

**Dominance Through the Lens of a Competitive Worldview:  
The Role of Relationship Expectancies**

Dean Baltiansky\*  
ORCID: 0000-0002-6537-8384  
Columbia Business School  
Management Division  
665 West 130th Street,  
New York, NY 10027 USA  
[dean.baltiansky@columbia.edu](mailto:dean.baltiansky@columbia.edu)

Daniel R. Ames  
ORCID: 0000-0002-4630-5956  
Columbia Business School  
Management Division  
665 West 130th Street,  
New York, NY 10027  
[da358@columbia.edu](mailto:da358@columbia.edu)

\*Corresponding author

All materials, measures, preregistrations, analysis scripts, and de-identified data are available on the Open Science Framework:

[https://osf.io/rjv3q/?view\\_only=4121fb8334184631956be1dda1dd4ad6](https://osf.io/rjv3q/?view_only=4121fb8334184631956be1dda1dd4ad6)

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### Abstract

Does the expected impact of dominance affect people's behavior? We propose that people are less likely to behave dominantly when they expect dominance to incur greater relationship costs, an expectancy shaped by a competitive worldview—a general view of the social world as a “competitive jungle.” In three preregistered studies, we show that those with a competitive worldview expect dominance to incur less relationship harm and that, in turn, they are more likely to behave dominantly. In Study 1 ( $N = 275$ ), part- and full-time employees completed a battery of well-established scales of dominance and worldviews, providing internal and discriminant validity for our claims, over and above alternative explanations of dominance. In Study 2 ( $N = 289$ ), participants estimated the relationship impact of employee-recounted real-world managerial dominance, indicated their behavioral intentions in those scenarios, and completed a measure of competitive worldview, providing external validity for our claims. In Study 3 ( $N = 595$ ), participants role-played as managers and employees in an incentive-compatible paradigm, providing behavioral evidence for our claims. In Study 4 ( $N = 492$ ), manager-playing participants who were randomly assigned to reflect on the positive, as opposed to negative, relationship impact of dominance consequently behaved more dominantly toward an ostensible employee, providing experimental evidence for the causal effect of relationship expectancies on dominant behavior. Overall, this research provides the first evidence that competitive worldview predicts relationship expectancies which, in turn, shape dominant strategies and behavior.

**Keywords:** relationship expectancies; competitive worldview; dominant behavior.

Why do some people behave dominantly, regularly using threats, coercion, and aggression, whereas others seem to avoid such behavior (Cheng et al., 2013; Henrich & Gil-White, 2001; de Waal-Andrews et al., 2015)? Many scholars approach dominance as a behavioral strategy used to gain and maintain status in hierarchies and interpersonal settings (for two brief reviews, see: Chen Zeng et al., 2022; Maner, 2017). Different traditions of work have offered a range of answers to the question of variance in dominance, from biological models positing, in effect, “it’s in their bodies or genes” (e.g., Johnson et al., 2007) to clinical and personality models suggesting “it reflects their personality or psychopathology” (e.g., Johnson et al., 2012; Simon & Reed, 2021) to social/situational/cultural models signaling “it’s evoked by the context or environment” (e.g., Anicich et al., 2016; Case & Maner, 2014; Chen et al., 2021A; Fast & Chen, 2009).

Each of these approaches, often revolving around situational or dispositional *drives* for dominance, are valuable and important in their own right. We see promise in tracing dominant behavior back to another, relatively unexamined, source: actors’ *beliefs* about behavioral consequences, especially for their relationships. People vary in the outcomes they expect from dominance. Reasonably so, as research points to both positive and negative social outcomes: Although dominant behavior may lead to gains in individual status and/or group performance (e.g., Chen et al., 2021B), it may also prompt negative affect as well as reduced liking and respect (e.g., Driskell et al., 1993; Driskell & Salas, 2005; Reit & Gruenfeld, 2022). We believe variance in *expectancies* about such outcomes matters. Related effects have been found in the domain of assertive behavior: peoples’ tendency to speak up in conflicts and be bold in negotiations is shaped by their forecast of social outcomes, such as a counterpart’s liking and trust (Ames, 2008), even though these forecasts are often wrong (Ames & Wazlawek, 2014). We

expect that a similar dynamic emerges in the domain of dominance. This is the first of our two core claims: an actor's relationship expectancies—their beliefs about the impact of dominant behavior on their relationships—meaningfully shape their dominance.

Our second core claim concerns a source of these beliefs. Relationship expectancies are not formed in a vacuum. People's broader mental models of the social world operate in the background as a source of their specific relationship expectancies in a given situation and as a potential predictor of their dominance. Indeed, recent work has linked some general mental models to dominant behavior. Some of these models reflect beliefs about the "rules of the game." That is, they paint a picture of how the world operates, what it takes to succeed, and which behaviors get punished or rewarded. For example, those who see social hierarchy as a zero-sum game, where one person's rise in status comes at the expense of another's, are more likely to pursue dominant strategies (Andrews-Fearon & Davidai, 2023). Research on beliefs about the attainment of power suggests that those who hold a coercive (versus collaborative) "theory of power" are more likely to endorse dominance (ten Brinke & Keltner, 2022). Other mental models reflecting assumptions about the "players in the game" have also been linked to dominance. These constructs involve beliefs about behavioral tendencies, human nature, and others' motivations. For instance, those who believe that people are motivated by self-interest are more likely to gravitate towards dominance (Stavrova et al., 2024), whereas those who believe that humans are naturally cooperative may be more trusting and kind (Clifton et al., 2019; Stahlmann & Ruch, 2023).

While the recent work noted above suggests that broader mental models might shape dominance, it has not examined relationship expectancies as a mechanism or mediator. We aim to do so in the present research, building on and going beyond prior research, operationalizing

mental models with a construct employed in political psychology: *competitive worldview*. A competitive worldview entails seeing the world as a “ruthless, amoral struggle for resources and power in which might is right and winning is everything” in contrast to “one of cooperative harmony in which people care for, help, and share with each other” (Duckitt et al., 2002; p. 78). This view of the world as a competitive jungle is broader than some of the constructs noted above (such as zero-sum status beliefs, theories of power, and beliefs about self-interest), characterizing both the “rules of the game” (“life is survival of the fittest where cutthroat competition is common and necessary”) as well as the “players” in it (“people cannot be trusted”) (Perry et al., 2013). Researchers have cast competitive worldview as a stable set of beliefs, with roots in personality (in particular, low levels of Agreeableness) and long-standing situational factors during personal development (such as a large-scale national threat; Duckitt & Fisher, 2003). It appears to act as a precursor to ideological preferences and Social Dominance Orientation (Sibley & Duckitt, 2009).

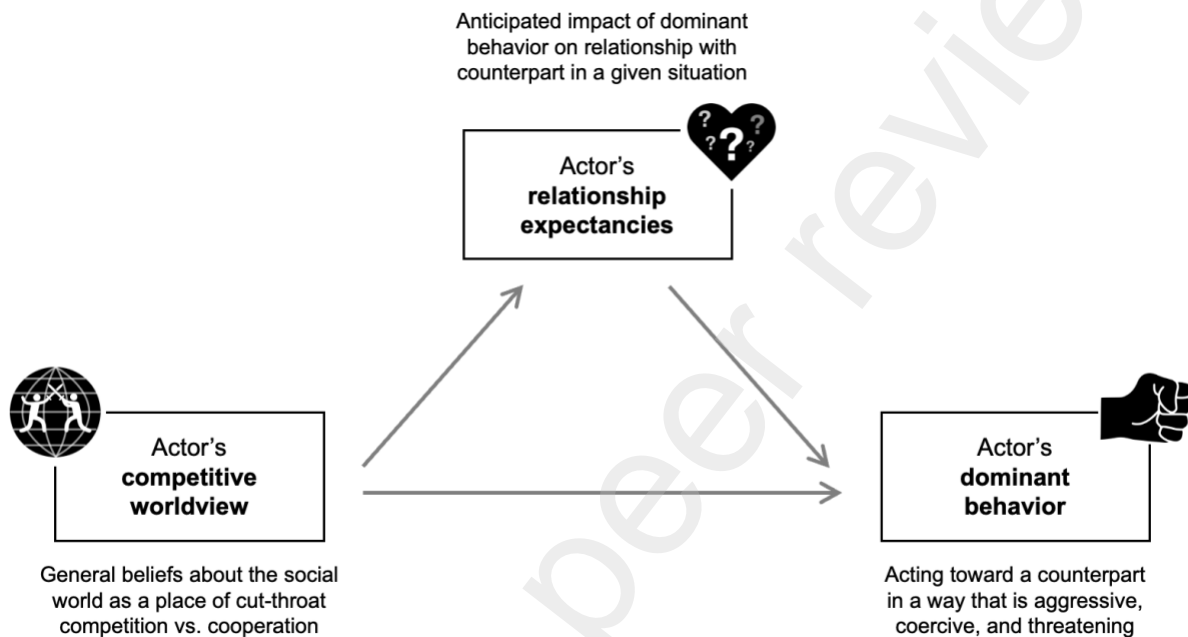
We think the breadth and nature of competitive worldview make it well-suited as a construct to predict both relationship expectancies and dominant behavior. While some recent research suggests that competitive worldview leads to more positive perceptions of antagonistic leaders (Nguyen & Ames, in press), the links between competitive worldviews and an actor’s own interpersonal dominance or relationship expectancies have not been demonstrated. This is our second core claim: competitive worldview predicts dominance—and this link is at least partly explained by how these worldviews shape relationship expectancies (see Figure 1). Those who believe they live in a competitive jungle may view dominant behavior as normal, unobjectionable, and even inevitable, entailing relatively few relationship costs, leading them to entertain dominance as an option. Those who believe they live in a harmonious, collaborative

world may view dominant behavior as aberrant, alarming, and inappropriate, entailing steep relationship costs, leading them to avoid dominance.

Other plausible alternatives may cast doubt on the distinct role we are positing for relationship expectancies. First, *motivations* may overshadow expectancies, such that differences in dominance primarily reflect differences in how much people care about relationship outcomes, not their optimism or pessimism about relationship outcomes in the wake of dominance. It is possible, for instance, that nearly everyone recognizes a likely relationship cost of dominance, but that dominant people are distinctly unbothered by that price, possessed by a drive to dominate regardless of social harm. Second, relationship expectancies may be overshadowed by *influence expectancies*, such that peoples' behavior is shaped less by "what will they think of me," but rather by "will I get my way." It is possible that dominant behavior may flow primarily from predictions about influence and compliance, not about relationships. We acknowledge and test for these alternatives in our work, but expect that relationship expectancies will play a unique and meaningful role in explaining dominant behavior above and beyond influence expectancies and relationship concerns.

In sum, we propose the following model: Dominant behavior is predicted by relationship expectancies which are, in turn, predicted by more general competitive worldviews (with expectancies at least partly mediating the effect of worldview; see Figure 1). We expect that competitive worldview will predict expectancies and behavior over and above other implicit theories, including status zero-sum beliefs and cooperative primal beliefs, as well as relationship concerns. Additionally, we believe relationship expectancies will explain dominant behavior

above and beyond influence/compliance expectancies of dominance.<sup>1</sup> Given the roots of competitive worldview in personality and developmental conditions, we did not expect it to be readily amenable to manipulation<sup>2</sup>, but we did aim to manipulate relationship expectancies, establishing a causal link between them and dominant behavior.



**Fig. 1.**  
A worldview-expectancy model of interpersonal dominance.

If relationship expectancies indeed play a distinct role in explaining dominance, a question naturally arises: Whose predictions are more or less accurate? On the one hand, those with a competitive worldview, or those prone to dominance, may be overly *optimistic*, under-

<sup>1</sup> We measure and account for coercive theories of power, cooperative theories of power, and expectancies of prestige strategies. We also examine an alternative path of prestige strategies as an outcome and prestige expectancies as mediators. See Appendix 1 in the Supplemental Material.

<sup>2</sup> Nevertheless, in three preregistered studies, we attempted to manipulate either general competitive worldview directly or a workplace-specific competitive culture, and measure consequent impact on relationship expectancies of dominance. In the studies that manipulated workplace specific competitive culture, we did not find an effect on relationship expectancies and behavior (see Studies S2a and S2b in the Supplemental Material), and in the study that tried to manipulate competitive worldview directly, we did not find an effect on the manipulation check, nor did we find a condition effect on relationship expectancies (see Study S2c in the Supplemental Material). However, in that study, we replicated our correlational findings of Studies 1-3, giving us further confidence in our theoretical model, and further suggesting that competitive worldview is not readily amenable to an experimental manipulation.

estimating the relationship costs of dominance and thereby ill-advisedly behaving dominantly. On the other hand, those with a cooperative worldview, or who eschew dominance, may be overly *pessimistic*, overestimating those costs and unwisely avoiding dominant behavior. Our work explores questions of accuracy as well as the potential for shifting relationship expectancies in a way that alters behavioral dominance.

### Overview of Studies

We tested the proposed model in four preregistered online studies. In Study 1, participants reported their competitive worldview, relationship expectancies of dominance, influence expectancies of dominance, relationship motivations, and endorsement of dominant strategies. Employing widely used scales, we tested the internal and discriminant validity of the proposed model. In Study 2, participants read descriptions of real-world instances of managerial dominance, predicting the behavior's relationship impact, and indicating their own readiness to behave dominantly in that situation. Using employees' first-hand descriptions of dominant behavior allowed us to examine the external validity of our proposed model. In Study 3, participants acted as managers and employees in a novel incentive-compatible role-play paradigm. Managers predicted the relationship impact of a specific dominant behavior and chose whether or not to behave dominantly. This tightly controlled manager-employee task allowed us to directly observe the behavioral consequences of competitive worldview and relationship expectancies. Study 4 manipulated relationship expectancies in an attempt to shift dominant behavior. Participants, acting as managers, were asked to reflect on either the prospective relationship benefit, or relationship harm, of behaving dominantly toward an employee in the paradigm from Study 3. Participants subsequently chose whether or not to behave dominantly, allowing us to gauge the causal impact of changing relationship expectancies.



## Study 1

We first tested our proposed model by predicting a widely used measure of dominance (adapted to describe behavior in the workplace) with competitive worldviews, controlling for a range of alternatives, such as cooperative primal beliefs, status zero-sum beliefs, and relationship motivations. We also tested our prediction that relationship expectancies would act as a mediator, evaluating multiple alternatives such as influence expectancies of dominance.

### Method

#### *Transparency*

We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the main text or in the Supplemental Material. The hypotheses, materials, and analysis plan were preregistered on the Open Science Framework

([https://osf.io/ygs53/?view\\_only=f5844a8417ec4ce8ae1c45e8cd858674](https://osf.io/ygs53/?view_only=f5844a8417ec4ce8ae1c45e8cd858674)). There are two minor deviations from the preregistration: (1) The original analysis plan did not include cooperative primal beliefs, coercive theories of power, and cooperative theories of power as control variables, but all models reported in the main text include them; and (2) the original exclusion criteria mentioned that exclusion will be based only on two failed attention checks, but we ultimately excluded four more participants who made it through the survey platform demographic filter despite not being part- or full-time employees<sup>3</sup>.

#### *Participants*

Three hundred US-American employees were recruited through Connect by CloudResearch (Hartman et al., 2023). Of those, 21 participants failed two preregistered attention checks and 4 reported that they were no longer employed, resulting in a final sample of

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<sup>3</sup> Conducting the analyses as preregistered does not change the patterns of the results (see Appendix 2 in the Supplemental Material)

275 eligible participants (155 men, 118 women, and 2 other gender; 190 White, 29 Black, 26 Asian, 7 Hispanic, 22 multiracial, and 1 other race/ethnicity; mean age of 38; median annual income of \$60,001-80,000). A sensitivity analysis found that this sample size, with 95% power, was sufficient to find an effect of at least  $\eta^2 = .09$  in a multiple regression containing one predictor variable and 10 control variables.

### ***Procedure***

After indicating their informed consent, participants completed three blocks of measures in random order: (1) worldviews; (2) expectancies of dominance and prestige; and (3) motivations at work and personal dominance and prestige. Within the first block, they completed randomly ordered measures of competitive worldview, status zero-sum beliefs, and cooperative primal beliefs. Within the second block, they completed randomly ordered measures of relationship expectancies of dominance and prestige, influence expectancies of dominance and prestige, coercive theories of power, and collaborative theories of power. Within the third block, they completed randomly ordered measures of influence motivations at work, relationship motivations at work, and personal dominance and prestige strategies. Finally, they completed a demographic questionnaire.

### ***Measures***

A full description of the measures completed in this study can be found in Appendix 3 of the Supplemental Material.

**Competitive worldview.** Competitive worldview was measured with a ten-item scale (Perry et al., 2013). Participants indicated their agreement (1 = *Strongly disagree* to 7 = *Strongly agree*) with statements such as: (1) “It’s a dog-eat-dog world where you have to be ruthless at times;” (2) “My knowledge and experience tell me that the social world we live in is basically a

competitive ‘jungle’ in which the fittest survive and succeed, in which power, wealth, and winning are everything, and might is right,” and; (3) reverse-scored statements such as “One should give others the benefit of the doubt. Most people are trustworthy if you have faith in them.” The items in the scale were internally consistent at Cronbach’s  $\alpha = .83$ .

**Status zero-sum beliefs.** Zero-sum beliefs, as they pertain to status, were measured with an eight-item scale (Andrews-Fearon & Davidai, 2023). Participants indicated their agreement (1 = *Strongly disagree* to 7 = *Strongly agree*) with statements such as “When status for one person is increasing it means that status for another person is decreasing,” and reverse-scored statements such as “Status is not a finite resource.” The items in the scale were internally consistent at Cronbach’s  $\alpha = .89$ .

**Cooperative primal beliefs.** Cooperative primal beliefs were measured with a four-item scale (Clifton et al., 2019). Participants indicated their agreement (1 = *Strongly disagree* to 7 = *Strongly agree*) with statements such as “The world runs on trust and cooperation way more than suspicion and competition,” and reverse-scored statements such as “Instead of being cooperative, the world is a cut-throat and competitive place.” The items in the scale were internally consistent at Cronbach’s  $\alpha = .86$ .

**Dominance strategies.** Dominance strategies to attain and maintain status at work were measured with nine items, as part of a widely used dominance and prestige scale (Cheng et al., 2010). Participants indicated the extent to which nine behaviors accurately described them at work (1 = *Not at all* to 7 = *Very much*). For example, “I am willing to use aggressive tactics to get my way at work” and reverse-scored behaviors such as “I do NOT enjoy having authority over other people at work.” The items in the scale were internally consistent at Cronbach’s  $\alpha = .86$ .

**Prestige strategies.** Prestige strategies to attain and maintain status at work were measured with seven items, as part of the dominance and prestige scale (Cheng et al., 2010). Participants indicated the extent to which seven statements accurately described them at work (1 = *Not at all* to 7 = *Very much*). For example, “My peers at work respect and admire me” and one reverse-scored statement reading “Others do NOT value my opinion at work.” The items in the scale were internally consistent at Cronbach’s  $\alpha = .88$ .

**Relationship expectancies of dominance strategies.** The same behaviors of the dominance strategies scale were assessed for their impact on relationships. Participants indicated the extent to which they believed each behavior would have a negative or positive impact on the actor’s relationships with others in a group of people (1 = *Strong negative effect on relationships* to 7 = *Strong positive effect on relationships*). The items in the scale were internally consistent at Cronbach’s  $\alpha = .85$ .

**Relationship expectancies of prestige strategies.** Similarly, the behaviors from the prestige strategies scale were assessed for their impact on relationships. Participants indicated the extent to which they believed these attributes would have a negative or positive impact on the actor’s relationships with others in a group of people (1 = *Strong negative effect on relationships* to 7 = *Strong positive effect on relationships*). The items in the scale were internally consistent at Cronbach’s  $\alpha = .76$ .

**Influence expectancies of dominance strategies.** The behaviors of the dominance strategies scale were assessed for their impact on influence. Participants indicated the extent to which they believed each behavior had a positive or negative impact on the actor’s influence over others in a group (1 = *Strong negative effect on influence* to 7 = *Strong positive effect on influence*). The items in the scale were internally consistent at Cronbach’s  $\alpha = .86$ .

**Influence expectancies of prestige strategies.** Similarly, the behaviors of the prestige strategies scale were assessed for their impact on influence as well. Participants indicated the extent to which they believed each statement had a positive or negative impact on the actor's influence over others in a group (1 = *Strong negative effect on influence* to 7 = *Strong positive effect on influence*). The items in the scale were internally consistent at Cronbach's  $\alpha = .82$ .

**Coercive theories of power.** Coercive theories of power were measured with a ten-item scale (ten Brinke & Keltner, 2022). Participants indicated their agreement (1 = *Strongly disagree* to 7 = *Strongly agree*) with statements such as "People mainly gain power by force" and "An influential individual is typically intimidating." The items in the scale were internally consistent at Cronbach's  $\alpha = .91$ .

**Collaborative theories of power.** Collaborative theories of power were measured with a ten-item scale (ten Brinke & Keltner, 2022). Participants indicated their agreement (1 = *Strongly disagree* to 7 = *Strongly agree*) with statements such as "People rise in power through virtue and respect" and "Influential individuals need to be approachable and empathetic." The items in the scale were internally consistent at Cronbach's  $\alpha = .89$ .

**Relationship motivations at work.** Relationship motivations at work were measured as a mean score of two items: "In your work life, to what extent do you care about having good relationships with the people you work with?" (1 = *I don't care about this at all* to 5 = *I care about this a great deal*); and a reverse-scored item reading "[I]n your work life, to what extent would it bother you if you did NOT have good relationships with other people at work?" (1 = *I would not be bothered at all if I didn't have good relationships* to 5 = *I would be greatly bothered if I didn't have good relationships*). These items were correlated at  $r = .64$ .

**Influence motivations at work.** Influence motivations at work were measured as a mean score of two items: “In your work life, to what extent do you care about having influence over the people you work with?” (1 = *I don’t care about having influence at all* to 5 = *I care about having influence a great deal*); and a reverse-scored item reading “I[n] your work life, to what extent would it bother you if you did NOT have much influence over other people at work?” (1 = *I would not be bothered at all if I didn’t have influence* to 5 = *I would be greatly bothered if I didn’t have influence*). These items were correlated at  $r = .69$ .

## Results

First, we examined the interclass correlations of all measures described above (see Table 1). As expected, competitive worldview was positively correlated with relationship expectancies of dominance strategies ( $r = .51, p < .001$ ) and with dominance strategies ( $r = .54, p < .001$ ). Relationship expectancies of dominance strategies were positively correlated, as expected, with dominance strategies ( $r = .62, p < .001$ ).

Table 1. Interclass correlations of measures in Study 1

Measure	<i>M</i> ( <i>SD</i> )	1	2	3	4	5	6	7	8	9	10	11	12
1. Competitive worldview	2.86 (0.94)												
2. Status zero-sum beliefs	3.38 (1.22)	.45***											
3. Cooperative primal beliefs	4.17 (1.40)	-.63***	-.45***										
4. Dominance strategies	2.70 (1.06)	.54***	.19**	-.27***									
5. Prestige strategies	5.25 (1.04)	-.10	-.22***	-.04	.10								
6. Relationship expectancies of dominance	2.34 (.88)	.51***	.27***	-.18**	.62***	-.09							
7. Relationship expectancies of prestige	5.90 (.70)	-.26***	-.16**	.01	-.22***	.28***	-.38***						
8. Influence expectancies of dominance	3.17 (1.12)	.39***	.25***	-.19**	.39***	-.24***	.53***	-.23***					
9. Influence expectancies of prestige	6.09 (.75)	-.39***	-.28***	.11	-.27***	.34***	-.45***	.71***	-.19**				
10. Coercive theories of power	3.89 (1.22)	.38***	.51***	-.49***	.17**	-.12*	.23***	-.06	.36***	-.15*			
11. Collaborative theories of power	5.19 (.97)	-.25***	-.34***	.31***	.04	.31***	-.08	.12	-.27***	.17**	-.52***		
12. Relationship motivations	3.84 (.94)	-.27***	-.10	.07	-.10	.42***	-.17**	.35***	-.19**	.37***	-.09	.21***	
13. Influence motivations	2.26 (.97)	.18**	.07	-.09	.59***	.36***	.32***	.02	.10	.08	.00	.23***	.23***

Notes. *M* = Mean. *SD* = Standard Deviation. \*  $p < .05$ ; \*\*  $p < .01$ ; and \*\*\*  $p < .001$ .

Next, we examined the unique variance of dominance strategies that was explained by competitive worldview, in a multiple regression model with a range of control variables and alternative constructs. Specifically, we controlled for status zero-sum beliefs, cooperative primal beliefs, relationship motivations, coercive theories of power, collaborative theories of power, age, race, gender, education, and income. As predicted, over and above these control variables, competitive worldview was still positively predictive of dominance strategies ( $b = 0.75$ ,  $F(1,254) = 8.85$ ,  $95\% CI = [0.58, 0.91]$ ,  $p < .001$ , partial  $\eta^2 = 0.32$ ). See Table 2 for a detailed report of this model.

Table 2. Multiple regression analysis predicting dominance strategies.

Predictor	<i>b</i>	<i>t</i>	95% <i>CI</i>	<i>p</i>	$\eta^2$
Competitive worldview	0.75	8.85	[0.58, 0.91]	< .001	0.32
Status zero-sum beliefs	-0.02	-0.40	[-0.13, 0.09]	.688	0.01
Cooperative primal beliefs	0.08	1.51	[-0.02, 0.19]	.131	0.01
Relationship motivations	0.05	0.79	[-0.08, 0.18]	.429	0.01
Coercive theories of power	0.07	1.09	[-0.05, 0.18]	.278	0.000
Collaborative theories of power	0.19	2.83	[0.06, 0.33]	.005	0.03
Age	0.00	-0.24	[-0.01, 0.01]	.808	0.000
Race: White	0.08	0.63	[-0.16, 0.31]	.526	0.001
Gender: Man	0.10	0.95	[-0.11, 0.32]	.343	0.004
Education	0.04	0.69	[-0.07, 0.14]	.488	0.01
Income	0.02	0.98	[-0.02, 0.07]	.326	0.004

Notes. For interpretability, education and income were converted from factor variables to numeric variables and race and gender were converted to binary variables (White = 1, non-White = 0; man = 1, non-man = 0);  $df = 254$ .

We assessed the unique variance shared between competitive worldview and relationship expectancies of dominance (our predicted mediator) with another multiple regression model. Again, as predicted, competitive worldview was positively associated with relationship expectancies ( $b = 0.60$ ,  $F(1,254) = 8.85$ ,  $95\% CI = [0.47, 0.73]$ ,  $p < .001$ , partial  $\eta^2 = 0.32$ ), controlling for zero-sum beliefs, cooperative primal beliefs, relationship motivations, coercive



theories of power, collaborative theories of power, age, gender, education, and income. See

Table 3 for a detailed report of this model.

Table 3. Multiple regression analysis predicting relationship expectancies of dominance strategies.

Predictor	<i>b</i>	<i>t</i>	95% <i>CI</i>	<i>p</i>	$\eta^2$
Competitive worldview	0.60	8.85	[0.47, 0.73]	< .001	0.32
Status zero-sum beliefs	0.06	1.34	[-0.03, 0.15]	.182	0.001
Cooperative primal beliefs	0.19	4.24	[0.10, 0.27]	< .001	0.07
Relationship motivations	-0.03	-0.63	[0.14, 0.07]	.529	0.000
Coercive theories of power	0.09	1.96	[-0.00, 0.19]	.051	0.01
Collaborative theories of power	0.09	1.57	[-0.02, 0.20]	.117	0.004
Age	0.00	0.16	[-0.01, 0.01]	.874	0.000
Race: White	0.23	2.42	[0.04, 0.42]	.016	0.02
Gender: Man	0.19	2.13	[0.01, 0.36]	.034	0.02
Education	0.05	1.08	[-0.04, 0.13]	.281	0.003
Income	-0.02	-0.84	[-0.05, 0.02]	.400	0.003

*Notes.* For interpretability, education and income were converted from factor variables to numeric variables and race and gender were converted to binary variables (White = 1, non-White = 0; man = 1, non-man = 0); *df* = 254.

To test our full hypothesized model, we examined the extent to which relationship expectancies of dominant strategies explained the relationship between competitive worldview and dominance strategies using a 10,000-bootstrapped mediation model (conducted using the *mediation* package in R; Tingley et al., 2014). Competitive worldview was inserted as the primary predictor, relationship expectancies of dominance as the mediator, and dominance strategies as the outcome. Status zero-sum beliefs, cooperative primal beliefs, relationship motivations, coercive theories of power, collaborative theories of power, age, race, income, and education were inserted as control variables. Consistent with our theoretical model, the indirect effect explained 44.8% of the total effect (Total effect:  $b = 0.75$ , 95%  $CI = [0.56, 0.92]$ ,  $p < .001$ ; Direct effect:  $b = 0.41$ , 95%  $CI = [0.22, 0.60]$ ,  $p < .001$ ; Indirect effect:  $b = 0.33$ , 95%  $CI = [0.22, 0.46]$ ,  $p < .001$ ), suggesting a meaningful role of relationship expectancies in the relationship between competitive worldview and dominance strategies. This model performed better than all

other combinations of variables in different placements of the mediation model. It also performed better than models with cooperative primal beliefs as the predictor in place of competitive worldview; relationship expectancies of prestige as mediators in place of relationship expectancies of dominant strategies; and endorsement of prestige strategies as the outcome variable, in place of endorsement of dominant strategies (see Appendix 1 in the Supplemental Material).

We also explored the relative role of relationship expectancies, as opposed to influence expectancies, in explaining dominance. We conducted a 10,000-bootstrapped mediation model (conducted using the *lavaan* package in R; Rosseel, 2012), with relationship expectancies of dominance and influence expectancies of dominance as simultaneous mediators, and the same predictor, outcome, and control variables as the model described above. As shown in Figure 2 and consistent with our predictions, controlling for one another, the indirect effect of relationship expectancies explained 41.1% of the total effect ( $b = 0.31$ , 95%  $CI = [0.19, 0.44]$ ,  $p < .001$ ), whereas the indirect effect of influence expectancies explained only 4.8% of the total effect ( $b = 0.04$ , 95%  $CI = [-.01, 0.09]$ ,  $p = .176$ ). This suggests that relationship expectancies, rather than influence expectancies, were driving the effect of competitive worldview on dominance strategies.

## Discussion

Measuring general behavior strategies in the workplace with a widely used measure of dominance, Study 1 found that competitive worldview predicted dominance, even when controlling for a host of other constructs such as relationship motivations, cooperative primal beliefs, zero-sum status beliefs, and theories of power. As predicted, this link was mediated by

relationship expectancies of dominance, even when adding influence expectancies as a simultaneous mediator.

## Study 2

Do our hypothesized effects emerge in specific, real-world instances of dominance?

Study 2 sought external and ecological validity by gauging predicted outcomes for dominant behaviors enacted by real managers, as recounted by their employees. The addition of a power imbalance allowed us to operationalize dominance with acts of threats and coercion, both of which feature prominently in scholarly definitions of dominant behavior. We expected to replicate our effects: competitive worldview would predict dominant behavior and this link would be at least partly mediated by relationship expectancies.

## Method

### *Transparency*

We report how we determined our sample size, all data exclusions, and all measures in the main text or in the Supplemental Material. The hypotheses, materials, and analysis plan were preregistered on the Open Science Framework

([https://osf.io/493q6/?view\\_only=ba0c4d08a7344522b8d0ab2557ac4c07](https://osf.io/493q6/?view_only=ba0c4d08a7344522b8d0ab2557ac4c07)). There is one minor deviation from the preregistration: the original exclusion criteria mentioned that exclusion will be based only on one failed attention check, but we ultimately excluded five more participants who made it through the survey platform demographic filter despite not being part- or full-time employees<sup>4</sup>. Additionally, we preregistered and conducted Study S1 a few days prior to Study 2. In Study S1, the order of competitive worldview and behavior description was randomized. The hypothesized effect did not emerge for participants who indicated their competitive worldview

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<sup>4</sup> Including the five participants who are not part- or full-time employees in the analyses does not change the patterns of the results (see Appendix 4 in the Supplemental Material)

before reading the description, likely because it biased the way they read the description. Study 2 was conducted a few days later without this randomization. Everything else was identical. For the sake of brevity, we report only Study 2 in the main text. For the sake of transparency, we report results of Study S1 in the Supplemental Material (see Appendix 5).

### ***Participants***

Three hundred and one US-American employees were recruited through Connect by CloudResearch (Hartman et al., 2023). Of those, 7 participants failed a preregistered attention check and 5 reported that they were no longer employed, resulting in a final sample of 289 eligible participants (163 men, 122 women, and 4 other gender; 193 White, 34 Black, 24 Asian, 22 Hispanic, 10 multiracial, and 6 other race/ethnicity; mean age of 38; median annual income of \$60,001-80,000). A sensitivity analysis found that this sample size, with 95% power, was sufficient to find an effect of at least  $\eta^2 = 0.07$  in a multiple regression containing one predictor variable and 5 control variables.

### ***Procedure***

For ecological validity, an initial phase of stimuli collection included a separate sample of US adult workers, asked to describe an incident in which their manager behaved dominantly toward them in an attempt to induce compliance. These descriptions were then shown to Study 2 participants. After reading one of 23 descriptions, participants described, in a short open-ended response, how they thought the employee reacted to that behavior. Next, they indicated the impact this behavior likely had on the employee's relationship with the manager, the employee's compliance with the manager's request, and the employee's ensuing quitting intentions. Participants then indicated how dominantly they would behave if they were the manager, trying

to induce compliance in their employee for the same task they read about in the description.

Finally, they completed a measure of competitive worldview and a demographic questionnaire.

### ***Materials***

Descriptions of events that included dominant behavior were collected from 51 full- and part-time US adult employees on Connect by CloudResearch (26 men, 25 women; 34 White, 9 Black, 6 Asian, 1 Hispanic, 1 multiracial; mean age of 39; median annual income of \$60,001-80,000). We began by defining dominant behavior in one of three ways: (1) dominant behavior is when a manager uses power, fear, intimidation, and/or coercion in how they act toward a subordinate (adapted from Maner, 2017; De Waal-Andrews et al., 2015); (2) dominant behavior is when a manager acts in a way that is forceful, assertive, and/or aggressive toward a subordinate (adapted from Cheng et al., 2013); or (3) dominant behavior is when a manager uses fear, threat, and/or compulsion in how they act toward a subordinate (adapted from Henrich & Gil-White, 2001). We then asked each of them to describe one episode in which their manager behaved in a dominant way, keeping the following points in mind: (1) the manager must have behaved dominantly with the goal of getting them to do something specific; (2) they should not include their own reaction to the behavior; and (3) they should provide as much context and detail as possible. We selected only those descriptions that matched these criteria, resulting in a set of 23 descriptions of managerial dominant behavior. For example, one description entailed a manager who wanted their 34-week pregnant employee to go on a work trip, threatening her to not involve HR or she “would be sorry.” Another description entailed a manager who threatened to stop paying for an employee’s Uber rides home if they didn’t increase sales (see Appendix 6 in the Supplemental Material for all descriptions). Participants in Study 2 were randomly shown one of these 23 descriptions.

### **Measures**

**Competitive worldview.** Competitive worldview was measured with the same ten-item scale described in Study 1 (Perry et al., 2013). Again, the items in the scale were internally consistent at Cronbach's  $\alpha = .78$ .

**Relationship expectancies.** Participants indicated, in a single item, what they believed the impact of the incident was on the employee's relationship with the manager (1 = *It had a strong negative effect on their relationship with their manager* to 7 = *It had a strong positive effect on their relationship with their manager*).

**Compliance expectancies.** Participants indicated, in a single item, the extent to which they believed the employee proceeded to comply with what the manager was seeking or requesting (1 = *They did not comply at all with what the manager was seeking* to 7 = *They completely complied with that the manager was seeking*).

**Expected quitting intentions impact.** Participants indicated, in a single item, what they believed the impact of the incident was on the employee's intentions to leave their manager or job (1 = *It greatly decreased their intentions to leave their manager* to 7 = *It greatly increased their intentions to leave their manager*). This was measured as an exploratory operationalization of relationship expectancies.

**Dominant behavior.** Participants indicated, in a single item, the likelihood that they would act in the way the manager did if they were a manager in the kind of situation they read about (1 = *Not at all likely* to 5 = *Extremely likely*).

### **Results**

We first examined whether competitive worldview predicted dominant behavior as the manager, conducting a linear random effects model, holding description as a random effect and

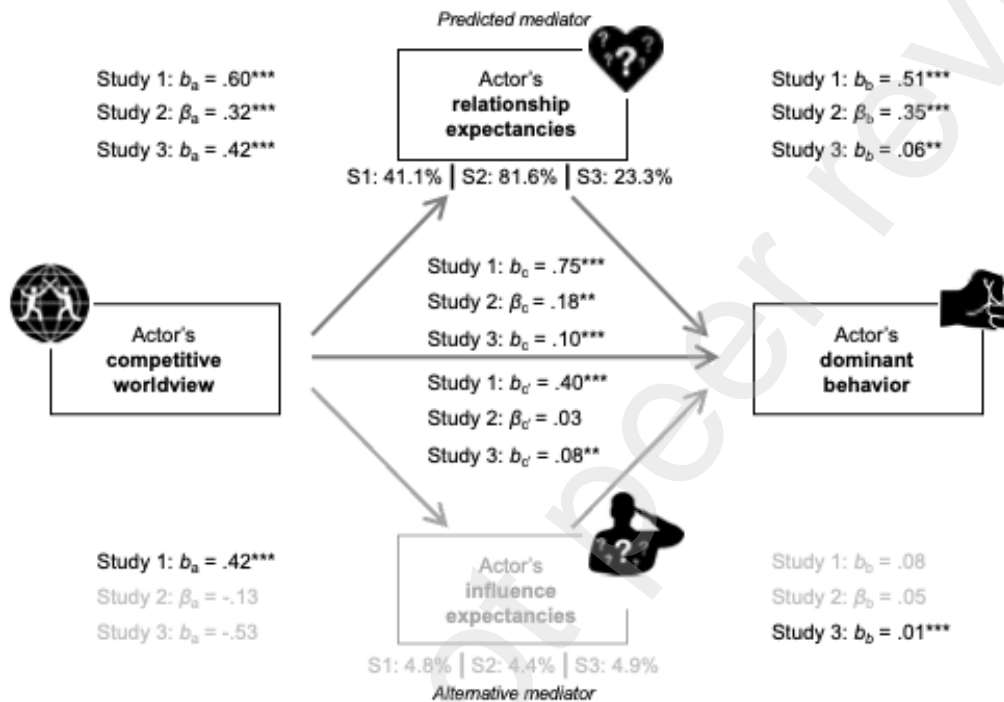
controlling for age, race, gender, education, and income. As predicted, competitive worldview was positively associated with intentions to behave dominantly ( $\hat{\beta} = 0.18$ ,  $t(254.57) = 2.67$ , 95%  $CI = [0.05, 0.31]$ ,  $p = .008$ , partial  $\eta^2 = 0.03$ ).

We next examined whether competitive worldview predicted relationship expectancies (our hypothesized mediator), conducting a linear random effects model, holding description as a random effect and controlling for age, race, gender, education, and income. As predicted, competitive worldview was positively associated with relationship expectancies ( $\hat{\beta} = 0.32$ ,  $t(261.03) = 4.74$ , 95%  $CI = [0.18, 0.45]$ ,  $p < .001$ , partial  $\eta^2 = 0.08$ ).

We tested our full model with a 10,000-bootstrapped random effects mediation model (using the *mediation* and *lme4* packages in R; Tingley et al., 2014; Bates et al., 2015). As in the regression models reported above, we held the description as a random effect and controlled for age, race, gender, education, and income. As predicted, relationship expectancies explained a meaningful portion of competitive worldview's effect on intentions to behave dominantly in the situation. In fact, the indirect effect explained 59.3% of the total effect (Total effect:  $\hat{\beta} = 0.18$ , 95%  $CI = [0.05, 0.21]$ ,  $p = .005$ ; Direct effect:  $\hat{\beta} = 0.07$ , 95%  $CI = [-0.06, 0.20]$ ,  $p = .265$ ; Indirect effect:  $\hat{\beta} = 0.11$ , 95%  $CI = [0.06, 0.17]$ ,  $p < .001$ ).

Finally, we explored the relative explanatory power of relationship and compliance expectancies in the effect of competitive worldview on dominant behavior. To that end, we conducted a 10,000-bootstrapped structural equation model, clustered within scenario, with both relationship and compliance expectancies as simultaneous mediators (conducted using the *lavaan* package in R; Rosseel, 2012). Again, description was held as a clustered effect, and age, race, gender, education, and income were inserted as control variables. Consistent with our predictions, the indirect effect of relationship expectancies explained 81.6% of the total effect ( $\hat{\beta}$

= 0.11, 95%  $CI$  = [0.05, 0.17],  $p$  = .001), whereas the indirect effect of compliance expectancies did not explain a meaningful portion of the total effect ( $\hat{\beta}$  = -0.01, 95%  $CI$  = [-0.03, 0.02],  $p$  = .579). Altogether, as predicted, this suggests that relationship expectancies, rather than compliance expectancies, explain the relationship between competitive worldview and dominant behavioral intentions as the manager (see Figure 2).



**Fig. 2.**

Relationship expectancies of dominance partly explain the relationship between competitive worldview and dominant behavior, over and above influence expectancies of dominance. Competitive worldview was measured the same way in all three studies. Relationship expectancies and influence expectancies were operationalized differently across all three studies: In Study 1, they were measured as beliefs about general dominant behaviors in the workplace; in Study 2, they were measured as a predicted outcomes of a specific dominant behavior from a manager, as recounted by their employee; and in Study 3, they were indicated as predictions by participants role-playing as managers before deciding whether or not to behave dominantly. Dominant behavior was operationalized differently across all three studies as well: In Study 1, it was measured as a general tendency to behave dominantly in the workplace; in Study 2, it was measured as the likelihood of participants to behave dominantly, in a similar way to how a manager behaved as recounted by their employee; and in Study 3, it was operationalized as sending a dominant message to a participant role-playing as an employee. Percentages shown under the mediators represent their respective indirect effects' shares of the total effects.

## Discussion



Using real-world reports of dominant behavior by managers toward subordinates, Study 2 confirmed our predictions and replicated the results of Study 1. Competitive worldview predicted intentions for dominant behavior—and this link was mediated by relationship expectancies (but not compliance expectancies).<sup>5</sup>

### Study 3

While Studies 1 and 2 supported our model, neither featured a behavioral measure of dominance. Study 3 sought such evidence with a novel paradigm, asking some participants to role-play as managers attempting to induce employees to complete a relatively unpleasant task and other participants to role-play as employees being induced to perform the task (a common dynamic in Study 2's reports of real-world dominance). This paradigm allowed us to test again for the predictive role of competitive worldviews and relationship expectancies and also to evaluate errors in expectancies by comparing managerial predictions of relationship outcomes to employees' actual behavior and self-reported attitudes towards their manager.

### Method

#### *Transparency*

We report how we determined our sample size, all data exclusions, and all measures in the main text or in the Supplemental Material. The hypotheses, materials, and analysis plan were preregistered on the Open Science Framework

([https://osf.io/8jzp5/?view\\_only=cbe1b5eb3a604f06b988ac9a3890053f](https://osf.io/8jzp5/?view_only=cbe1b5eb3a604f06b988ac9a3890053f)).

#### *Participants*

Study 3 featured two non-overlapping samples. Three hundred and one US-American participants were recruited through Connect by CloudResearch (Hartman et al., 2023) to play the

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<sup>5</sup> We replicated these findings with another operationalization of relationship expectancies: expected quitting intentions (Appendix 7 in the Supplemental Material).

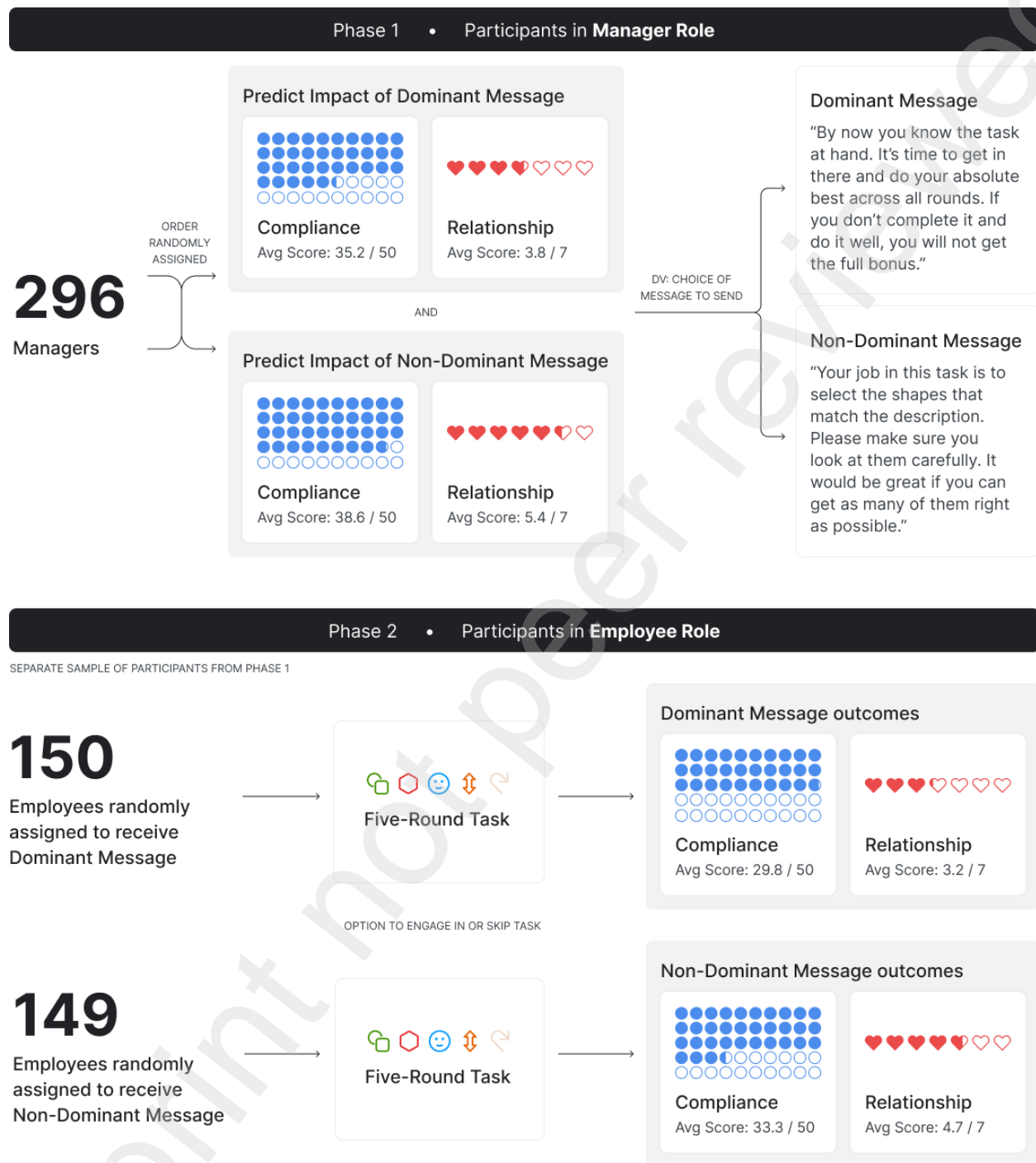
role of the manager in a hypothetical workplace scenario. Of those, 5 participants failed a preregistered attention check, resulting in a final sample of 296 eligible participants (155 men, 137 women, and 4 other gender; 208 White, 42 Black, 16 Asian, 16 Hispanic, 12 multiracial, and 2 other race/ethnicity; mean age of 39; median annual income of \$60,001-80,000). Then, 299 US-American participants were recruited through the same platform to play the role of the employee in the same hypothetical workplace scenario (123 men, 171 women, and 5 other gender; 197 White, 35 Black, 31 Asian, 12 Hispanic, 20 multiracial, and 4 other race/ethnicity; mean age of 38; median annual income of \$60,001-80,000). As preregistered, the main analyses were conducted on the manager-playing sample. A sensitivity analysis found that this sample size, with 95% power, was sufficient to find an effect of at least  $\eta^2 = 0.05$  in a multiple regression containing one predictor variable and 2 control variables.

### ***Procedure***

The study was conducted in two phases: One in which one sample of participants acted as managers and one in which another sample of participants acted as employees. Our design was informed by the behavioral reports gathered in Study 2, which tended to revolve around managers pressing employees to complete unpleasant work with some threat for noncompliance or under-performance. Phase 1 participants were asked to imagine that they were managers in a mid-sized company facing a tough task to be assigned to their employee—another participant on Connect by CloudResearch. The employee's performance on the task determined the manager's bonus (up to \$2 in addition to a base pay of \$1.60). The employee also had a \$2 "pending" bonus, but the amount they would receive would be determined by their manager (who could factor in the employee's performance as much or little as they wanted). Importantly, these bonuses were independent: the amount awarded to the employee had no impact on the amount

awarded to the manager. After receiving information about the task and bonus payment structure, manager participants were told that they could motivate their employees with one of two messages, one of which was dominant, and the other non-dominant. For each message, the managers predicted how well the employee would perform in the task and how the message would impact the employee's attitude towards them. Then, the manager selected the message they wished to send to the employee. After selecting the message, they indicated if they believed the employee would nominate them for an additional paid "good manager" survey. Next, they indicated the bonus they wished to grant the employee for every possible level of performance in the task. Finally, they completed a measure of competitive worldview.

Phase 2 participants were asked to imagine that they were employees in a mid-sized firm. We informed them that they had been randomly assigned a manager who had participated in a previous phase of the study. After reading about the scenario, the task, and the bonus payment structure (where the manager's bonus depended on their performance, but their own bonus was independent, decided solely by the manager), participants were told that the manager chose to send them a message. They then read the message that the manager selected to send (either dominant or non-dominant) and indicated if they wanted to complete the task. If not, they answered a number of questions about the manager and ended the survey at the agreed-upon \$0.80 base pay. If yes, they began a five-round task (described below). After completing the task, they saw their score, indicated their attitudes about the manager, and were asked if they would recommend the manager for a paid "good manager" follow-up study. Finally, they were told how much the manager decided to grant them out of the \$2 pending bonus. See Figure 3 for a visual description of the procedure.



**Fig. 3.** Visual representation of the procedure in Study 3. Scores indicate sample averages for each of the measures.

### Materials

**Scenario and payment structure.** Participants read that they worked at a mid-sized company, with a tough task that the manager was delegating to the employee. Both actors read that they had a chance to receive up to \$2 in bonus pay, on top of the base pay for the survey (\$1.60 for the managers and \$0.80 for the employees). The manager's bonus was determined solely by the employee's performance in the task. The employee's bonus was determined solely by the manager's decision. Employee and manager bonuses were independent (i.e., the amount available to the manager did not depend on the amount award to the employee and vice versa). Managers indicated their bonus choice for the employee for all possible levels of employee performance. We randomly assigned a manager to each employee and executed their bonus decision for that employee (see Appendix 8 in the Supplemental Material for full scenario description and payment structure, as explained to participants).

**Task.** Performance in the task was intended to reflect effort rather than skill. Therefore, we designed an image-tagging sequence that would be onerous to complete but not difficult for anyone who is motivated to put in the effort. In total, the task was estimated to take eight minutes to complete. Employees who decided to perform the task were shown five randomly ordered sets of twenty images. Each set started with a prompt detailing a criterion (e.g., shapes that have six sides), ten images that matched that criterion and ten images that did not match that criterion. In total, there were 100 images, half of which matched the criterion. If participants selected an image that matched its criterion, they received one point. If they selected an image that did not match its criterion, their point total was deducted by one point. The maximum they could earn, then, was 50 points. Every point the employee scored equaled 4 cents for their manager. So, if they scored all 50 points, their manager received the full \$2 bonus. If they scored 0 points or

lower, their manager did not receive a bonus (see Appendix 8 in the Supplemental Material for the full task).

**Messages.** To motivate the employees, managers could choose to send one of two unlabeled messages: a dominant message and a non-dominant message (confirmed as such with a separate sample; see Appendix 9 in the Supplemental Material). Along with threat being consistent with our working definitions of dominance (Cheng et al., 2013; Henrich & Gil-White, 2001; Maner, 2017), it also emerged as a consistent feature of employee-reported managerial dominant behaviors in the stimuli collection portion of Study 2. Therefore, using threat as an operationalization of dominance was consistent with both theory and laypeople's intuition, so we wrote the messages in a way that felt plausible to participants. Of course, we did not need for them to be otherwise identical because they were not used as a manipulation of dominance. Rather, it was enough for us to show that they differ on dominance, both theoretically and intuitively, while allowing for them to be potentially different on other dimensions as well. The dominant message featured a threat regarding the bonus:

*By now you know the task at hand. It's time to get in there and do your absolute best across all rounds. If you don't complete it and do it well, you will not get the full bonus.*

The non-dominant message featured no threat:

*Your job in this task is to select the shapes that match the description. Please make sure you look at them carefully. It would be great if you can get as many of them right as possible.*

### **Measures**

**Competitive worldview.** Manager participants indicated their competitive worldview with the same ten-item scale described in Studies 1 and 2 (Perry et al., 2013). Again, the items in the scale were internally consistent at Cronbach's  $\alpha = .81$ .

**Relationship expectancy.** For each of the messages, manager participants indicated the predicted impact of the message on their employee's attitude towards them (1 = *Extremely Negative* to 7 = *Extremely Positive*).

**Compliance expectancy.** For each of the messages, manager participants predicted their employee's performance in the task (0-50 points).

**Manager-as-employee attitudes.** For each of the messages, manager participants indicated the impact the message would have on their attitude towards their manager if they were their employee (1 = *Extremely Negative* to 7 = *Extremely Positive*).

**Dominant behavior.** After predicting hypothetical outcomes for each of the messages, manager participants selected the message to send to their employee (dominant message vs. non-dominant message).

**Predicted nomination for a "good manager" survey.** After selecting which message to send, manager participants were told that we, the researchers, were interested in targeting "good managers"<sup>6</sup> for a well-paid follow-up survey. We told them that their employee would be asked, after completing the task but before knowing their manager's bonus decision, if they want to recommend their manager for this follow-up survey. Then, we asked, for each of the messages (the one that was chosen and the one that was not chosen), if they believed their employee would recommend them as a participant in this "good manager" survey (1 = *Yes*; 0 = *No*).

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<sup>6</sup> Described as "those who show an ability to effectively lead their workers to achieve goals while fostering a positive work environment."

**Compliance.** Compliance was measured as the extent to which participants who role-played as employees correctly completed the task (0-50 points).

**Attitude.** After completing the task (or after opting out of the task), employee participants were asked about the impact of the message they received on their attitudes towards their manager (1 = *Extremely Negative* to 7 = *Extremely Positive*).

**Nomination for a “good manager” survey.** After completing the task (or after opting out of the task), employee participants were told that we, the researchers, were targeting good managers for a paid follow-up survey. We then asked if they would recommend their manager as a participant in this “good manager” survey (1 = *Yes*; 0 = *No*).

## Results

### *Manager Predictions and Behavior*

The primary analyses were conducted with the manager sample ( $n = 296$ ). Of those, 84 participants sent the dominant message and 212 sent the non-dominant message. We tested whether competitive worldview predicted dominant behavior in a linear regression model with competitive worldview as the predictor and the binary variable of message choice (0 = non-dominant; 1 = dominant) as the outcome variable, controlling for age, gender, race, income, and education<sup>7</sup>. As expected, competitive worldview was positively associated with selection of the dominant message ( $b = 0.10$ ,  $F(1,280) = 3.30$ , 95%  $CI = [0.04, 0.17]$ ,  $p = .001$ , partial  $\eta^2 = 0.03$ ).

We conducted another multiple linear regression model to test the relationship between competitive worldview and our hypothesized mediator—relationship expectancy for the dominant message<sup>8</sup>. As predicted, competitive worldview was positively associated with

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<sup>7</sup> Logistic regressions confirmed the same patterns (see Appendix 10 in the Supplemental Material)

<sup>8</sup> Competitive worldview was not associated with relationship expectancy of the non-dominant message, ( $b = -0.01$ ,  $F(1,280) = -0.10$ , 95%  $CI = [-0.17, 0.15]$ ,  $p = .922$ , partial  $\eta^2 = 0.00$ )



relationship expectancy ( $b = 0.42$ ,  $F(1,280) = 3.68$ , 95%  $CI = [0.20, 0.64]$ ,  $p < .001$ , partial  $\eta^2 = 0.05$ ), controlling for age, gender, race, income, and education.

The same pattern was observed with the other operationalization of expected relationship impact: Predicted nomination for the “good manager” survey. A multiple linear regression model revealed that competitive worldview was positively associated with predicted nomination for the “good manager” survey in the case of sending the dominant message ( $b = 0.14$ ,  $F(1,280) = 4.29$ , 95%  $CI = [0.08, 0.21]$ ,  $p < .001$ , partial  $\eta^2 = 0.06$ ), controlling for age, gender, race, income, and education.

Next, we examined mediation, gauging if relationship expectancy explained the relationship between competitive worldview and dominant message. As predicted, in a 10,000-bootstrapped mediation model controlling for age, gender, race, income, and education (conducted using the *mediation* package in R; Tingley et al., 2014), the indirect effect of relationship expectancy explained a meaningful portion (36.6%) of the total effect (Total effect:  $b = 0.10$ , 95%  $CI = [0.04, 0.17]$ ,  $p = .002$ ; Direct effect:  $b = 0.07$ , 95%  $CI = [0.002, 0.13]$ ,  $p = .043$ ; Indirect effect:  $b = 0.04$ , 95%  $CI = [0.02, 0.07]$ ,  $p = .001$ ). A similar pattern emerged with the operationalization of predicted nomination for the “good manager” survey. A 10,000-bootstrapped mediation model controlling for age, gender, race, income, and education revealed that the indirect effect of predicted nomination for the “good manager” survey explained a meaningful portion (51.4%) of the total effect (Total effect:  $b = 0.10$ , 95%  $CI = [0.04, 0.17]$ ,  $p = .002$ ; Direct effect:  $b = 0.05$ , 95%  $CI = [-0.01, 0.11]$ ,  $p = .110$ ; Indirect effect:  $b = 0.05$ , 95%  $CI = [0.03, 0.08]$ ,  $p < .001$ ).

We also examined an alternative mediator—compliance expectancy in the case of dominant message selection. We conducted a 10,000-bootstrapped mediation model (conducted

using the *lavaan* package in R; Rosseel, 2012), with relationship expectancy and compliance expectancy as simultaneous mediators, and the same predictor, outcome, and control variables as the model described above. As shown in Figure 2 and consistent with our predictions, controlling for one another, the indirect effect of relationship expectancy explained 23.3% of the total effect ( $b = 0.02$ , 95%  $CI = [0.01, 0.05]$ ,  $p = .027$ ), whereas the indirect effect of compliance expectancy did not explain any of the total effect ( $b = -0.005$ , 95%  $CI = [-.02, 0.01]$ ,  $p = .539$ ). This suggests that the expected impact of dominant behavior on the relationship, rather than its expected impact on compliance, was driving the effect of competitive worldview on selection of the dominant message.

### ***Comparing Manager Predictions to Employee Outcomes***

Our final exploratory analyses considered the nature and direction of error in expectancies associated with competitive worldview and dominance. We compared managers' predicted relationship outcomes with employees' reported relationship outcomes. We did this with both operationalizations of relationship outcomes: Attitude and nomination in a "good manager" survey. After completing the task, employee participants reported their attitudes about their managers and indicated if they wanted to nominate them for the "good manager" survey. Those who received the dominant message ( $N = 150$ ) served as the ground truth against which we compared relationship expectancies (attitude = 3.24; rate of nomination for "good manager" survey = .48). To compare the slope of competitive worldview against these ground truth scores, we conducted two Johnson-Neyman interval analyses (Bauer & Curran, 2005; see Johnson & Fay, 1950), one for each operationalization of relationship outcome (conducted with the *interactions* package in R; Long, 2024). This analysis allows us to compare the different levels

of the slope of competitive worldview and expectancies to a constant value: employee-reported relationship outcomes.

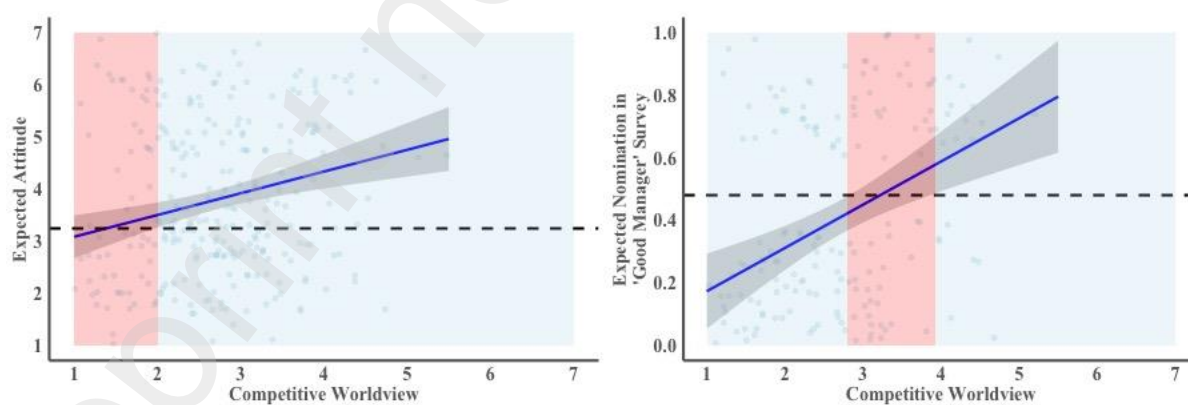
We first examined the difference between predicted attitude toward the manager (relationship expectancy) and self-reported attitude toward the manager (relationship outcome). A Johnson-Neyman interval analysis revealed that the attitude predictions of participants who were low in competitive worldview was not significantly different from employee-reported attitudes of those who received the dominant message ( $M = 3.24$ ). The cutoff for significant difference between the competitive worldview slope and ground truth was 2 on the 1-7 competitive worldview scale ( $N = 62$ ). Participants who scored more than 2 on the competitive worldview scale overestimated the positive attitude of employees toward them if they were to send the dominant message. In fact, participants who were in the middle of the competitive worldview distribution (above -1SD and under +1SD) predicted that employees would have less unfavorable attitudes toward them if they were to send the dominant message ( $M = 3.69$ ;  $SD = 1.56$ ). The over-estimate was even higher for participants who were high in competitive worldview (+1SD and above)—they predicted that employees who received the dominant message would have favorable attitudes toward them ( $M = 4.72$ ;  $SD = 1.71$ ). This prediction corresponded to the 88<sup>th</sup>-95<sup>th</sup> percentile of the employee-reported attitudes from those who received the dominant message, far from the mean of the employee-reported attitude toward their dominant manager ( $M = 3.24$ ).

Next, we examined the difference between predicted nomination for the “good manager” survey and actual nomination for the “good manager” survey. This variable was binary (1 = nominated; 0 = did not nominate) so the means and predictions are in proportions of 0-1. A Johnson-Neyman interval analysis revealed that manager participants low in competitive

worldview *underestimated* employee nomination for “good manager” survey. Specifically, manager participants who scored under 2.80 in competitive worldview ( $N = 154$ ) believed that 35.06% of employees who received the dominant message would nominate their manager for the “good manager” survey, whereas 48% of them ended up nominating their managers for that survey. Conversely, manager participants who scored between 2.80 and 3.92 in competitive worldview ( $N = 114$ ) quite accurately estimated, on average, that 47.52% of employees would nominate their dominant managers for the “good manager” survey. Finally, manager participants who scored over 3.92 in competitive worldview ( $N = 28$ ) overestimated nomination likelihood, estimating on average, that 64.29% of employees would nominate their dominant managers for the “good manager” survey.

In sum, analyses of both operationalizations (attitudes and “good manager” nomination) showed that high competitive worldview managers *overestimated* relationship outcomes as a consequence of sending the dominant message. The patterns for managers with low and medium competitive worldview were mixed.

See Figure 4 for a visual representation of these analyses.



**Fig. 4.** Comparison of expected relationship impact and self-reported relationship impact. The dashed line represents the ground truth, as reported by employee participants who received the dominant message. The Y axis represents predictions made by manager when asked what would happen if they were to send the dominant message. The red-shaded area represents levels of the competitive worldview distribution in which predictions were not significantly different from

employee-reported relationship outcomes, according to Johnson-Neyman interval analyses. The light blue-shaded area represents levels of the competitive worldview distribution in which predictions were significantly different from employee-reported relationship outcomes, according to Johnson-Neyman interval analyses.

We also explored how relationship expectancy errors varied by dominant behavior. That is, whether those opting to send the dominant message over-estimated relationship attitudes in the wake of the dominant message, compared to those who opted to send the non-dominant message. Manager participants who selected the dominant message ( $N = 84$ ) expected greater relationship benefit from sending the dominant message ( $M = 4.76$ ,  $SD = 1.51$ ) than was ultimately observed in the employee sample ( $M = 3.24$ ),  $t(83) = 9.24$ ,  $p < .001$ ,  $d = 1.01$ . On the other hand, manager participants who selected the non-dominant message ( $N = 212$ ) were much more accurate in their predicted relationship benefit from sending the dominant message ( $M = 3.42$ ,  $SD = 1.59$ ),  $t(211) = 1.69$ ,  $p = .093$ ,  $d = 0.12$ .

## Discussion

Using a novel behavioral paradigm, Study 3 supported our predictions: managers' competitive worldviews predicted their dominant behavior, and this relationship was explained by relationship expectancies. Study 3 also offered evidence about the direction of error in expectations. In both of our relationship operationalizations, those high in competitive worldview (and those who acted dominantly) *underestimated* relationship harm in the wake of dominant behavior. Evidence was mixed for those moderate and low in competitive worldview. Those who acted non-dominantly seemed to have roughly accurate predictions.

## Study 4

While Studies 1-3 provide correlational evidence that relationship expectancies shape dominant behavior and that worldviews, in turn, shape relationship expectancies, several important causal questions remain. In particular, is it possible to shift relationship expectancies

... and would doing so change behavioral dominance? Study 4 tackles these questions by experimentally manipulating the expected relationship impact of dominant behavior and measuring its effect on incentive-compatible dominant behavior. Specifically, we posit that experimentally channeling participants' attention to the negative, as opposed to positive, relationship consequences of dominant behavior will lead them to behave less dominantly. Additionally, we explore whether this relationship expectancy will explain the causal effect over and above compliance expectancies about the specific task and pre-existing competitive worldviews. To that end, we adapt the paradigm from Study 3, putting participants into the manager role, and introduce a manipulation of relationship expectancies.

## **Method**

### ***Transparency***

The hypotheses, materials, measures, and analysis plan were preregistered on the Open Science Framework ([https://osf.io/86me4/?view\\_only=d6414b68148a4dd1b87bba265095a7bf](https://osf.io/86me4/?view_only=d6414b68148a4dd1b87bba265095a7bf)). The way in which analyses are reported below (confirmatory or exploratory) corresponds to their categorization as such in the preregistration.

### ***Participants***

Five hundred and three US-American employees were recruited through Connect by CloudResearch (Hartman et al., 2023). Of those, 7 participants failed a preregistered attention check and 4 participants were revealed to be bots in a preregistered bot detection question, resulting in a final sample of 492 eligible participants (241 men, 249 women, and 2 other gender; 335 White, 55 Black, 47 Asian, 25 Hispanic, 21 multiracial, and 9 other race/ethnicity; mean age of 39; median annual income of \$60,001-80,000). A sensitivity analysis found that this sample

size, with 95% power, was sufficient to find an effect of at least Cohen's  $d = .30$  in a two-sample t-test.

### ***Procedure***

Participants were given the same scenario, introduction, and context as the manager side of Study 3. They were told to imagine that they were managers in a mid-sized company and that they needed to assign a task to an employee who would be randomly assigned to them. The incentive structure was identical to the one in Study 3, with one exception: Instead of a \$2 potential bonus, the potential bonus was \$1 (for managers and employees). To motivate the employee, the manager could send one of two messages: A dominant message or a non-dominant message. After reading the scenario, incentive structure, and messages, participants were randomly assigned to one of two experimental conditions: The *Positive Relationship Impact Condition* or the *Negative Relationship Impact Condition*. Accordingly, they were asked to think and write about how the employee might react [positively/negatively] to the dominant message. Specifically, they wrote about [positive/negative] thoughts or feeling the employee could have about the manager and their relationship with them. Participants then selected which message to send and made predictions about the relationship and compliance impact of sending the dominant message. Next, they indicated the extent to which they preferred the message they selected over the other. Finally, they completed a measure of competitive worldview.

### ***Manipulation***

Depending on the condition participants were randomly assigned to, they were asked to reflect on and write about either the positive or negative relationship impact of sending the dominant message. The manipulation prompt read as follows (paste disabled; 50-character minimum):

Before you make your choice of which message you want to send, think for a moment about how your employee might react [**positively/negatively**] to this message:

*By now you know the task at hand. It's time to get in there and do your absolute best across all rounds. If you don't complete it and do it well, you will not get the full bonus.*

How and why might the employee have a **positive/negative** (or at least not negative/positive) reaction to that message, affecting their **attitude towards the manager**?

In the space below, please write 1-2 sentences about positive thoughts or feelings they could have about the manager and their relationship with them.

### ***Measures***

**Dominant behavior.** Participants selected which of the two messages (dominant or non-dominant) they wished to send to their employee. Responses were coded as 1 for selection of the dominant message and 0 for selection of the non-dominant message.

**Relationship expectancy.** Participants predicted the impact of the dominant message on the employee's attitude towards the manager (1 = *Extremely Negative* to 7 = *Extremely Positive*).

**Compliance expectancy.** Participants predicted the impact of the dominant message on the employee's performance in the task (0-50 points).

**Preference for selected message.** Participants indicated the extent to which they preferred the message that was selected (1 = *Slightly preferred* to 3 = *Strongly preferred*). We later recoded this response, in combination with the message selection question, as a 6-point



dominance scale (1 = *Strongly preferred the non-dominant message* to 6 = *Strongly preferred the dominant message*).

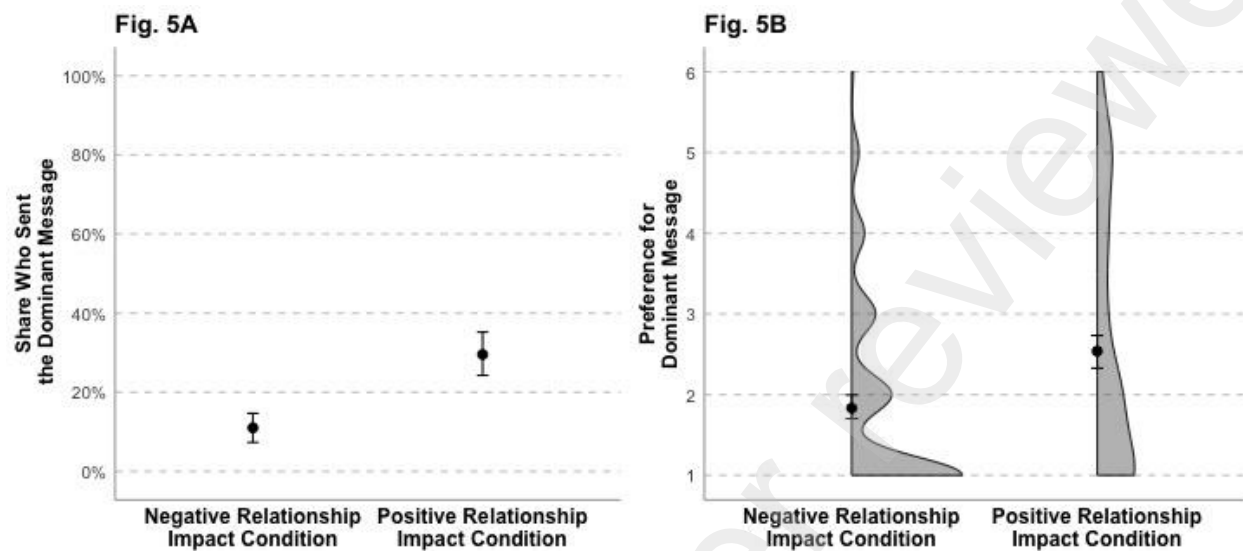
**Competitive worldview.** Competitive worldview was measured with the same 10-item scale that was used in Studies 1-3 (Perry et al., 2013; Cronbach's  $\alpha = .79$ ).

## Results

First, as a manipulation check, we examined the effect of condition on relationship expectancy of sending the dominant message. As predicted, a two-sample t-test confirmed that participants in the *Positive Relationship Impact Condition* predicted more positive relationship outcomes for sending the dominant message ( $M = 4.39$ ,  $SD = 1.65$ ) than participants in the *Negative Relationship Impact Condition* ( $M = 3.31$ ,  $SD = 1.67$ ),  $t(489.73) = 7.25$ ,  $SE = 1.50$ , 95%  $CI = [0.79, 1.38]$ ,  $p < .001$ , Cohen's  $d = 0.66$ .

To test our primary hypothesis, we conducted another two-sample t-test, examining the effect of condition on the likelihood of selecting the dominant message (1 = selection of dominant message; 0 = selection of non-dominant message). As predicted, participants in the *Positive Relationship Impact Condition* were more likely to send the dominant message ( $M = 0.30$ ;  $SD = 0.46$ ) than participants in the *Negative Relationship Impact Condition* ( $M = 0.11$ ,  $SD = 0.31$ ),  $t(435.98) = 5.25$ ,  $SE = 0.04$ , 95%  $CI = [0.12, 0.25]$ ,  $p < .001$ , Cohen's  $d = 0.50$ . As an exploratory continuous dependent variable to allow for more variance, we examined the effect of condition on preference for the dominant message, as opposed to the non-dominant message. Replicating the pattern observed in the binary outcome variable reported above, a two-sample t-test showed that those in the *Positive Relationship Impact Condition* reported a stronger preference for the dominant message ( $M = 2.54$ ;  $SD = 1.63$ ) than those in the *Negative Relationship Impact Condition* ( $M = 1.83$ ,  $SD = 1.18$ ),  $t(447.92) = 5.51$ ,  $SE = 0.13$ , 95%  $CI =$

[0.45, 0.96],  $p < .001$ , Cohen's  $d = 0.52$ . See Figure 5 for a visual representation of these analyses.



**Fig. 5.**

Effects of experimental condition on selecting the dominant message over the non-dominant message (Fig. 5A) and preferring the dominant message over the non-dominant message (Fig. 5B). Errors bars represent 95% confidence intervals.

We then confirmed that the effect of condition on message selection was at least partially explained by relationship expectancy of dominant behavior. To that end, we conducted a 10,000-bootstrapped mediation model with condition as predictor (1 = *Positive Impact*; 0 = *Negative Impact*), predicted relationship impact as mediator, and message selection as outcome. As expected, predicted relationship impact explained a substantial portion of the relationship between condition and message selection. In fact, the indirect effect explained 32.23% of the total effect (Total effect:  $b = 0.18$ , 95%  $CI = [0.12, 0.25]$ ,  $p < .001$ ; Direct effect:  $b = 0.13$ , 95%  $CI = [0.06, 0.19]$ ,  $p < .001$ ; Indirect effect:  $b = 0.06$ , 95%  $CI = [0.04, 0.09]$ ,  $p < .001$ ). To rule out the possibility that the effect was entirely driven by predicted compliance, we consequently conducted a simultaneous 10,000-bootstrapped mediation model, with the same predictor and outcome as above, but with predicted compliance as an additional mediator. Indeed, the indirect

effect via predicted relationship impact remained significant ( $b = 0.05$ , 95%  $CI = [0.02, 0.08]$ ,  $p < .001$ ), over and above the indirect effect via predicted compliance ( $b = 0.01$ , 95%  $CI = [0.001, 0.02]$ ,  $p = .065$ ). This suggests that the manipulation targeted relationship expectancies uniquely, over and above compliance expectancies, which ultimately led to selection of the dominant message.

Finally, as an exploratory analysis, we examined whether participants across the spectrum of competitive worldview were impacted by the experimental condition, and whether the extent to which they were impacted by condition depended on the extent to which they endorsed a competitive worldview. To that end, we conducted a multiple linear regression model with condition as the primary predictor (1 = Positive Impact; 0 = Negative Impact), competitive worldview as a moderator, and selection of the dominant message as the outcome variable. Controlling for competitive worldview and its interaction with condition, those in the *Positive Relationship Impact Condition* were more likely to select the dominant message than those in the *Negative Relationship Impact Condition*,  $b = 0.39$ ,  $t(488) = 3.23$ ,  $SE = .12$ , 95%  $CI = [0.15, 0.63]$ ,  $p = .001$ , partial  $\eta^2 = 0.05$ . Consistent with Studies 1-3 and with our theorizing, a main effect of competitive worldview emerged as well,  $b = 0.07$ ,  $t(488) = 2.17$ ,  $SE = .03$ , 95%  $CI = [0.01, 0.13]$ ,  $p = .031$ , partial  $\eta^2 = 0.003$ . The interaction of condition and competitive worldview was not statically significant ( $b = -0.08$ ,  $t(488) = -1.78$ ,  $SE = .04$ , 95%  $CI = [-0.16, 0.01]$ ,  $p = .076$ , partial  $\eta^2 = 0.01$ ), suggesting that the impact of experimental condition on dominant behavior was relatively uniform across the spectrum of competitive worldview.

## Discussion

With an experimental manipulation in an incentive-compatible behavioral paradigm, we showed that shifting relationship expectancies changed dominant behavior. Specifically, those

who reflected on and wrote about the positive, as opposed to negative, relationship impact of dominance showed nearly triple the rate of dominant behavior. It is worth highlighting that we did not tell participants what to believe or whether to care about these beliefs; we simply asked them to describe potential positive or negative effects of dominance. The effect of condition remained even when controlling for the expected compliance impact of dominant behavior and competitive worldview.

### **General Discussion**

Who acts dominantly—and why? It is tempting to single out a “drive” of some kind, a conscious or implicit motivation to dominate as an “end” itself or as a means to a more distal end (e.g., power, compliance), perhaps traceable to some genetic, biological, or personality underpinning or amplified by a situation. Indeed, there is considerable scholarship highlighting such a motivational route and its precursors (e.g., Case & Maner, 2014; Johnson et al., 2012). We argue here that a different, underappreciated source can also play an important role: situation-specific beliefs about relationship impact rooted in broader beliefs about the social world. We posit that variance in these beliefs can promote or inhibit dominance. Across our studies, we confirmed our prediction that competitive worldview—a general belief that the social world is a cutthroat struggle for status and resources—would positively predict dominant behavior, over and above other mental models of the social world. We also confirmed our prediction that a meaningful share of this link would be explained by expectations about the relationship consequences of dominance. Namely, competitive worldviews explain relationship expectancies, which in turn, shape dominant behavior. When we manipulated relationship expectancies by simply asking participants to describe either the potential positive or negative effects of dominance, we found a dramatic change in dominant behavior. Those who focused on

positive effects were nearly three times as likely to act dominantly as those focused on negative effects.

Overall, our predicted results emerged even when controlling for relationship motivations, instrumental motivations, and instrumental beliefs. To be sure, some people, including those with a competitive worldview, might behave dominantly in part because they care less about relationships with others. Others might eschew dominance because they care so much about relationships. But our work suggests that this motivational account is not the only story of dominance. Some people may behave dominantly not simply because of an indifference to others but because they anticipate little relationship harm, or even relationship benefits. Others might avoid dominance not because of a preoccupation with relationships but because they predict dramatic relationship costs. Our results appear to be the first to spotlight this expectancy story of dominance. We also explored the accuracy of these expectancies. Congruent with previous research on predicted teammate-impact of dominance (see Reit & Grunfeld, 2022), our findings suggest that dominant people may often be overly optimistic, and sometimes even clueless, about the interpersonal costs of their behavior.

A number of important questions remain unresolved. First, what is the inferential route from a broad worldview to a context-specific relationship expectancy of dominant behavior (the “a” path in Figure 1)? We suspect actors may often look inward for answers, projecting their own acceptance of dominance onto others. Indeed, exploratory analyses from Study 3 suggest that the link between competitive worldview and relationship expectancies may be explained by projecting one’s own reaction to dominance (see Appendix 11 in the Supplemental Material).

Second, do clearer workplace norms and established relationships limit the predictive role of competitive worldview in relationship expectancies and ensuing dominance? In the current

research, participants did not have an existing relationship with the potential target of dominant behavior, nor were they aware of workplace-specific norms. Of course, group- and workplace-specific cultures of competition and cooperation matter (Fletcher et al., 2008; Milkman et al., 2014), so they might overshadow general worldviews in driving specific expectancies and ensuing behavior. It is possible that people's competitive worldview shapes whether and how behavior is interpreted as dominant. Indeed, as observed in Study 2, the behaviors that people described as dominant differed substantially from one another, not just in dominance, but also in legality and adherence to workplace norms and regulations. Tighter norms (potentially influenced by legislation or labor regulations) may disambiguate the expected impact of dominance and limit the inferential impact of a general worldview in determining the impact of dominance. Future research would benefit from more naturalistic settings, including those that feature established norms and cultures of competition and cooperation, to uncover the contextual determinants of managerial dominance.

Third, can dominant individuals revise their expectancies—or are they stuck in a loop of beliefs and behavior that might become self-fulfilling? Both effects seem plausible. Dominant behavior may, over time, create an environment where dominance is normalized and accepted. Indeed, some work suggests that cynicism begets disrespect, thereby reinforcing cynical worldviews (Stavrova et al., 2020). Additionally, dominant individuals may selectively attend to and interpret others' reactions as confirming their expectations (for a related account, see Case et al. (2021) on the link between prestige and social hypervigilance). Relatedly, people tend to confirm their own ideology when processing new information (e.g., Ditto et al., 2019). At the same time, we also believe that people can learn and change under the right conditions. Study 4 showed a substantial effect on behavior and expectancies simply by asking participants to

speculate about potential positive or negative impacts of dominance. This brief and basic manipulation (which did not involve telling participants what to think, only what to think about) suggests that interventions (e.g., from coaches or colleagues) may be able to guide dominant (or acquiescent) individuals to more effectively anticipate reactions and behave adaptively.

Fourth, how do different antecedents of dominance intersect? We posit that relationship expectancies are an important precursor to dominant behavior. However, we also acknowledge work demonstrating a wide array of other precursors, ranging from testosterone levels (Johnson et al., 2007) to situational attributions of hierarchy (Anicich et al., 2016). The field would benefit from an overarching account that integrates different sources, painting a picture of how a broad range of antecedents, including both general beliefs (like worldviews) and more specific ones (such as expectancies), come together with motivations and other factors to drive interpersonal dominance.

### Open Practices

Project OSF page: [https://osf.io/rjv3q/?view\\_only=4121fb8334184631956be1dda1dd4ad6](https://osf.io/rjv3q/?view_only=4121fb8334184631956be1dda1dd4ad6)

Study 1 preregistration: [https://osf.io/ygs53/?view\\_only=f5844a8417ec4ce8ae1c45e8cd858674](https://osf.io/ygs53/?view_only=f5844a8417ec4ce8ae1c45e8cd858674)

Study 2 preregistration: [https://osf.io/493q6/?view\\_only=ba0c4d08a7344522b8d0ab2557ac4c07](https://osf.io/493q6/?view_only=ba0c4d08a7344522b8d0ab2557ac4c07)

Study 3 preregistration: [https://osf.io/8jzp5/?view\\_only=cbe1b5eb3a604f06b988ac9a3890053f](https://osf.io/8jzp5/?view_only=cbe1b5eb3a604f06b988ac9a3890053f)

Study 4 preregistration: [https://osf.io/86me4/?view\\_only=d6414b68148a4dd1b87bba265095a7bf](https://osf.io/86me4/?view_only=d6414b68148a4dd1b87bba265095a7bf)

Study S1 preregistration: [https://osf.io/cxdkh/?view\\_only=a08f8661113e43df81d48ff6e2e5e073](https://osf.io/cxdkh/?view_only=a08f8661113e43df81d48ff6e2e5e073)

Study S2a preregistration:

[https://osf.io/mj537/?view\\_only=ffcc87aa8e3b42c7a0c89c21772db5a3](https://osf.io/mj537/?view_only=ffcc87aa8e3b42c7a0c89c21772db5a3)

Study S2b preregistration:

[https://osf.io/xfqby/?view\\_only=5c79b5bdc79845ed94b2571a760e8025](https://osf.io/xfqby/?view_only=5c79b5bdc79845ed94b2571a760e8025)

Study S2c preregistration:

[https://osf.io/d2hym/?view\\_only=006339cf1db54c31af73aa5a6621a9ef](https://osf.io/d2hym/?view_only=006339cf1db54c31af73aa5a6621a9ef)

### Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, we used ChatGPT in order to review our writing and study materials. After using this tool, we reviewed and edited the content as needed and take full responsibility for the content of the publication.



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