### Electronic Supplementary Material for Genau, H. A., Blickle, G., Schütte, N., & Meurs, J. A. (2021). Machiavellian leader effectiveness: The moderating role of political skill. *Journal of Personnel Psychology*. https://doi.org/10.1027/1866-5888/a000284

Since the ICC(1, k) was below .75 (LeBreton & Senter, 2008), in an additional analysis, we tested our moderated mediation model with a 2-1-2 MSEM using grand mean centering in Mplus (Muthén & Muthén, 1998-2012). We built the model and computed the indirect effect following the recommendations by Preacher et al. (2010). In support of our hyptheses, we found a significant interaction effect of machiavellianism x political skill on transformational leadership (without CVs: estimate = .23, SE = .08, p = .003; with CVs: estimate = .24, SE = .08, p = .002) and a significant effect of transformational leadership on leader effectiveness (without CVs: estimate = 1.70, SE = .35, p < .001; with CVs: estimate = 1.72, SE = .35, p < .001). The index of moderated mediation was IMM = .39 and the 95% confidence interval excluded zero (SE = .09; 95% CI [.212, .574]; with CVs: IMM = .42, SE = .09; 95% CI [.238, .594]). Then, we computed the conditional indirect effects at the same values of the moderator as used in the analyses described above. When political skill was medium (without CVs: z = 0; with CVs: z = -.5), there was a negative and significant relation between Machiavellianism and leader effectiveness via transformational leader behavior (without CVs: estimate = -.29, SE = .14, 95% CI [-.557, -.019]; with CV: estimate = -.47, SE = .16, 95% CI [-.786, -.148]). When political skill was high (without CVs: z = 1.65; with CVs: z = 1.5), there was a positive and significant relation between Machiavellianism and leader effectiveness (without CVs: estimate = .36, SE = .20, 90% CI [.028, .692]; with CVs: estimate = .36, SE = .19, 90% CI [.053, .676]). Thus, the MSEM results provide further support for our hypotheses.

In a further post-hoc analysis, we found that the interaction of Machiavellianism x political skill positively predicted leader effectiveness with and without control variables (F =12.20, df1 = 1, df2 = 149, p = .001,  $\Delta R^2 = 0.048$ ). However, this relation implies common-source bias (Podsakoff et al. 2012). In a final post-hoc analysis, we integrated the path from superiorrated leader political skill to superior-rated leader effectiveness (see Figure 1), although this relation also implies common-source bias. The goal of this analysis was to conservatively test whether the subordinate ratings of transformational leader behaviors have incremental validity above and beyond a potential bias of superiors' performance ratings. As expected, transformational leadership behaviors still positively predicted ( $\beta = .13$ , p = .026, one-tailed) leader effectiveness. This additionally supports the suggestion that leadership behaviors have a specific impact on supervisory performance ratings of leaders.

Additional Analyses (N = 154). The results of the below analyses include the participant who gave identical responses to all Machiavellian items. Overall, neither the significance nor the directionality of these relationships changed with the inclusion of this case, and the effect sizes and standard errors were nearly unchanged. The additional case includes only one subordinate. Therefore, the results of the ICC and rWG do not change when including this case. Table E1 presents the descriptive statistics and correlations for all study variables (with the additional case). In line with Hypothesis 1, we found a significant Machiavellianism x political skill interaction effect on transformational leader behavior (Table E2, Model 1b;  $\beta = .27$ , p = .001,  $\Delta R^2 = 6.7\%$ ). The cumulative probability of finding significant effects for the interaction was 93.36% (Bliese & Wang, 2020). Using the Johnson-Neyman technique (Hayes, 2015a), we found that the conditional effect of Machiavellianism on transformational leadership was significantly negative at all values of political skill below 0 *SD* (with control variables [CVs] below -.50 *SD*) and significantly positive at all values of political skill above 1.70 *SD* (with CVs above 1.55 *SD*; Table E3).

The plot of the interaction (Figure E1) shows the form of the Machiavellianism x political skill interaction at low (i.e., -1.50 *SD*), medium (i.e., 0 *SD*) and high (i.e., 1.70 *SD*) levels of political skill. When political skill was low (z=-1.5), Machiavellianism negatively predicted transformational leader behavior (b = -.34, p = .001). When political skill was medium (z=0), Machiavellianism negatively predicted transformational leader behavior (b = -.10, p = .023). When political skill was high (z = 1.70), Machiavellianism positively predicted transformational leader behavior (b = .17, p = .012). Including the control variables did not substantially change our results (Table E2: Model 1c).

In line with Hypothesis 2, we additionally found a significant positive effect of transformational leadership on leader effectiveness (Table E2: Model 2a;  $\beta = .30$ , *p*<.001, *R*<sup>2</sup> = 9.0%). The cumulative probability of finding significant effects for transformational leadership was 96.73% (Bliese & Wang, 2020). Again, entering the control variables did not change our results (Table E2: Model 2b). The index of moderated mediation was IMM=.08 and the 95% confidence interval excluded zero (*SE*=.04; 95% CI [.022, .168]; with CVs: IMM=.08, *SE*=.04; 95% CI [.022, .171]).

Table E3 shows the results for the conditional indirect effect of Machiavellianism on leader effectiveness via transformational leader behavior. In the model without control variables, when political skill was low (z=-1.5), there was a negative and significant relation between Machiavellianism and leader effectiveness (b = -.18, SE = .07, 95% CI [-.34, -.05]). When political skill was medium (z = 0), there was a negative and significant relation between Machiavellianism and leader effectiveness (b = -.05, SE = .03, 95% CI [-.13, -.01]). When political skill ratings were high (z = 1.70), there was a positive and significant relation between Machiavellianism and leader effectiveness (b = .09, SE = .06, 95% CI [.01, .23]). Again, controlling for age and gender did not change the results significantly (Table E3).

## Table E1

Means, Standard Deviations, Cronbach's Alphas, and Intercorrelations of Study Variables

		М	SD	1	2	3	4	5	6
1	Gender <sup>a</sup>	1.50	.50	-					
2	Age <sup>a</sup>	42.44	10.58	03	-				
3	Machiavellianism <sup>a</sup>	2.25	.57	.36***	19*	(.88)			
4	Political skill <sup>b</sup>	4.93	.90	04	21**	.02	(.95)		
5	Transformational leadership <sup>c</sup>	3.66	.58	11	02	11	.29***	(.95)	
6	Leader effectiveness <sup>b</sup>	3.76	.69	.03	12	06	.60***	.30***	(.90)

*Note.* N = 154 target leaders, superiors, and combined subordinate ratings (comprising 284 subordinates in total); Gender (1 =female, 2 =male).

<sup>a</sup> target leader's self-report ratings;

<sup>b</sup> superior's ratings;

<sup>c</sup> subordinates' ratings; \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001.

# Table E2

Moderated Mediation Models of Machiavellianism x Political Skill on Leader Effectiveness via Transformational Leadership

	DV = Transformational leader behavior <sup>b</sup>						DV = Leader effectiveness <sup>c</sup>				
	Model 1a		Model 1b		Model 1c			Model 2a		Model 2b	
	β	р	β	р	β	р		β	р	β	р
Gender <sup>a</sup>					06	.451	Gender <sup>a</sup>			.09	.272
Age <sup>a</sup>					03	.685	Age <sup>a</sup>			12	.128
Machiavellianism <sup>a</sup>	11	.144	18	.021	17	.055	Machiavellianism <sup>a</sup>	03	.740	08	.335
Political skill <sup>c</sup>	.30	<.001	.33	<.001	.32	<.001					
Machiavellianism			.27	.001	.27	.001					
Х											
Political skill											
							Transformational	.30	<.001	.30	<.001
							leader behavior <sup>b</sup>				
$R^2$	.099 (	p	.16	6 (p		.170 (p		.090 (p	= .001)	.111 (p	= .001)
	<.001	1		)01)		<.001)		v	,	L, L	,
$F(R^2)$		8.34		9.96		6.08			7.51		4.65
(df1, df2)		(2, 151)	(	3, 150)	(	(5, 148)			(2, 151)		(4, 149)
$\Delta R^2$			.0	67 (p = 1)	.0	04 (p = 1)				.021 (p	= .183)
				.001)		.685)				_	
$F_{\Delta R^2}$				11.99		.38					1.72
(df1, df2)			(	1, 150)	(	(2, 148)					(2, 149)

Note. N = 154 target leaders, superiors, and combined subordinate ratings (comprising 284 subordinates in total); Gender (1 = female, 2 = male); all independent variables are *z*-standardized; <sup>a</sup>target leader's self-report ratings; <sup>b</sup>subordinates' ratings; <sup>c</sup>superior's rating.

## Table E3

Regions of Significance and indirect effects of Machiavellianism x Political Skill on Leader

Effectiveness via Transformational Leadership

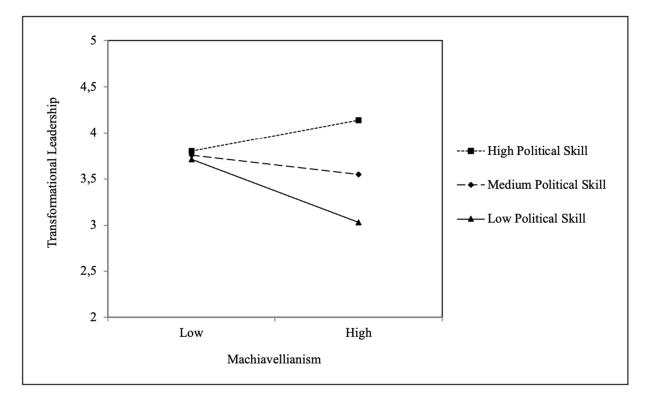
Value of	Conditional effect (B) of	Conditional indirect effect ( <i>B</i> ) of					
Political	Machiavellianism on Transformational	Machiavellianism on leader effectiveness					
Skill	Leadership at values of Political Skill	via Transformational Leadership at values					
	F	of Political Skill					
Without Control Variables:							
-1.96	72 ( <i>SE</i> = .19, LLCI = -1.07, ULCI =32)	21 ( <i>SE</i> = .09, LLCI =42, ULCI =06)					
-1.50	59 ( <i>SE</i> = .16, LLCI =89, ULCI =26)	18 ( <i>SE</i> = .07, LLCI =34, ULCI =05)					
-1.00	45 ( <i>SE</i> = .12, LLCI =68, ULCI =20)	13 ( <i>SE</i> = .06, LLCI =27, ULCI =04)					
50	31 ( <i>SE</i> = .09, LLCI =49, ULCI =13)	09 (SE = .04, LLCI =19, ULCI =03)					
.00	18 ( <i>SE</i> = .08, LLCI =33, ULCI =02)	05 ( <i>SE</i> = .03, LLCI =13, ULCI =01)					
.50	04 ( <i>SE</i> = .09, LLCI =20, ULCI = .14)	01 ( <i>SE</i> = .03, LLCI =07, ULCI = .04)					
1.70	.29 ( <i>SE</i> = .16, LLCI = .01, ULCI = .64)	.09 (SE = .06, LLCI = .01, ULCI = .23)					
1.80	.32 ( <i>SE</i> = .17, LLCI = .02, ULCI = .68)	.09 ( <i>SE</i> = .06, LLCI = .01, ULCI = .26)					
1.96	No observed values						
With Control Variables:							
-1.96	71 ( <i>SE</i> = .21, LLCI = -1.11, ULCI =28)	21 ( <i>SE</i> = .09, LLCI =43, ULCI =06)					
-1.50	58 ( <i>SE</i> = .17, LLCI =91, ULCI =23)	17 ( <i>SE</i> = .08, LLCI =36, ULCI =05)					
-1.00	44 ( <i>SE</i> = .14, LLCI =71, ULCI =16)	13 ( <i>SE</i> = .06, LLCI =28, ULCI =04)					
50	30 ( <i>SE</i> = .11, LLCI =51, ULCI =09)	09 ( <i>SE</i> = .04, LLCI =20, ULCI =02)					
.00	16 ( <i>SE</i> = .09, LLCI =34, ULCI = .01)	05 ( <i>SE</i> = .03, LLCI =13, ULCI =001)					
.50	02 ( <i>SE</i> = .09, LLCI =19, ULCI = .17)	01 ( <i>SE</i> = .03, LLCI =07, ULCI = .05)					
1.55	.27 ( <i>SE</i> = .15, LLCI = .002, ULCI = .59)	.08 ( <i>SE</i> = .05, LLCI = .01, ULCI = .22)					
1.80	.34 ( <i>SE</i> = .17, LLCI = .04, ULCI = .70)	.10 ( <i>SE</i> = .06, LLCI = .01, ULCI = .26)					
1.96	No observed values						

*Note.* N = 154 target leaders, superiors, and combined subordinate ratings (comprising 284 subordinates in total); effects based on 10,000 bootstrap samples and 95% confidence intervals; values of the moderator variable at which the slope coefficients become significantly negative or positive are bold faced.

#### Figure E1

#### Interaction between Machiavellianism and Political Skill in Predicting Transformational

Leadership



*Note*. N = 154 target leaders, 154 superiors, and 284 subordinates; low (-1.5 SD) political skill (b = -.34, p = .001), medium (0 SD) political skill (b = -.10, p = .023) and high (1.70 SD) political skill (b = .17, p = .012).

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