Supplemental digital content for Kaatz A, Lee Y-G, Potvien A, Magua W, Filut A, Bhattacharya A, Leatherberry R, Zhu X, Carnes M. Analysis of National Institutes of Health R01 critiques, impact, and criteria scores: Does the sex of the principal investigator make a difference? Acad Med. 2016;91.

## Supplemental Digital Appendix 1

Coefficients (and Standard Errors) for Logit and OLS Regression Models of Word Category Differences Between Male and Female PIs' Application Critiques, Adjusted for Differences in Experience Level, R01 Type, Funding Outcome, and Priority Scores, from a Study of 739 NIH R01 Grant Critiques and Scores, University of Wisconsin-Madison, Fiscal Years 2010–2014<sup>a</sup>

	Ability	Achievement	Agentic	Negative eval.	Positive eval.	Research	Standout adj.					
Coefficients (and standard errors) for logistic regression models <sup>a</sup>												
	n =670	n = 670	n = 670	n = 670	$\mathbf{n} = 670$	n = 670	n = 670					
PI sex	0.09 (0.23)	0.17 (0.28)	0.18 (0.27)	0.24 (0.26)	0.20 (0.28)	0.19 (0.28)	-0.06 (0.21)					
Coefficients (and standard errors) for OLS regression models <sup>a</sup>												
	n = 563	n = 509	n = 562	n = 496	n = 560	n = 550	n = 564					
PI sex	0.06 (0.08)	0.01 (0.04)	-0.02 (0.06)	0.08 (0.06)	$-0.10^{b}(0.04)$	0.05 (0.05)	$-0.20^{c}(0.07)$					

Abbreviations: PI indicates primary investigator; NIH; National Institutes of Health; OLS, ordinary least squares.

aVariables are coded as follows: PI sex, M = 0, F = 1; Exp level, Exp Invst . =0, New Invst. = 1; R01 Type, Type1/new project = 0, Type 2/renewal = 1; Funding outcome, Unfunded = 0, Funded = 1; Logit regression models assess significant differences in the extent to which words from a given category occur in critiques by group; OLS regression models assess significant differences in the levels of words from a given category in critiques by group, thus, there is a reduced N to only target critiques that contain words from our categories.

<sup>&</sup>lt;sup>b</sup>Difference between groups is significant at the P < .05 level.

<sup>&</sup>lt;sup>c</sup>Difference between groups is significant at the P < .01 level.

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## Supplemental Digital Appendix 2

Coefficients (and Standard Errors) for Logit and OLS Regression Models of Word Category Differences in PIs' Application Critiques as an Effect of PI Sex and Application Type, Adjusted for Differences in Experience Level, Funding Outcome, the Interaction Between PI Sex and Experience level, the Interaction between PI Sex and Funding Outcome, and Priority Scores, from a Study of 739 NIH R01 Grant Critiques and Scores, University of Wisconsin-Madison, Fiscal Years 2010–2014<sup>a</sup>

	Ability	Achieve	Agentic	Negative Eval.	Positive Eval	Research	Standout Adj.			
	Coefficients (and Standard Errors) for Logistic Regression Models <sup>a</sup>									
	n = 670	n = 670	n = 670	$\mathbf{n} = 670$	$\mathbf{n} = 670$	n = 670	n = 670			
PI Sex	0.13 (0.52)	0.15 (0.67)	0.14 (0.66)	0.40 (0.68)	0.01 (0.67)	0.14 (0.67)	-0.44 (0.41)			
R01 Type	-0.51 (0.26)	-0.36 (0.29)	-0.36 (0.30)	-0.26 (0.33)	-0.46 (0.29)	-0.41 (0.29)	-0.22 (0.29)			
PI Sex × R01 Type	1.21 <sup>b</sup> (0.48)	0.74 (0.62)	0.81 (0.60)	0.76 (0.62)	0.83 (0.62)	0.80 (0.61)	1.24 <sup>b</sup> (0.50)			
Coefficients (and Standard Errors) for OLS Regression Models <sup>a</sup>										
	n = 563	n = 509	n = 562	n = 496	n = 560	n = 550	n = 564			
PI Sex	0.01 (0.15)	0.03 (0.09)	-0.13 (0.12)	0.23 (0.13)	$-0.19^{b}(0.08)$	0.02 (0.09)	-0.09 (0.15)			
R01 Type	0.11 (0.12)	0.03 (0.05)	0.08 (0.07)	0.03 (0.10)	$0.13^{b}(0.06)$	-0.02 (0.06)	0.16 (0.12)			
PI Sex × R01 Type	-0.02 (0.16)	-0.01 (0.09)	0.01 (0.12)	-0.21 (0.15)	-0.09 (0.09)	0.01 (0.09)	0.04 (0.13)			

Abbreviations: PI indicates primary investigator; NIH; National Institutes of Health; OLS, ordinary least squares.

<sup>&</sup>lt;sup>a</sup>Variables are coded as follows: PI sex, M = 0, F = 1; Exp level, Exp Invst. = 0, New Invst .= 1; R01 Type, Type1/new project = 0, Type 2/renewal = 1; Funding outcome, Unfunded = 0, Funded = 1; Logit regression models assess significant differences in the extent to which words from a given category occur in critiques by group; OLS regression models assess significant differences in the levels of words from a given category in critiques by group, thus, there is a reduced N to only target critiques that contain words from our categories.

<sup>&</sup>lt;sup>b</sup>Difference between groups is significant at the P < .05 level.