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STFU and follow: Trait activation of dark triad responses to leader profanity across 19 countries

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ABSTRACT

While workplace profanity is typically considered inappropriate, research indicates mixed effects on perceived trustworthiness, intelligence, authenticity, and informality. Using trait activation theory, we examined how leader profanity influences supervisor satisfaction among 5660 employees across 19 countries, considering follower Dark Triad traits (narcissism, Machiavellianism, psychopathy) and country-level income inequality. Leader profanity interacted significantly with each Dark Triad trait. In low-inequality countries, highly Machiavellian and psychopathic followers responded positively to leader profanity, while narcissistic followers showed minimal effects. In high-inequality countries, leader profanity decreased satisfaction regardless of follower personality, suggesting strong situational norms override individual differences. These findings demonstrate that personality traits require specific situational conditions for expression, with societal context establishing boundary conditions for trait activation.

Effective leadership communication is a critical determinant of organizational success (Eriksson et al., 2021). As multinational corporations navigate diverse cultural and organizational contexts, the nuances of leadership communication styles demand rigorous scholarly attention. One particularly salient, and often contentious, aspect of leader communication is the use of profanity. While frequently perceived as inappropriate and unprofessional in formal workplace settings (Baruch et al., 2017), profanity is also increasingly observed as a communicative tool employed by leaders, potentially signaling authenticity, informality, or even boldness (Cavazza & Guidetti, 2014; Feldman et al., 2017). However, the effectiveness of such communication in a globalized workforce is likely to vary significantly.

In this study, we leverage trait activation theory (Tett & Guterman, 2000) to investigate how leader profanity elicits differential responses among followers with different Dark Triad personality traits (i.e., narcissism, Machiavellianism, and psychopathy) across diverse national contexts. Research on Dark Triad traits in organizational settings has produced mixed findings regarding when and how these traits shape

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workplace outcomes (cf. Gruda et al., 2022). This is likely due to prior work examining Dark Triad effects without specifying the situational conditions that activate trait-relevant responses. Trait activation theory (TAT; Tett & Guterman, 2000) provides a precise framework for resolving this ambiguity: personality traits are not expressed uniformly but are activated by trait-relevant situational cues. We examine supervisor satisfaction as our focal outcome because it directly captures followers' affective-evaluative response to leader behavior. Satisfaction with one's supervisor is among the most consequential attitudes in organizational life, with documented links to turnover intentions, organizational commitment, and well-being (Judge et al., 2001). We argue that followers' Dark Triad traits (DTTs) may be activated by exposure to leader profanity in distinct ways. Furthermore, we examine country-level inequality as a critical moderator that establishes the normative context within which trait activation occurs.

Using a multinational dataset of 5660 employees across 19 countries spanning diverse levels of income inequality, we provide the first large-scale, cross-cultural test of how follower personality moderates reactions to supervisor profanity, demonstrating boundary conditions for Dark Triad trait expression and how macro-level inequality shapes micro-level personality effects.

1. Profanity in leader communication

Profanity, defined as language considered vulgar, irreverent, or obscene (Jay & Janschewitz, 2008), represents a workplace norm violation that can serve as a situational trigger for trait-relevant responses. From a trait activation perspective, leader profanity creates a situation where followers must interpret and respond to norm-violating behavior; a process that should differentially activate responses based on their underlying personality traits.

The leader-follower relationship provides a fascinating context for examining trait activation for several reasons. Unlike peer relationships, where profanity might be reciprocal, the hierarchical nature of leader-follower dynamics creates an asymmetric situation in which followers must respond to, rather than match, their leader's communication style. In addition, the power differential inherent in leader-follower relationships may amplify the trait-activation process, as followers with different Dark Triad profiles may interpret the same behavior through distinct lenses of power, manipulation, or emotional significance.

Leaders may use profanity to signal informality and reduce social distance (Stenström, 2017). The use of profanity affects the overall impression, perceived intelligence, and trustworthiness of leaders, which are generally rated lower on these variables (DeFrank & Kahlbaugh, 2019). However, the impact of these perceptions on supervisor satisfaction likely depends on whether such norm violations activate the follower's personality traits. For followers whose Dark Triad traits predispose them to value rule-breaking or power displays, such signals may activate positive responses. Conversely, in some contexts, leader profanity could be interpreted as a signal of dominance, assertiveness, or even intimidation (Balakrishnan et al., 2019).

2. Follower Dark Triad traits and leader profanity

From a trait activation perspective, follower personality traits, specifically the DTTs narcissism, Machiavellianism, and psychopathy, should be differentially activated by exposure to leader profanity. While these three traits share a common core of disagreeableness and callousness (Jones & Paulhus, 2014), they differ in important ways that should lead to distinct patterns of activation when confronted with norm-violating leader behavior.

Psychopathy is characterized by impulsivity, thrill-seeking, low empathy, and low anxiety (Jones & Paulhus, 2014). Of the three Dark Triad traits, psychopathy involves the greatest emotional detachment and disregard for social norms. Leader profanity should strongly activate psychopathic followers' trait-relevant responses, as their tolerance for norm violations and emotional detachment leads them to be unbothered by, or attracted to, leaders who disregard social conventions. Machiavellianism is characterized by strategic manipulation, long-term planning, and a cynical worldview (Gruda et al., 2023). Unlike psychopaths, Machiavellian individuals are calculating rather than impulsive. Leader profanity should prompt a strategic assessment: a profanity-using leader may be seen as willing to break rules to achieve goals, aligning with Machiavellian followers' instrumental approach. Finally, narcissism, while sharing the Dark Triad's antagonistic core, is distinguished by grandiosity, need for admiration, and ego-fragility (Gruda et al., 2022; Miller et al., 2017). Because narcissists are primarily concerned with self-image and admiration rather than rule-breaking, leader profanity presents an ambiguous stimulus that neither directly threatens nor enhances their ego, leading to weaker trait activation compared to psychopathy and Machiavellianism.

H1. Follower psychopathy (H1a) and Machiavellianism (H1b) will show strong positive moderation of the relationship between leader profanity and supervisor satisfaction, while narcissism (H1c) will show a weaker positive moderation, such that followers who score high on these traits perceive leader profanity less negatively (or more positively) than followers who score low on these traits, with the effect being most substantial for psychopathy, moderate for Machiavellianism, and weakest for narcissism.

3. Leader communication across countries

Extending trait activation theory to the multinational context requires consideration of how cultural and socioeconomic factors shape the situational strength of leader profanity as a trait-activating stimulus. Given that national contexts influence leader behaviors and leadership effectiveness, we argue that country-level income inequality fundamentally alters both the normative context and the strength of the situation, thereby moderating the activation process of the respective trait.

We chose income inequality (Gini coefficient) over cultural frameworks (Hofstede, 2001) because it captures objective structural conditions that shape power-distance expectations and power dynamics (Wilkinson & Pickett, 2009). From a situational strength perspective (Meyer et al., 2010), high-inequality contexts create “strong situations” with clear norms constraining personality expression. In high-inequality countries, formalized communication norms emphasize deference to authority (Dai et al., 2022). High-income inequality contexts also affect social mobility beliefs; in high-inequality societies where mobility is limited, violating communication norms may be seen as futile rebellion rather than authentic expression, with leader profanity likely signaling a strong suppression of differential trait activation (Rau & Stokes, 2025). All followers, regardless of personality type, tend to interpret the behavior negatively. Conversely, in low-inequality countries, more informal communication norms create a weaker context in which normative violations are less severe, providing the ambiguity necessary for personality traits to guide interpretation and response.

H2. Country-level income inequality moderates the trait activation process, such that in low-inequality countries, Dark Triad traits will be more strongly activated by leader profanity (showing more substantial moderation effects), while in high-inequality countries, the negative situational strength of profanity will suppress trait activation (showing weaker or null moderation effects).

4. Methods

4.1. Participants and procedure

We tested our hypotheses using data from a sample of 5660 full-time employees across 19 countries (M_{age} = 33.23, SD = 10.25; 52.23% female). Countries were selected to ensure variation in income inequality while maintaining geographical diversity. Data were collected primarily

through Prolific and personal networks. Entry requirements were adult age (18+), nationality, and English fluency. Participation was voluntary with informed consent.

A list and demographic overview of participating countries is provided in Table 1. The dataset is publicly available at https://osf.io/576gx/?view_only=872b14787c154a5ca7ae113547c750d0.

4.2. Measures

The survey was administered in English to all participants except those in China, where items were translated using back-translation procedures. Unless otherwise noted, all items were rated on a 7-point Likert-type scale ranging from 1 (strongly disagree/never) to 7 (strongly agree/very frequently).

4.2.1. Leader profanity

We measured leader profanity from the follower's perspective using a single-item 5-point scale (1 = no, 5 = a great deal), adapted from previous research on workplace communication. The item read: "My supervisor uses _____ (of) profanity at work". The single-item measure was necessitated by the brevity required for a multi-country survey to minimize participant fatigue. Single-item measures are appropriate when the construct is concrete, unambiguous, and behaviorally specific (Matthews et al., 2022), as with profanity frequency.

4.2.2. Follower Dark Triad traits

We assessed follower DTTs using the Dirty Dozen (DD) scale (Jonason & Webster, 2010), a well-validated 12-item measure. The DD includes separate subscales for narcissism (α = 0.85 (overall), ranging from 0.74 to 0.88 across countries; 4 items; e.g., "I tend to seek prestige or status"), Machiavellianism (α = 0.82 (overall), ranging from 0.74 to 0.92 across countries (except China: α = 0.55; 4 items; e.g., "I tend to manipulate others to get my way."), and psychopathy (α = 0.82 (overall), ranging from 0.61 to 0.92 across countries (except China: α = 0.23; excluded from analysis; 4 items; e.g., "I tend to be callous or insensitive"). Participants responded using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Notably, the psychopathy subscale demonstrated unacceptable reliability in China (α = 0.23); therefore, the Chinese data were excluded from all psychopathy analyses. This exclusion reduced the sample to n = 5360 across 18 countries for models involving psychopathy.

Table 1
Sample and demographics by country.

Country	n	% of total sample	n_{male}	n_{female}	Age (mean)	Age (SD)
Armenia	383	6.77	75	308	37.96	10.16
Australia	293	5.18	148	145	34.51	11.85
Austria	212	3.75	114	98	29.47	8.21
Chile	287	5.07	179	108	28.08	7.06
China	300	5.3	98	202	32.51	6.06
Ghana	192	3.39	63	129	42.97	9.58
Greece	281	4.96	142	139	37.11	11.62
India	489	8.64	325	164	32.64	9.21
Ireland	288	5.09	95	193	38.74	11.05
Israel	207	3.66	100	107	31.75	10.32
Mexico	287	5.07	136	151	29.34	7.31
North Macedonia	189	3.34	66	123	36.51	6.98
Poland	283	5.0	170	113	27.26	7.59
Portugal	286	5.05	169	117	28.83	9.07
Romania	481	8.5	174	307	29.88	8.78
South Africa	286	5.05	88	198	29.82	7.90
Spain	280	4.95	148	132	34.34	10.89
Sweden	275	4.86	201	74	31.29	9.46
US	361	6.38	213	148	40.45	10.91

4.2.3. Supervisor satisfaction

We measured supervisor satisfaction using four items adapted from established job satisfaction instruments, including the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) and Minnesota Satisfaction Questionnaire (MSQ; Weiss et al., 1967). Participants were asked "How satisfied are you with" (a) "the amount of support and guidance your supervisor gives you", (b) "the overall competence of your supervisor", (c) "the respect and fairness you receive from your supervisor", and (d) "the way your supervisor handles complaints". The scale demonstrated good internal consistency reliability (Cronbach's α = 0.90 across the entire sample and ranged from 0.78 to 0.94 across individual countries).

4.2.4. Country-level inequality

We used the Gini coefficient as our measure of country-level income inequality. Gini coefficient data were obtained from the World Bank for the year closest to the year of data collection.

4.2.5. Control variables

We controlled for participant age, gender, education level, and leader-follower relational tenure.

4.3. Data analysis

We employed multilevel modeling (MLM) using Stata 18.0 to account for the nested structure of the data. To test our hypotheses, we examined interaction effects at high (95th percentile) and low (5th percentile) levels of the moderator. The use of extreme percentiles is justified for identifying boundary conditions in cross-cultural research (Cohen et al., 2003).

Our multilevel models specified random intercepts for country (allowing baseline supervisor satisfaction to vary across countries). All models were estimated with robust standard errors clustered by country to account for potential heteroscedasticity and non-independence within countries. The null model yielded an ICC of 0.052, indicating that approximately 5.2% of the variance in supervisor satisfaction was attributable to between-country differences, justifying the multilevel approach. We report pseudo-R^2 values, confirmatory factor analyses, and evidence of measurement invariance in the Supplementary Materials (S8).

Models were built hierarchically: controls (Step 1), main effects (Step 2), two-way interactions (Step 3), and three-way interactions (Step 4). Simple slopes were calculated to examine the nature of significant interactions. All interaction effects were estimated using the full sample (N = 5660) with continuous interaction terms. The 5th and 95th percentile values of the Gini coefficient are used solely for computing simple slopes (i.e., evaluating the conditional effect of profanity at specific values of the moderator) and for graphical display, following standard practice for probing interactions in multilevel models (Preacher et al., 2006). We also report simple slopes at the mean ± 1 SD of the Gini coefficient, plots showing marginal effects across the DT trait range (S9), control-variable interactions with leader profanity (S6), and an alternative model specification with profanity as a moderator (S10) in the Supplementary Materials.

5. Results

Zero-order pairwise correlations are reported in Table 2. Two-way interaction results are reported in Table 3.

5.1. Two-way interactions between leader profanity and follower DTTs

Consistent with trait activation theory, leader profanity activated differential responses based on followers' Dark Triad traits. The interaction between leader profanity and follower psychopathy and Machiavellianism positively predicted supervisor satisfaction across countries (psychopathy: b = 0.08, SE = 0.01, z = 10.75, p < 0.001;

Table 2
Zero-order pairwise correlations.

	Variables	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1)	Supervisor Satisfaction	3.76	1.03	(0.90)									
(2)	L-Profanity	2.02	1.11	−0.10***	–								
(3)	F-Narcissism	3.17	1.45	−0.01	0.29***	(0.85)							
(4)	F-Machiavellianism	2.54	1.42	−0.04**	0.36***	0.65***	(0.86)						
(5)	F-Psychopathy	2.48	1.33	−0.04**	0.37***	0.57***	0.75***	(0.82)					
(6)	Gini	0.36	0.08	0.05***	−0.02	−0.12***	−0.06***	−0.15***	–				
(7)	Tenure	4.18	5.95	0.04***	0.06***	0.03	0.03*	0.05***	−0.06***	–			
(8)	L-Gender	1.42	0.49	−0.02	−0.13***	−0.03	−0.06***	−0.07***	−0.01	−0.01	–		
(9)	F-Gender	1.52	0.50	0.00	−0.14***	−0.05***	−0.14***	−0.20***	0.04**	0.02	0.37***	–	
(10)	F-Age	33.23	10.26	−0.01	−0.12***	−0.16***	−0.16***	−0.12***	−0.05***	0.31***	−0.01	0.03*	–
(11)	F-Work Experience	10.48	9.31	−0.02	−0.12***	−0.16***	−0.16***	−0.14***	−0.05***	0.32***	−0.01	0.02	0.88***

Note: F = Follower, L = Leader; Cronbach alphas on diagonal; Gender = male (1) and female (2); *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$; n = 5660, $n_{countries} = 19$.

Table 3
Two-way interaction results of leader profanity and follower dark triad traits.

	Controls	Main Effects	Profanity X F-Narc	Profanity X F-Mach	Profanity X F-Psych
	b/se	b/se	b/se	b/se	b/se
Tenure	0.01**	0.01***	0.01**	0.01**	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Controls					
L-Gender (Female)	−0.02	−0.04	−0.05	−0.05	−0.04
	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)
F-Age	0.00	−0.00	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
F-Gender (female)	0.00	−0.04	−0.04	−0.04	−0.04
	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)
F-Work Experience	−0.01	−0.01	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Independent variables					
L-Profanity		−0.13***	−0.34***	−0.35***	−0.36***
		(0.02)	(0.05)	(0.04)	(0.03)
F-Narc		0.02	−0.11***	0.01	0.01
		(0.02)	(0.03)	(0.02)	(0.02)
F-Mach		−0.03	−0.03*	−0.20***	−0.03*
		(0.01)	(0.01)	(0.02)	(0.01)
F-Psych		−0.05	−0.06*	−0.06*	−0.24***
		(0.04)	(0.03)	(0.03)	(0.02)
Interactions					
L-Profanity X F-Narc			0.06***		
			(0.02)		
L-Profanity X F-Mach				0.08***	
				(0.01)	
L-Profanity X F-Psych					0.09***
					(0.01)
Constant	3.73***	4.22***	4.68***	4.70***	4.74***
	(0.09)	(0.18)	(0.13)	(0.12)	(0.12)
Wald χ^2	9.82	156.68***	218.81***	260.75***	203.74***

Note: F = Follower, L = Leader, Narc = narcissism, Mach = Machiavellianism, Psych = psychopathy, *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$; n = 5660, $n_{countries} = 19$.

Machiavellianism: b = 0.08, SE = 0.01, $z = 8.62$, $p < 0.001$), while the interaction with narcissism was somewhat smaller in magnitude (b = 0.06, SE = 0.02, $z = 4.23$, $p < 0.001$). To better understand these interactions, we graphed each relationship separately: psychopathy (Fig. 1), Machiavellianism (Fig. 2), and narcissism (Fig. 3).

The pattern of results supports our differentiated predictions. Less psychopathic followers were more likely to report lower supervisor satisfaction scores as leader profanity increased in frequency (Fig. 1; simple slope = −0.26, SE = 0.02, $z = -10.85$, $p < 0.001$). In contrast, more psychopathic followers were more likely to indicate higher supervisor satisfaction scores as leader profanity increased (simple slope = 0.13, SE = 0.02, $z = 7.81$, $p < 0.001$), suggesting strong trait activation for this personality dimension.

Similarly, less Machiavellian followers indicated lower supervisor satisfaction scores as leader profanity became more frequent (Fig. 2; simple slope = −0.24, SE = 0.02, $z = -9.96$, $p < 0.001$); the opposite was true for highly Machiavellian followers (simple slope = 0.10, SE = 0.02, $z = 4.56$, $p < 0.001$), indicating moderate trait activation.

Less narcissistic followers indicated lower supervisor satisfaction scores as leader profanity increased (Fig. 3; simple slope = −0.26, SE = 0.04, $z = -7.36$, $p < 0.001$). Notably, and consistent with our theorizing about the weaker relevance of profanity for narcissistic concerns, more narcissistic followers were not significantly more likely to indicate different supervisor satisfaction scores as leader profanity became more frequent (simple slope = 0.03, SE = 0.04, $z = 0.77$, $p = 0.44$), suggesting that narcissistic traits were only weakly activated by leader profanity.

We note that the interaction coefficients for psychopathy (b = 0.08), Machiavellianism (b = 0.08), and narcissism (b = 0.06) were broadly

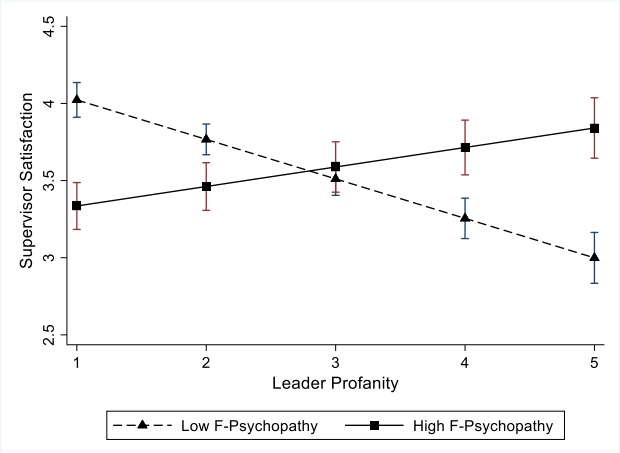

Fig. 1. Two-way interaction between leader profanity and follower psychopathy (across all countries, except China).

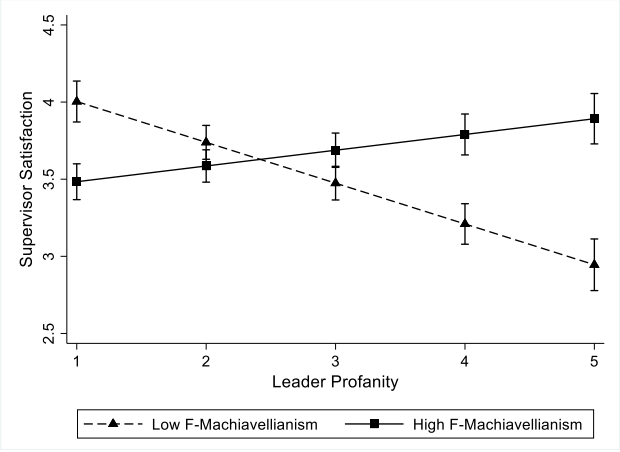

Fig. 2. Two-way interaction between leader profanity and follower Machiavellianism (across all countries).

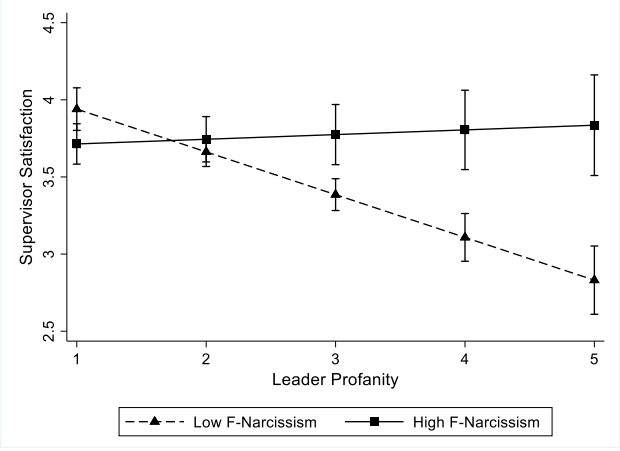

Fig. 3. Two-way interaction between leader profanity and follower narcissism (across all countries).

comparable, though not identical. Formal coefficient comparison tests (Paternoster et al., 1998) revealed that psychopathy's interaction coefficient was significantly larger than narcissism's ($z = 2.35$, $p = 0.019$), while psychopathy and Machiavellianism did not differ from each other ($z = 0.59$, $p = 0.55$). The Machiavellianism–narcissism difference was marginally significant ($z = 1.79$, $p = 0.073$). These results provide partial statistical support for differential activation: psychopathy (and, to a marginal extent, Machiavellianism) shows a stronger moderating effect than narcissism.

Three-way interactions between leader profanity, follower DTTs, and inequality.

Next, we tested the extent to which societal inequality shapes the trait-activation process. These results are shown in Table 4.

Each examined three-way interaction significantly predicted supervisor satisfaction (narcissism: $b = -0.17$, $SE = 0.08$, $z = -2.13$, $p = 0.03$; Machiavellianism: $b = -0.30$, $SE = 0.09$, $z = -3.30$, $p = 0.001$; psychopathy: $b = -0.28$, $SE = 0.07$, $z = -3.88$, $p < 0.001$). These negative coefficients indicate that higher inequality suppresses the activation of the trait, consistent with our situational strength argument. To better understand these interactions, we graphed (5th and 95th percentile) each interaction (psychopathy = Fig. 4; Machiavellianism: Fig. 5, narcissism: Fig. 6), respectively.

5.1.1. Follower psychopathy

The strongest support for differential trait activation across inequality contexts emerged for psychopathy. In low-inequality

Table 4
Interaction results of leader profanity, follower dark triad traits, and country-level inequality.

	Follower narcissism	Follower Machiavellianism	Follower psychopathy
	b (SE)	b (SE)	b (SE)
Gini	−0.16	−0.56	−0.46
	(0.63)	(0.87)	(0.70)
Leader Profanity	−0.58***	−0.65***	−0.63***
	(0.12)	(0.10)	(0.07)
Gini X Leader Profanity	0.65**	0.85**	0.80***
	(0.25)	(0.26)	(0.17)
Gini X F-Dark Triad Trait	0.21	0.47*	0.40*
	(0.18)	(0.20)	(0.17)
Leader Profanity X Follower Dark Triad Trait	0.13***	0.19***	0.18***
	(0.04)	(0.03)	(0.03)
Gini X Leader Profanity X Follower Dark Triad Trait	−0.17*	−0.30***	−0.28***
	(0.08)	(0.09)	(0.07)
Tenure	0.01**	0.01**	0.01**
	(0.00)	(0.00)	(0.00)
Leader Gender	−0.05	−0.05	−0.04
	(0.04)	(0.03)	(0.04)
Follower Narcissism	−0.19**	0.01	0.02
	(0.07)	(0.02)	(0.02)
Follower Machiavellianism	−0.03*	−0.36***	−0.03*
	(0.01)	(0.07)	(0.01)
Follower Psychopathy	−0.06*	−0.06*	−0.38***
	(0.03)	(0.02)	(0.08)
Follower Age	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)
Follower Gender	−0.04	−0.04	−0.04
	(0.03)	(0.03)	(0.04)
Follower Work Experience	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)
Constant	4.74***	4.90***	4.83***
	(0.28)	(0.35)	(0.30)
Wald χ^2	353.58***	745.39***	817.01***
n	5660	5660	5360
$n_{countries}$	19	19	18

*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

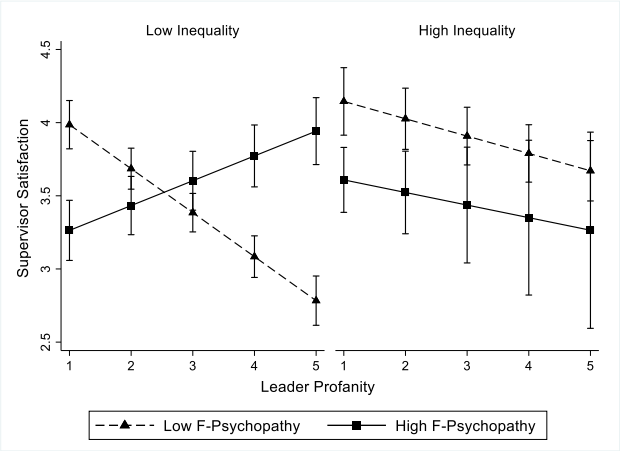

Fig. 4. Three-way interaction between inequality, leader profanity, and follower psychopathy.

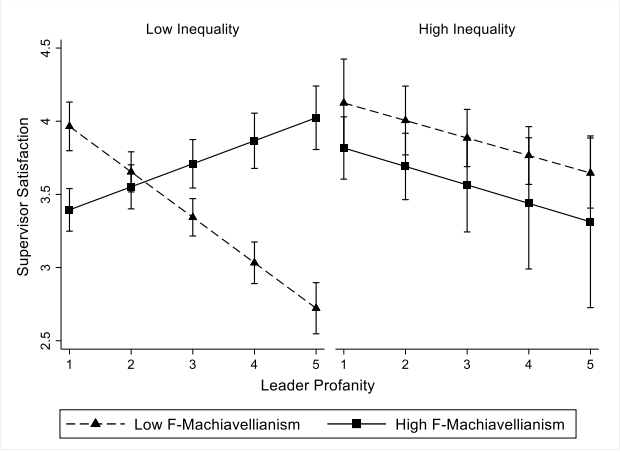

Fig. 5. Three-way interaction between inequality, leader profanity, and follower Machiavellianism.

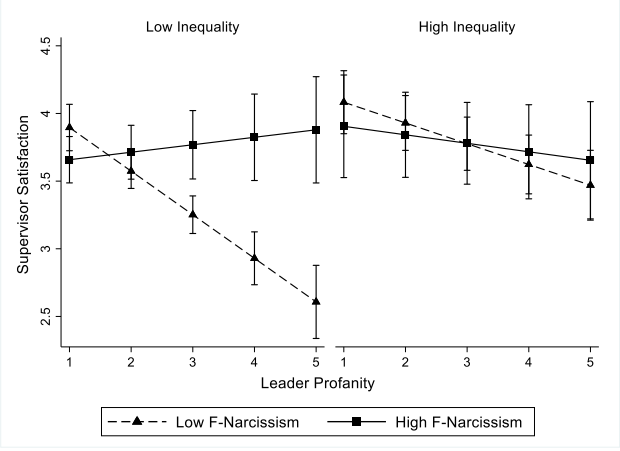

Fig. 6. Three-way interaction between inequality, leader profanity, and follower narcissism.

countries, followers who scored high on psychopathy were substantially more likely to interpret more frequent leader profanity as positive (Fig. 4; simple slope = 0.17, SE = 0.02, $z = 8.10$, $p < 0.001$) compared to their counterparts in high inequality countries (simple slope = −0.09, SE = 0.08, $z = -1.11$, $p = 0.27$). In contrast, followers who scored low on psychopathy were more likely to interpret more frequent leader profanity as negative, regardless of country inequality (low inequality: simple slope = −0.30, SE = 0.03, $z = -11.49$, $p < 0.001$; high inequality: simple slope = −0.12, SE = 0.02, $z = -4.88$, $p < 0.001$).

5.1.2. Follower Machiavellianism

In low-inequality countries, followers who scored high on Machiavellianism were more likely to interpret more frequent leader profanity as positive (Fig. 5; simple slope = 0.16, SE = 0.02, $z = 7.56$, $p < 0.001$) compared to their counterparts in high inequality countries (simple slope = −0.13, SE = 0.08, $z = -1.63$, $p = 0.10$). Followers who scored low on Machiavellianism interpreted more frequent leader profanity as negative, regardless of country inequality (low inequality: simple slope = −0.31, SE = 0.03, $z = -10.77$, $p < 0.001$; high inequality: simple slope = −0.12, SE = 0.05, $z = -2.49$, $p = 0.013$).

5.1.3. Follower narcissism

Consistent with the weaker trait activation observed in two-way interactions, less narcissistic followers were more likely to interpret more frequent leader profanity as negative, regardless of country inequality (low inequality: simple slope = −0.30, SE = 0.04, $z = -7.24$, $p < 0.001$; high inequality: simple slope = −0.15, SE = 0.03, $z = -4.47$, $p < 0.001$). In low-inequality countries, more narcissistic followers showed a non-significant tendency to interpret leader profanity more positively (Fig. 6; simple slope = 0.06, SE = 0.04, $z = 1.30$, $p = 0.20$). In contrast, in high-inequality countries, more narcissistic followers were similarly unaffected (simple slope = −0.06, SE = 0.07, $z = -0.90$, $p = 0.37$), suggesting that narcissistic traits are not strongly activated by profanity across contexts.

6. Discussion

Drawing on trait activation theory (Tett et al., 2021), we found evidence that leader profanity differentially activates responses based on followers' personality traits, with activation patterns further moderated by societal-level inequality. Profanity may also function as a signal of authenticity (Avolio & Gardner, 2005) or differentially affect leader-member exchange quality (Graen & Uhl-Bien, 1995) depending on follower disposition. However, our data cannot adjudicate between these mechanisms. A key contribution is demonstrating distinct activation patterns across the three Dark Triad traits. Psychopathy showed the strongest activation, with highly psychopathic followers responding positively to leader profanity in low-inequality contexts, consistent with psychopathy's core features of emotional detachment (Jones & Paulhus, 2010). Machiavellianism showed a similar activation pattern, consistent with these followers' strategic interpretation of rule-breaking as potentially useful. Most notably, narcissism showed a weaker activation pattern, with highly narcissistic followers being largely unaffected by leader profanity. This weaker effect likely reflects narcissism's concern with ego-enhancement rather than norm violation; profanity neither threatens nor bolsters the narcissistic ego.

In high-inequality countries, leader profanity was consistently associated with lower supervisor satisfaction regardless of DTTs, creating a strong situation that suppresses personality-based variation. Indeed, in such contexts, leader profanity may be interpreted through a despotic leadership lens, signaling dominance rather than informality. Conversely, in low-inequality countries, the moderating effects of DTTs were much more pronounced, suggesting that weaker situational constraints allow for greater trait expression.

An alternative interpretation is that high-DT followers are more accepting of profanity without invoking trait "activation." However, this acceptance account cannot explain the three-way interaction: if tolerance were a stable disposition, it should operate regardless of context. The context-dependency of DT moderation—appearing in low-

inequality but not high-inequality countries—is precisely what trait activation theory predicts: traits require situational conditions that permit their expression.

6.1. Practical implications

Our findings provide necessary boundary conditions for understanding Dark Triad traits in organizational settings. These traits are not uniformly expressed across all situations; instead, they require trait-relevant situational cues to be activated. Leader profanity appears to be highly relevant for activating psychopathic and Machiavellian tendencies but less relevant for narcissistic ones. These results suggest that different leader behaviors might be needed to activate narcissistic responses, including behaviors that directly relate to status, admiration, or ego-threat.

Leaders operating in multinational contexts should be aware that informal communication strategies, including profanity, may be received very differently depending on both the personality composition of their team and the broader socioeconomic context. In low-inequality contexts where communication norms are more relaxed, profanity may be tolerated or even appreciated by some followers, particularly those higher in psychopathy and Machiavellianism. However, in high-inequality contexts, profanity appears to be universally detrimental to supervisor satisfaction. This suggests that leaders in multinational organizations should err on the side of formality when cultural norms are uncertain, and that leadership training programs should address the cultural contingency of communication style effectiveness.

6.2. Limitations

This study has several significant limitations that should be considered when interpreting our findings. First, our reliance on a single-item measure of leader profanity, while necessary for survey brevity and supported by previous psychometric research (Matthews et al., 2022), cannot distinguish between different types, contexts, or targets of profanity. For example, casual swearing may function very differently from aggressive or directed profanity, a distinction our single-item measure cannot capture. Future research should employ multi-dimensional measures that capture the nature, intensity, target, and context of profanity use. Dark Triad traits were also positively correlated with reported leader profanity. High-DT followers may be more accurate reporters of norm-violating behavior, they may elicit more profanity from their supervisors due to their own workplace conduct, or the shared method variance inherent in single-source data may inflate the association. Future research should employ multi-source designs (e.g., objective recordings of supervisor communication paired with follower personality assessments) to disentangle these possibilities. We also acknowledge that the Dirty Dozen has been critiqued for limited content validity and poor trait differentiation, particularly for psychopathy (Miller et al., 2012). We selected the DD over longer alternatives (e.g., the Short Dark Triad; Jones & Paulhus, 2014) because our multinational survey design required extreme brevity to minimize participant fatigue across 19 countries. Importantly, the observed pattern of results—with narcissism showing a distinct (weaker) moderation pattern compared to psychopathy and Machiavellianism—suggests that the DD differentiated meaningfully between traits in our sample. If the DD were merely capturing general antagonism, we would expect identical moderation effects across all three subscales. Nevertheless, replication with longer, more psychometrically robust measures is warranted. Confirmatory factor analyses and Tucker's congruence coefficients supported configural and approximate metric invariance across countries (see Supplementary Materials S8). However, formal scalar invariance testing was not feasible with 19 country groups, and cross-country mean comparisons should be interpreted with caution.

Second, our cross-sectional design precludes causal inferences. While trait activation theory suggests that situational cues activate trait-relevant responses, our data cannot rule out reverse causation or unmeasured confounds. For example, it is conceivable that low supervisor satisfaction might lead leaders to use more profanity, or that organizational culture (i.e., a potential third variable) might influence both leader communication style and supervisor satisfaction. Longitudinal designs tracking changes in leader profanity, follower personality, and supervisor satisfaction would allow for a more rigorous assessment of the temporal dynamics of these relationships. Relatedly, trait activation might be bidirectional**,** similar to the bi-directionality of emotional contagion (Psychogios et al., 2023). Put differently, followers high in Dark Triad traits might elicit different communication styles from their leaders. Future research should examine these reciprocal dynamics.

Third, our study did not collect data on participants' industry or sector. Given that the acceptability of profanity likely varies substantially across industries (e.g., construction vs. primary education), industry-level norms may represent an important intermediate-level moderator between country-level inequality and individual-level trait activation, consistent with trait activation theory's emphasis on situational cues operating at multiple levels. Future research should examine how industry context shapes the activation of traits.

Finally, our measure specifically references the immediate supervisor, and we cannot speak to whether the effects of leader profanity differ across hierarchical levels. The dynamics of profanity from a CEO or senior executive may differ substantially from those of a front-line supervisor, and future research should examine whether the observed trait activation patterns are isomorphic across hierarchical levels.

7. Conclusion

This multinational study provides suggestive evidence that the association between leader profanity and follower supervisor satisfaction is likely contingent on both follower DTTs and broader country-level socioeconomic factors. This moderation pattern is further shaped by societal inequality, with high-inequality contexts appearing to constrain personality-based variation while low-inequality contexts permit greater trait expression in responses. These results demonstrate that: (1) Dark Triad traits, despite their shared core, show distinct activation patterns in response to the same situational cue and (2) societal-level factors can function as boundary conditions for trait activation**.**

CRediT authorship contribution statement

Dritjon Gruda: Writing – original draft, Methodology, Formal analysis, Conceptualization. **Jim A. McCleskey:** Writing – review & editing, Funding acquisition. **Marwan Al-Shammari:** Writing – review & editing, Funding acquisition, Data curation. **Alon Lisak:** Writing – review & editing, Funding acquisition, Data curation. **Alexandros Psychogios:** Writing – review & editing, Funding acquisition, Data curation. **Leslie Szamosi:** Funding acquisition, Data curation. **Lovina Akowuah:** Data curation. **Aditya Simha:** Funding acquisition, Data curation. **Mingfeng Tang:** Funding acquisition, Data curation. **Monica Zaharie:** Funding acquisition, Data curation. **Chou-Yu Tsai:** Writing – review & editing, Conceptualization.

Ethical approval

Ethics approval was granted by CITY College, University of York Europe Campus, Thessaloniki, Greece.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used Claude 4.6 Opus (Anthropic) to assist with writing and editing. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

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Declaration of competing interest

None.

Appendix A. Supplementary data

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Data availability

The respective dataset is publicly available at https://osf.io/576gx/?view_only=872b14787c154a5ca7ae113547c750d0

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