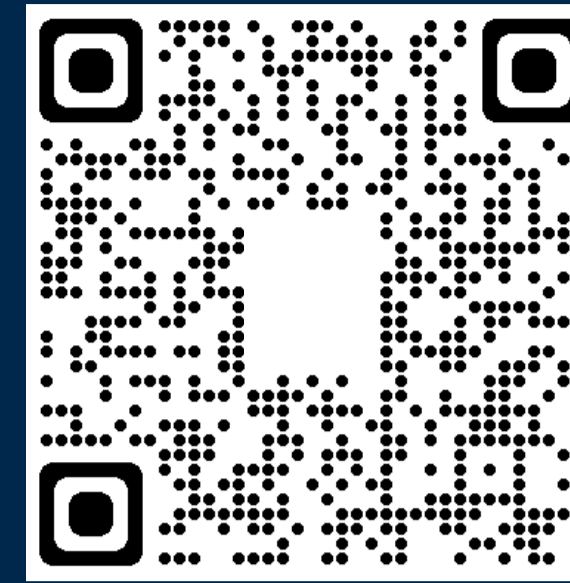


Link to procedure, survey items, and descriptive statistics



Academic Climate at Multiple Levels Mediates Marginalized Scholars' Career Attitudes and Intentions

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Background

- ❖ Despite efforts and funding dedicated to increasing diversity in academia, marginalized groups do not have equal access to success compared to majority groups with more relative privilege
- ❖ White scholars are overfunded by the NSF compared to Black and Asian American scholars [1]; disabled academics reported more disruptions to their research during the first year of the COVID pandemic [2]; and white, able-bodied, heterosexual, cis-men experience more social inclusion, respect, and career opportunities in STEM professions compared to all other groups [3]
- ❖ Person-environment fit theory [4] can help explain higher turnover for marginalized scholars who experience less inclusive climate in academia

❖ **Research question: Does climate—perceptions of inclusion in the working environment—within research groups, departments, and professional fields partially explain career attitudes for marginalized scholars?**

Method

- ❖ Surveyed 3,512 early career scholars from biology, economics, physics, and psychology departments at 94 US universities
- ❖ Responses were included in the analysis if participants were still in the department they were recruited from and completed at least 45% of the survey ($N = 3,204$)
- ❖ To examine marginalized scholars' experiences, we created a composite variable based on self-reported race, gender, socio-economic status, first generation undergraduate status, disability status, and sexual identity
 - ❖ 0 marginalized identities $n = 356$; 1 marginalized identity $n = 857$; 2 or more marginalized identities $n = 2,001$
- ❖ The survey included measures of *research group psychological safety* and *intragroup conflict*, *department climate of diversity*, and *professional field climate of scholarly inclusion* (mediators) as well as *turnover intentions*, *burnout disengagement*, and *burnout exhaustion* (outcomes)

Results: Identities to Climate

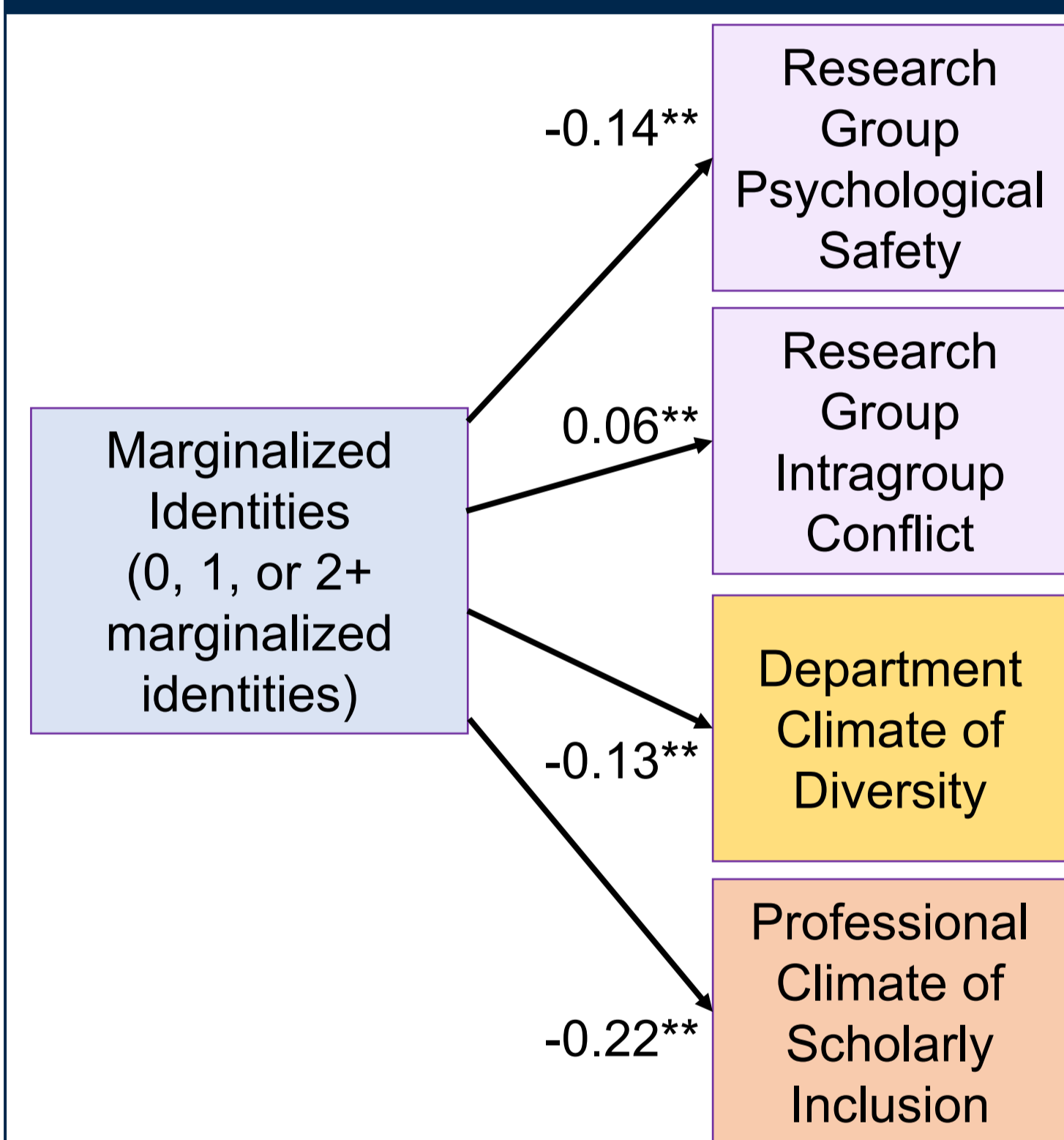


Figure 1. Paths and unstandardized coefficients from generalized structural equation model representing the relationship between marginalized identities and climate within the research group, department, and professional field. $** p < .001$

Results: Climate Variables to Outcome Variables

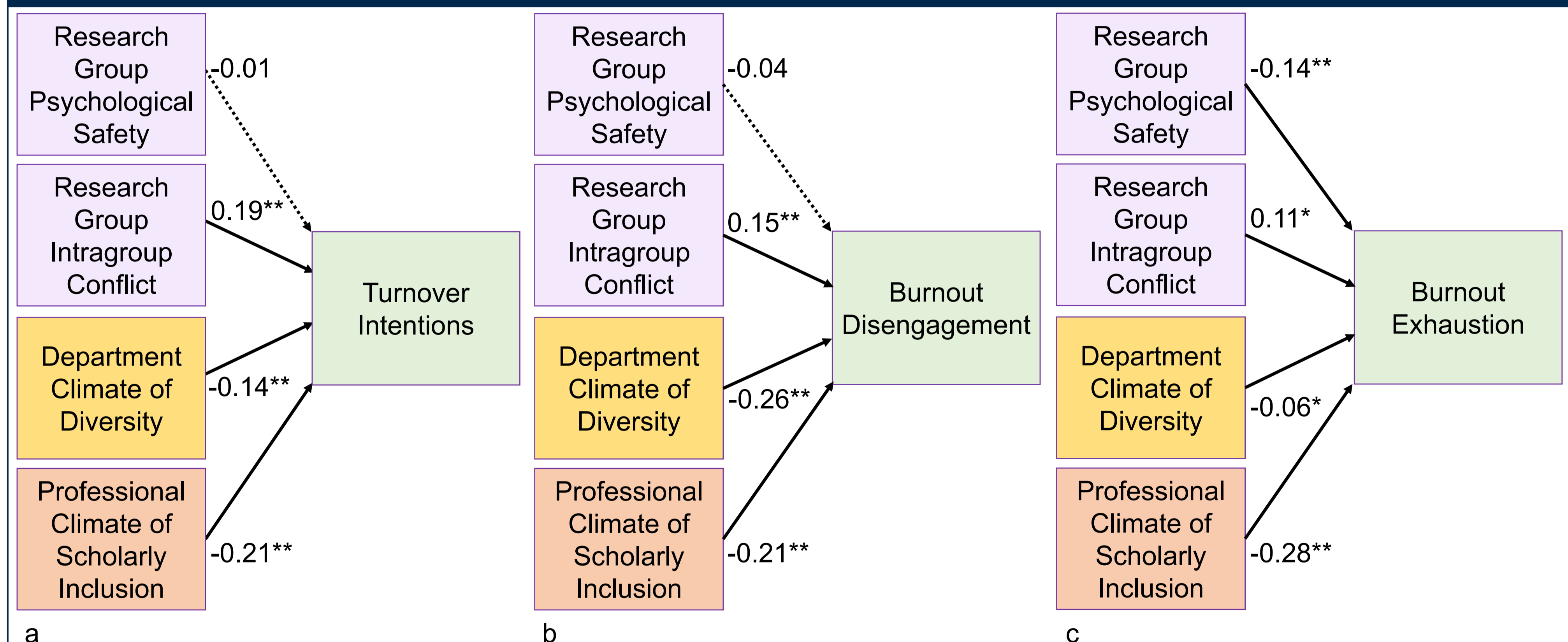


Figure 2. Paths and unstandardized coefficients from generalized structural equation models representing the relationships between climate within the research group, department, and professional field on (a) turnover intentions, (b) burnout disengagement, and (c) burnout exhaustion. Solid lines indicate significant mediators between marginalized identity status and career attitudes. Not pictured – marginalized identities paths to mediators and outcomes; career stage, professional field, and department as covariates. $* p < .01$; $** p < .001$

Discussion and Limitations

- ❖ Early career scholars with marginalized identities experienced more negative climate at all levels compared to those with no marginalized identities
- ❖ Climate at all three levels was also significantly associated with career attitudes and significantly mediated the relationship between marginalization and career attitudes
- ❖ Marginalized scholars who experience climate as more negative compared to those with more privilege may feel a discrepancy between personal values and organizational norms resulting in more disengagement
 - ❖ Positive climates at all levels, especially professional field level, is crucial for reduced work disengagement
- ❖ Though there was no relationship between psychological safety and organizational withdrawal, it does seem to help against burnout exhaustion, or the ability to decompress
- ❖ Cross-sectional design examining experiences of 4 fields only. Follow-up surveys will provide insight on long-term career decisions

Policy Implications

- ❖ Field level norms inform practices at more local levels such as within collaborations. Professional societies should promote equity and inclusion principles through their mission statement, building diverse committees, and funding equity focused research
- ❖ As research collaborations are crucial to academic science, departments and professional societies can host training and development programs on inclusive team practices such as fostering a culture of safety around sharing ideas
- ❖ Research groups can co-create team policies to enhance transparency around research practices (e.g., data sharing) and empower early-career scholars, especially marginalized scholars, in collaborations and writing

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