

Project for Scholarly Integrity

Methodology Brief: Overview

One key component of the Project for Scholarly Integrity (PSI) was a common assessment strategy designed to enable institutions to identify institutional needs, promote cross-campus dialogue about possible solutions, and compare approaches to meeting those needs with other institutions. The PSI assessment strategy builds on some of the results of [prior CGS RCR initiatives](#) and provides graduate schools with tools and resultant data to identify curricular gaps in specific graduate programs and colleges and potentially remedy differences in perception between faculty and students about the quality of RCR training.

The *Research Integrity Inventory Survey* is one of two components used in the common assessment strategy. The questionnaire includes twelve questions and 209 question items aimed at understanding: the *policy environment* within which graduate departments/programs function, *practices and procedures* in place to impart principles associated with scholarly integrity and the extent to which scholarly integrity is embedded into instruction through *Modes of Exposure*. Research partners were asked to administer the survey to one individual per graduate program who was most knowledgeable about scholarly integrity policies, practices, and curricula.¹ Typically, respondents were department chairs or directors of graduate studies. Respondents were encouraged to answer all questions to the best of their ability on behalf of the graduate institution, department, and/or program. The survey generated 240 usable responses.

The second assessment instrument used in the PSI was the *Survey of Organizational Research Climate*. This survey was adopted to assess the organizational environment for responsible research practices at the six participating institutions from the perspective of students, faculty, and other personnel. The survey used was a pre-validated version of an instrument first developed by Thrush, Putten, Rapp, Pearson, Berry, and O-Sullivan (2007) and later refined by Thrush, Martinson, Crain, & Wells (2011). The instrument was adopted by research partners with developers' permission. The survey included 63 climate items that asked respondents to respond to questions pertaining to climate on topics such as the availability and adequacy of resources and training, their own familiarity with procedures pertaining to research integrity issues, the fairness of practices and procedures in their subunit (e.g., lab or program), and perceived behaviors of colleagues. Respondents were asked to rate each climate item using a five-point scale: (1) not at all; (2) somewhat; (3) moderately; (4) very; and (5) completely. Respondents who felt that they had no basis for judging were given a sixth option for this purpose. The survey generated 21,313 responses, 14,947 of which were used for this analysis and include respondents who performed research and were either graduate students in research master's or doctoral programs, postdoctoral trainees, or faculty.

When the PSI assessment strategy was launched, it was agreed that data generated by both surveys would only be reported by broad field, subfield, or discipline level in instances where five or more institutions were represented in the dataset. Aggregate data are reported in CGS' final publication (CGS, 2012) as well as its online companion, the [PSI Dashboard](#). Data that met the five institution threshold are included in the online PSI Dashboard. Additionally, aggregate data generated by the *Survey of Organizational Research Climate* are summarized according to subscales developed by Thrush, et al. (2011) in CGS 2012. Because the PSI Dashboard is intended for a general audience beyond immediate users of the survey, and in order to provide results that are accessible and do not require users' familiarity with background on the survey and/or methodology for developing subscales, individual item responses are depicted. Guidelines for institutions considering use of these survey instruments are included in CGS' final publication (CGS, 2012).

References

- CGS (Council of Graduate Schools). (2012). [Research and scholarly integrity in graduate education: A comprehensive approach](#). Washington, DC: CGS.
- Thrush, C. R., Martinson, B.C., Crain, A.L., & Wells, J.A. (2011, March). *User's manual for the survey of organizational research climate*. Retrieved August 12, 2011 from <https://sites.google.com/site/surveyoforgresearchclimate/>
- Thrush, C. R., Putten, J. V., Rapp, C. G., Pearson, L. C., Berry, K. S., & O'Sullivan, P. S. (2007). Content validation of the organizational climate for research integrity (OCR) survey. *Journal of Empirical Research on Human Research Ethics*, 2(4), 35-52. doi:[10.1525/jer.2007.2.4.35](https://doi.org/10.1525/jer.2007.2.4.35)

¹ Each of the six participating institutions customized the questionnaire to some extent. Variations among these questionnaires were noted, and some accommodations were made to the data in order to perform certain analyses.

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Methodology Brief: Table of Valid Responses for the Research Integrity Inventory Survey

Category	Heading	Usable n
Policies	RCR Oversight Committee	239
	Policy Interpretation	239
	RCR Requirements	156
	Faculty Review	187
	Policy Review	154
Practices	RCR Forums	237
	Web resources	239
	Discussions	236
	RCR Orientation	182
	Faculty Rewards	226
Modes of Exposure	Data Acquisition	Varies by mode of delivery (e.g., advisor, courses, etc.) and perspective (student, faculty, etc.) Range is 148 – 216
	Conflict of Interest/Commitment	
	Human Subjects	
	Animal Care	
	Research Misconduct	
	Publication/Authorship	
	Mentoring Relationships	
	Peer Review	
	Collaborative Research	
	Personnel Management	
	Financial Stewardship	
Hazardous Materials		

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Methodology Brief: Table of Valid Responses for the Survey of Organizational Research Climate

Category	Heading	Usable n
Leadership	Institutional Commitment	13,709
	Institutional Communication	13,352
	Departmental Standards	12,994
	Departmental Commitment	12,755
	Commitment to Training	12,500
	Communication Consistency	12,269
	Expectation Consistency	12,294
	Advisor Commitment	12,481
Policies	Policy Accessibility	13,636
	Policy Comprehension	12,322
	Policy Usefulness	14,053
Practices and Resources	Training Effectiveness	13,726
	Accessibility of Expertise	13,703
	Openness of Discussions	12,896
	Mentoring Effectiveness	12,937
	Supervisor of Advisees	12,394
	Additional Training Needs	12,723
	Human Resources	12,720
	Technical Resources	12,393
Know-How	Conflict of Interest	14,146
	Reporting Misconduct	12,457
	Defining Misconduct	13,383
Climate	Working Relationships	12,726
	Fairness of Advisors	12,313
	Respectfulness of Advisors	12,263
	Advisor Availability	12,222
	Obligation to Report Violations	12,466
	Effective RCR Socialization	12,388