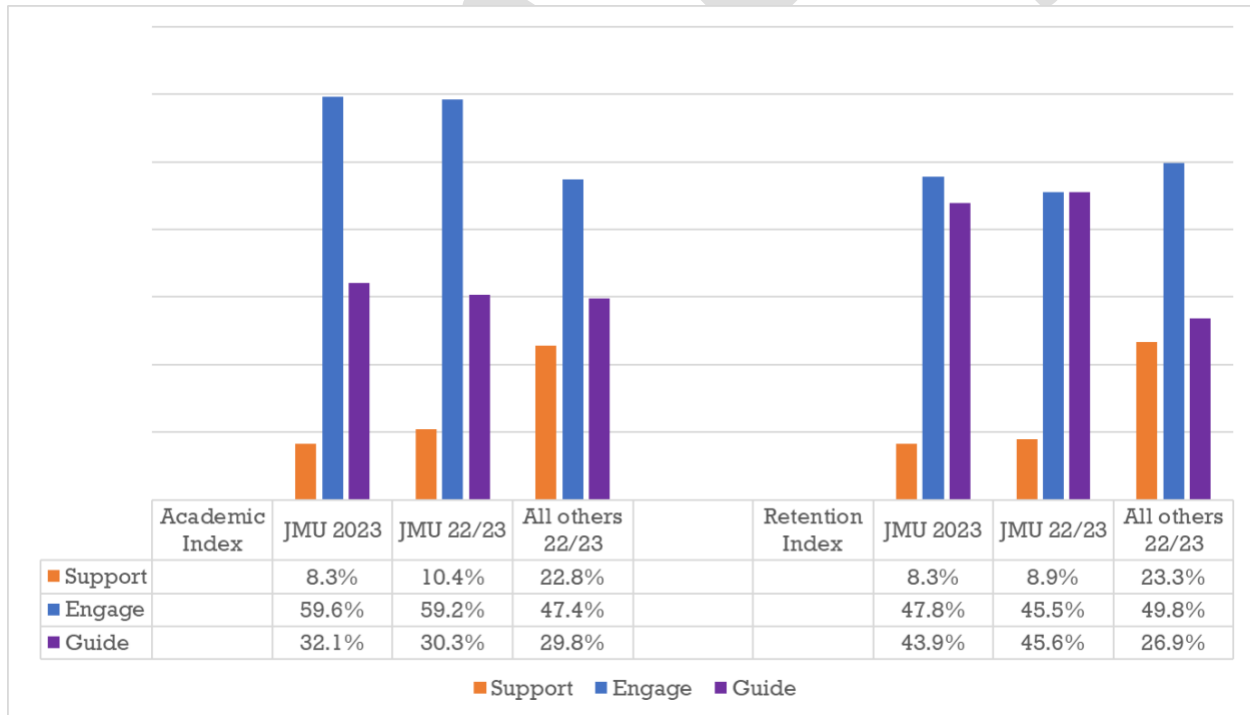


Figure 3. JMU ISSAQ Success Indices vs. Comparison ISSAQ Population.

Phase 4: Supplemental ISSAQ-SS Questions

Beginning with the Fall 2022 administration, DIA began reporting on several domains of supplemental questions to provide other perspectives on potential

student success issues. Specifically, these new items referred to three domains: Career Efficacy, Financial Worry, and Basic Needs.

Data for the Career Efficacy and Financial Worry items are presented in Table 7 and Figure 4. With regard to Career Efficacy, JMU students scored very positively. All items had an agreement rate of more than 77%, and in each case this level of agreement exceeded that of the overall ISSAQ population.

Table 7. Response frequencies for Career Efficacy and Financial Worry items.

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
<i>Career Efficacy</i>				
I know how my classes prepare me for my career.	0.9%	7.2%	48.3%	43.6%
I know how my major and career goals are related.	1.0%	5.5%	42.7%	50.8%
I know how to choose between occupations.	2.5%	16.0%	47.3%	34.3%
I know how to gain experience to prepare me for my career.	1.2%	9.8%	45.9%	43.1%
I know how to gain practical experience in my field of study.	1.3%	10.8%	45.8%	42.1%
I know how to identify possible career options based on my strengths, values, and interests.	1.5%	7.8%	47.7%	42.9%
I know what kind of classes to take in order to prepare for my career.	1.8%	10.0%	48.4%	39.9%
<i>Financial Worry</i>				
I worry about being able to pay for college	25.8%	23.3%	29.5%	21.4%
I worry about not having enough money for the basic necessities of life (for example clothing, food, rent.)	37.2%	28.0%	21.5%	13.3%
I worry about running out of money.	27.1%	24.2%	29.9%	18.9%
I worry about transportation to get to and from school.	40.5%	30.2%	20.3%	9.0%

For Financial Worry, while students generally scored better than the overall ISSAQ population (i.e., expressed less agreement with each item), some issues may still warrant attention. More than 50% of students agreed with items relating to worry about paying for college and running out of money.

Table 8. Response distribution for basic needs items (% of sample).

	JMU	ISSAQ Pop.
<i>Needed medical care but were not able to get it because you couldn't afford it?</i>		
No, I have been able to afford the medical care I needed	98.2	94.7
Yes, I have needed medical care but was not able to afford it	1.8	5.3
<i>In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?</i>		
No	97.5	90.8
Yes	2.5	9.2
<i>In the last 12 months, have you needed mental health resources but were not able to access them?</i>		
No, I have not needed mental health resources	93.6	86.8
Yes, I have needed mental health support but was unable to access them	6.4	13.2
<i>Do you have a reliable means of transportation to get to campus?</i>		
I do not need transportation	20.5	32.7
No, I do not have a reliable means of transportation	2.7	8.3
Yes, I have a reliable means of transportation	76.8	59.1
<i>If they were available to you at no cost, would you be interested in any of the resources below?*</i>		
Childcare resources	2.3	3.3
Clothing resources	19.5	22.4
Financial assistance for tuition/college costs	81.8	83.5
Financial assistance for other needs	28.3	39.6

Housing or shelter resources

14.4

16.3

Results for questions dealing with basic needs – medical care, mental healthcare, transportation, and food security – are presented in Table 8 (full versions of these questions are presented in Appendix B). Generally speaking, JMU students demonstrated a fractional need for basic support compared to the comparative ISSAQ population. Interestingly, however, the cost of college remains a concern. The only metric where JMU students approached the general population was related to interest in resources related to financial assistance for tuition/college costs.

Conclusions and Recommendations

Overall Findings and Recommendations

Below is a summary of the major conclusions from this report, which will be followed by recommendations for future study, implications, and action:

A. *JMU is to be applauded for its commitment to gathering these critical data.*

While this finding is repeated from last year's summary report, it is indeed still worth noting. Not only has JMU integrated ISSAQ into an already well-developed orientation program to effectively gather data from incoming students, but it has also pursued data among other populations, including transfer students, graduate students, adult learners, and international students. Specific analyses among those groups is beyond the scope of this report, but such a breadth and depth of data collection is commendable (though not from an organization with an established recommendation for valuing assessments and data).

B. *Overall, JMU students showed strong noncognitive skills, but vulnerable subgroups still exist.* With assessments such as the ISSAQ Student Survey, one of the most common examinations is an overall comparison of average scores to the general population or peer institutions. Indeed, as a whole, JMU students showed a strong profile of noncognitive skills, with none of the 12 ISSAQ scores showing significantly lower levels than the overall population, and several factors showing notably higher levels within JMU students.

However, it is important to note that each factor still contains a subgroup of students that scored relatively low in comparison to the total sample. The recommendations below will discuss steps that can address such groups.

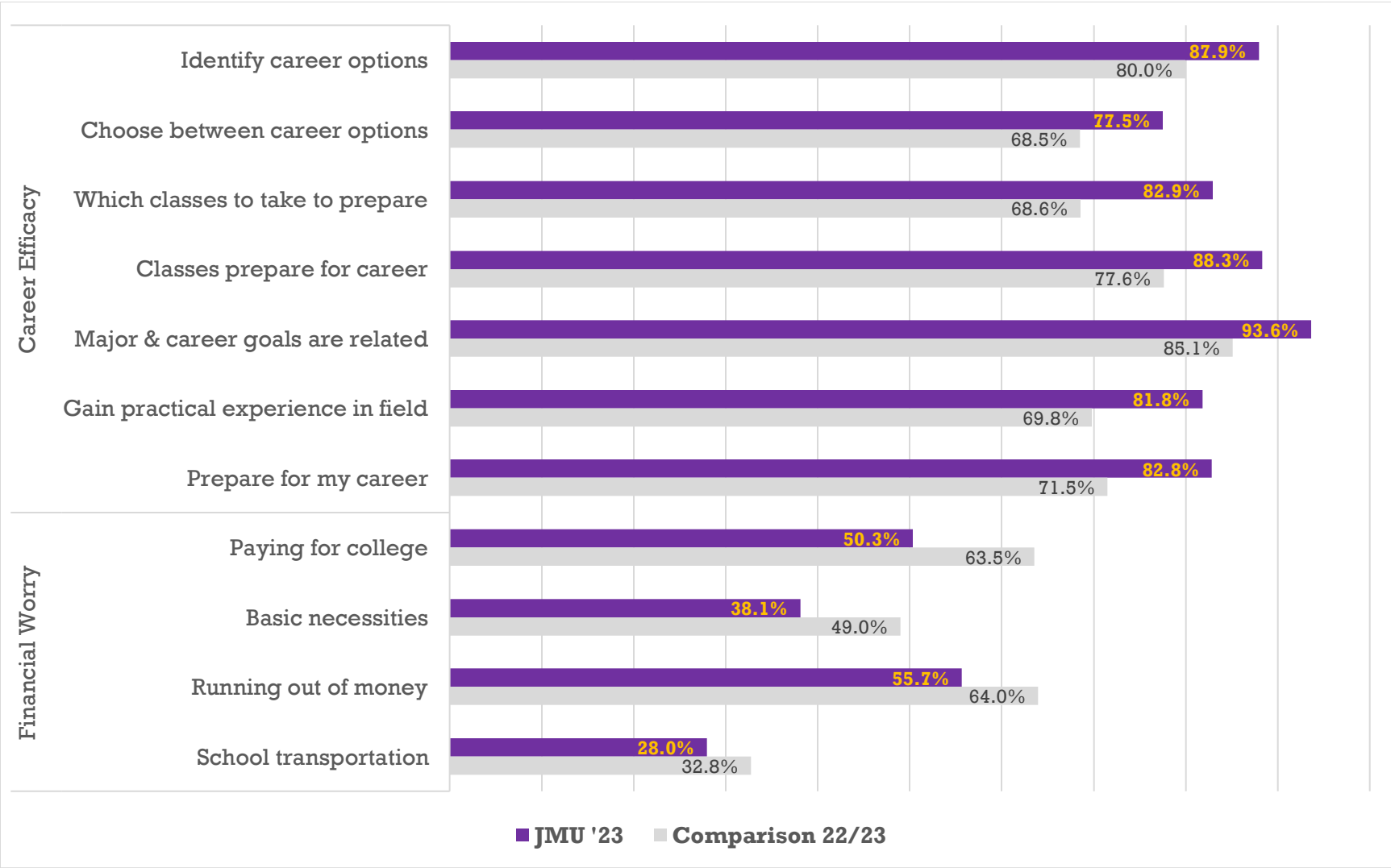


Figure 4. Agreement with Career and Financial Worry items.

A. *ISSAQ scores and Success Indices suggest a multi-faceted strategy for supporting students.* One of the challenges in addressing student success is the tendency to adopt a deficit mindset (Dampier, et al., 2019; Smith, 2012). Our assumption is that most of our student success challenges come from student need, and we simply need to identify those needs, provide the appropriate supports, and help students overcome obstacles.

One of the major principles of our work with ISSAQ is to avoid this tendency. Rather than view students' likelihood for success as a continuum (e.g., low, medium, high), ISSAQ scoring proposes three levels of qualitatively different interventions. Students who receive a *Support* score do, in fact, have a lower probability of success. Thus, providing intensive and/or intrusive supports is recommended, whether talking about targeted supports in the case of ISSAQ factors or broader advising, coaching, and/or counseling in the case of the Success Indices.

Students in the middle – who receive an *Engage* score – can benefit from support. However, this does not need to be the intensive or intrusive type of support. Rather, institutions are encouraged to simply emphasize the use of existing resources.

Finally – and most pertinent to this conversation – is the *Guide* designation. In this case, students demonstrate strength. ISSAQ schools are encouraged not to simply assume that students in this category will succeed independently, but rather to provide opportunities for students to apply those strengths.

While the SACS-COC QEP project at JMU has emphasized tiered interventions to support student success, these data could provide a somewhat different interpretation of that approach. Rather than emphasize the identification and support of students who are “at risk,” it may also suggest that more opportunities should be developed for those students with a strong probability of success.

Recommendations and Future considerations

The goal of ISSAQ is to help institutions infuse valuable student data into their student success strategies. Hopefully, the findings in this report do so. Additionally, based on our experience in working with institutions of higher education, DIA would like to provide the following recommendations to JMU as they consider targeted actions to improve student success.

- *Consider broader dissemination and use of student data, reports.* Especially given that this was the first operational administration of the ISSAQ-SS, JMU demonstrated an exemplary ability to take and use student reports throughout advising and other initiatives. However, taking both the student and

aggregate-level results from ISSAQ – as with many institutional change efforts – is perennially a challenge. Certainly, this report and accompanying materials can support dissemination efforts, but JMU should constantly consider ways in which it can disseminate the learning generated here to ensure that student success efforts match the strengths and challenges that JMU students face.

- *Consider the implications for a multi-faceted, holistic approach to advising, coaching, and counseling.* As mentioned, one of the challenges in using data such as these is the emphasis on a deficit mindset. Most student success initiatives tend to focus on the challenges that certain students bring, and assume that helping students overcome those challenges will be the most effective to improve institutional student success outcomes.

While this is largely true, there is also often the opportunity to consider a truly holistic approach to supporting students. In this case, institutions implement qualitatively different types of support based on students' likelihood for success. This is the intention of the scoring structure used in ISSAQ. Regardless of whether the score is an individual ISSAQ factor or a global Success Index, *Support* suggests that students need intrusive involvement in order to avoid negative outcomes. *Engage* indicates that traditional support mechanisms can help students overcome challenges. *Guide* indicates a strength, and moreover an opportunity for that student to further enrich their development.

Nearly every indicator here shows that, as a whole JMU students have a strong capacity for success. Indeed, this is likely why – relatively speaking – JMU has demonstrated such strong outcomes (e.g., retention, graduation rates). But in order to serve such a capable population, improvements might not just consist of better identifying students who struggle, but also better supporting students who are capable and likely to be successful on their own.

Thus, using metrics such as the ISSAQ success indices can not only support the identification of students who may benefit from early involvement to avoid obstacles. The connection of students with strong potential to resources such as undergraduate research, campus involvement and leadership positions, or mentorship opportunities can further enrich their development. Moreover, while students who receive *Guide* scores are highly likely to be successful, their success is not guaranteed. Often times, when students like this leave, it's due to their inability to find the appropriate enrichment at their institution. Thus, this holistic strategy can provide the appropriate type of support.

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Appendix A: ISSAQ Scores by Subgroup

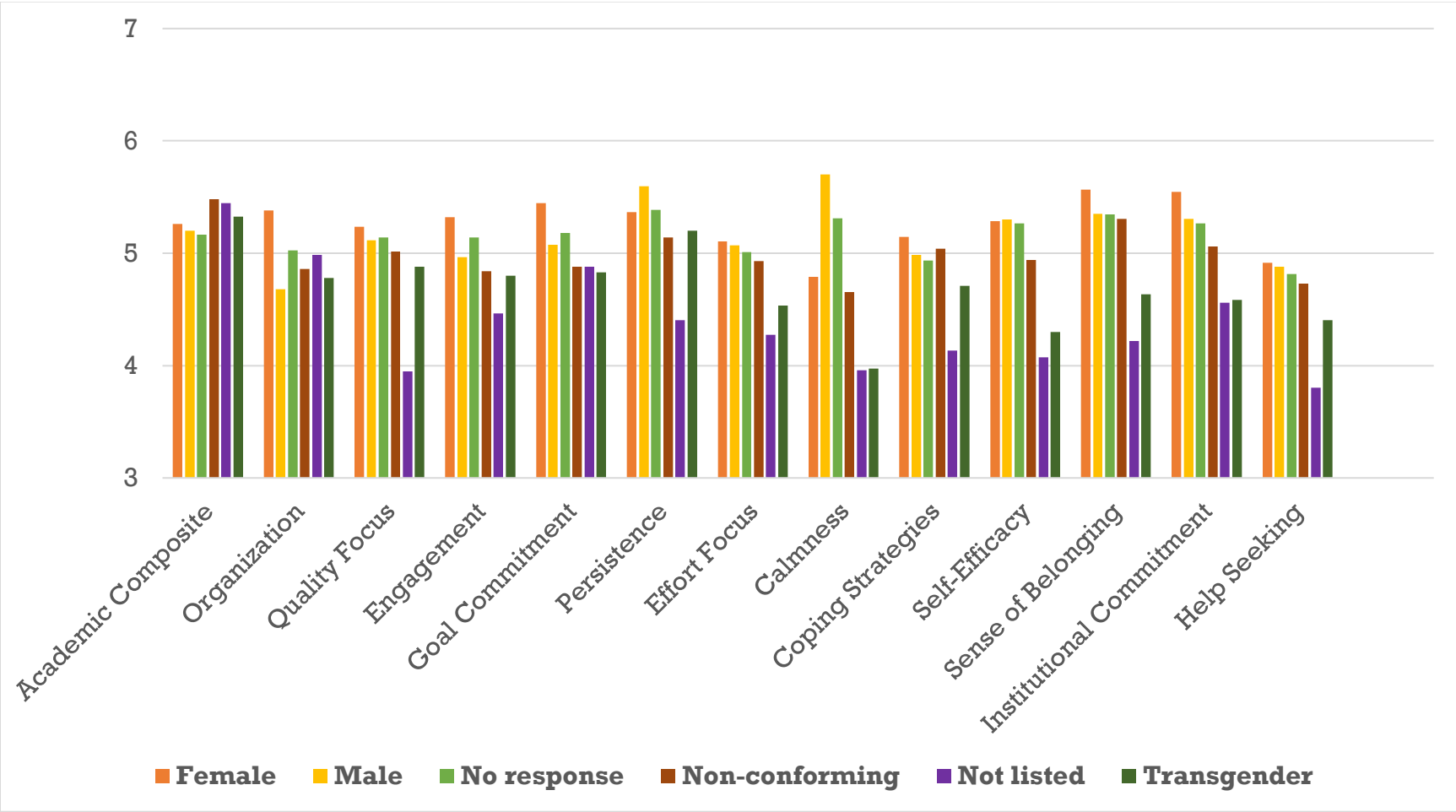


Figure 5. ISSAQ scores by gender.

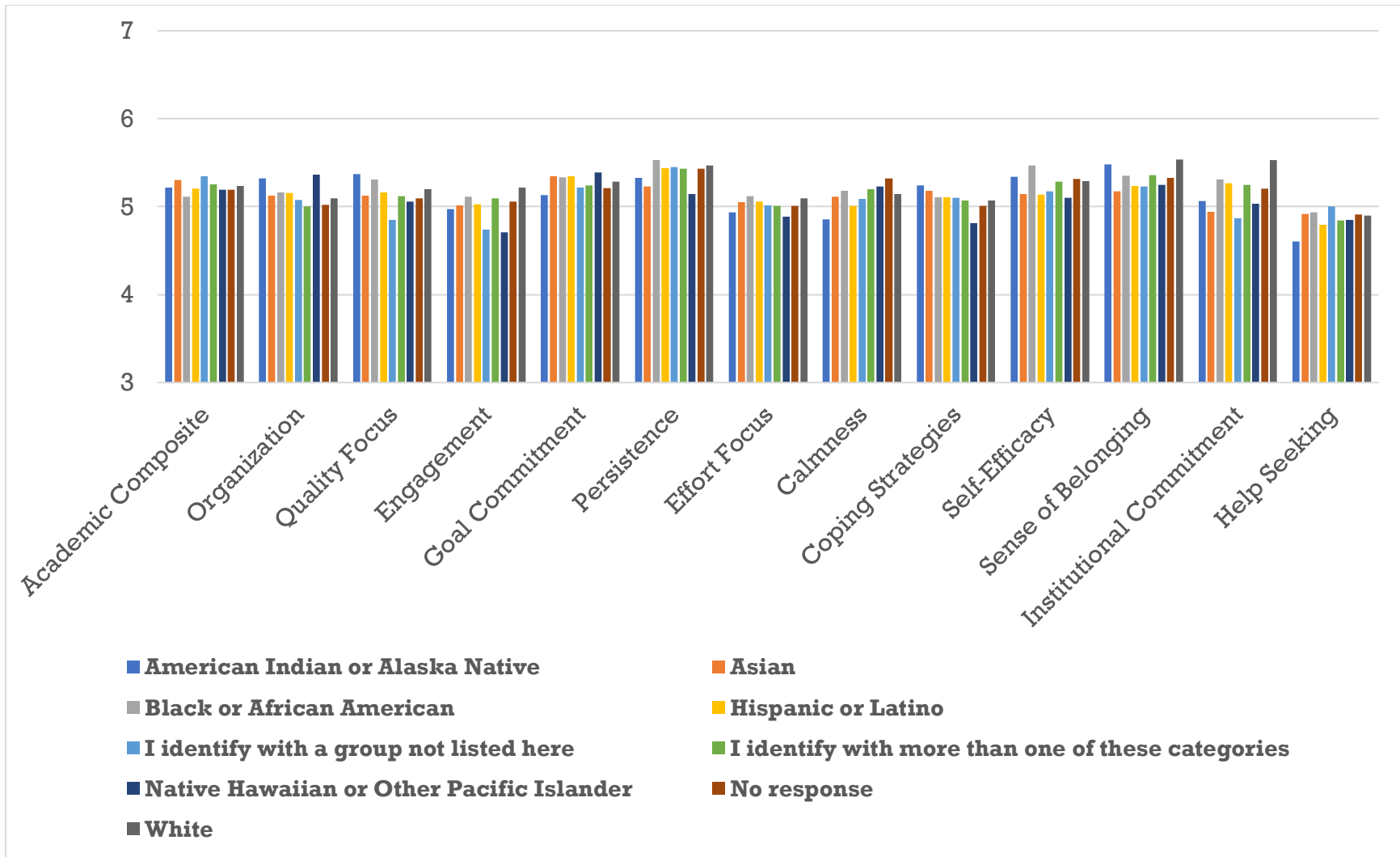


Figure 6. ISSAQ scores by race/ethnicity.

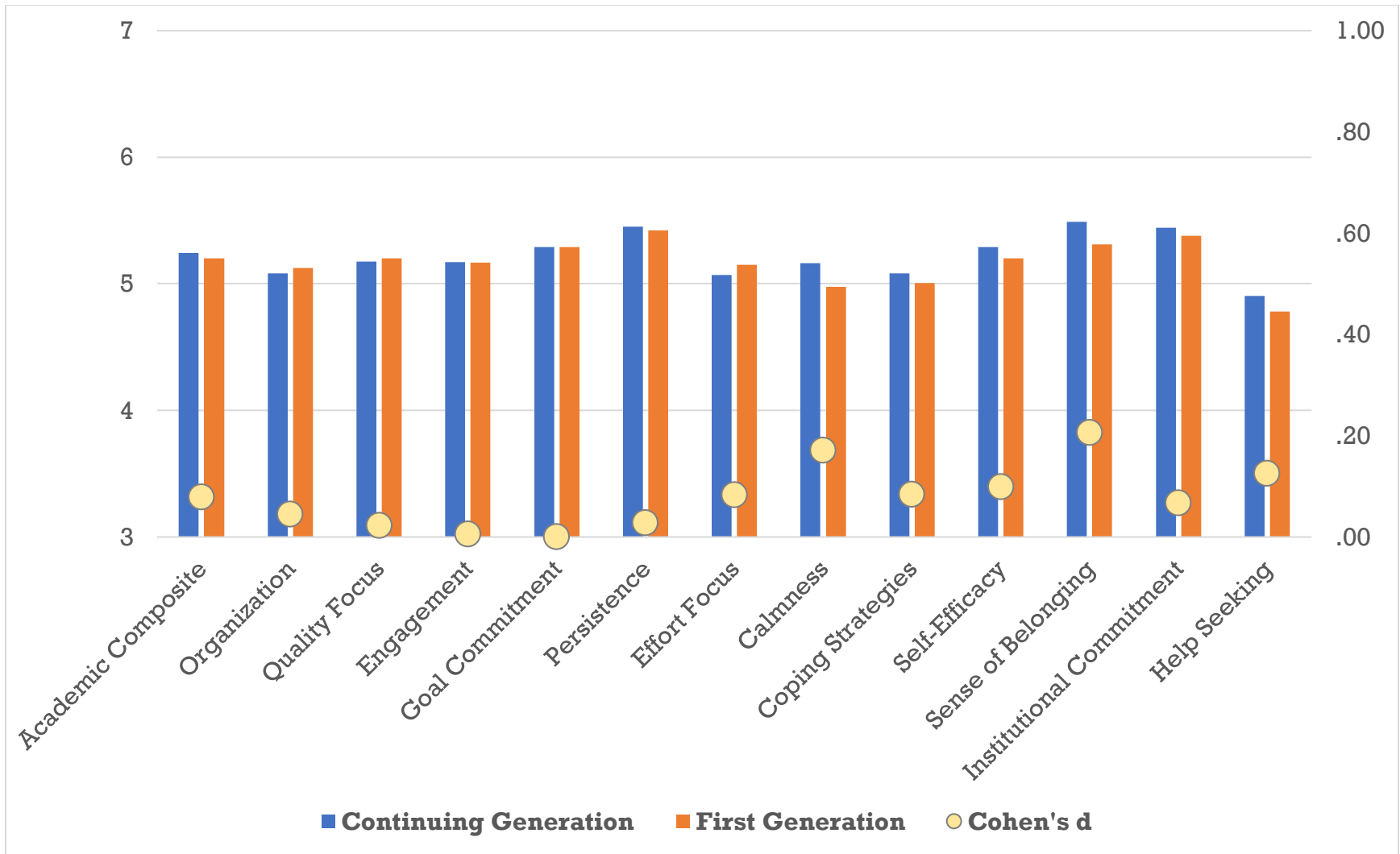


Figure 7. ISSAQ scores by first-generation status.

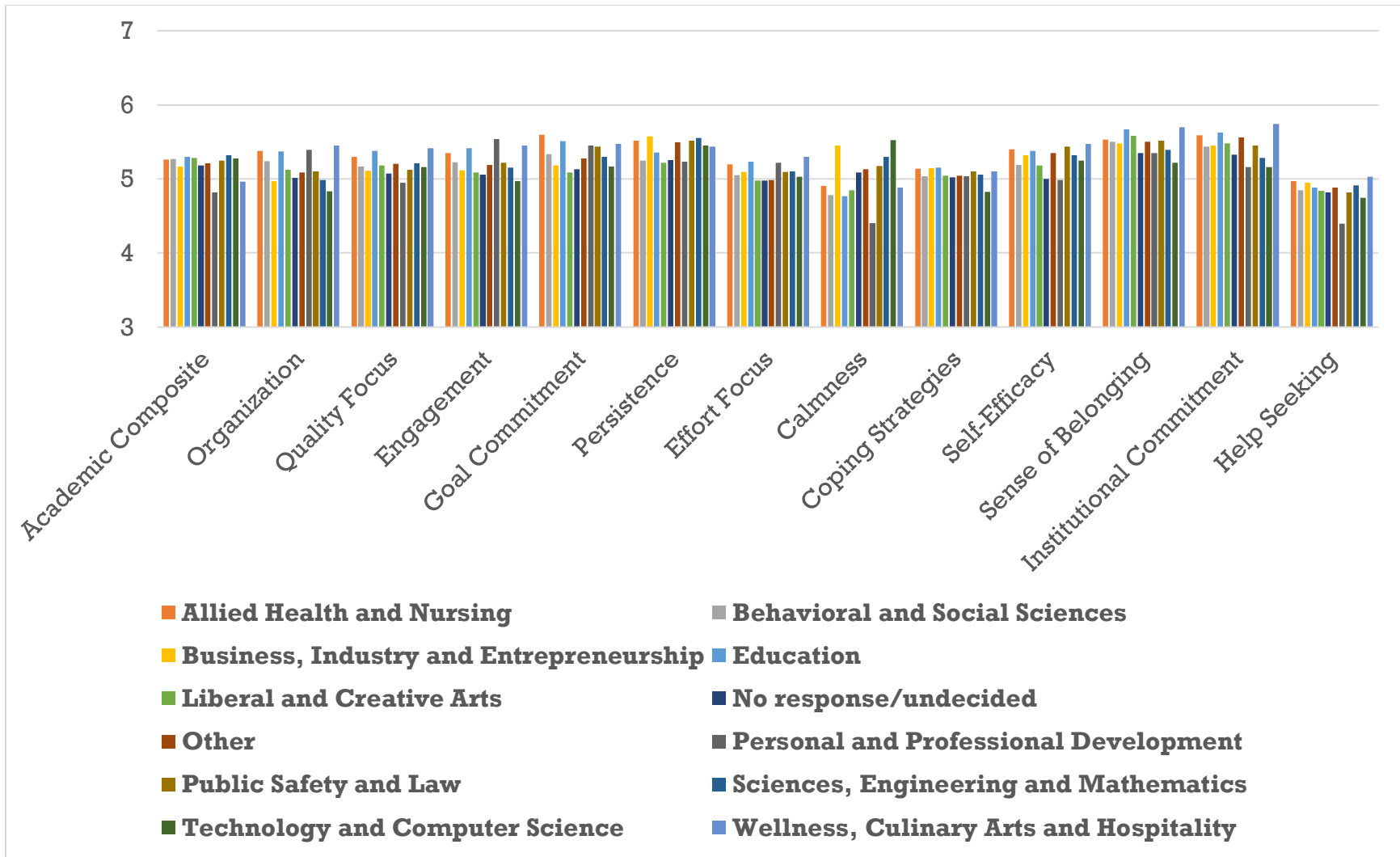


Figure 8. ISSAQ scores by intended field of study.

Appendix B: ISSAQ 2.0 Basic Needs Items

In the last 12 months, were you every hungry but didn't eat because there wasn't enough money for food?

- Yes
- No

In the last 12 months, have you needed medical care (such as a doctor's visit, hospital visit, or medication) but were not able to get it because you couldn't afford it?

- Yes, I have needed medical care but was not able to afford it
- No, I have been able to afford the medical care I needed

In the last 12 months, have you needed mental health resources but were not able to access them?

- Yes, I have needed mental health support but was unable to access them
- No, I have not needed mental health resources

Do you have a reliable means of transportation to get to campus?

- Yes, I have a reliable means of transportation
- No, I do not have a reliable means of transportation
- I do not need transportation

If they were available to you at no cost, would you be interested in any of the resources below? (Check all that apply)

- Clothing resources
- Childcare resources
- Financial assistance for tuition/college costs
- Financial assistance for other needs
- Housing or shelter resources