Your First College Year – Analysis of Results by Demographic Groups

Your First College Year (YFCY) is a survey administered at CWRU every three years to first-year students that assesses their adjustment to college, academic outcomes, academic and co-curricular experiences, growth, and satisfaction. The data presented here are from the 2017 first-year cohort.

Key items and construct scales from the YFCY survey were analyzed for differences between sexes and racial/ethnic groups. Sex and race/ethnicity information were validated using institutional data so categories align with groupings used for reporting purposes. Below is a breakdown of the total sample:

![Figure 1. Sex](image1.jpg)

![Figure 2. Race/Ethnicity](image2.jpg)

The key items tested were students’ self-ratings of abilities, ratings of diversity, opinions on discrimination, interaction with faculty, and sense of belonging and community. Several items representing the overall college experience were included as well. The individual items were selected alongside the 18 constructs and tested for differences between sexes and race/ethnic groups.

Sex and racial/ethnic groups were compared across the same set of items and constructs. To allow for simpler statistical comparison, the 7 racial/ethnic groups reported above were combined to represent three distinct groups: Under-represented minorities (i.e., Black and Latino), International, and Domestic other (Asian, Multi-racial, Unknown, and White) students. While the groups are not balanced (i.e., approximately 9% URM, 10% international, and 81% other domestic), each has enough students to allow statistical comparisons to be made. All classifications were based on federally-reported census data, so it does not account for endorsement of other categories for sex or race/ethnicity.

**Explanation of Scales**

The scores presented here fall into two distinct categories: individual items and constructs. The instrument as a whole provides students a response scale ranging from 1 (low, very dissatisfied, or strongly disagree) to 5 (high, very satisfied, or strongly agree) for all items. Therefore, individual items are presented as group means along that 1-5 response scale. Constructs are used to aggregate the results of multiple questions with the same focus. The construct scores are transformed so they can be compared, resulting in what is considered a standard score. This allows not only a comparison of constructs with each other, but also allows for an evaluation of how CWRU students and sub-groups perform relative to the entire population of YFCY respondents. While the range of scaled scores may be different, the average standard score is maintained at 50 across all constructs.
The Academic Experience

The first set of items pertained to students’ academic experience. The individual items examined included students’ self-ratings of:

- Academic ability
- Mathematical ability
- Critical thinking skills
- Ability to manage time effectively
- General education and core courses
- Overall academic experience

Academic experience was also investigated through the following constructs:

- Habits of mind, which represents the behaviors and traits associated with academic success and seen as the foundation for lifelong learning. Items include frequencies of supporting opinions with a logical argument, seeking solutions to problems and explaining them to others, and seeking alternative solutions to a problem.

- Academic adjustment, which measures the ease with which students adjust to the academic demands of college. Self-ratings of ability to adjust to the academic demands of college, develop effective study skills, and understand what professors expect academically are items included within this construct.

- Academic disengagement, which measures the extent to which students engage in behaviors that are inconsistent with academic success. Items include frequencies of being late to class, skipping class, and turning in assignments late.

- Academic self-concept, which represents students’ beliefs about their abilities and confidence in academic environments. Self-ratings of academic ability, mathematical ability, intellectual self-confidence, and drive to achieve are component items of this construct.

- Satisfaction with courses, which measures the extent to which students see their coursework as relevant, useful, and applicable to academic success and future plans. Items that make up this construct include relevance of coursework to future career plans, relevance of coursework to everyday life, and ratings of general education or core curriculum courses.

- Science identity, or the extent to which students conceive of themselves as scientists. Having a strong sense of belonging to a community of scientists, satisfaction with working on a team doing important research, and thinking of one’s self as a scientist constitute this construct.

- Science self-efficacy, which measures students’ confidence in their ability to conduct scientific research. Items include ability to use technical science skills, to generate research questions, and to determine how to collect appropriate data.

Differences: Men and Women

On the key items, men reported significantly higher scores pertaining to their academic abilities, mathematical abilities, and critical thinking skills than their women peers. Similarly, men reported higher scores on the Academic Self-Concept and Science Self-Efficacy constructs, reflecting their perceived stronger academic skills. Interestingly, men also reported higher scores on the Academic Disengagement construct, which addresses behaviors such as falling asleep in class, turning in work late, and being late to or skipping class. There were no differences between men and women on their Habits of Mind,
Academic Adjustment, Science Identity, or the Satisfaction with Courses construct scores, nor were the groups experiencing differing levels of satisfaction with their overall academic experience.

*Differences: Race/ethnicity*

When exploring race/ethnicity differences, international students recorded significantly higher self-ratings for academic ability, mathematical ability, and ease of adjusting to the academic demands of college. They also recorded the highest scores on the Academic Adjustment and the Academic Self-Concept constructs. On each of these items and constructs, under-represented minority students scored the lowest. There were no significant differences between groups in ratings of overall academic experience, or on the Habits of Mind or Academic Disengagement construct scores. Other domestic students were more satisfied with their overall academic experience than other groups, but least satisfied with general education and core curriculum courses and the Satisfaction with Courses construct; for all three, group differences were not significant.
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**The Social Experience**

The second set of items pertained to students’ social experience. The individual items examined included students’ self-ratings of:

- Ability to see the world from someone else’s perspective
- Openness to having my own views challenged
- Ability to discuss and negotiate controversial issues
- Tolerance of others with different beliefs
- Ability to work cooperatively with diverse people
- I have felt discriminated against
- Sexual violence is prevalent on this campus
- Gender diversity of faculty

Social experience was also investigated through the following constructs:

- **Social self-concept**, which reflects students’ beliefs about their abilities and confidence in social situations. Items include social self-confidence, leadership ability, and public speaking ability.
- **Sense of belonging**, which measures the extent to which students feel a sense of academic and social integration on campus. Feelings of membership, sense of belonging, and seeing one’s self as part of the campus community reflect this construct.
- **Positive cross-racial interaction**, reflecting students’ level of positive interaction with diverse peers. Items in this construct include frequencies of sharing personal feelings and problems, dining or sharing a meal, and intellectual discussions outside of class.
- **Negative cross-racial interaction**, reflecting students’ level of negative interaction with diverse peers. Frequencies of tense, somewhat hostile interactions, feeling insulted or threatened, and having guarded or cautious interactions with others are items representing this construct.
- **Social agency**, measuring the extent to which students value political and social involvement as a personal goal. Items include participating in a community action program, helping to promote racial understanding, and being a community leader.

*These constructs are graphed based on scaled scores*
• Civic awareness, which represents changes in students’ understanding of the issues facing their community, nation and the world. Understanding of national issues, global issues, and problems facing the community are the representative items for this construct.

• Leadership, which measures students’ beliefs about their capability of, development, and experiences as a leader. Leadership items include self-rated leadership ability, effective leadership of a group to a common purpose, and experience as a leader of an organization.

• Pluralistic orientation, which measures skills and dispositions for living and working in a diverse society. Items include such as self-ratings of tolerance of others with different beliefs, ability to work cooperatively with diverse people, and ability to discuss and negotiate controversial issues.

• Civic engagement, which reflects how students are motivated and involved in civic, electoral, and political activities. Importance of working on a state, local, or national political campaign, demonstrating for a cause, and keeping up to date with political affairs are included in this construct.

**Differences: Men and Women**

Overall, men and women reported similar scores on most of the social items and constructs. Women reported significantly higher scores on the Social Agency and Civic Awareness constructs, while men self-reported a higher Social Self-Concept construct score. The groups did not differ on construct scores of Sense of Belonging, Pluralistic Orientation, Leadership, or Civic Engagement. Men responded with higher scores when asked about their ability to discuss and negotiate controversial issues and about administration’s response to incidents of sexual assaults, both significantly higher than women. However, when examining campus satisfaction, women reported a significantly higher sense of community among students.

**Differences: Race/ethnicity**

When considering racial/ethnic groups, other domestic students reported significantly less feelings of discrimination and less racial tension, items where international students reported the highest levels. Under-represented minority students are significantly less satisfied with the racial/ethnic diversity of the faculty, an area international students rated highly. No significant differences were found on satisfaction.
with racial/ethnic diversity of the student body, ease with which students develop close friendships with other students, and self-reported abilities to discuss and negotiate controversial issues. Positive cross-racial interactions were significantly greater for under-represented minority students than international students, while negative cross-racial interactions were significantly greater for international students than for other domestic students.

The constructs of Social Agency, Civic Awareness, Civic Engagement, and Pluralistic Orientation showed no significant differences between groups, but in all cases these were greater for students in the under-represented minority classification. Under-represented minority students also recorded the highest Sense of Belonging construct score, as well as a greater sense of community among students and respect for expression of diverse beliefs, though these are not statistically significant. Scores across all three groups were almost identical for the items addressing a sense of belonging to this campus, identifying as part of the campus community, and feeling valued as a member of CWRU.

![Graph showing differences between groups for various constructs](image)

*These items are scored from 1 (Low) to 5 (High)*

*These constructs are graphed based on scaled scores*
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**Overall Satisfaction**

The final set of items related to students’ overall satisfaction. The individual items examined included students’ responses to:

- I would recommend this college to others
- If you could make your college choice over, would you still choose CWRU?
- I feel I am a member of this college
- Overall college experience
- Overall sense of community among students
- I feel valued at this institution

Student satisfaction was also investigated through the Overall Satisfaction construct score, which serves as the unified measure of students’ satisfaction with the college experience. Items comprising this construct include satisfaction with the overall college experience, overall quality of instruction, and overall academic experience.

**Differences: Men and Women**

Men and women did not differ in their likelihood to choose CWRU if they could make their college choice over, likelihood of recommending CWRU to others, their sense of belonging or feelings of membership to CWRU. Women did report a greater overall sense of community among students, as well as significantly higher satisfaction with their overall college experience, and they recorded higher Overall Satisfaction construct scores. Taken together, women perceive a greater sense of community and are, holistically, more satisfied overall than men.

**Differences: Race/ethnicity**

Overall satisfaction showed minimal differences between the racial/ethnic groupings. Satisfaction with the overall college experience was rated highest by under-represented minority students, willingness to recommend CWRU to others was rated highest by other domestic students, and international students were most likely to choose CWRU if they could make their choice over. In all cases, the differences were small and not significant, but reflect consistency in overall satisfaction of CWRU students. Further, the Overall Satisfaction construct scores were consistent across groups with under-represented minority students (50.98) scoring slightly higher than other domestic students (50.97) and international students (49.85).