

Supplementary Information

Table SI1

Meta-Analysis of the relationships between leadership and workplace aggression: tests for publication bias.

Leadership variable	<i>k</i>	<i>N</i>	<i>r</i>	<i>SDr</i>	ρ	<i>SDρ</i>	<i>CI_{LL}</i>	<i>CI_{UL}</i>	<i>CV_{LL}</i>	<i>CV_{UL}</i>	Var%	Egger's regression	
												<i>zval</i>	<i>pval</i>
Change-oriented													
Transformational	22	8134	-0.22	0.17	-0.24	0.19	-0.33	-0.15	-0.49	0.01	8.08	-0.44	0.66
Task-oriented													
Transactional	10	2526	-0.15	0.24	-0.16	0.28	-0.36	0.05	-0.54	0.22	5.96	-0.30	0.76
Relational-oriented	41	39103	-0.26	0.11	-0.29	0.13	-0.34	-0.25	-0.46	-0.13	6.48		
Supportive	14	19626	-0.28	0.09	-0.30	0.10	-0.36	-0.25	-0.44	-0.17	6.91	-0.68	0.49
LMX	25	18107	-0.25	0.13	-0.29	0.16	-0.36	-0.23	-0.50	-0.09	6.24	-0.09	0.93
Values-based and Moral	34	14478	-0.29	0.14	-0.33	0.14	-0.38	-0.27	-0.51	-0.14	10.60		
Authentic	12	6156	-0.22	0.09	-0.26	0.09	-0.32	-0.19	-0.38	-0.14	21.80	-1.13	0.26
Ethical	18	6849	-0.32	0.13	-0.36	0.15	-0.44	-0.28	-0.55	-0.16	10.57	0.60	0.55
Passive													
Laissez-faire Leadership	17	14758	0.31	0.14	0.37	0.16	0.28	0.45	0.15	0.58	4.65	0.18	0.86
Destructive Leadership	83	36191	0.42	0.19	0.47	0.21	0.42	0.52	0.20	0.74	4.39		
Abusive	53	19933	0.45	0.22	0.51	0.24	0.44	0.57	0.20	0.81	3.73	0.60	0.28
Narcissistic	4	1498	0.38	0.15	0.44	0.19	0.12	0.75	0.12	0.75	6.80	1.08	0.07
Uncivil	14	5526	0.41	0.13	0.46	0.13	0.38	0.54	0.28	0.63	11.41	1.80	0.78
Authoritarian	9	7917	0.33	0.12	0.37	0.14	0.26	0.47	0.18	0.56	5.68	0.28	0.66

Note: *k* = number of studies contributing to meta-analysis; *N* = total sample size; *r* = mean sample-size-weighted observed correlations; *SDr* = estimated true standard deviation of correlations; ρ = mean sample-size-weighted corrected correlation; *SD ρ* = estimated true standard deviation of corrected correlations; *CI_{LL}* and *CI_{UL}* = lower and upper bounds, respectively, of the 95% confidence interval; *CV_{LL}* and *CV_{UL}* = lower and upper bounds, respectively, of the 80% credibility interval around the mean true-score correlations; Var% = percentage of variance attributable to statistical artifacts; Q = Chi-square test of homogeneity; *zval* = the value of the Egger's regression test statistic; *pval* = the corresponding p-value of Egger's regression test.

* *p* < .05.

** *p* < .01.

Table SI2

Meta-Analysis of the relationships between leadership and workplace aggression in(ex)cluding outliers.

Leadership variable	<i>k</i>	<i>N</i>	<i>r</i>	<i>SDr</i>	ρ	<i>SD</i> ρ	CI _{LL}	CI _{UL}	CV _{LL}	CV _{UL}	Var%	<i>Q</i>	<i>I</i> ²	τ^2	O- <i>k</i>	O- <i>r</i>
Change-oriented																
Transformational	22	8134	-0.22	0.17	-0.24	0.19	-0.33	-0.15	-0.49	0.01	8.08	259.87**	91.92	0.03	1	-0.22
Task-oriented																
Transactional	10	2526	-0.15	0.24	-0.16	0.28	-0.36	0.05	-0.54	0.22	5.96	151.08**	94.04	0.08	1	-0.09
Relational-oriented	41	39103	-0.26	0.11	-0.29	0.13	-0.34	-0.25	-0.46	-0.13	6.48	617.08**	93.52	0.02		
Supportive	14	19626	-0.28	0.09	-0.30	0.10	-0.36	-0.25	-0.44	-0.17	6.91	188.15**	93.09	0.01	2	-0.29
LMX	25	18107	-0.25	0.13	-0.29	0.16	-0.36	-0.23	-0.50	-0.09	6.24	384.36**	93.76	0.02	2	-0.40
Values-based and Moral	34	14478	-0.29	0.14	-0.33	0.14	-0.38	-0.27	-0.51	-0.14	10.60	311.42**	89.40	0.02		
Authentic	12	6156	-0.22	0.09	-0.26	0.09	-0.32	-0.19	-0.38	-0.14	21.80	50.46**	78.2	0.01	0	-0.22
Ethical	18	6849	-0.32	0.13	-0.36	0.15	-0.44	-0.28	-0.55	-0.16	10.57	160.76**	89.43	0.02	0	-0.32
Passive																
Laissez-faire Leadership	17	14758	0.31	0.14	0.37	0.16	0.28	0.45	0.15	0.58	4.65	344**	95.35	0.03	1	0.34
Destructive Leadership	83	36191	0.42	0.19	0.47	0.21	0.42	0.52	0.20	0.74	4.39	1869.64**	95.61	0.04		
Abusive	53	19933	0.45	0.22	0.51	0.24	0.44	0.57	0.20	0.81	3.73	1392.56**	96.27	0.06	3	0.45
Narcissistic	4	1498	0.38	0.15	0.44	0.19	0.12	0.75	0.12	0.75	6.80	44.11**	93.2	0.04	2	0.47
Uncivil	14	5526	0.41	0.13	0.46	0.13	0.38	0.54	0.28	0.63	11.41	113.97**	88.59	0.02	1	0.47
Authoritarian	9	7917	0.33	0.12	0.37	0.14	0.26	0.47	0.18	0.56	5.68	140.8**	94.32	0.02	2	0.40

Note: *k* = number of studies contributing to meta-analysis; *N* = total sample size; *r* = mean sample-size-weighted observed correlations; *SDr* = estimated true standard deviation of correlations; ρ = mean sample-size-weighted corrected correlation; *SD* ρ = estimated true standard deviation of corrected correlations; CI_{LL} and CI_{UL} = lower and upper bounds, respectively, of the 95% confidence interval; CV_{LL} and CV_{UL} = lower and upper bounds, respectively, of the 80% credibility interval around the mean true-score correlations; Var% = percentage of variance attributable to statistical artifacts; *Q* = Chi-square test of homogeneity; *I*² = proportion of observed variance in the observed correlation attributable to statistical artifacts; τ^2 = the variance of the distribution of true effect sizes; O-*k* = number of outliers detected; O-*r* = adjusted *r* after excluding outlier studies.

* *p* < .05.

** *p* < .01.

Table SI3

Meta-analysis results for leadership and workplace aggression: the role of aggression types.

Leadership	Subgroup	<i>k</i>	<i>N</i>	<i>r</i>	ρ	<i>SD</i> ρ	CI _{LL}	CI _{UL}	<i>t</i>	<i>p</i>
Transformational	Bullying	12	5789	-0.19	-0.22	0.21	-0.35	-0.09	0.84	0.41
	Incivility	7	1566	-0.27	-0.29	0.15	-0.43	-0.15		
Transactional	Bullying	6	1613	-0.13	-0.14	0.34	-0.50	0.22	0.00	1.00
	Incivility	4	806	-0.14	-0.14	0.19	-0.45	0.17		
Supportive	Bullying	7	17852	-0.28	-0.30	0.10	-0.40	-0.21	3.15	0.01
	Incivility	3	672	-0.40	-0.45	0.05	-0.58	-0.31		
LMX	Bullying	11	12244	-0.29	-0.34	0.09	-0.40	-0.28	-1.61	0.20
	Incivility	4	1643	-0.14	-0.15	0.23	-0.51	0.20		
Authentic	Bullying	8	3058	-0.23	-0.26	0.12	-0.36	-0.17	0.15	0.89
	Incivility	2	1335	-0.25	-0.27	0.07	-0.86	0.32		
Ethical	Bullying	9	4232	-0.37	-0.41	0.13	-0.51	-0.31	-1.37	0.27
	Incivility	3	1339	-0.24	-0.27	0.16	-0.66	0.13		
Laissez-faire	Bullying	15	17614	0.32	0.37	0.14	0.29	0.45	-0.18	0.87
	Incivility	5	1045	0.36	0.40	0.37	-0.06	0.86		
Abusive	Bullying	10	3371	0.33	0.37	0.22	0.21	0.52	-3.92	0.00
	Incivility	4	2918	0.65	0.73	0.12	0.55	0.92		
Uncivil	Bullying	2	1928	0.30	0.34	0.14	-0.89	1.57	-2.30	0.20
	Incivility	5	1345	0.55	0.59	0.10	0.47	0.72		
Authoritarian	Bullying	7	6988	0.36	0.40	0.06	0.34	0.46	1.32	0.41
	Incivility	2	929	0.11	0.11	0.31	-2.66	2.89		

Note: *k* = number of studies contributing to meta-analysis; *N* = total sample size; *r* = mean sample-size-weighted observed correlations; ρ = mean sample-size-weighted corrected correlation; *SD* ρ = estimated true standard deviation of corrected correlations; CI_{LL} and CI_{UL} = lower and upper bounds, respectively, of the 95% confidence interval.