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## UMass ADVANCE STEM Decision-Making Findings 2022

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## UMass ADVANCE Faculty Survey Shared Decision-Making Findings

Shared decision-making refers to faculty having opportunities to engage in discussions, voice their opinions, and have those opinions recognized as departments make decisions. While the university has a long history of faculty-led governance, there has always been substantial variability between departments. In addition, the pandemic has depressed opportunities for faculty to work together to make formal and informal decisions.

In 2022, 273 UMass faculty from 32 STEM departments in CICS, CNS, College of Engineering, and CSBS responded to the ADVANCE survey. In this research brief, we describe some of the key findings from this survey, focusing on patterns among STEM faculty by gender. We also explored college level data and found that there are not many differences by college. CICS faculty, who engage in weekly faculty meetings, rate the fairness and transparency of their departmental decision-making relatively higher than faculty in other colleges. CICS faculty are also more likely to believe their tenure and promotion processes are clear and consistent.

By faculty career stage, we found that **rank plays an important role in shaping the perceptions of departmental decision-making**. Junior faculty believe that departmental decision-making is less transparent to them, and the tenure and promotion processes are less clear and transparent. Non-tenure track faculty are also less likely to see decision-making in the department as fair and transparent. Yet, whether faculty joined UMass before or since 2019 does not shape their experiences around decision-making.

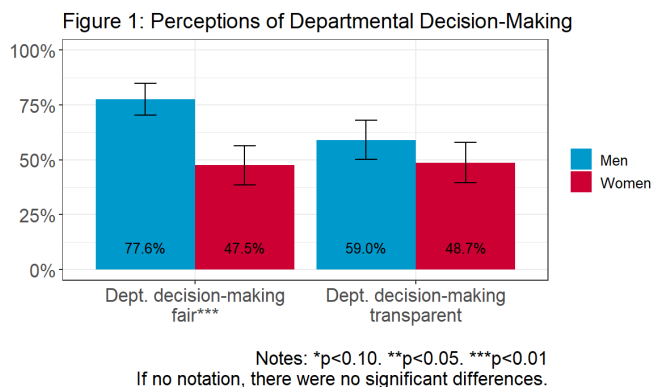
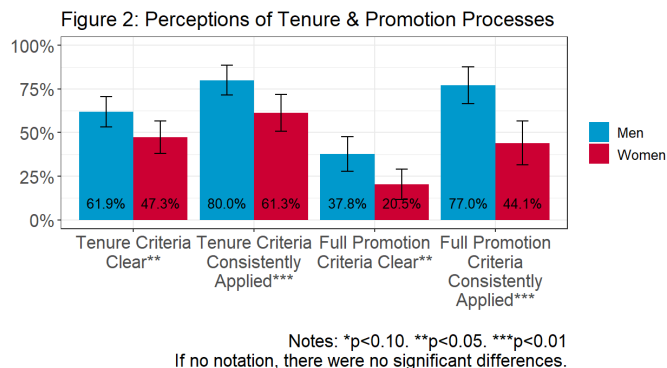


Figure 1 summarizes faculty members' perceptions of departmental decision-making processes. The majority (63%) of STEM faculty believe that the decision-making process in their department is fair, but fewer (52%) think that these processes are transparent. Thus, while many believe that the department works to make decisions fairly, how those decisions are made is not always clear. Gender significantly affects these perceptions: **47.5% of women STEM faculty report that departmental decision-**

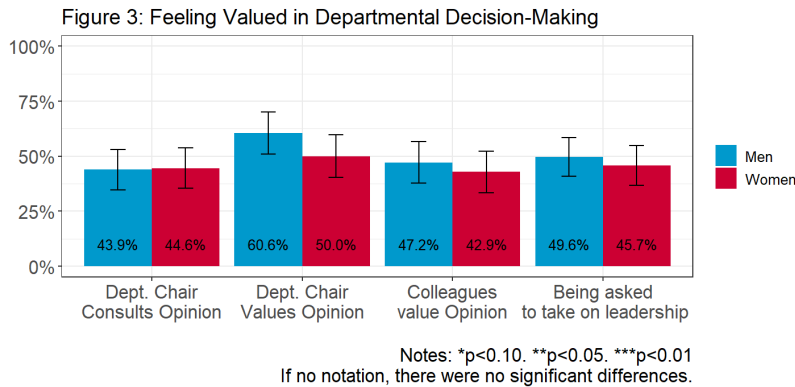
**making is fair**, as compared to 77.6% of men ( $p<0.01$ ). We also observe marginal gender differences in decision-making transparency ( $p<0.1$ ).

The survey also asked faculty about their perceptions on specific personnel procedures in their departments and programs, including tenure and promotion to Full Professor. Figure 2 suggests significant gender differences in the perceptions of promotion processes. **Women STEM faculty are significantly less likely than men to believe that the tenure criteria is clear** ( $p<0.05$ ), and **they are also significantly less confident that the tenure criteria are applied consistently** ( $p<0.01$ ). In terms of promotion to



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Full Professor, women associate professors and full professors are significantly less clear on the criteria ( $p < 0.05$ ), and they are significantly less likely to believe that these criteria are consistently applied ( $p < 0.01$ ), compared to men associate and full professors. Overall, we observe **substantial gender differences in the perceptions of consistent tenure and promotion criteria** and **gender plays a significant role in how faculty feel about decision-making processes** for departmental personnel procedures.



The survey also includes measures of how engaged faculty feel in departmental decision-making processes, based on their interactions with department chairs/heads and colleagues. The good news is that, as shown in Figure 3, we do not see significant gender differences in feeling valued in decision-making. On average, 54% of STEM faculty report that their chairs value their

opinion while only 43% of them report that their chairs actually consult their opinion. Similarly, only 43% of STEM faculty report that their colleagues value their opinion for departmental decision-making. Lastly, around 46% of STEM faculty report that they are asked to take on leadership roles. We suspect that these numbers reflect how the lack of interaction among faculty, due to changes in response to the pandemic, has made decision-making processes less consultative.

**Implications for interventions:** Meaningful interactions among faculty are critical to creating democratic decision-making. ADVANCE provides [tools](#) around how to make decisions fairly, including considering different approaches to bylaws and voting, and will continue to promote these resources with an aim to strengthening decision-making on campus. ADVANCE also provides [tools](#) for inclusive mentoring, which plays a key role in ensuring that faculty understand how personnel decisions are made, as well as [tools](#) for inclusive evaluation, which plays a key role in ensuring that personnel decisions are made fairly. ADVANCE will continue to provide support to leaders, to ensure that they have tools to engage in inclusive leadership.

*Through the power of collaboration UMass ADVANCE provides knowledge driven research and solutions for faculty equity. ADVANCE cultivates faculty equity, inclusion and success by providing the resources, recognition and relationship building that are critical for equitable and successful collaboration in the 21st century academy. UMass ADVANCE is funded by the National Science Foundation (NSF), which is advancing gender and racial equity for faculty in science and engineering. For more information on UMass ADVANCE go to: <https://www.umass.edu/advance/home>*

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