

## **LONGITUDINAL ASSESSMENT OF ORGANIZATIONAL CLIMATE IN THE SOCIETY OF AMERICAN GASTROINTESTINAL AND ENDOSCOPIC SURGEONS: COMPARISON OF 2017 AND 2023 CLIMATE SURVEYS**

**AUTHOR LIST:** Jennifer Colvin, Callie Van Winkle, Charlotte Horne, Denise Nemeth, Dana Telem, Jenny Shao

**INTRODUCTION:** The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) has long prioritized fostering a diverse, equitable, and inclusive professional environment. In 2017, SAGES conducted its first organizational climate survey to assess members' experiences with inclusivity, mentorship, bias, and overall satisfaction. Overall results showed a positive climate; however, several key issues were identified from the quantitative survey as well as the free text responses. A follow-up survey in 2023 was conducted to evaluate the impact of improvement initiatives and identify ongoing areas for development.

**METHODS:** This cross-sectional study utilized a validated climate survey instrument, adapted from the ADVANCE University of Michigan tool, to assess SAGES' organizational climate in 2023. Domains included overall society experience, mentorship, leadership opportunities, inclusivity, and experiences with bias or discrimination, rated on scale from 0 to 10, with 10 being completely agree. Responses were collected from SAGES committee members via an anonymous online survey. Data were analyzed using descriptive statistics and compared with 2017 results. Subgroup analyses examined differences by gender, race/ethnicity, sexual orientation, and practice type. Statistical tests included chi-squared, Wilcoxon rank-sum, one-way ANOVA, and Kruskal-Wallis as appropriate. Thematic analysis was performed on qualitative free-text responses.

**RESULTS:** Survey response rate was 27.1% (203/747). Between 2017 and 2023, there were overall trends toward improved satisfaction with SAGES membership on a 10-point Likert scale ( $7.5 \pm 2.1$  vs  $9.0 \pm 1.3$ ,  $p < 0.01$ ), improved transparency for leadership and advancement ( $6.6 \pm 2.5$  vs  $7.8 \pm 2.5$ ,  $p < 0.01$ ), reduced discrimination based on gender ( $7.9 \pm 2.5$  vs  $8.3 \pm 2.4$ ,  $p = 0.03$ ) and race/ethnicity ( $7.8 \pm 2.6$  vs  $8.5 \pm 2.4$ ,  $p < 0.01$ ). Subgroup analysis revealed very small but persistent gaps in experiences based on gender and race/ethnicity. While overall perception of culture is very positive, there is a slight disparity in responses with females still reported slightly less positive perception overall compared to their male counterparts ( $1.7 \pm 2.5$  vs  $1.1 \pm 2.3$ ,  $p < 0.01$ ). Female respondents were also more likely to desire gender-congruent mentors ( $6.1 \pm 2.6$  vs  $5.3 \pm 2.9$ ,  $p < 0.01$ ). Racial and ethnic minorities reported higher levels of scrutiny than non-minorities, even though this rate overall was very low ( $1.9 \pm 2.5$  vs  $1.2 \pm 1.7$ ,  $p = 0.02$ ).

**CONCLUSION:** Longitudinal comparison of the 2017 and 2023 SAGES Climate Surveys demonstrates measurable improvements in members' perceptions of inclusion, satisfaction, and equity, suggesting that targeted interventions have had a positive impact. Despite these gains and overall positive perception of culture, there is still a disparity in the ways the gender and racial/ethnic minorities perceive culture within an organization. This underscores the need for ongoing, deliberate strategies to foster an environment of belonging for all members. Regular climate assessments remain essential to guide continued progress and accountability.

**Table 1. SAGES Climate Survey Results from comparing 2017 to 2023.**

Question	Total N=723 N=723	2017 N=520 N=520	2023 N=203 N=203	Trend Improved (↑) Worse (↓)	KW* p-value
Overall I am satisfied with my SAGES membership	7.91 (2.05)	7.50 (2.13)	8.95 (1.34)	↑	< 0.005
I am satisfied with my sense of being valued by the society	7.36 (2.38)	6.93 (2.44)	8.46 (1.81)	↑	< 0.005
I feel I can turn to members of the organization when I have difficulties	7.19 (2.54)	6.73 (2.58)	8.36 (2.03)	↑	< 0.005
I get along well with my colleagues	8.70 (1.50)	8.47 (1.57)	9.29 (1.10)	↑	< 0.005
My colleagues respect me as a person at SAGES	7.89 (2.10)	7.43 (2.19)	9.06 (1.24)	↑	< 0.005
My colleagues are supportive of one another as SAGES	7.90 (2.05)	7.47 (2.12)	8.99 (1.33)	↑	< 0.005
I feel I fit in well in the SAGES society	7.68 (2.24)	7.31 (2.31)	8.62 (1.70)	↑	< 0.005
I have a sense of control over my advancement in the SAGES organization	6.11 (2.75)	5.75 (2.71)	7.04 (2.63)	↑	< 0.005
I feel SAGES offers equal advancement opportunities within the society	6.51 (2.87)	6.15 (2.88)	7.42 (2.65)	↑	< 0.005
Resources and opportunities for leadership are equitably distributed among SAGES members	6.08 (2.72)	5.54 (2.62)	7.44 (2.49)	↑	< 0.005
I feel that SAGES leadership is transparent	6.95 (2.57)	6.64 (2.55)	7.75 (2.45)	↑	< 0.005

With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (Some SAGES members have a condescending attitude toward men)	2.64 (2.70)	2.85 (2.72)	2.08 (2.59)	↑	< 0.005
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (Some SAGES members have a condescending attitude toward women)	3.14 (2.86)	3.28 (2.86)	2.79 (2.85)	↑	0.06590
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (Some SAGES members have a condescending attitude toward underrepresented racial-ethnic minorities)	2.89 (2.67)	3.10 (2.66)	2.37 (2.61)	↑	< 0.005
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (Some SAGES members have a condescending attitude towards LGBTQ+ communities)	2.15 (2.52)	2.81 (2.57)	0.49 (1.36)	↑	< 0.005
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (SAGES is a society in which men feel comfortable and are included)	7.91 (2.56)	7.66 (2.56)	8.52 (2.44)	↑	< 0.005
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (SAGES is a society in which women feel comfortable and are included)	7.48 (2.48)	7.24 (2.50)	8.11 (2.32)	↑	< 0.005

With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (I have experienced discrimination based on gender at a SAGES meeting)	1.28 (2.12)	1.43 (2.18)	0.87 (1.90)	↑	< 0.005
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (I have experienced discrimination based on race/ethnicity at a SAGES meeting)	1.52 (2.36)	1.68 (2.41)	1.11 (2.17)	↑	0.007
With regard to ATTITUDES and EXPERIENCES, to what extent do you agree with the following statements: (I have experienced discrimination based on sexual orientation at a SAGES meeting)	1.18 (2.02)	1.45 (2.17)	0.49 (1.36)	↑	< 0.005

\*KW denotes Kruskal-Wallis. Scale is scored on a Likert Scale of 0-10 with 10 being completely agree. Depending on the question, either a lower or higher score could denote an improvement in culture.