COSC 6323 - Statistical Methods in Research Project Phase - 2

Members: Team-8

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Contributions: Contribution paragraph goes here.

Fig. 4:

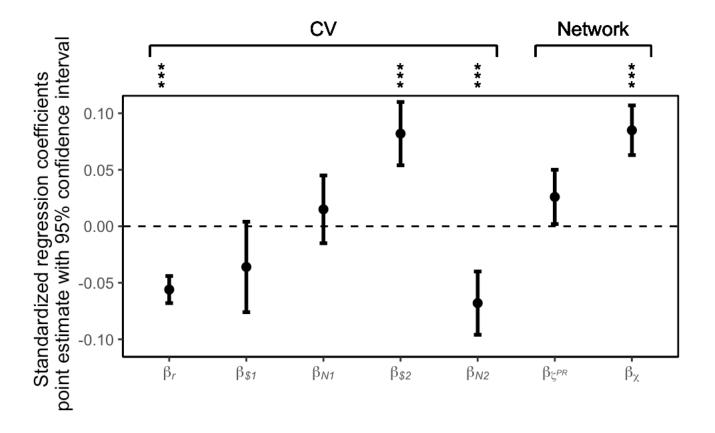


Fig. 4. Career cross-sectional regression model.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.

Table S2:

Productivity (h -index), β_h -0 Total NSF funding, $\beta_{\$1}$ -0 # of NSF grants, β_{N1}	0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000)	-0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	-0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	$\begin{array}{c} \beta_{N1}, \beta_{N2} \\ -0.000^{***} \\ (0.000) \\ -0.000^{***} \\ (0.000) \\ -0.000^{***} \\ (0.000) \\ -0.000^{***} \end{array}$	$\begin{array}{c} 3r \\ -0.000*** \\ (0.000) \\ -0.000*** \\ (0.000) \\ -0.000*** \\ (0.000) \\ -0.000*** \\ (0.000) \end{array}$
Departmental rank, β_r -(Productivity (h-index), β_h -(Total NSF funding, $\beta_{\$1}$ -(# of NSF grants, β_{N1}	(0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***
Productivity (h -index), β_h -0 Total NSF funding, $\beta_{\$1}$ -0 # of NSF grants, β_{N1}	(0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***
Productivity (h-index), β_h -0 Total NSF funding, $\beta_{\$1}$ -0 # of NSF grants, β_{N1}	0.000*** (0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000***	-0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	-0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	-0.000*** (0.000) -0.000*** (0.000) -0.000*** (0.000)	-0.000*** (0.000) -0.000*** (0.000) -0.000***
Total NSF funding, $\beta_{\$1}$ -0 # of NSF grants, β_{N1}	(0.000) 0.000*** (0.000) 0.000*** (0.000) 0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000) -0.000***	(0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000) -0.000***
Total NSF funding, $\beta_{\$1}$ -0 # of NSF grants, β_{N1} -0	0.000*** (0.000) 0.000*** (0.000) 0.000***	-0.000*** (0.000) -0.000*** (0.000) -0.000***	-0.000*** (0.000) -0.000*** (0.000)	-0.000*** (0.000) -0.000*** (0.000)	-0.000*** (0.000) -0.000***
# of NSF grants, β_{N1}	(0.000) 0.000*** (0.000) 0.000***	(0.000) -0.000*** (0.000) -0.000***	(0.000) -0.000*** (0.000)	(0.000) -0.000*** (0.000)	(0.000) -0.000***
# of NSF grants, β_{N1}	0.000*** (0.000) 0.000***	-0.000*** (0.000) -0.000***	-0.000*** (0.000)	-0.000*** (0.000)	-0.000***
0 // -:-	(0.000) 0.000***	(0.000) -0.000***	(0.000)	(0.000)	
	0.000***	-0.000***			(0.000)
			-0 000***	0 000444	
0, , 4 2	(0.000)			-0.000***	-0.000***
	\	(0.000)	(0.000)	(0.000)	(0.000)
" 0 // :- 2	0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Network parameters					
	0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
V	0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
	0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
- V / / X	0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Discipline (O) dummy	Y	Y	Y	Y	Y
5-year cohort $(y_{i,5}^0)$ dummy	Y	Y	Y	Y	Y
Constant -(0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
n	3900	3387	3900	3900	3900
adj. R^2	0.882	0.873	0.883	0.882	0.881

Standard errors in parentheses, listed below coefficient estimate. * $p \le .05$, ** $p \le .01$, *** $p \le .001$

Table S2. Career data set: Pooled cross-sectional model.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.

Table S3:

	(a)_	(b)	(c)	(d)	(e)
	\mathscr{C}^{PR}	\mathscr{C}^B	\mathscr{C}^D	β_{N1}, β_{N2}	β_r
CV parameters					
Departmental rank, β_r	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Productivity (h-index), β_h	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total NSF funding, $\beta_{\$1}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
# of NSF grants, β_{N1}	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total NIH funding, $\beta_{\$2}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
# of NIH grants, β_{N2}	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Network parameters					
PageRank centrality, $\beta_{\mathscr{C}^{PR}}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Betweenness centrality, $\beta_{\mathscr{C}^B}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Degree centrality, $\beta_{\mathscr{C}^D}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Cross-disciplinarity, β_{χ}	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Discipline (\mathcal{O}) dummy	Y	Y	Y	Y	Y
5-year cohort $(y_{i,5}^0)$ dummy	Y	Y	Y	Y	Y
Constant	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
n	3900	3387	3900	3900	3900
adj. R^2	0.882	0.873	0.883	0.882	0.881

Standard errors in parentheses, listed below coefficient estimate. * $p \le .05$, ** $p \le .01$, *** $p \le .001$

Table S3. Career data set: Pooled cross-sectional model-robustness check.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.