



## Methodology

Participant survey responses were submitted to multiple-group structural equation modeling (MGSEM) following guidelines outlined by Kline<sup>1</sup> and Muthén and Muthén.<sup>2</sup> All analyses were conducted using Mplus software with a robust maximum likelihood estimation method.<sup>3</sup> Measurement models for all latent constructs were examined by conducting a multiple-group confirmatory factor analysis (MGCFA) to test each scale for measurement invariance.<sup>4</sup> Configural, metric, and scalar models were compared using chi-square difference tests. Tests of measurement invariance across all countries indicate the latent constructs for innovation,<sup>5</sup> team citizenship,<sup>6</sup> belongingness,<sup>7</sup> and uniqueness<sup>8</sup> are all metric invariant [Innovation:  $X^2=(22, N=1259)=18.67$ ,  $p>.05$ , RMSEA=.00, CFI= 1.0, SRMR=.06; Team Citizenship:  $X^2=(41, N=1259)=56.73$ ,  $p>.05$ , RMSEA=.04, CFI= .99, SRMR=.08; Belongingness:  $X^2=(8, N=1238)=9.85$ ,  $p>.05$ , RMSEA=.03, CFI= 1.00, SRMR=.05; Uniqueness:  $X^2=(22, N=1238)=31.26$ ,  $p>.05$ , RMSEA=.04, CFI= .99, SRMR=.095]. Inclusion was assessed as a latent composite with two latent indicators of the scales for uniqueness and belongingness  $X^2=(85, N=1238)=113.82$ ,  $p<.05$ , RMSEA=.04, CFI= .99, SRMR=.08]. Analyses of inclusion in India indicated a statistical lack of distinction between uniqueness and belongingness, therefore inclusion was modeled as a latent factor with the items from uniqueness and belongingness as indicators  $X^2=(14, N=253)=16.50$ ,  $p>.05$ , RMSEA=.03, CFI= 1.00, SRMR=.02].

We assessed altruistic leadership using a scale of servant leadership.<sup>9</sup> MGCFA revealed we were unable to replicate the complete factor structure of the original scale and, therefore only four of the eight factors were retained. Altruistic leadership was

modeled as a second-order latent variable with four first-order latent indicators [All countries:  $X^2=(414, N=1009)=680.59$ ,  $p<.001$ , RMSEA=.05, CFI= .97, SRMR=.06; India:  $X^2=(87, N=253)=167.37$ ,  $p<.001$ , RMSEA=.06, CFI= .94, SRMR=.05].

Despite the growing body of research touting the merits of servant leadership, it doesn't seem to have garnered the support and preeminence of other leadership styles, such as transformational or more recently, authentic leadership. Harvard Business School professor James Heskett raised this very question in a popular *HBS Working Knowledge* piece titled, "Why Isn't Servant Leadership More Prevalent?"<sup>10</sup> The numerous responses to his post varied dramatically. Some pointed to the term "servant leadership" itself, while others named fundamentally incompatible organizational reward systems. In order to address some of these concerns, we decided to omit the reference to servant leadership and use a term that reflected the specific subset of behaviors that we measured in this study.

Assessment of the MGSEM model included examining the chi-square statistic, RMSEA (<.05 indicates close fit),<sup>11</sup> CFI (>.95 indicates good fit),<sup>12</sup> and SRMR (<.08 indicates good fit).<sup>13</sup> Overall model fit for all countries excluding India indicated adequate fit [ $X^2=(2427, N=1259)=3544.20$ ,  $p<.001$ , RMSEA=.04, CFI= .95, SRMR=.08]. Model fit for India indicated adequate fit [ $X^2=(456, N=253)=627.72$ ,  $p<.001$ , RMSEA=.04, CFI= .95, SRMR=.06]. The chi-square statistic can often be misleading due to deviations in multivariate non-normality, large sample sizes, and model complexity.<sup>14</sup> Therefore, our assessment of the model involved a holistic approach where we examined all model fit statistics.

**TABLE 1****Participant Characteristics in Australia, China, Germany, India, Mexico, and the United States**

Variable	Australia		China		Germany		India		Mexico		United States	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1 Gender <sup>15</sup>	1.50	0.50	1.50	0.50	1.49	0.50	1.51	0.50	1.50	0.50	1.50	0.50
2 Age at time of survey	41.69	10.54	35.64	7.16	45.00	9.83	32.19	7.32	36.48	9.28	48.11	13.60
3 Tenure at company <sup>16</sup>	8.55	7.61	7.54	5.26	13.81	10.76	6.29	5.06	7.07	5.95	11.48	9.57
4 Rank <sup>17</sup>	1.86	0.89	2.64	0.70	1.56	0.83	2.62	1.03	2.21	1.14	1.72	0.92
5 Workgroup size	15.69	18.93	28.19	26.16	17.81	20.60	30.70	28.16	20.00	22.52	19.71	22.59
6 Gender composition of workgroup <sup>18</sup>	0.44	0.31	0.40	0.20	0.46	0.32	0.36	0.19	0.43	0.24	0.53	0.30
7 Years worked with manager	4.01	3.90	5.29	3.89	6.39	6.62	4.67	3.56	5.13	4.82	4.96	4.88
8 Gender of manager <sup>19</sup>	1.29	0.46	1.29	0.45	1.30	0.46	1.26	0.44	1.23	0.42	1.45	0.50
9 Company size <sup>20</sup>	10.51	3.10	10.00	2.26	10.27	3.01	10.77	2.77	9.39	2.80	10.64	3.02

**TABLE 2**

**Estimated Correlations of SEM Variables in Australia, China, Germany, India, Mexico, and the United States**

Rg	Variable	1	2	3	4	5	6	7	8	9	10
Australia	1 Courage	1.00									
	2 Empowerment	0.68	1.00								
	3 Accountability	0.35	0.51	1.00							
	4 Humility	0.60	0.88	0.45	1.00						
	5 Altruistic Leadership	0.68	1.00	0.51	0.88	1.00					
	6 Uniqueness	0.42	0.62	0.32	0.54	0.62	1.00				
	7 Belongingness	0.43	0.63	0.32	0.55	0.63	0.98	1.00			
	8 Inclusion	0.43	0.63	0.32	0.55	0.63	0.99	1.00	1.00		
	9 Innovation	0.20	0.29	0.15	0.26	0.29	0.46	0.46	0.47	1.00	
	10 Team Citizenship	0.27	0.40	0.20	0.35	0.40	0.64	0.64	0.64	0.55	1.00
China	1 Courage	1.00									
	2 Empowerment	0.76	1.00								
	3 Accountability	0.48	0.63	1.00							
	4 Humility	0.74	0.96	0.61	1.00						
	5 Altruistic Leadership	0.76	1.00	0.63	0.96	1.00					
	6 Uniqueness	0.65	0.84	0.53	0.81	0.84	1.00				
	7 Belongingness	0.63	0.82	0.52	0.79	0.82	0.98	1.00			
	8 Inclusion	0.64	0.84	0.53	0.81	0.84	0.99	0.99	1.00		
	9 Innovation	0.57	0.74	0.47	0.71	0.74	0.88	0.88	0.89	1.00	
	10 Team Citizenship	0.54	0.71	0.44	0.68	0.71	0.84	0.84	0.84	0.82	1.00

Rg	Variable	1	2	3	4	5	6	7	8	9	10
Germany	1 Courage	1.00									
	2 Empowerment	0.76	1.00								
	3 Accountability	0.36	0.48	1.00							
	4 Humility	0.68	0.89	0.42	1.00						
	5 Altruistic Leadership	0.76	1.00	0.48	0.89	1.00					
	6 Uniqueness	0.50	0.66	0.31	0.59	0.66	1.00				
	7 Belongingness	0.40	0.52	0.25	0.46	0.52	0.95	1.00			
	8 Inclusion	0.45	0.59	0.28	0.52	0.59	0.99	0.99	1.00		
	9 Innovation	0.21	0.27	0.13	0.24	0.27	0.45	0.45	0.46	1.00	
	10 Team Citizenship	0.26	0.34	0.16	0.30	0.34	0.57	0.57	0.58	0.47	1.00
India	1 Courage	1.00									
	2 Empowerment	0.77	1.00								
	3 Accountability	0.65	0.72	1.00							
	4 Humility	0.70	0.77	0.65	1.00						
	5 Altruistic Leadership	0.83	0.93	0.78	0.84	1.00					
	8 Inclusion	0.54	0.60	0.50	0.54	0.65	—	—	1.00		
	9 Innovation	0.42	0.47	0.40	0.43	0.51	—	—	0.79	1.00	
	10 Team Citizenship	0.35	0.39	0.33	0.35	0.42	—	—	0.65	0.84	1.00

Rg	Variable	1	2	3	4	5	6	7	8	9	10
Mexico	1 Courage	1.00									
	2 Empowerment	0.88	1.00								
	3 Accountability	0.51	0.58	1.00							
	4 Humility	0.78	0.89	0.51	1.00						
	5 Altruistic Leadership	0.88	1.00	0.58	0.89	1.00					
	6 Uniqueness	0.50	0.57	0.33	0.50	0.57	1.00				
	7 Belongingness	0.43	0.49	0.28	0.43	0.49	0.97	1.00			
	8 Inclusion	0.46	0.53	0.31	0.47	0.53	0.99	0.99	1.00		
	9 Innovation	0.33	0.38	0.22	0.34	0.38	0.71	0.71	0.72	1.00	
	10 Team Citizenship	0.36	0.41	0.24	0.36	0.41	0.77	0.77	0.78	0.77	1.00
United States	1 Courage	1.00									
	2 Empowerment	0.76	1.00								
	3 Accountability	0.42	0.55	1.00							
	4 Humility	0.67	0.88	0.48	1.00						
	5 Altruistic Leadership	0.76	1.00	0.55	0.88	1.00					
	6 Uniqueness	0.52	0.68	0.38	0.60	0.68	1.00				
	7 Belongingness	0.46	0.61	0.33	0.53	0.61	0.92	1.00			
	8 Inclusion	0.50	0.65	0.36	0.57	0.65	0.97	0.99	1.00		
	9 Innovation	0.22	0.29	0.16	0.25	0.29	0.43	0.43	0.44	1.00	
	10 Team Citizenship	0.27	0.35	0.19	0.31	0.35	0.52	0.53	0.54	0.58	1.00

**TABLE 3**  
**Results of Structural Equation Modeling in Australia, China, Germany, Mexico, and the United States**

	Australia			China			Germany			Mexico			United States		
	Ustd <sup>a</sup>	SE <sup>b</sup>	Std <sup>c</sup>	Ustd	SE	Std	Ustd	SE	Std	Ustd	SE	Std	Ustd	SE	Std
<b>Altruistic Leadership—Latent</b>															
Courage	1.00 <sup>d</sup>	—	0.68 <sup>e</sup>	1.00 <sup>d</sup>	—	0.76 <sup>e</sup>	1.00 <sup>d</sup>	—	0.76 <sup>e</sup>	1.00 <sup>d</sup>	—	0.88 <sup>e</sup>	1.00 <sup>d</sup>	—	0.76 <sup>e</sup>
Empowerment	1.20	0.06	1.00	1.20	0.06	1.00	1.20	0.06	1.00	1.20	0.06	1.00	1.20	0.06	1.00
Accountability	0.55	0.05	0.51	0.55	0.05	0.63	0.55	0.05	0.48	0.55	0.05	0.58	0.55	0.05	0.55
Humility	1.17	0.06	0.88	1.17	0.06	0.96	1.17	0.06	0.89	1.17	0.06	0.89	1.17	0.06	0.88
<b>Inclusion—Formative</b>															
Uniqueness	1.00 <sup>d</sup>	—	0.47 <sup>e</sup>	1.00 <sup>d</sup>	—	0.49 <sup>e</sup>	1.00 <sup>d</sup>	—	0.45 <sup>e</sup>	1.00 <sup>d</sup>	—	0.47 <sup>e</sup>	1.00 <sup>d</sup>	—	0.43 <sup>e</sup>
Belongingness	1.00 <sup>d</sup>	—	0.54 <sup>e</sup>	1.00 <sup>d</sup>	—	0.52 <sup>e</sup>	1.00 <sup>d</sup>	—	0.57 <sup>e</sup>	1.00 <sup>d</sup>	—	0.54 <sup>e</sup>	1.00 <sup>d</sup>	—	0.59 <sup>e</sup>
<b>Direct Effects</b>															
AL→Uniq	0.67	0.09	0.62	0.97	0.09	0.84	0.72	0.08	0.66	0.56	0.08	0.57	0.67	0.08	0.68
AL→Belong	0.78	0.10	0.63	0.99	0.10	0.82	0.73	0.10	0.52	0.54	0.09	0.49	0.80	0.11	0.61
Uniq→Belong	0.31	0.04	0.96	0.13	0.03	0.93	0.44	0.05	0.95	0.38	0.05	0.96	0.30	0.05	0.88
Inc→Citizenship	0.28	0.04	0.64	0.39	0.04	0.84	0.23	0.04	0.58	0.36	0.03	0.78	0.23	0.03	0.54
Inc→Creativity	0.23	0.04	0.47	0.41	0.03	0.89	0.20	0.04	0.46	0.32	0.03	0.72	0.20	0.04	0.44
Citizen→Creativity	0.11	0.04	0.37	0.03	0.01	0.30	0.10	0.03	0.28	0.09	0.02	0.48	0.16	0.04	0.46

<sup>a</sup>Unstandardized Estimate; All estimates p<.001.

<sup>b</sup>Standard Error.

<sup>c</sup>Standardized Estimate.

<sup>d</sup>Not tested for statistical significance (i.e., constrained parameter).

<sup>e</sup>Standardized estimate p<.001.

**TABLE 4**  
**Results of Structural Equation Modeling in India**

	Ustd <sup>a</sup>	SE <sup>b</sup>	Std <sup>c</sup>
<b>Altruistic Leadership—Latent</b>			
Courage	1.02	0.11	0.83
Empowerment	1.00 <sup>d</sup>	—	0.93 <sup>e</sup>
Accountability	0.74	0.10	0.78
Humility	0.79	0.11	0.84
<b>Direct Effects</b>			
AL→Inclusion	0.66	0.10	0.65
Inc→Citizenship	0.52	0.08	0.65
Inc→Creativity	0.72	0.09	0.79
Citizen→Creativity	0.11	0.03	0.70

<sup>a</sup>Unstandardized Estimate; All estimates  $p < .001$ .

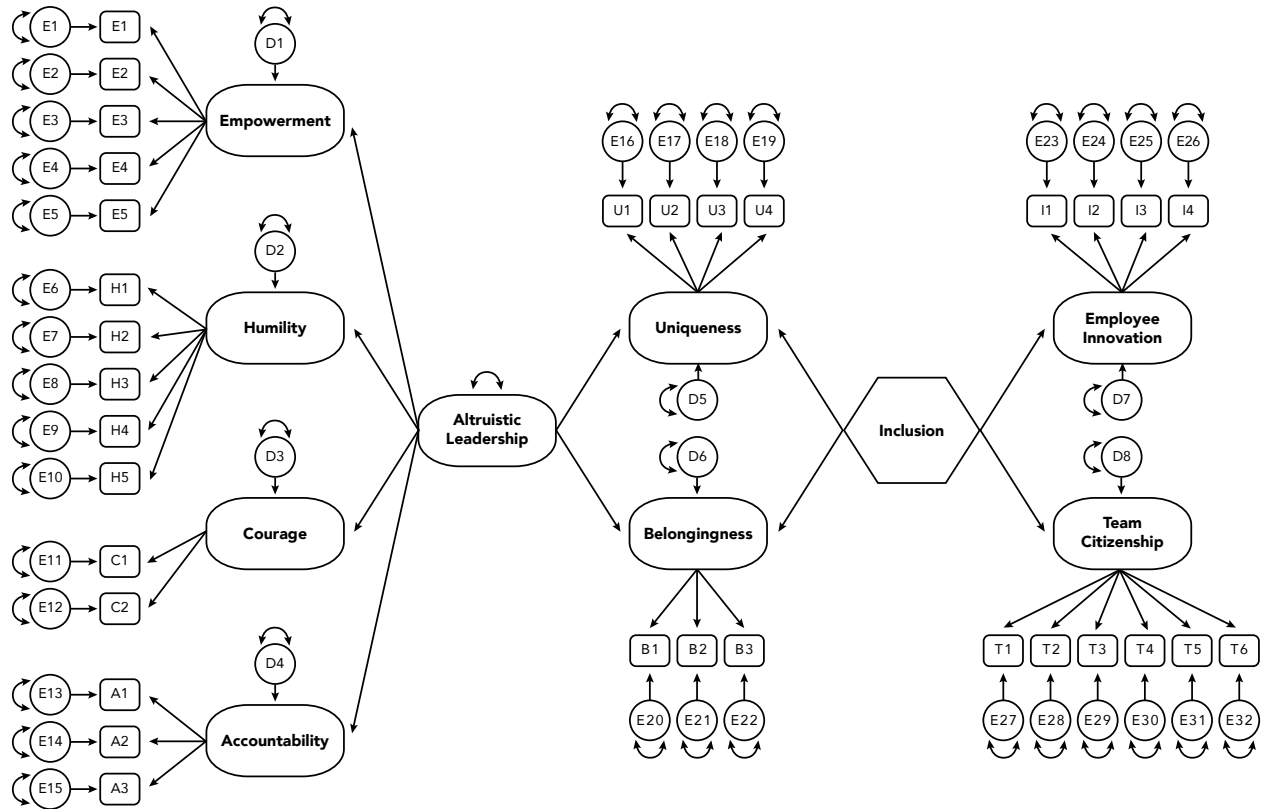
<sup>b</sup>Standard Error.

<sup>c</sup>Standardized Estimate.

<sup>d</sup>Not tested for statistical significance (i.e., constrained parameter).

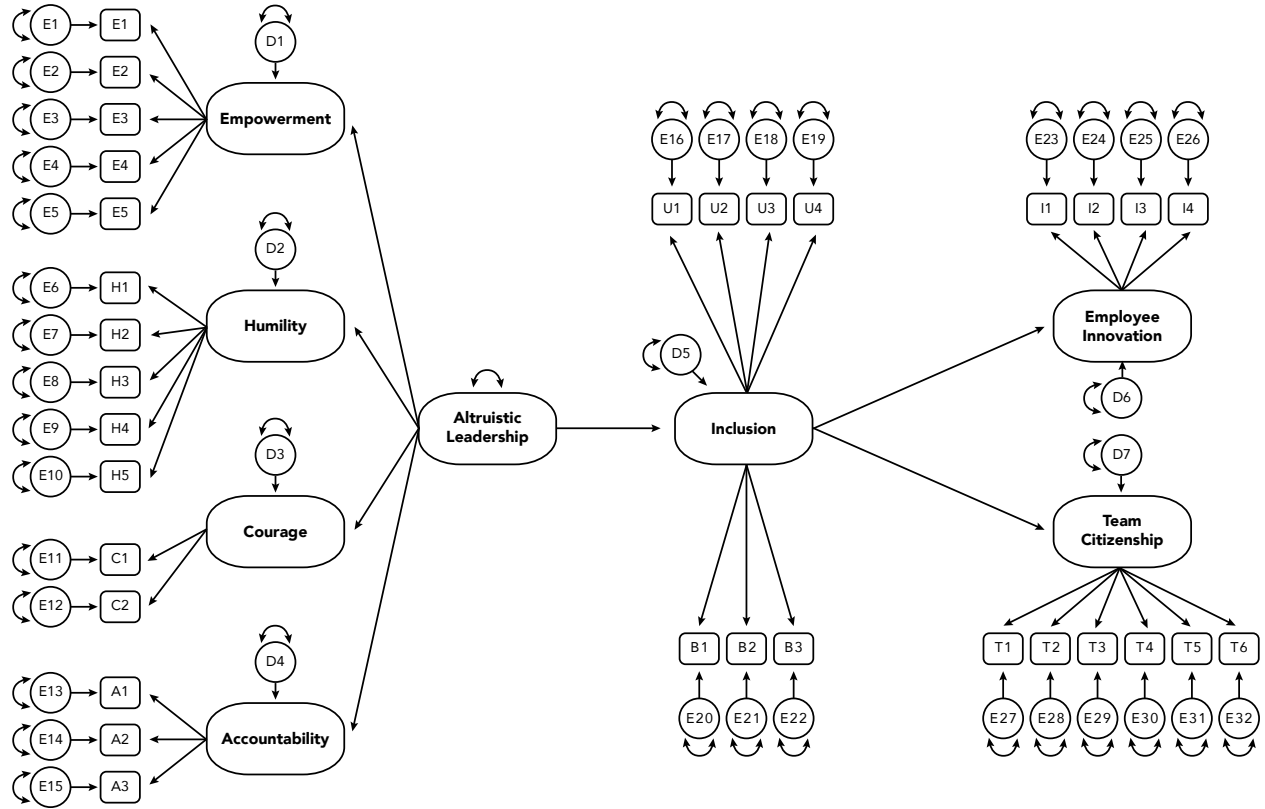
<sup>e</sup>Standardized estimate  $p < .001$ .

**FIGURE 1**  
 Technical Model of Altruistic Leadership and Inclusion in Australia, China, Germany, Mexico, and the United States





**FIGURE 2**  
**Technical Model of Altruistic Leadership and Inclusion in India**



**TABLE 5**  
**Results of Structural Equation Modeling Tests of Gender Invariance in India**

	Men			Women		
	Ustd <sup>a</sup>	SE <sup>b</sup>	Std <sup>c</sup>	Ustd <sup>a</sup>	SE <sup>b</sup>	Std <sup>c</sup>
<b>Altruistic Leadership—Latent</b>						
Courage	1.00	0.11	0.86	1.00	0.11	0.79
Empowerment	1.00 <sup>d</sup>	0.00	0.97 <sup>e</sup>	1.00 <sup>d</sup>	0.00	0.91 <sup>e</sup>
Accountability	0.73	0.10	0.78	0.73	0.10	0.78
Humility	0.77	0.11	0.86	0.77	0.11	0.80
<b>Direct Effects</b>						
AL→Inclusion	0.60	0.12	0.62	0.71	0.12	0.67
Inc→Citizenship	0.60	0.09	0.78	0.48	0.12	0.54
Inc→Creativity	0.83	0.10	0.90	0.62	0.12	0.68
Citizen→Creativity	0.07	0.03	0.78	0.15	0.04	0.65

<sup>a</sup>Unstandardized Estimate; All estimates p<.001.

<sup>b</sup>Standard Error.

<sup>c</sup>Standardized Estimate.

<sup>d</sup>Not tested for statistical significance (i.e., constrained parameter).

<sup>e</sup>Standardized estimate p<.001.

## Endnotes

1. Rex B. Kline, *Principles and Practice of Structural Equation Modeling*, 3rd ed. (New York: Guilford Press, 2011).
2. Linda K. Muthén and Bengt O. Muthén, "Mplus Short Courses Topic 1: Exploratory Factor Analysis, Confirmatory Factor Analysis, And Structural Equation Modeling For Continuous Outcomes."
3. Linda K. Muthén and Bengt O. Muthén, *Mplus Users Guide*, 7th ed. (Los Angeles: Muthén & Muthén, 2012).
4. Muthén and Muthén, "Mplus Short Courses Topic 1: Exploratory Factor Analysis, Confirmatory Factor Analysis, And Structural Equation Modeling For Continuous Outcomes."
5. Pamela Tierney, Steven M. Farmer, and George B. Graen, "An Examination of Leadership and Employee Creativity: The Relevance of Traits and Relationships," *Personnel Psychology*, vol. 52, no. 3 (1999): p. 591–620.
6. Onne Janssen and Xu Huang, "Us and Me: Team Identification and Individual Differentiation as Complementary Drivers of Team Members' Citizenship and Creative Behaviors," *Journal of Management*, vol. 34, no. 1 (February 2008): p. 69–88.
7. Christina L. Stamper and Suzanne S. Masterson, "Insider or Outsider? How Employee Perceptions of Insider Status Affect Their Work Behavior," *Journal of Organizational Behavior*, vol. 23, no. 8 (December 2002): p. 875–894.
8. Due to a lack of published scales measuring state-like perceptions of uniqueness in the workplace, one was developed in-house.
9. Robert K. Greenleaf, *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness* (New York: Paulist Press, 1977); Dirk van Dierendonck and Inge Nuijten, "The Servant Leadership Survey: Development and Validation of a Multidimensional Measure," *Journal of Business and Psychology*, vol. 26, no. 3 (September 2011): p. 249–267.
10. Jim Heskett, "Why Isn't 'Servant Leadership' More Prevalent?," *HBS Working Knowledge*, May 13, 2013.
11. Michael W. Browne and Robert Cudeck, "Alternative Ways of Assessing Model Fit," in *Testing Structural Equation Models*, ed. Kenneth A. Bollen and J. Scott Long (Newbury Park, CA: Sage, 1993): p. 136–162.
12. Li-tze Hu and Peter M. Bentler, "Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification," *Psychological Methods*, vol. 3, no. 4 (1998): p. 424–453.
13. Ibid.
14. Stephen G. West, John F. Finch, and Patrick J. Curran, "Structural Equation Models with Nonnormal Variables: Problems and Remedies," in *Structural Equation Modeling: Concepts, Issues, and Applications*, ed. Rick. H. Hoyle (Thousand Oaks, CA: Sage, 1995): p. 56–75.
15. 1=Male, 2=Female.
16. Tenure at company was calculated by subtracting the participant's start date from the date the survey was taken, then dividing by 365.
17. 1=Non-management level (including entry level), 2=First-level management (manager of employees) or the equivalent on the professional or technical ladder, 3=Second-level management (manager of managers) or the equivalent on the professional or technical ladder, 4=Senior level management or the equivalent on the professional or technical ladder (but not CEO), 5=CEO.
18. Gender composition of workgroup was calculated by dividing the total number of people in the workgroup by the total number of females in the workgroup.
19. 1=Male, 2=Female.
20. 1=1; 2=2 to 4; 3=5–9; 4=10–24; 5=25–49; 6=50–99; 7=100–249; 8=250–499; 9=500–999; 10=1,000–2,499; 11=2,500–4,999; 12=5,000–9,999; 13=10,000–14,999; 14=15,000–19,999; and 15=20,000+.