

2019 XSEDE Staff Climate Study

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XSEDE

Extreme Science and Engineering
Discovery Environment



Supported by OAC 15-48562.

Purpose

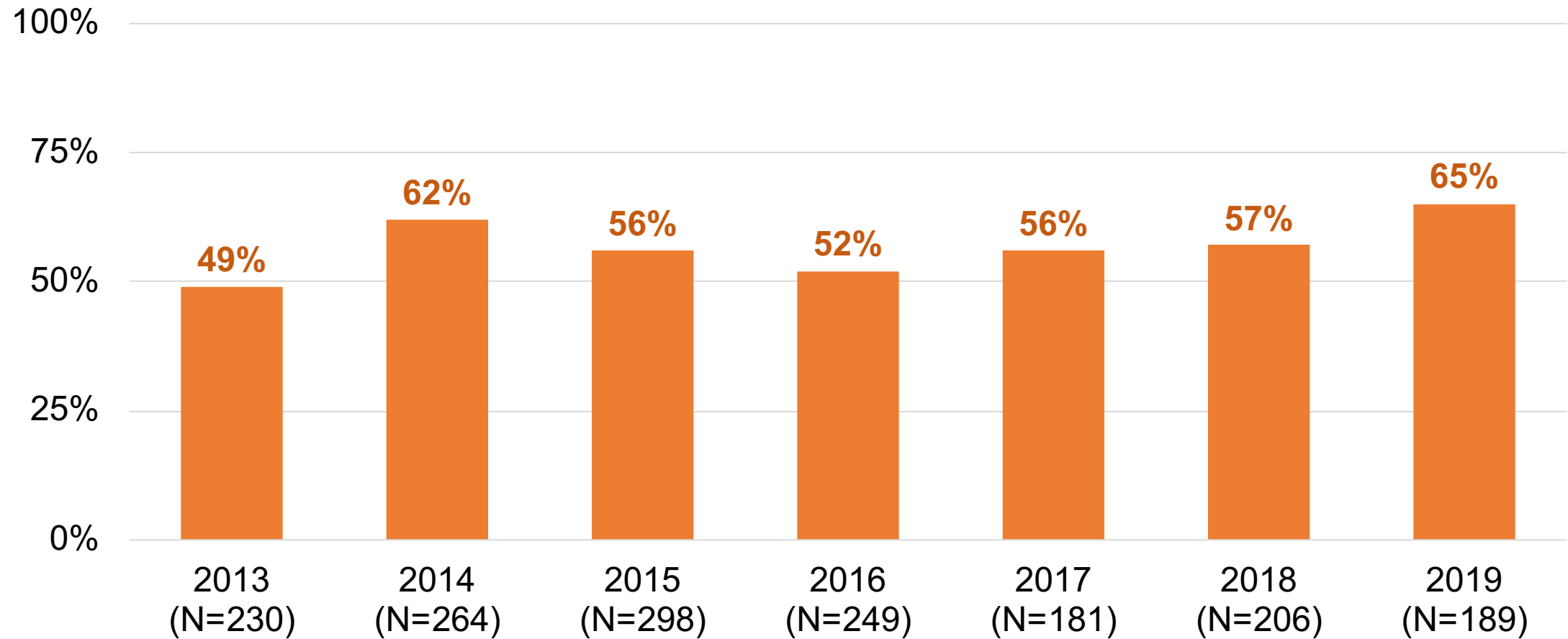
Support XSEDE's organizational health by providing data over time to:

- Better understand current working conditions
- Recognize successes and areas of concern
- Develop responses to improve working conditions
- Improve workplace efficiency and satisfaction

Method

- Annual on-line Survey to all XSEDE staff and leadership
 - Core items
 - XSEDE specific items
 - May-June administration
- Disaggregation by Level 2, 3, site, FTE, length of employment
 - Special requests by L2 and L3 managers
- **EXTENSIVE** dissemination and interaction around results
- Documentation of XSEDE response to results
 - Quarterly Meetings

Study Response Rates

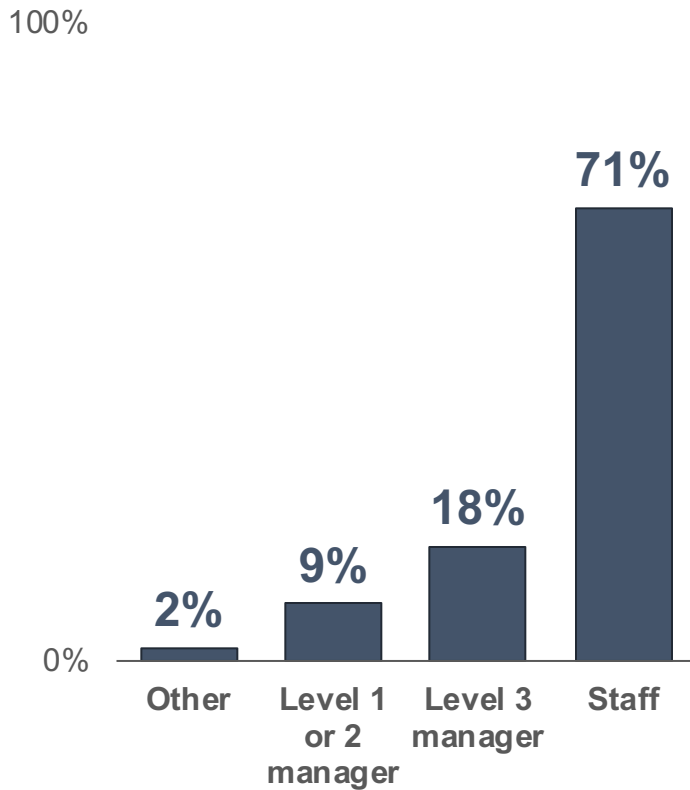


2019 Study Response Rate Explained

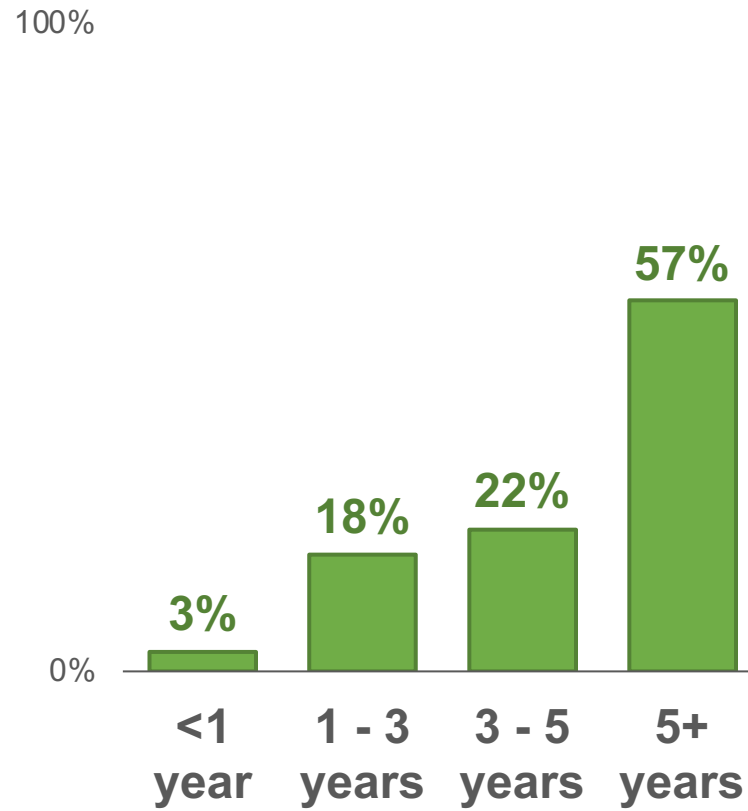
- Total response to 2019 survey was 123/189 (65%)
- In 2019, staff totals were generated by staff in the XSEDE budget office based on PY8 billing history.
 - 195 emails were provided
 - 3 opted out
 - 3 email addresses undeliverable
 - 66 no response
 - *123 responses*
 - 8 insufficient responses
 - **115 staff responses analyzed**

Respondent Demographics, N=115

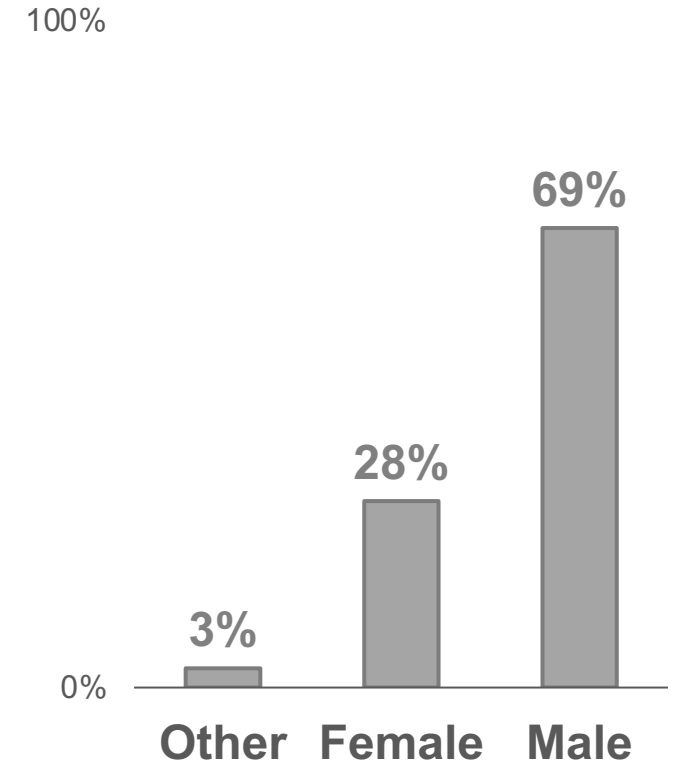
Staff Level (Self Report)



Length of Employment (Self Report)



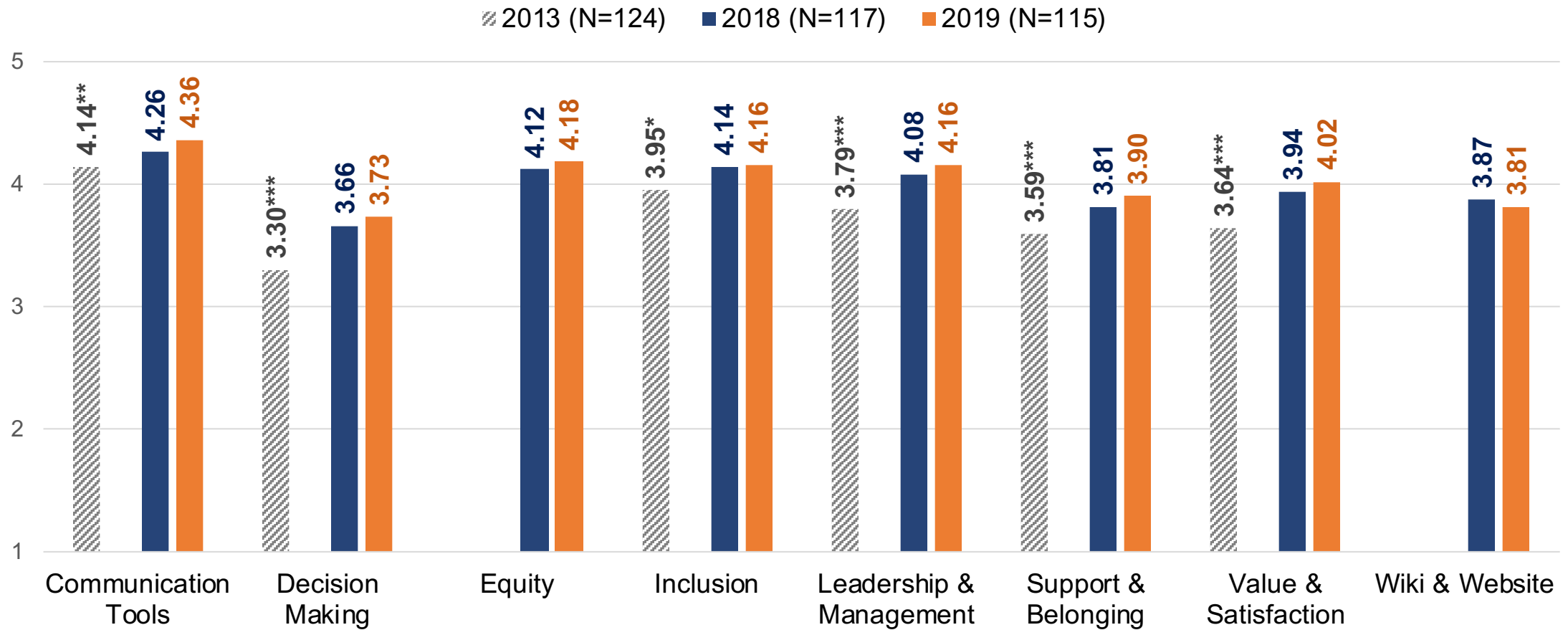
Gender (Self Report)



2019 General Findings

- All but one (Wiki & Website) index increased in ratings from 2018 to 2019, however none of these differences were found to be statistically significant. The highest gains were made in Communication Tools and Support & Belonging.
- Five of the eight study dimensions achieved their highest ratings to date. These include Communication Tools, Decision Making, Leadership & Management, Support & Belonging, and Value & Satisfaction.
- Staff were more satisfied with the progress their program area is making towards their goals ($p=.032$) and increasingly believe some of their best work has been done on XSEDE ($p=.021$).
- All groups rated Equity positively (above a 3.7), though some Gender and L2 differences exist. Racial and ethnic URMs, however, rated the index similarly to majority groups.
- Comments suggest a lack of awareness regarding staff training resources for internal XSEDE communications and management (i.e. Jira, Confluence Wiki, and performance evaluations).

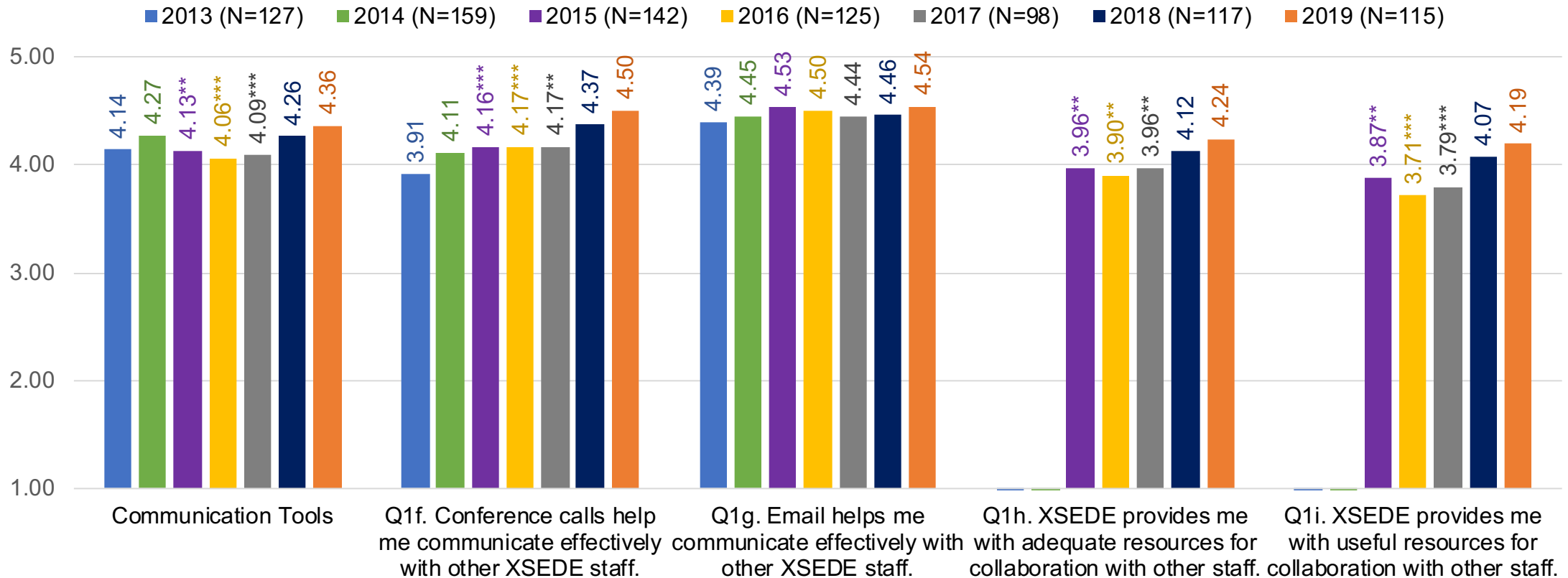
2013 (baseline), 2018, and 2019 Index Scores (Scale 1 – 5)



* $p < .05$, ** $p < .01$, *** $p < .001$

Communication Tools: Like previous years, this index continues to be among the highest rated. Significantly higher ratings were observed in 2019 compared to 2015-2017. Changes in the effectiveness of conference calls (Q1f) suggest the project's move to Zoom was worthwhile.

Communication Tools Index Response Over Time, (Scale 1, Strongly Disagree – 5, Strongly Agree)



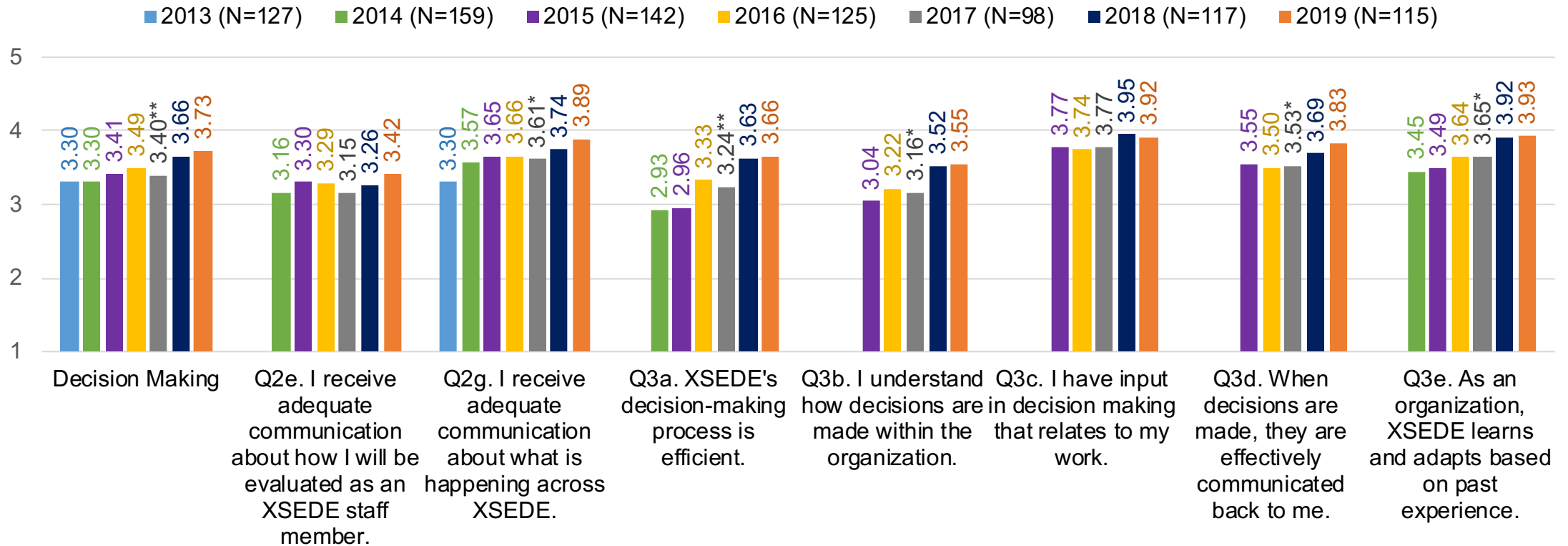
* $p < .05$, ** $p < .01$, *** $p < .001$

Some staff found existing resources on XSEDE Communication Tools beneficial while others made requests for training in these systems.

- “The resources available through Confluence and JIRA have helped a lot. Anything that can help further streamline the use of management tools like Confluence/JIRA for tracking projects, keeping records, following up with staff, and project reporting will reduce overhead and allow me to focus on other parts of my work.”
- *Regarding training requests:* “Secondary Internal XSEDE services; Understanding the use of and management of, areas such as Confluence, XSEDE Wiki, XSEDE Ticketing System”

Decision Making: Significantly higher ratings were given to this dimension compared to 2017. In particular, communication of decision making outcomes (Q2G, Q3b, & Q3d) has improved considerably across XSEDE over the past two years.

Decision Making Index (non role specific) Response Over Time
(Scale 1, Strongly Disagree – 5, Strongly Agree)

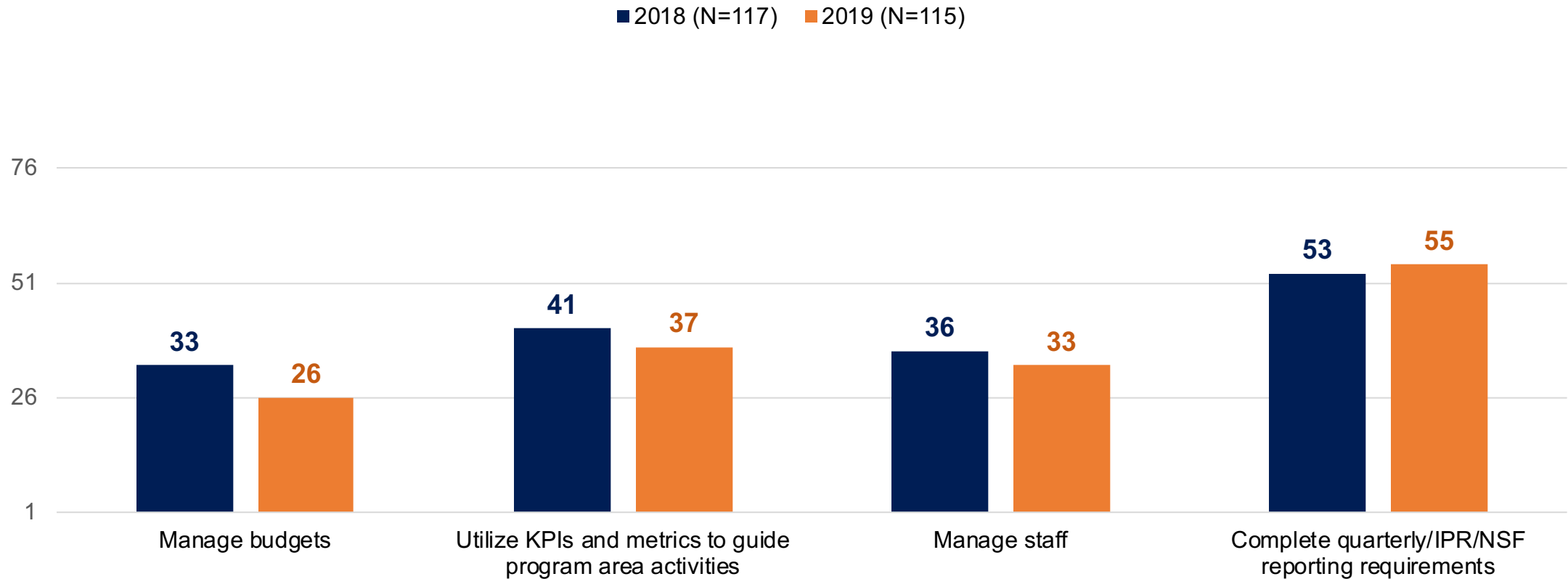


* $p < .05$, ** $p < .01$, *** $p < .001$

Note that role specific index items are displayed on future slide

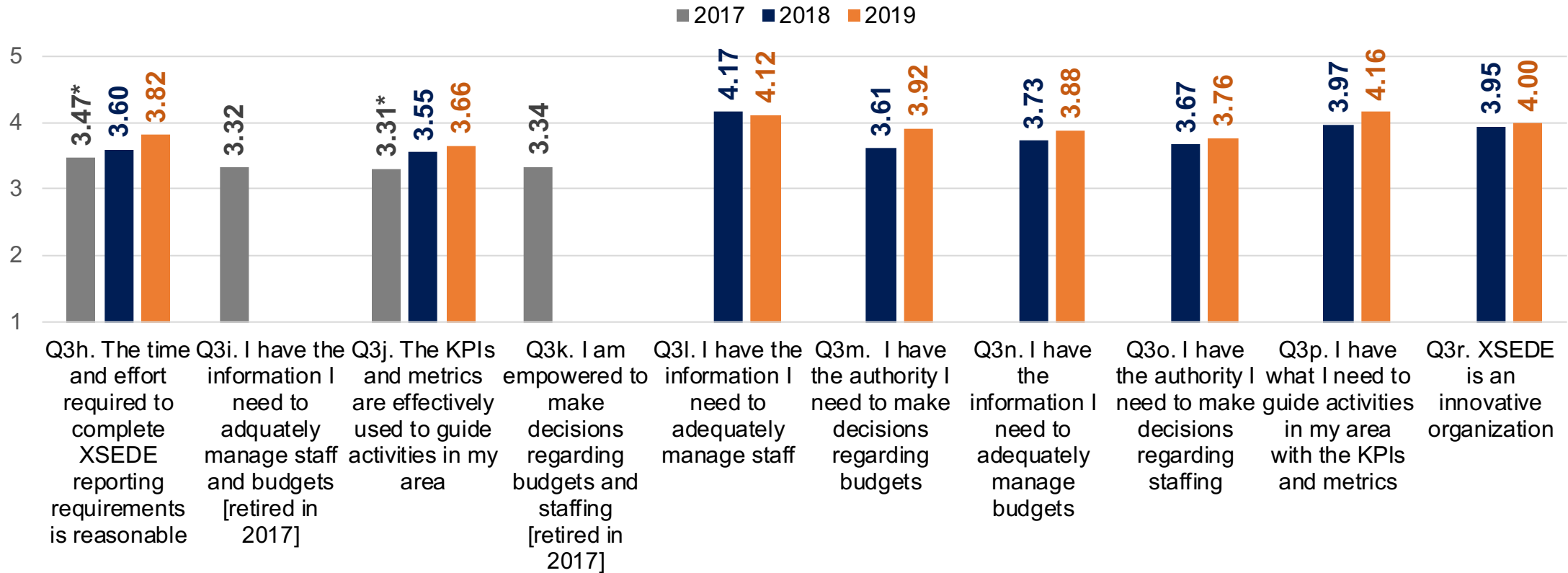
In 2018 item Q5 “Which of the following responsibilities are part of your current role in XSEDE2.0? (Select all that apply)” was added prior to role-specific decision making items regarding budgets, metrics, staffing , & reporting. This year, nearly one third (32%, 37/115) of respondents and most (90%, 28/31) L1/2 – 3 managers who responded report utilizing KPIs and metrics to guide program area activities.

2018 - 2019 Count of Self Reported XSEDE2.0 Responsibilities



Decision Making: At the project's request, items Q3l-3p & Q3r were added to the decision making index in 2018. These items were only visible to respondents with related responsibilities (previous slide). Nearly all items increased in 2019. Notably, Q3h respondents (N=56) found the time and effort to complete reporting requirements significantly improved compared to 2017. Most staff (Q3j, N=100) also find their area activities are data driven.

Decision Making (Role Specific) Index Response Over Time

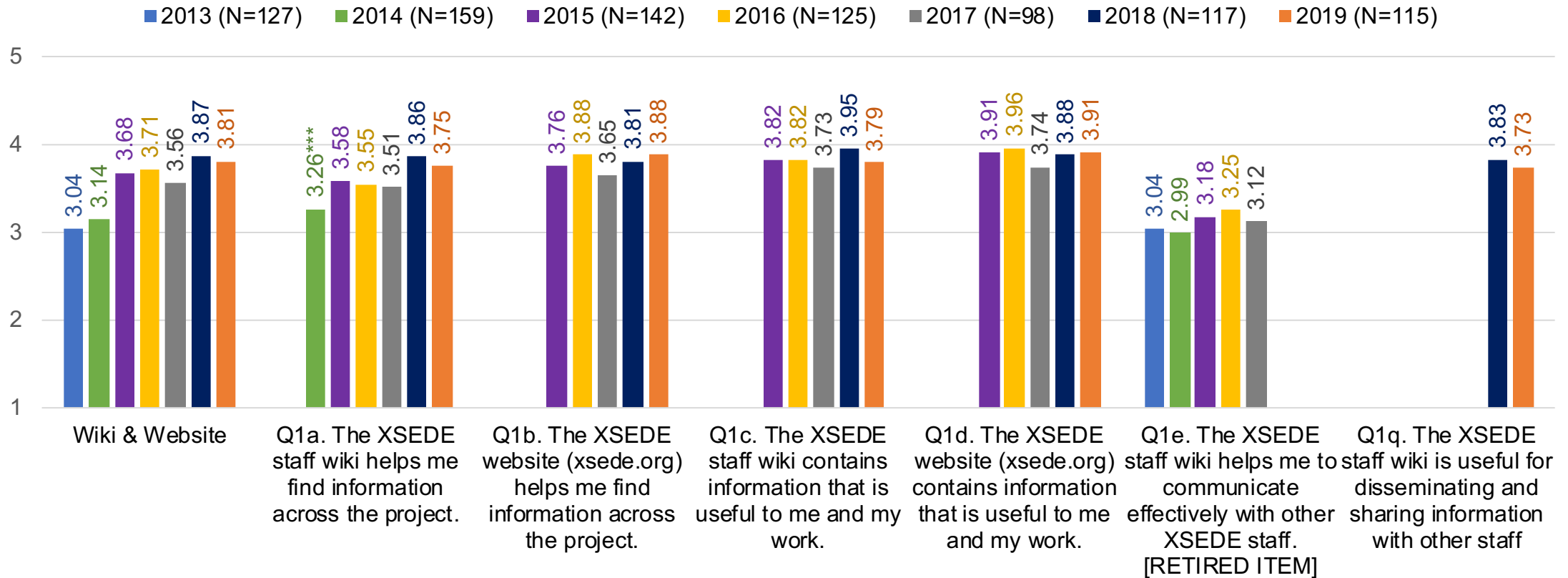


* $p < .05$, ** $p < .01$, *** $p < .001$

Note that non-role specific index items are displayed on a previous slide

Wiki & Website: ratings of this index decreased overall in 2019 compared to 2018 though this was not statistically significant. Ratings regarding the website increased while wiki items decreased. Comments on the following slide suggest lower wiki ratings may be due to lack of Confluence knowledge and its integration in project reporting.

Wiki & Website Index Response Over Time, (Scale 1, Strongly Disagree – 5, Strongly Agree)



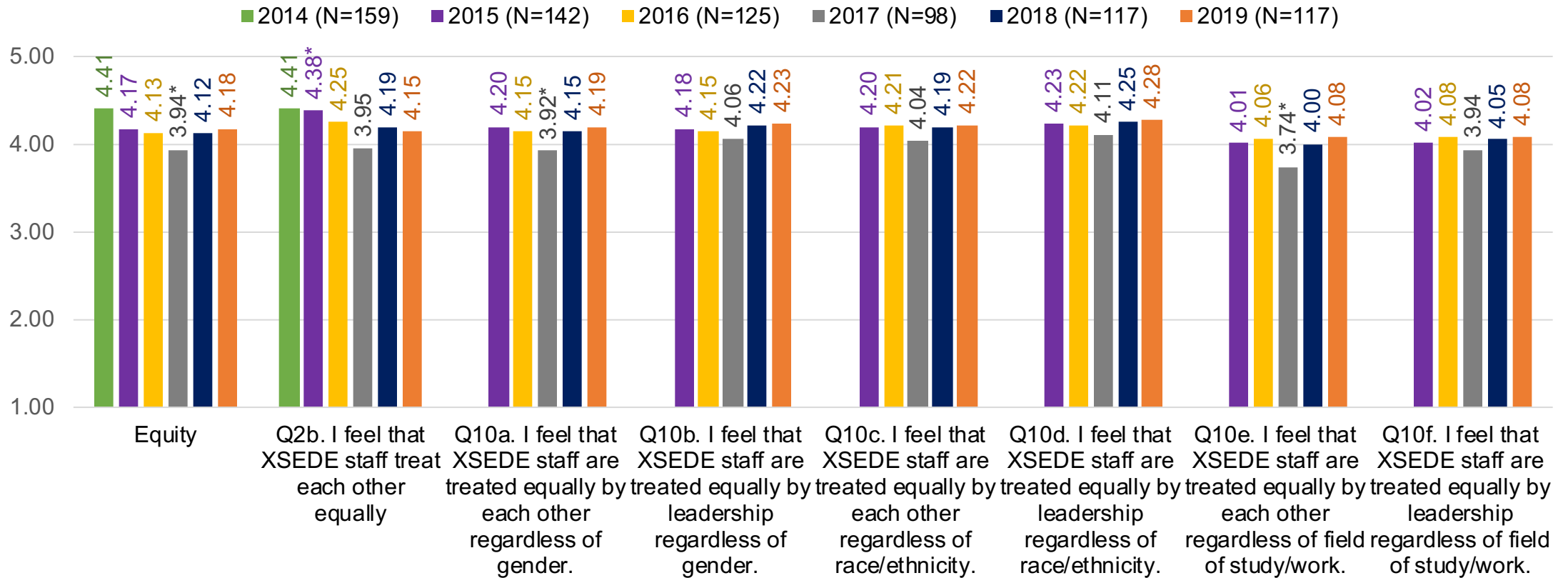
* $p < .05$, ** $p < .01$, *** $p < .001$

Wiki & Website quotes tend to cite the wiki together with project reporting and a need for more training resources.

- “When given a task, I should be able to bring up one or two windows to get the work done. But the way it's spread out within the Wiki and Jira and Google docs, I have like 5-6 windows to work on and it gets unwieldy.”
- “I went to a 2 hour training session to learn how to use confluence, and found I forgot all the details shortly afterward,..... Reporting for us should be simple, we shouldn't have to spend time using/figuring out a system that is designed for management.”

Equity: Unlike previous years where equity items trended down, in 2019 most equity item ratings increased and two items (Q10a & Q10e) were rated significantly higher than 2017. While all groups rated the index positively, differences were found between women (M=3.99) and men (M=4.29, $p=0.04$). Notably, URMs rated the index similar to majority groups (URM M=4.13, SD=0.77, N=11, $p=0.72$).

Equity Index Response Over Time, (Scale 1, Strongly Disagree – 5, Strongly Agree)



* $p < .05$, ** $p < .01$, *** $p < .001$

Comments regarding Equity typically cite the lack of diversity in XSEDE. Some also note instances of marginalization.

- “There is so little diversity in the XSEDE staff that equity simply isn't possible. I don't see--and haven't experienced--active discrimination, but the lack of diversity itself is discriminatory because it draws attention to anyone different. I've observed that people whose primary language isn't English have a much harder time being understood on teleconferences, even when they're making good points.”
- “There are still too many occasions when thoughtless comments are made and when called out no apologies or reaction from management. We still need to continue to work on the cultural competencies of the XSEDE management and staff. It was very uncomfortable to hear [offensive] words used in a professional setting... However, the reaction by some staff that those terms are not racist was the most disturbing. In calls and emails, some of us are continuously marginalized”

Staff Training: Comments suggest a lack of awareness regarding staff training resources for XSEDE communication mechanisms. Comments cite Jira, Confluence, and performance evaluations as main areas of confusion.

Training

- “If there is training available, I'd like to find out where it is. This is the first time I've heard of it.”
- “The training resources aren't designed for my work area, which is a support function and non-computational.”
- “Suggested Training Topics: -XSEDE Infrastructure Overview; More than just an ORG chart, but a talk, dialogue and discussion of how XSEDE is laid out.. -Allocations Overview; Understanding the different allocations (start-up, education, research, CC). Understanding renewals, advances, supplementals and transfers... Overview of the XSEDE Portal and it's various functions. Who controls changes and administrates particular areas.”

Staff Training Comments: Performance Evaluations

Performance Evaluations

- “Effectively communicating to home institution the positive impact I have on the project so that when I am evaluated, that is taken into consideration when compensation is considered [would help me complete my work more effectively]. I feel at a disadvantage when it comes to performance evaluations and that lack of awareness of the positive impact of my work might not be taken into consideration when it comes to receiving salary increases (compared to other colleagues).”
- “I don't know of any feedback given to my (non-XSEDE) supervisor from my XSEDE management.”
- “I have *no* idea how I am or will be evaluated as an XSEDE staff member, beyond general expressions of satisfaction from my immediate supervisors. I am ok with this - but the question implies that there exists some more official form of evaluation, which would be somewhat disconcerting to be unaware of.”

Similar to 2018, management training was requested by staff at all levels.

- “Management training”
- “I’ve struggled with creating a strong team dynamic where everyone feels bought in and connected to our L3 team. It seems like this is an issue several other groups across the XSEDE project experience as we’re a virtual organization. I’ve reached out to other folks on the project, including other L3 managers, to see how they’ve tried to address this issue. While their insights have been helpful, I wonder if there isn’t a better way that we could be sharing our tips/tricks/insights for building a strong culture within a virtual organization? I imagine this would be an especially helpful resource for new L3 managers.”
- “There are no real training opportunities offered to staff in non-leadership roles. PERC and other XSEDE related conferences and meetings are offered to leaders and managers only. This is a missed opportunity for individuals involved in the XSEDE program from a staff level, as staff may have a different perspective due to a variance of job duties and user interaction. There are multiple individuals who have been involved with XSEDE in non-leadership roles for years. It would be helpful if their insight and perspectives would be taken into account along with offered opportunities for professional growth.”

Comments suggest some staff feel isolated and would benefit both personally and professionally from engaging with XSEDE colleagues more often.

- “There is also little to no sense of comradery among XSEDE from an overall staff perspective. This may be facilitated by the overall lack of quality interaction of groups and staff within the XSEDE umbrella. e.g. Little to no opportunity to "shake hands with", or "put a name with a face" of those you may interact with.”
- “Sabbatical (quarterly) to work in a different group and come back with fresh new ideas.”
- “I would like to see an exchange program between sites-- HPC members from one site visit for 1-3 months another site. I have done this before with a non-XSEDE site, and it was great!”
- “I'd benefit from knowing more about what other teams and staff areas do and what their experiences are.”
- “Some institutionalized pair programming wouldn't hurt once and a while”

2019 Recommendations

- **Training & Human Resources:** Improve awareness regarding optional staff evaluations and training on project management tools. Consider coupling implementation of any new processes with training available to all XSEDE staff. Identify and advertise high quality management training resources for interested staff.
- **Unity:** Reduce staff isolation by offering more opportunities to engage with XSEDE colleagues. Consider piloting optional programs like “Catch Up with a Colleague” where staff can informally engage with co-workers they may not normally get to interact with. Promote and reward cross-area collaborations with project-wide recognition and support for dissemination activities (i.e. conference presentations, seminars, training workshops, etc.).

Discussion

- How can the annual Climate Study be better leveraged during the remainder of XSEDE2.0?
 - How can the study be leveraged to aid in transition planning for XSEDE? Or NSF?
 - Should we be conducting the analysis any differently (i.e. different group comparisons)?