Appendix I: Performance Evaluation Adopted by JJMF and TEC

This appendix describes how the bonus of employees is determined in our research settings. Both companies have set unambiguous key performance indicators (KPIs) to evaluate the performance of their employees and provide employees with performance bonus based on the extent to which they have met the KPIs of their department. The bonus is calculated as a multiple or fraction of the employees' monthly basic salary.

Performance indicators of JJMF

The company JJMF tracks employees' performance on a quarterly basis and uses different KPIs to evaluate employees from different types of departments. Specifically, JJMF evaluates their sales employees on the following KPIs: the total value of contracts brought in by the sales employee and the total payments from customers managed by the sales employee. Similarly, JJMF also sets clear KPIs for employees from technical departments, including: (1) completions of design project (square footage of designs drawn); (2) accuracy of design drawings (quality inspections ensuring that drawings are clear and precise, with sufficient depth and quality, and that the product design is reasonably comprehensive, with no major errors); (3) timeliness of design drawings (whether design tasks are done on schedule, and whether designers have good control of the work progress); (4) conformance to quality control procedures (whether designers have provided complete information, recording and filing of all information required for quality control). Performance bonus of support employees in JJMF are determined by subjective KPIs rated by their supervisors. These KPIs include discipline, coordination, work quality, work efficiency, professional knowledge, work enthusiasm, learning ability, delegation ability, and ability to handle challenges. Quarterly

performance bonus of each employee is calculated as a multiple of their base salary, and the bonus coefficients depend on the extent that they have met their KPIs.

Performance Indicators of TEC

The company TEC also sets clear and unambiguous KPIs for different types of departments, and evaluates employees on an annual basis. TEC evaluates sales employees based on KPIs such as the amount of sales revenue, net of sales expenditure, and the ability to receive payment from customer receivables. For employees in technical departments, TEC focuses on KPIs such as: (1) timeliness (e.g., employees' working hours), (2) functionality (e.g. whether the new product meets customers' requirements), and (3) process indicators (e.g. the number of the processes reengineered or improved and the number of suggestions provided by employees that are adopted). Employees from support departments are evaluated with subjective KPIs such as: moral character, discipline, responsibility, collaboration, quality, efficiency, professional knowledge, honesty and integrity, and passion. Similar to JJMF, the amount of annual performance bonus is determined by the extent to which they have met the KPIs and their base salary.

Appendix II: Items of Measures

This appendix introduces the items we adopted to measure the constructs in our paper. Detailed items and their literature sources are illustrated in the following sections.

Political skills (Ferris et al., 2005).

1. I spend a lot of time and effort at work networking with others
2. I am able to make most people feel comfortable and at ease around me
3. I am able to communicate easily and effectively with others
4. It is easy for me to develop good rapport with most people
5. I understand people very well
6. I am good at building relationships with influential people at work
7. At work, I know a lot of important people and am well connected to them
8. I spend a lot of time at work developing connections with others
9. I am good at getting people to like me
10. I am good at using my connections and network to make things happen at work
11. I have good intuition or savvy about how to present myself to others
12. I always seem to instinctively know the right things to say or do to influence others
13. I pay close attention to people's facial expressions
14. I have developed a large network of colleagues and associates at work who I can call on for support when I really need to get things done
15. I am particularly good at sensing the motivations and hidden agendas of others

Organizational knowledge

Items measuring organizational knowledge are created based on our interviews and Gupta and Govindarajan's (2000) measure. Respondents are asked to rate the extent of their

understanding on organizational knowledge in following aspects:

1. Organizational processes and activities (e.g., workflow, business processes, etc.)
2. Organizational routines and procedures (e.g., standard procedures, forms, responsible individuals)
3. Management systems and practices (e.g., HR appraisal and incentive systems)
4. Organizational norms and practices (e.g., accepted practices and norms)

Advice network (Ibarra and Andrews, 1993)

Questions are designed as follows: Consider the people in [THE FIRM] who are important sources of professional advice to you. Over the past year, please indicate the person whom you approach if you have a work-related problem or when you want advice on a decision you have to make. For those individuals you have selected, please also indicate how frequently you approach this individual for advice according to the following scale: (less than once a year; several times a year; once a month; several times a month; several times a week; everyday).

Hindrance to other coworkers (Sparrowe et al., 2001)

Respondents are asked the following question: At the other extreme, who among the people working for [THE FIRM] has made it difficult for you to acquire resources or carry out your job responsibilities? (and remember that these data will be strictly confidential, and will not be released to management).

Appendix III: Results of Robustness Tests

This appendix provides the detailed results and tables on the robustness tests, of which the tables are not presented in the paper. In sum, the results of the robustness tests are consistent with the findings in the main analysis.

Robustness Tests on Performance Measure.

While we adopt the ratio of bonus to base salary as the work performance measure in the main analysis, we validate our findings with a different performance measure proposed by Burt (1997). It captures individual performance by comparing individuals' actual bonus with the bonus predicted based on seniority. Specifically, for individuals from the same company and the same type of department, we regress their bonus on their tenure to generate the predicted values of their bonus. Then, we calculate the z-score of the residual and use it to represent individual performance. For example, a value of 0 indicates that the individual achieved average performance compared to employees working in the same company, for a similar department and tenure, while a value of 1 (or -1) indicates that the individual performed one standard deviation better (or worse) than the average. Results using this new performance measure, shown in Table 1, are consistent with findings of our main analysis.

Table 1 Robustness test on performance measure

	(1)		(2)		(3)	
	Coef.	p	Coef.	p	Coef.	p
Intercept	-0.331 (.293)	.260	-0.395 (.296)	.184	-0.258 (.324)	.426
Company	0.072 (.131)	.583	0.221 (.138)	.111	0.213 (.14)	.129
Gender	-0.392 (.096)	.000	-0.378 (.093)	.000	-0.376 (.091)	.000
Tenure	-0.096 (.025)	.000	-0.112 (.025)	.000	-0.113 (.025)	.000
Sales	0.158 (.201)	.431	0.163 (.196)	.406	0.167 (.197)	.397

	(1)		(2)		(3)	
	Coef.	p	Coef.	p	Coef.	p
Tech	0.035 (.138)	.801	-0.022 (.135)	.871	-0.021 (.135)	.878
Supervisor	1.094 (.276)	.000	1.052 (.271)	.000	1.035 (.279)	.000
Dept Size	0.000 (.003)	.999	-0.001 (.003)	.881	-0.001 (.003)	.875
Inter-dept Ratio	0.106 (.132)	.421	-.044 (.133)	.739	-0.065 (.133)	.623
Org Knowledge	0.097 (.034)	.005	0.101 (.034)	.003	0.101 (.033)	.002
Political Skill	-0.019 (.060)	.750	-0.034 (.061)	.578	-0.062 (.065)	.339
Advice-giving Centrality	6.110 (2.532)	.016	17.13 (4.412)	.000	3.393 (22.629)	.881
Advice-giving Centrality^2			-44.921 (12.9)	.001	36.505 (124.038)	.769
Advice-giving Centrality × Political Skill					3.164 (4.979)	.526
Advice-giving Centrality^2 × Political Skill					-18.905 (29.769)	.526
R^2	0.306		0.342		0.344	

Note: robust standard errors are reported in () under each coefficient.

Robustness Tests on the Measure of Hindrance to Other Coworkers.

While we highlight that hindrance associating with the interdependencies among employees' work and tasks is affected by individual advice-giving centrality, an important concern is that individuals may also nominate coworkers whom they do not depend on. Our findings are at risk of being driven by this type of hindrance nominations, which is not aligned with our theorization. To further validate our theoretical arguments, we exclude hindrance that may associate with little work interdependencies. Given that tasks within the same department are likely to be interdependent, we focus on examining the interdependencies of inter-departmental hindrance nominations. Specifically, our survey also invites participants to evaluate the extent that they rely on each of other departments to accomplish their work, and

the extent that each of the other departments relies on them (rated on a 7-level Likert scale). We eventually receive evaluations from 224 participants, which are then used to filter hindrance nominations. Specifically, we retain hindrance nominations from a certain department when the nominated employees think the reliance of the department on them is no less than 4, the midpoint of the evaluation scale. As a result, about 51% of cross-departmental hindrance nominations are excluded. The results with this hindrance measure are reported in model (1) and model (2) in Table 2, which are consistent with our main analysis.

In addition, we assess the department-level interdependency by aggregating the evaluations of employees from the same department, and filter hindrance nominations based on the department-level interdependency. Specifically, the interdependency of department A on department B is represented by the mean score of both evaluations from employees in department A about their reliance on department B and evaluations from employees in department B about department A's reliance on them. If the aggregate interdependency score of department A on department B is lower than 4, the midpoint of the evaluation scale, hindrance nominations from employees in department A to employees in department B will be excluded. Consequently, about 37% cross-departmental hindrance nominations are dropped based on this criterion. Results based on this alternative hindrance measure, shown in model (3) and model (4) in Table 2, are also consistent with our main analysis, suggesting that high advice-giving centrality is likely to inhibit cooperation and pose hindrance among interdependent employees.

Table 2 Robustness test on hindrance measure

	Hindrance (Individual-dept dependency)				Hindrance (Aggregate dependency)			
	(1)		(2)		(3)		(4)	
	Coef.	p	Coef.	p	Coef.	p	Coef.	p
Intercept	0.000 (.002)	.818	-0.001 (.002)	.702	-0.001 (.002)	.812	-0.002 (.002)	.217
Company	0.002 (.001)	.014	0.002 (.001)	.004	0.002 (.001)	.066	0.002 (.001)	.017
Gender	-0.001 (.001)	.184	-0.001 (.001)	.397	-0.000 (.001)	.566	-0.000 (.001)	.931
Tenure	-0.000 (.000)	.972	-0.000 (.000)	.862	-0.000 (.000)	.846	-0.000 (.000)	.744
Sales	-0.000 (.001)	.887	0.000 (.001)	.924	-0.001 (.001)	.331	-0.001 (.001)	.462
Tech	-0.001 (.001)	.423	-0.001 (.001)	.447	-0.001 (.001)	.338	-0.001 (.001)	.36
Supervisor	0.002 (.001)	.222	0.002 (.001)	.075	0.000 (.001)	.904	0.001 (.001)	.532
Dept Size	-0.000 (.000)	.883	-0.000 (.000)	.655	0.000 (.000)	.147	0.000 (.000)	.271
Inter-dept Ratio	-0.001 (.001)	.19	-0.002 (.001)	.054	-0.001 (.001)	.42	-0.001 (.001)	.154
Org Knowledge	0.000 (.000)	.516	0.000 (.000)	.891	0.000 (.000)	.099	0.000 (.000)	.24
Political Skill	-0.000 (.000)	.521	-0.000 (.000)	.898	-0.000 (.000)	.635	0.000 (.000)	.749
Advice-giving Centrality	0.158 (.035)	.000	0.04 (.187)	.83	0.159 (.035)	.000	0.079 (.205)	.701
Advice-giving Centrality^2	0.074 (.136)	.585	2.462 (.862)	.005	0.012 (.154)	.94	2.252 (.922)	.015
Advice-giving Centrality × Political Skill			0.036 (.038)	.346			0.028 (.043)	.52
Advice-giving Centrality^2 × Political Skill			-0.582 (.192)	.003			-0.549 (.209)	.009
R^2	0.64		0.693		0.594		0.653	

Note: robust standard errors are reported in () under each coefficient.

Robustness on Measure of Weighted Advice-giving Centrality.

In the main analysis, we construct the measure of advice-giving centrality by counting the number of employees seeking advice from the focal individual. While the measure

considers the potential redundancy or duplication of advice requests from the same individual, it may also risk to underestimate the differences between multiple requests from the same individual. To validate the robustness of our findings, we use the frequency of contacts as the weight for each advice tie and calculate the weighted advice-giving centrality for each participant. This weighted advice-giving centrality can better capture the intensity or frequency that others seek out the focal individual for advice. Results based on the weighted advice-giving centrality, shown in Table 3, are consistent with our main analysis.

Table 3 Robustness test with weighted advice-giving centrality

	Performance				Hindrance			
	(1)		(2)		(3)		(4)	
	Coef.	p	Coef.	p	Coef.	p	Coef.	p
Intercept	-0.716 (.302)	.019	-0.597 (.328)	.069	-0.000 (.003)	.884	-0.003 (.002)	.254
Company	0.326 (.124)	.009	0.320 (.125)	.011	0.002 (.001)	.050	0.003 (.001)	.020
Gender	-0.436 (.093)	.000	-0.431 (.092)	.000	-0.001 (.001)	.095	-0.001 (.001)	.227
Tenure	-0.016 (.023)	.496	-0.016 (.023)	.476	0.000 (.000)	.554	0.000 (.000)	.550
Sales	0.052 (.193)	.790	0.056 (.195)	.775	-0.001 (.002)	.729	-0.000 (.002)	.947
Tech	0.028 (.133)	.831	0.032 (.133)	.811	-0.001 (.001)	.245	-0.001 (.001)	.273
Supervisor	0.913 (.267)	.001	0.896 (.275)	.001	0.002 (.001)	.238	0.002 (.001)	.106
Dept Size	-0.001 (.003)	.790	-0.001 (.003)	.776	-0.000 (.000)	.784	-0.000 (.000)	.581
Inter-dept Ratio	-0.027 (.138)	.845	-0.045 (.138)	.746	0.000 (.001)	.777	0.000 (.001)	.951
Org Knowledge	0.101 (.035)	.004	0.102 (.045)	.004	0.000 (.000)	.314	0.000 (.000)	.575
Political Skill	-0.049 (.063)	.439	0.074 (.069)	.285	-0.000 (.000)	.698	0.000 (.001)	.669
Weighted Advice Giving	32.572 (6.45)	.000	7.477 (41.836)	.858	0.424 (.072)	.000	0.346 (.438)	.430

Weighted Advice Giving^2	-183.199 (40.734)	.000	-134.370 (472.126)	.776	0.366 (.544)	.502	8.361 (3.679)	.024
Weighted Advice Giving × Political Skill			5.804 (9.328)	.534			0.032 (.092)	.728
Weighted Advice Giving^2 × Political Skill			-73.56 (113.278)	.517			-1.933 (.785)	.014
R^2	0.364		0.366		0.720		0.752	

Note: robust standard errors are reported in () under each coefficient.

Robustness Tests based on Sample without Top Management.

In the main analysis, our sample includes all participants we are able to access. Since top management may have strong influence on their own performance evaluation and may not be comparable with other employees, we validate our findings by excluding 4 participants from top management, which reduces our sample size to 283. Results based on the new sample, shown Table 4, are consistent with our main analysis.

Table 4 Robustness test with sample excluding top management

	Performance				Hindrance			
	(1)		(2)		(3)		(4)	
	Coef.	p	Coef.	p	Coef.	p	Coef.	p
Intercept	-0.578 (.297)	.053	-0.63 (.337)	.063	-0.000 (.003)	.873	-0.002 (.002)	.254
Company	0.265 (.124)	.033	0.272 (.122)	.027	0.002 (.001)	.028	0.003 (.001)	.013
Gender	-0.461 (.088)	.000	-0.457 (.088)	.000	-0.001 (.001)	.216	-0.001 (.001)	.349
Tenure	-0.01 (.022)	.66	-0.01 (.022)	.657	0.000 (.000)	.536	0.000 (.000)	.586
Sales	0.002 (.195)	.991	0.01 (.197)	.958	0.001 (.002)	.759	0.001 (.002)	.544
Tech	-0.026 (.128)	.842	-0.02 (.129)	.875	-0.001 (.001)	.259	-0.001 (.001)	.389
Supervisor	0.954 (.278)	.001	0.967 (.287)	.001	0.002 (.001)	.168	0.002 (.001)	.067
Dept Size	-0.001 (.003)	.878	-0.001 (.003)	.862	-0.000 (.000)	.487	-0.000 (.000)	.383

	Performance				Hindrance			
	(1)		(2)		(3)		(4)	
	Coef.	p	Coef.	p	Coef.	p	Coef.	p
Inter-dept Ratio	-0.045 (.139)	.746	-0.049 (.14)	.73	-0.000 (.001)	.958	-0.001 (.001)	.659
Org Knowledge	0.098 (.035)	.006	0.095 (.035)	.007	0.000 (.000)	.424	0.000 (.000)	.669
Political Skill	-0.056 (.063)	.381	-0.045 (.071)	.522	-0.000 (.001)	.728	0.000 (.001)	.893
Advice Giving Centrality	15.943 (3.595)	.000	17.209 (21.552)	.425	0.233 (.037)	.000	0.15 (.236)	.526
Advice Giving Centrality^2	-40.904 (10.232)	.000	-20.782 (109.48)	.85	0.043 (.124)	.727	2.139 (.963)	.027
Advice Giving Centrality × Political Skill			-0.156 (4.782)	.974			0.027 (.049)	.586
Advice Giving Centrality^2 × Political Skill			-5.196 (25.947)	.841			-0.519 (.209)	.014
R^2	0.367		0.367		0.720		0.745	

Note: robust standard errors are reported in () under each coefficient.

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