COSC 6323 - Statistical Methods in Research Project Phase - 1

Members: Team-8

- 1. Farah Naz Chowdhury, ID:1798957, fchowdhury4@uh.edu@
- 2. Md Rafiqul Islam Rabin, ID:1797648, mrabin@central.uh.edu
- 3. S M Salah Uddin Kadir, ID:1800503, ssalahuddinkadir@uh.edu

March 08, 2019.

Contributions: Contribution paragraph goes here.

Fig. 4:

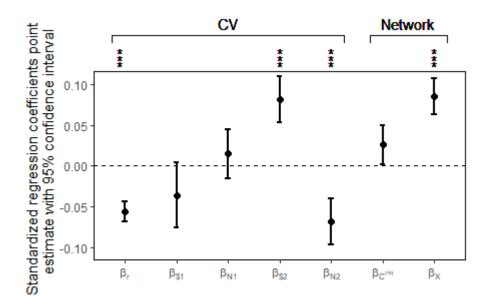


Fig. 4. Career cross-sectional regression model.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.

Table S2:

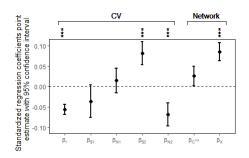


Table S2. Career data set: Pooled cross-sectional model.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.

Table S3:

| | (a) | (b) | (c) | (d) | (e) |
|---|-----------|-----------|-----------|--------------------------|------------|
| | C^{PR} | C^B | C^D | β_{N1}, β_{N2} | B/r |
| CV parameters | | | | F41) 1V2 | <i>Y</i> ' |
| 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) |
| | -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, $\beta_{C^{PR}}$ | -0.000*** | -0.000*** | -0.000*** | -0.000*** | -0.000*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Betweenness centrality, β_{C^B} | -0.000*** | -0.000*** | -0.000*** | -0.000*** | -0.000*** |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Degree centrality, β_{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_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 S3. Career data set: Pooled cross-sectional model-robustness check.

Description of figure content:

Descriptions goes here.

Observations, conclusions, and hypotheses:

observations goes here.