

## Supplement to:

Shepherd, Hana, and Adam Reich. 2020. "The Toll of Turnover: Network Instability, Well-Being, and Academic Effort in 56 Middle Schools." Sociological Science 7: 663-691.

Appendix Table A. Descriptive Statistics for Well-being, Academic Effort, and Control Variables. (n=21,124; without imputation)

|                                     | Mean | Std Dev | Range         |
|-------------------------------------|------|---------|---------------|
| Demographic Characteristics         |      |         |               |
| Male                                | 0.51 | 0.5     | 0-1           |
| Grade                               | 1.91 | 0.96    | 0-3 (5th-8th) |
| White                               | 0.66 | 0.47    | 0-1           |
| Language Other than English at Home | 0.38 | 0.48    | 0-1           |
| Activities and Aspirations          |      |         |               |
| Date, W1                            | 0.22 | 0.41    | 0-1           |
| Do Lots of Homework, W1             | 0.43 | 0.5     | 0-1           |
| Do Lots of Homework, W2             | 0.39 | 0.49    | 0-1           |
| Intend to Go to College             | 0.86 | 0.35    | 0-1           |
| Social Life                         |      |         |               |
| Most Friends Go to the School       | 0.92 | 0.32    | 0-1           |
| On Facebook                         | 0.48 | 0.5     | 0-1           |
| Have to "be mean to survive"        | 0.2  | 0.4     | 0-1           |
| Betweenness Centrality              | 0.01 | 0.007   | 0-0.11        |
| Clustering Coefficient              | 0.15 | 0.08    | 0-1           |
| Indegree                            | 7.74 | 4.38    | 0-35          |
| Change in Outdegree, W1 to W2       | 0.31 | 2.53    | -10-10        |
| Family Characteristics              |      |         |               |
| Parent Lost Job                     | 0.14 | 0.35    | 0-1           |
| House is Nice (Wealth)              | 0.58 | 0.49    | 0-1           |
| Mother Went to College              | 0.74 | 0.44    | 0-1           |
| Recently Moved                      | 0.18 | 0.38    | 0-1           |
| Well-being                          |      |         |               |
| Index, W1                           | 3.41 | 0.91    | 0-4           |
| Index, W2                           | 3.14 | 1.08    | 0-4           |

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Appendix Table B. Logistic Regression of Well-being and Academic Effort on Network Stability, Treatment Status, and Interaction among Intervention Students and Counterfactual Treatment Students in Control Schools (reported as odds ratios).

|                               | Well-being, W2      |                  |     | Academic Effort, W2 |                  |    |
|-------------------------------|---------------------|------------------|-----|---------------------|------------------|----|
|                               | Without<br>Controls | With<br>Controls |     | Without<br>Controls | With<br>Controls |    |
| Jaccard Index                 | 4.03                | *** 4.75         | *** | 1.34                | ** 1.34          | ** |
|                               | 3.18                | 3.45             |     | 2.74                | 2.77             |    |
| Treatment School              | 1.12                | 1.09             |     | 0.82                | 0.84             |    |
|                               | 0.53                | 0.39             |     | -1.25               | -1.23            |    |
| Treatment Sch * Jaccard Index | 0.75                | 0.78             |     | 0.88                | 0.87             |    |
|                               | -0.46               | -0.38            |     | -0.85               | -0.97            |    |
| Negative Log Likelihood       | -1441.05            | -1408.9          |     | -819                | -772.8           |    |
| n                             | 1278                | 1273             |     | 1320                | 1290             |    |

Note: Models include individual-level controls and school fixed effects. Standard errors appear beneath non-standardized coefficients, and are clustered by network cluster. \* p<.05, \*\* p<.01, \*\*\* p<.001. Controls are individual-level characteristics associated with network instability to ensure that the results are not due to an imbalance of characteristics among intervention and counterfactual treatment students: race, language spoken at home, age-adjusted socioeconomic status, gender, grade, date at W1, homework at W1, whether most friends go to the school, college aspirations, mother's education, whether someone in family lost a job recently, whether moved recently, and Facebook usage. Results shown use multiply-imputed values for missing control variables in order to minimize the effect of observations lost when using list-wise deletion.