

LMXSC Elicits Hubristic Pride and Social Undermining in Individuals with High Trait Dominance

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ABSTRACT A consensus in the literature has converged on the idea that one's perceptions of being treated better by a leader (compared with one's coworkers' treatment by the same leader) motivate prosocial behaviour. Drawing on current theory of hubristic pride and its evolutionary role in status maintenance, we challenge this consensus by proposing that favourable, downward social comparisons of leader-member exchange (i.e., leader-member exchange social comparisons; LMXSC) can also lead to social undermining. Specifically, we argue that, in individuals with high trait dominance, LMXSC triggers hubristic pride, which, in turn, motivates social undermining. Results from two experiments and a longitudinal field study support this idea. In sum, our work shifts the consensus in LMXSC theory by showing when and why high LMXSC can motivate negative coworker-directed behaviour, and it also offers practical help to organizational leaders dealing with the ethical decision of if, and when, to preferentially treat individual team members.

Keywords: hubristic pride, leader-member exchange social comparison (LMXSC), social undermining, trait dominance

INTRODUCTION

The relationship between leaders and their employees has been suggested to be one of, if not the most, important relationship for employees (e.g., Manzoni and Barsoux, 2002). While decades of research have acknowledged the role of leader-member exchange

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(LMX) in eliciting interpersonal work behaviours (Ilies et al., 2007), more recently the focus has shifted to leader-member exchange social comparison (LMXSC), defined as the social comparison employees make when they perceive that they have a better LMX relationship with their leader compared with their coworkers' LMX with the same leader (Vidyarathi et al., 2010). Given individuals' ubiquitous motivation to compare themselves with others (Festinger, 1954), LMXSC has emerged as a key driver of interpersonal behaviours in the workplace, even considered more powerful than LMX (Vidyarathi et al., 2010). Prior research in the growing literature on LMXSC has converged on the idea that employees with high LMXSC will engage in more promotive interpersonal behaviours (i.e., organizational citizenship behaviours; OCBs) (Abu Bakar and Connaughton, 2019; Vidyarathi et al., 2010, 2016), whereas employees with low LMXSC will engage in more harmful interpersonal behaviours (i.e., social undermining) (Pan et al., 2021). Vidyarathi et al. (2010) claim the driving factor of this behaviour is the increased standing and self-worth that employees experience when making favourable downward social comparisons of LMX. However, research has not yet considered that these feelings may also be associated with the experience of superiority and arrogance (i.e., hubristic pride) (Tracy et al., 2009), which motivates harmful interpersonal behaviour (Cheng et al., 2013). Thus, although research on LMXSC has gravitated towards the view that high LMXSC maximizes the citizenship potential of employees (Vidyarathi et al., 2010), recent theorizing and empirical findings call this consensus into question.

In this study, we challenge the LMXSC literature by contending that high LMXSC can lead to social undermining, defined as 'behavior intended to hinder, over time, the ability [of coworkers] to establish and maintain positive interpersonal relationships, work-related success, and favorable reputation' (Duffy et al., 2002, p. 332). Hubristic pride, the emotional mechanism driving this effect, is however tied to a larger suit of distinct psychological traits uniquely associated with dominance (Cheng et al., 2010), suggesting that this effect may occur only in certain individuals. Within the nominal network of traits associated with hubristic pride, trait dominance is most closely linked to dominance strategies in gaining and maintaining social rank (Johnson et al., 2012). Therefore, we argue that LMXSC interacts with trait dominance, a personality characteristic defined as the tendency to use 'intimidation and coercion to attain a social status based largely on the effective induction of fear' (Cheng et al., 2010, p. 335), to predict hubristic pride. We argue this is because high trait dominant individuals are more attentive and responsive to, as well as gratified by, LMXSC. Hubristic pride, we argue, leads to coworker-directed social undermining of coworkers who have lower-quality relationships with the leader because it is a means of maintaining one's high status within the workgroup (see Figure 1).

This research has several theoretical and practical implications. First, this study challenges the dominant theoretical perspective that high LMXSC leads to positive outcomes. By introducing hubristic pride as a mediator and trait dominance as a moderator, we show that high LMXSC can also lead to a sense of superiority (i.e., hubristic pride) and harmful behaviours (i.e., social undermining). Thus, we shift the consensus in previous theorizing on LMXSC to show when and why high LMXSC can also negatively affect organizations. In doing so, we also demonstrate that upward comparison targets are not the only ones needing to fear harmful behaviours from social comparison makers, which is typically assumed in research

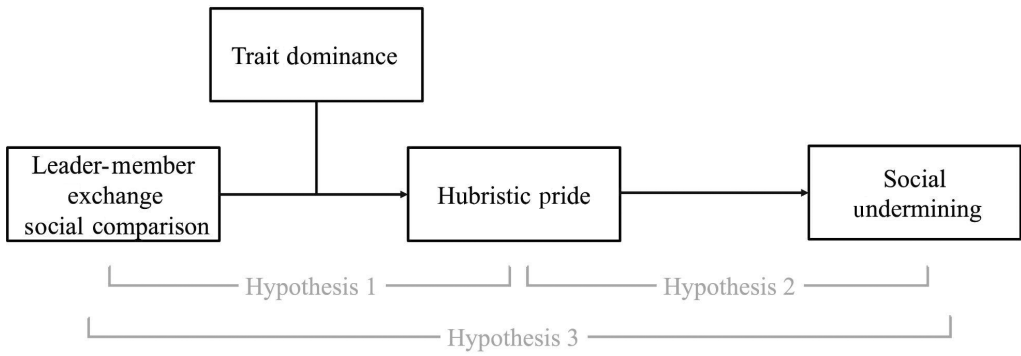


Figure 1. Theoretical model

on social comparisons (Exline and Lobel, 1999; Henagan, 2010), but also the individuals who are the targets of downward comparisons. Second, this study contributes to the social undermining literature by challenging previous research that has assumed that social undermining is typically the result of unfavourable upward social comparisons and the related emotion of envy (Duffy et al., 2012; Reh et al., 2018) by demonstrating that this behaviour can be linked to *favourable* downward social comparisons and hubristic pride as well. Taken together with recent work relating low LMXSC to social undermining via envy (Pan et al., 2021), our study thus constitutes an overall picture of the LMXSC–social undermining association by showing when high LMXSC leads to social undermining. Third, Vidyarthi et al. (2010) stressed that treating everyone similarly well is counterproductive because organizations may benefit from giving employees the feeling that they enjoy high relative standing with the leader. While preferential treatment practiced by leaders may be desirable from an organizational perspective, Thau et al. (2013) argued that this leads to an ‘ethical trade-off’ because it goes against the moral standard that everybody should be treated equally well. Our study offers practical help to leaders in dealing with this ethical decision by highlighting when high LMXSC may not be instrumental for the organization and, thus, when the trade-off for treating everyone equally well is reduced or eliminated.

THEORETICAL BACKGROUND

Leader-member exchange (LMX) refers to the perceived relationship quality employees have with their leader (Liden and Maslyn, 1998). LMX theory is founded on the premise that leaders have differing relationships with each of their employees (Graen, 1976). As a result of leaders’ limited time and resources (Scott et al., 2009, 2014), high LMX employees receive greater socioemotional and tangible resources from their leader than low LMX employees (Erdogan and Bauer, 2015; Graen and Uhl-Bien, 1995). These resources include the leader’s social support, trust, and loyalty (Bauer and Green, 1996; Liden et al., 1993), as well as unique task assignments and career development opportunities (Law et al., 2000).

Although much of the LMX literature has focused on the dyadic relationship between leaders and subordinates (for a review, see Martin et al., 2016), researchers have also drawn on social comparison theory (Festinger, 1954) to explore the social context

in which LMX relationships are embedded. This is because objective standards for what constitutes high or low LMX are lacking (Folger and Cropanzano, 1998), which motivates employees to engage in social comparisons (Festinger, 1954) with those in their immediate reference group (i.e., coworkers) (Goethals, 1986) to better evaluate their LMX relationship with their leader (Greenberg et al., 2007). Leader-member exchange social comparison (LMXSC) is the comparison a focal employee makes in terms of their own perceived LMX as it compares with the LMX they perceive their coworkers have with the same leader (Vidyarthi et al., 2010). Unlike LMX, LMXSC is based on within-group social comparison with coworkers as the reference point, whereas LMX involves no comparative judgment or reference point (Vidyarthi et al., 2010). Therefore, a focal employee's LMX may be low in absolute terms, but the focal employee may still consider themselves as having a higher-quality relationship with their leader than others (i.e., as having high LMXSC). Like LMX, LMXSC is a multidimensional concept in that high LMXSC employees perceive themselves as 'receiving a relatively higher share of the leader's valued resources, information, and emotional support than other coworkers' (Vidyarthi et al., 2010, p. 852). These valued resources include the leader's time, trust (e.g., whether the subordinate is asked to represent the leader in the leader's absence), and loyalty (Vidyarthi et al., 2010). Furthermore, LMXSC includes supervisor support in the form of emotional support, such as praise for a job well done, and therefore represents a higher quality form of social exchange between high LMXSC subordinates and their leaders than leaders have with low LMXSC subordinates.

To date, the LMXSC literature has attributed negative consequences of LMXSC to unfavourable upward social comparisons and positive consequences to favourable downward social comparisons. On the one hand, Vidyarthi et al. (2010) argued that high LMXSC motivates OCB via focal employees' increased standing in the workgroup, and their arguments are in line with findings linking high LMXSC to increased OCB (e.g., Abu Bakar and Connaughton, 2019; Vidyarthi et al., 2016). On the other hand, Matta and Van Dyne (2020) theorized that unfavourable upward social comparisons of LMX (low LMXSC) can lead to negative interpersonal consequences via the emotional experience of envy, which includes a hostile evaluation of the comparison target and an attribution of one's own inferiority (Duffy et al., 2021). Pan et al. (2021) provide empirical support for this idea in a pair of studies linking low LMXSC to increased coworker-directed undermining via feelings of envy. Similarly, Tse et al. (2018) found that unfavourable upward LMX social comparisons led to employees' hostile attributions towards high LMX coworkers that then motivated harmful behaviours towards these coworkers. Thus, whereas the consensus in the LMXSC literature is that unfavourable outcomes result from low LMXSC and envy, we will challenge this by arguing that high LMXSC can, in individuals high in trait dominance, lead to negative behaviour such as social undermining.

LMXSC, Trait Dominance, and Hubristic Pride

Social comparisons of LMX are motivated by employees' uncertainty about their leader-member exchange quality because objective standards of what constitutes a

high or low level of LMX do not exist (Folger and Cropanzano, 1998). Although the distribution of LMX-related resources among leaders and their employees is relatively stable, it is not invariant. Accordingly, each shift in this distribution invites social comparisons because it marks a diagnostic event to assess one's leader-member exchange quality (Matta and Van Dyne, 2020; Weiss and Cropanzano, 1996) and the opportunity for employees to judge their relative status in their workgroup (Vidyarathi et al., 2010).

When employees make downward social comparisons of LMXSC, they interpret this as being more successful than their coworkers and signalling having higher status (i.e., superiority) in their group (e.g., Pan et al., 2021). This interpretation satisfies their self-enhancement motives (Brigham et al., 1997), especially when they do better than others and are recognized for this superiority, such as when receiving supervisor praise (Webster et al., 2003). The importance of perceived status to individuals is clear given the evolutionarily based psychological adaptation said to guide humans' emotional and behavioural responses to the acquisition and maintenance of social resources (Tracy et al., 2010) like praise and attention (Hawley, 1999), which are representative of one's status and linked to LMXSC (Vidyarathi et al., 2010). Importantly, previous studies claim that LMXSC motivates behaviour because of the increased standing and self-worth that employees experience when making favourable downward social comparisons of LMX (Vidyarathi et al., 2010). However, research has not yet considered that these feelings may also be associated with the experience of superiority and arrogance (i.e., hubristic pride) (Tracy et al., 2009). Recent theory on status acquisition and maintenance (Cheng et al., 2010; Tracy et al., 2023) states that hubristic pride, a positively valenced emotion (Mercadante et al., 2021) characterized by feelings of superiority (Tracy et al., 2009), evolved to facilitate the acquisition and maintenance of status via a dominance strategy utilizing dominant methods involving intimidation and aggression (e.g., social undermining). Considering that hubristic pride can occur in response to (diverse indicators of) success (Tracy and Robins, 2007a), and downward social comparisons with others (i.e., high LMXSC) inform ones' evaluations of one's own work-related success (Heslin, 2005), we expect that high LMXSC has the potential to lead to more hubristic pride.

However, not all employees are expected to respond to high LMXSC with the same amount of hubristic pride. This is because the emotional experience of hubristic pride is tied to a larger suit of distinct psychological traits uniquely associated with dominance (Cheng et al., 2010). Within the nominal network of traits associated with hubristic pride, trait dominance is most closely linked to dominance strategies in gaining and maintaining social rank (Johnson et al., 2012). Trait dominance is a personality characteristic representing an individual's desire to control others and their willingness to use aggressive methods to achieve this (Cheng et al., 2010). It shows 'constant realistic adjustment to the individual's success and failure' (Cattell et al., 1970, p. 163), suggesting that individuals motivated by dominance pay particularly close attention to status-relevant information (McClelland, 1985). Support for this idea comes from studies showing that individuals with high trait dominance have greater blood pressure reactivity following status-relevant social interactions (Gramer and Berner, 2005; Lee and Hughes, 2014) and report greater enjoyment of having high status positions (Kim and Guinote, 2021). Thus, trait dominance determines

how important superiority over others is to the individual and, thus, how important control over resources and the social attention of others are as life goals (Johnson et al., 2012). Accordingly, individuals with higher trait dominance are more attentive to events indicative of status (e.g., LMXSC) and, we argue, will experience greater feelings of hubristic pride in response to having high LMXSC relative to other individuals with high LMXSC but low trait dominance. Thus, we propose the following:

Hypothesis 1: LMXSC interacts with trait dominance to predict hubristic pride. Specifically, the relationship between LMXSC and hubristic pride will be more positive for employees high in trait dominance than employees low in trait dominance.

Hubristic Pride as a Driver of Social Undermining

To understand why hubristic pride motivates social undermining, it is important to understand that as an emotion, hubristic pride facilitates behaviours directed towards the maintenance of social status (Tracy et al., 2014). Specifically, hubristic pride provides individuals ‘a sense of grandiosity and entitlement that allows them to take [or keep] power rather than earn it, and to feel little empathy for those who get in the way’ (Tracy et al., 2014, p. 303). As such, hubristic pride evolved to promote status maintenance via dominant behaviours such as intimidating other group members and taking or withholding resources (Cheng et al., 2010). We argue that such behaviours are represented in the workplace by social undermining. Social undermining, which includes behaviours such as withholding assistance, spreading rumours, and refusing to communicate with others, describes behaviours by which employees can maintain within-group status by hindering and intimidating their coworkers (Duffy et al., 2002; Lee et al., 2016). By hindering and intimidating others, individuals can coerce others into complying with their demands or providing them with valuable material or social resources (Cheng et al., 2010). Indeed, Reh et al. (2018) found that a threat to one’s expected future status motivated social undermining, arguably because employees wanted to maintain their high status. Similarly, we expect here that hubristic pride, because of its motivational focus on dominance-oriented behaviours, will motivate social undermining so that employees can maintain their higher rank in the social hierarchy of their workgroup. We therefore hypothesize the following:

Hypothesis 2: Hubristic pride is positively linked to social undermining.

Taking our arguments for Hypotheses 1 and 2 together, we propose that LMXSC triggers greater social undermining via increased hubristic pride in individuals high in trait dominance relative to individuals low in trait dominance. This idea is in line with previous theoretical work suggesting that downward social comparisons at work may motivate employees to (indirectly) harm fellow coworkers, for example by negatively gossiping about them or withholding help from them, for self-enhancement purposes (Matta and Van Dyne, 2020; Wert and Salovey, 2004). Drawing on previous empirical and theoretical research, we propose the following:

Hypothesis 3: LMXSC has a positive conditional indirect effect on social undermining which is moderated by trait dominance and mediated by hubristic pride. Specifically, this positive conditional indirect effect is stronger when trait dominance is high than when trait dominance is low.

Overview of Studies

We test our hypotheses using different methods (two online experiments and a bi-daily diary study) and different samples (UK and USA) to provide a robust test of our theoretical model. Our use of experimental and bi-daily diary designs conforms to our theoretical model, which considers LMXSC events (e.g., receiving more of the leaders' resources relative to coworkers) as episodic events that trigger specific emotional and behavioural responses (Matta and Van Dyne, 2020). Furthermore, our focus on LMXSC events as episodic events aligns with our investigation of hubristic pride as the mediating mechanism linking LMXSC to social undermining, given that hubristic pride is an emotion and, therefore, typically short-lived (e.g., Isen et al., 1976).

Additionally, triangulating findings by combining randomized experiments with field studies is an effective approach to theory testing because only experiments with randomized assignment to experimental conditions can deal with endogeneity threats (e.g., third variable effects) and establish high internal validity, and only field studies can establish high external validity (Turner et al., 2016). Also, by conducting two experiments, we use a causal-experimental design to test our theoretical model with high internal validity (Spencer et al., 2005; Stone-Romero and Rosopa, 2007). The inclusion of covariates in our analyses and the within-person design of our field study (Study 3), furthermore, allows us to demonstrate the robustness of our correlational findings to alternative explanations.

STUDY 1

Study 1 uses a vignette experimental design because experimental vignettes are effective in establishing internal validity (Aguinis and Bradley, 2014) and previous research on leadership social comparisons (e.g., Tse et al., 2016) has successfully implemented similar designs. Furthermore, research implementing experimental vignettes has demonstrated convergence between real and imagined reactions to emotional stimuli, justifying their implementation (Robinson and Clore, 2001). Finally, it is worth noting that, despite their hypothetical nature, vignette experiments have been previously recommended because they enhance experimental realism, increasing studies' internal and external validity (Aguinis and Bradley, 2014).

Data and Sample

Three hundred (N = 300; 50 percent female) participants located in the UK and recruited via the online platform Prolific (Palan and Schitter, 2018) completed an online vignette experiment. Prolific is a valuable resource for researchers as it offers a diverse pool of reliable study participants (Peer et al., 2017). Furthermore, Prolific ensures its

data quality by regularly vetting users via quality checks and algorithms for detecting and removing bots (Bradley, 2018). Participants were on average 37.7 years old ($SD = 11.2$) and predominantly white (88 percent), and 57 percent of participants reported having a bachelor's degree or higher university qualification.

Procedure

Participants provided informed consent at the beginning of the study, then answered demographic questions regarding their age, gender, ethnicity, and education. We then asked participants to complete a measure of their trait dominance. Following this, participants were randomly assigned to one of two experimental conditions (low vs. high LMXSC). In each condition, participants were instructed to read about a hypothetical scenario in which they were asked to imagine that they were members of a sales team in a company. Participants were informed that the sales team consisted of themselves, the team leader, and four other team members in order to keep the team size constant across conditions. In the low/high LMXSC conditions ($n_{\text{LMXSC low}} = 152$, $n_{\text{LMXSC high}} = 148$), participants read a hypothetical scenario about a team meeting they had attended. Following exposure to the LMXSC condition, participants first completed measures of hubristic pride and authentic pride, and then social undermining. Lastly, we asked participants whether they answered all questions honestly at the end of the survey, to which all participants responded affirmatively. We rewarded participants with 1£ (\$1.35) upon completion of the study.

Manipulations. LMXSC is a multidimensional concept in that experiences of high LMXSC are associated with employees' perceptions 'that they are receiving a relatively higher share of the leader's valued resources, information, and emotional support than other coworkers' (Vidyarthi et al., 2010, p. 852). Thus, in order to manipulate LMXSC, we manipulated the extent to which participants perceived their leader as providing them with a greater proportion of valued resources such as time (Dansereau et al., 1975; Dienesch and Liden, 1986) and support (praise and leadership opportunities). To ensure that our manipulation had a high degree of construct validity, we worded our manipulation in a way that it resembled items that are used to measure LMXSC (i.e., 'Relative to the others in my work group, I receive more support from my manager', 'My manager enjoys my company more than he/she enjoys the company of other group members', 'When my manager cannot make it to an important meeting, it is likely that s/he will ask me to fill in') (Vidyarthi et al., 2010). We also took care not to confound LMXSC with LMX by keeping the focal employees' level of LMX constant across both conditions and only varying the LMX of their coworkers. This resulted in the following manipulation for low LMXSC, with words in parentheses representing the high LMXSC condition:

Today, Alex, the team leader, calls the sales team together to discuss current and upcoming work projects. In this meeting, Alex praises your work and (but not) that of your coworkers. Following the meeting, Alex invites you and (but not) your coworkers out to lunch. Also, because Alex can't run the next meeting, Alex nominates you and (but not) another coworker of the sales team to do this instead.

Manipulation check. We followed recommendations (Fayant et al., 2017; Lonati et al., 2018) and conducted manipulation checks in an independent sample so that the manipulation checks themselves would not exert a demand effect that would otherwise not be controlled for. In particular, we wanted to test whether we were successful in manipulating LMXSC and that we did not accidentally also manipulate LMX. To this end, we collected data from 101 participants (57 percent female) who were located in Canada and recruited via [CloudResearch.com](https://www.cloudresearch.com) (Chandler et al., 2019). CloudResearch (also known as Prime Panels) is advantageous because the platform implements a variety of methods to ensure reliable data, such as vetting users based on their data quality and IP activity (Litman, n.d.), allowing us to specifically recruit from an ‘approved’ (i.e., high quality) group of users (Hauser et al., 2022). Participants were, on average, 46.5 years old ($SD = 14.5$), the majority of them were white (68 percent), and 43 percent had a bachelor’s degree or higher university qualification. After being randomly assigned to the above manipulation condition ($n_{low} = 57$, $n_{high} = 44$), participants rated their perceived relationship with the hypothetical supervisor, Alex, using the 6-item LMXSC scale (Vidarthi et al., 2010) and the 7-item LMX scale (Graen and Uhl-Bien, 1995). Responses on the LMXSC scale were given using a 7-point Likert scale ($\alpha = 0.92$), and responses on the LMX scale were given using a 5-point Likert scale ($\alpha = 0.87$). Participants rated their LMXSC significantly higher in the high LMXSC condition ($M_{high} = 5.13$, $SD_{high} = 0.16$) compared with the low LMXSC condition ($M_{low} = 4.11$, $SD_{low} = 0.15$), $t(99) = -4.59$, $p < 0.001$. However, participants’ LMX did not significantly differ across the manipulation condition ($M_{low} = 3.43$, $SD_{low} = 0.10$; $M_{high} = 3.37$, $SD_{high} = 0.11$), $t(99) = 0.41$, $p = 0.68$. These results substantiate the efficacy of our LMXSC manipulation conditions and show that LMXSC was not confounded with LMX in our experiment.

Measures

We adjusted all variables to take into account the hypothetical nature of our vignette (e.g., changing measurement items from ‘I feel’ to ‘I would feel’) and that the hypothetical leader’s name was Alex.

Trait dominance. We assessed trait dominance using the 8-item trait dominance scale developed by Cheng et al. (2010). An example item is ‘I enjoy having control over others’. All responses were given using 7-point Likert scales (1 = ‘strongly disagree’ to 7 = ‘strongly agree’).

Hubristic pride. We assessed hubristic pride using the 7-item hubristic pride scale developed by Tracy and Robins (2007b). An example item is ‘I would feel like I am arrogant’. All responses were given using 7-point Likert scales (1 = ‘not at all likely’ to 7 = ‘extremely likely’).

Social undermining. We measured social undermining using the 13-item social undermining scale implemented by Castille and colleagues (2017) and originally adapted from Duffy et al.’s (2002) social undermining scale. Whereas the original scale by Duffy et al. (2002) measures social undermining from the victim’s perspective, the version used by Castille

et al. (2017) measures social undermining from the perpetrator's perspective, which is in line with our theory. An example item is 'I would belittle the other sales team members or their ideas'. All responses were given using 6-point Likert scales (1 = 'extremely unlikely' to 6 = 'extremely likely').

Covariates. We included authentic pride as a covariate to ensure that the effect of hubristic pride on social undermining was not confounded with authentic pride, a separate facet of pride (e.g., Cheng et al., 2010). Furthermore, given that both hubristic pride and authentic pride are high in positive affect (Mercadante et al., 2021), by statistically accounting for authentic pride we can rule out general positive affect as the psychological mechanism linking LMXSC to social undermining. We assessed authentic pride using the 7-item authentic pride scale developed by Tracy and Robins (2007b). An example item is 'I would feel like I am achieving'. All responses were given using 7-point Likert scales (1 = 'not at all likely' to 7 = 'extremely likely').

The means, standard deviations, Cronbach's alphas, and zero-order correlations of the study variables are shown in Table I.

Analyses and Results

Hypothesis testing. To test our hypotheses, we estimated a first-stage moderated-mediation model (see Model 7 in Preacher et al., 2007). This analysis was conducted using structural equation modelling (SEM) in STATA/MP 15.1 (Stata Corp, 2017). LMXSC was set as the independent variable, trait dominance as the first-stage moderator, hubristic pride as the mediator, and social undermining as the dependent variable. The results of this initial analysis are summarized in Table II (Model 1). As expected, LMXSC interacted with trait dominance to predict hubristic pride, $\beta = 0.28$, $p = 0.012$. While follow-up simple slopes showed a significant positive relationship between LMXSC and hubristic pride regardless of trait dominance level, the association was stronger at higher levels of trait dominance (+1 SD), $\beta = 1.18$, $p < 0.001$, than at lower levels of trait dominance (-1 SD), $\beta = 0.63$, $p < 0.001$ (see Figure 2 for details). These findings support Hypothesis 1. Furthermore, hubristic

Table I. Means, standard deviations, Cronbach's alphas, and zero-order correlations among variables (Study 1)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. LMXSC (0 = low; 1 = high)	0.49	0.50	–				
2. Trait dominance	2.72	1.02	0.05	(0.84)			
3. Hubristic pride	2.10	1.14	0.41	0.36	(0.94)		
4. Social undermining	1.46	0.58	0.08	0.49	0.49	(0.92)	
5. Authentic pride	5.65	0.87	0.04	-0.08	-0.03	-0.17	(0.95)

Note: Cronbach's alphas are shown in parentheses on the diagonal line. Correlations ≥ 0.10 or ≤ -0.10 are significant at the 0.05 level (two-tailed test).

LMXSC = leader-member exchange social comparison.

Table II. Regression results of vignette experiment (Study 1)

Variables	Hubristic pride						Social undermining					
	Model 1			Model 2			Model 1			Model 2		
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>
Intercept	1.64	0.08	<0.001	1.64	0.08	<0.001	1.51	0.04	<0.001	1.51	0.04	<0.001
LMXSC (0 = low; 1 = high)	0.91	0.11	<0.001	0.91	0.11	<0.001	-0.12	0.06	0.035	-0.11	0.06	0.049
Trait dominance	0.26	0.08	0.001	0.25	0.08	0.001	0.17	0.04	<0.001	0.16	0.04	<0.001
LMXSC \times trait dominance	0.28	0.11	0.012	0.29	0.11	0.010	0.08	0.05	0.152	0.09	0.05	0.076
Hubristic pride							0.23	0.03	<0.001	0.22	0.03	<0.001
Authentic pride				-0.04	0.06	0.481				-0.08	0.03	0.002

Note: Model 1 = Main analysis; Model 2 = Robustness check analysis.
 LMXSC = leader-member exchange social comparison.

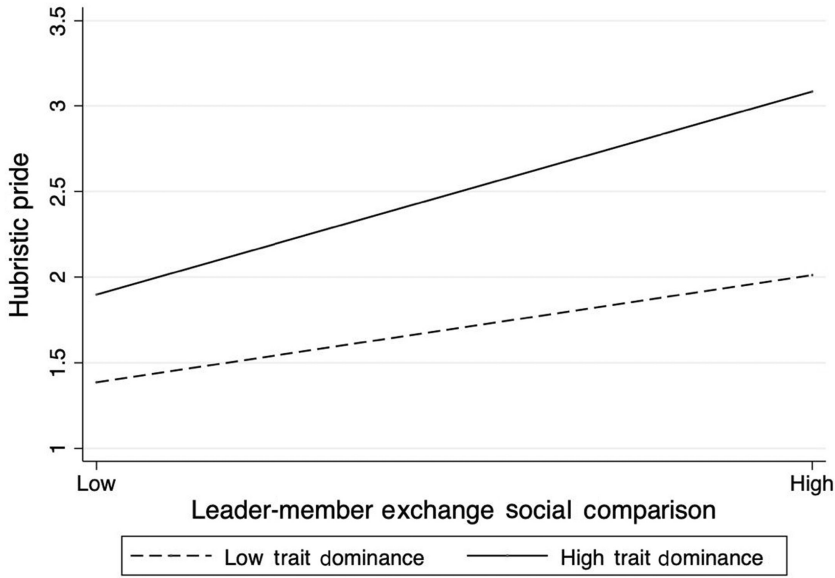


Figure 2. Leader-member exchange social comparison \times trait dominance interaction effect on hubristic pride (Study 1)

Note: High and low levels of trait dominance represent $+1$ and -1 standard deviations around the mean.

pride was significantly correlated with social undermining, $\beta = 0.23$, $p < 0.001$, which supports Hypothesis 2.

To test Hypothesis 3, we calculated the index of moderated mediation according to the procedure outlined by Hayes (2015) using 5000 bias-corrected bootstrap samples. The index of moderated mediation was significant, $\beta = 0.06$, 95% CI [0.011, 0.134], showing that the indirect effect of LMXSC on social undermining was moderated by trait dominance. As expected, LMXSC had a stronger effect on social undermining via hubristic pride in individuals with high trait dominance, $\beta = 0.27$, 95% CI [0.165, 0.409], compared with individuals with low trait dominance, $\beta = 0.14$, 95% CI [0.072, 0.231].^[1] Thus, the findings support Hypothesis 3.

Discussion

The results of a vignette experiment support our theory that individuals high in trait dominance respond to LMXSC with greater hubristic pride compared with individuals low in trait dominance (Hypothesis 1) and that higher hubristic pride is associated with more social undermining (Hypothesis 2). Finally, the results support our theory that hubristic pride mediates the conditional effect of LMXSC on social undermining (Hypothesis 3).

STUDY 2

Due to the fact that LMXSC, but not hubristic pride, was manipulated in Study 1, Study 1 cannot rule out issues of endogeneity, such as omitted variables or simultaneity

(Hill et al., 2020), potentially affecting the b path of our theoretical model. To establish causality in mediation analysis, Spencer and colleagues recommend that researchers ‘utilize several studies to examine a psychological process as both an effect of the proposed independent variable and as a cause of the proposed dependent variable’ (2005, p. 850). This is referred to as a causal-experimental design, and following their recommendation, we experimentally manipulate hubristic pride in Study 2 to provide causal evidence of hubristic pride’s effect on social undermining as well as to replicate our correlational, b path findings from Study 1. Importantly, by providing causal evidence of our a path (Hypothesis 1) in Study 1 and our b path (Hypothesis 2) in Study 2, we can logically establish causality for the conditional indirect effect (Hypothesis 3) proposed in our theoretical model (Stone-Romero and Rosopa, 2007). In addition, we included authentic pride in Study 1 as a covariate to rule out that positive affect was confounded with our findings. In Study 2, we included an authentic pride condition to experimentally deal with this endogeneity threat. If hubristic pride, but not authentic pride, affects social undermining, we can rule out that positive affect drives our findings because both authentic pride and hubristic pride are high in positive affect (Mercadante et al., 2021).

Data and Sample

One hundred and fifty (N = 150; 55 percent female) participants located in the USA were recruited via Amazon’s Mechanical Turk (MTurk). In line with previous recommendations on how to ensure the data quality of MTurk samples, we recruited only participants who had completed 50 or more HITS (‘human intelligence tasks’) with a high ratio (95 percent) of approved-versus-submitted tasks (Hauser and Schwarz, 2016; Litman et al., 2015). Studies have shown that MTurkers with a high reputation are more attentive in online tasks (Goodman et al., 2013; Peer et al., 2014). This is because reputable MTurkers are driven to be attentive when completing tasks so as not to risk losing their high reputation (which is visible to researchers), and, thus, their access to more desirable tasks, by failing to gain approval for submitted tasks (Peer et al., 2014). In addition, and again as in the Study 1 manipulation check, we collected the data via CloudResearch (also known as Prime Panels) because it allowed us to specifically recruit from an ‘approved’ (i.e., high quality) group of users (Hauser et al., 2022). Participants were on average 39.3 years old (SD = 11.5) and predominantly white (78 percent), and 58 percent of participants reported having a bachelor’s degree or higher university qualification.

Procedure

Participants provided informed consent at the beginning of the study, then answered demographic questions regarding their age, gender, ethnicity, and education. Following this, participants were randomly assigned to one of three experimental conditions ($n_{\text{hubristic pride}} = 48$, $n_{\text{authentic pride}} = 48$, $n_{\text{control}} = 54$). Participants were instructed to write about a time when they felt superior to others (hubristic pride condition), a time when they felt accomplished but not superior to others (authentic pride condition), or what they do on a typical day (control condition). These experimental conditions were

taken from, and have been effectively used in, previous work on hubristic pride (e.g., Huang et al., 2014; Septianto et al., 2020). Following the writing task, participants indicated to what extent they would socially undermine a coworker. Lastly, we asked participants whether they answered all questions honestly at the end of the survey, to which all participants responded affirmatively. We rewarded participants with \$1.50 upon completion of the study.

Manipulation check. To test the efficacy of the experimental manipulations, we collected data from 120 participants (43 percent female) who were located in the USA and recruited via MTurk. Participants were, on average, 39.9 years old ($SD = 11.1$), the majority of them were white (82 percent), and 56 percent had a bachelor's degree or higher university qualification. After being randomly assigned to one of the three experimental conditions ($n_{\text{hubristic pride}} = 42$, $n_{\text{authentic pride}} = 37$, $n_{\text{control}} = 41$), participants rated their state level of hubristic pride ($\alpha = 0.97$) and authentic pride ($\alpha = 0.93$) using the 7-item hubristic pride scale and 7-item authentic pride scale. All responses were given using a 7-point Likert scale (1 = 'not at all' to 7 = 'to a large extent'). Two one-way ANOVAs showed significant differences between the experimental conditions on hubristic pride ($F(2,117) = 23.91$, $p < 0.001$) and authentic pride ($F(2,117) = 3.92$, $p = 0.022$). Using Tukey's HSD test for multiple comparisons, we find that hubristic pride was significantly higher in the hubristic pride condition ($M = 2.78$, $SD = 1.12$) compared with both the authentic pride ($M = 1.64$, $SD = 1.13$), $d = 1.14$, $p < 0.001$, and the control conditions ($M = 1.32$, $SD = 0.74$), $d = 1.45$, $p < 0.001$. There was no significant difference between the authentic pride and the control conditions, $d = 0.31$, $p = 0.359$. Furthermore, authentic pride was lower in the hubristic pride condition ($M = 3.83$, $SD = 0.82$) than the authentic pride condition ($M = 4.27$, $SD = 0.64$), albeit not significantly, $d = -0.44$, $p = 0.056$. Also, the level of authentic pride in the hubristic pride condition was similar to that in the control condition, $d = 0.05$, $p = 0.967$. Lastly, authentic pride was significantly higher in the authentic pride condition compared with the control condition ($M = 3.78$, $SD = 1.02$), $d = 0.49$, $p = 0.032$. This implies that any differences between the hubristic pride and the authentic pride and control conditions in our main study are due to differences in hubristic pride, not authentic pride.

Measures

Social undermining. We used the same social undermining scale items as in Study 1, but this time participants received the following instructions before answering the items: 'Considering how you feel right now and without a specific person in mind, how likely would you engage in the following behaviors?' All responses were given using 6-point Likert scales (1 = 'extremely unlikely' to 6 = 'extremely likely') ($\alpha = 0.94$).

Analyses and Results

Hypothesis testing. A one-way ANOVA showed that social undermining differed significantly based on experimental conditions ($F(2,147) = 5.90$, $p = 0.003$). Using Tukey's HSD test for multiple comparisons, we find that social undermining was significantly higher ($p < 0.05$) in the hubristic pride condition ($M = 2.15$, $SD = 1.06$) than in either the authentic pride

($M = 1.69$, $SD = 0.78$) or control conditions ($M = 1.61$, $SD = 0.72$) (see Table III). These findings support Hypothesis 2.

Discussion

The findings of Study 2 provide causal evidence that hubristic pride, but not authentic pride, causes social undermining (Hypothesis 2). Also, because hubristic pride and authentic pride are both emotions high in positive affect (Mercadante et al., 2021), these findings show that positive affect cannot explain our findings either. Together, Study 1 and Study 2 experimentally establish a causal chain and thus provide causal evidence of the conditional indirect effect of LMXSC on social undermining via hubristic pride. However, due to the hypothetical nature of Study 1 and Study 2, field data are necessary to establish the external validity of our findings. To address this limitation, we conducted Study 3.

STUDY 3

Study 3 was a longitudinal survey covering two work weeks (i.e., ten working days and no weekends). We chose this time period based on the suggestion that two weeks represent a generalizable sample of employees' lives (Wheeler and Reis, 1991). Moreover, we explored the within-person relationship of our hypothesized variables within the same day to account for the within-day variability of our hypothesized effects and the fact that, theoretically, we had conceptualized LMXSC and its associated emotional response as an episodic event (Matta and Van Dyne, 2020). In addition, by using a within-person design, we could rule out the influence of between-person effects other than trait dominance (Hill et al., 2020). In particular, and to reduce concerns of common-method variance (Podsakoff et al., 2012), we looked at how LMXSC and hubristic pride in the morning were related to changes in social undermining in the afternoon of the same working day depending on individuals' trait dominance.

Data and Sample

One hundred and forty-seven ($N = 147$; 71 percent male) participants located in the USA completed an online diary study via MTurk. As in Study 2, we recruited only participants who had completed 50 or more HITS with a high ratio of approved-versus-submitted

Table III. Tukey's HSD pairwise comparisons on social undermining (Study 2)

<i>Experimental conditions</i>	<i>Contrast</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Hubristic pride vs. control	0.54	0.17	3.17	0.005
Hubristic pride vs. authentic pride	0.49	0.18	2.76	0.018
Authentic pride vs. control	0.06	0.17	0.33	0.943

Note: Contrasts were calculated by subtracting the first-mentioned condition from the second-mentioned condition.

tasks. Participants were, on average, 35.6 years old ($SD = 9.9$) and predominantly white (76 percent). Seventy-one percent of participants reported having a bachelor's degree or higher university qualification. All participants reported having full-time employment (outside of MTurk), a work schedule averaging 41 hours per week ($SD = 9.4$), 6.8 years average tenure at their current organization ($SD = 5.2$), and 4.6 years average tenure under their current supervisor ($SD = 4.0$). Participants represented a diverse array of industries, the most common being information technology (19 percent), retail (14 percent), and manufacturing (12 percent).

We conducted an initial intake survey to gather information on participants' demographics (i.e., age, gender, ethnicity, education, employment type, organizational tenure, supervisor tenure, and industry of work) as well as trait dominance. In the intake survey, we also asked participants whether they had meaningful personal interactions with their supervisor on most days of the week (e.g., more than just small talk or an occasional e-mail) and whether they would be working during the study's data collection period. All participants responded affirmatively to both of these questions. Following the intake survey, and across a period of two weeks (i.e., ten working days), participants were given access to two daily surveys, one to be completed midway through their work shift (t) and one to be completed at the end of their work shift ($t + 1$). Mid-shift surveys (t) were made available to participants in the morning so that they could complete these surveys during their mid-shift break. The surveys to be completed after participants' work shift ($t + 1$) were first made available to them in the afternoon. We alerted participants to the availability of the most recent study survey via a mass message on the MTurk Platform. This was done twice a day (morning and afternoon) for all ten days of the two-week diary study. In total, 21 (1 intake and 20 daily) surveys were distributed to participants. We rewarded participants with \$1.00 upon completion of each of the study's 21 surveys. Data across the intake and daily surveys were matched for 138 (94 percent) of the original 147 participants. Our dataset consisted of 1172 daily observations nested within 138 participants.

Measures

We used the same measures as in Study 1 with a few changes. Due to the nested nature of our data, we followed recommendations to estimate and report multilevel reliability of our study measures using multilevel confirmatory factor analysis (Geldhof et al., 2014). This involves separately estimating the within and between reliability of measurement scales and was done because 'single-level estimates will not reflect a scale's actual reliability unless reliability is identical at each level of analysis' (Geldhof et al., 2014, p. 72). Composite reliability scores (omegas) were calculated using the *lavaan* (Rosseel, 2012) and *semTools* (Jorgensen et al., 2021) packages in *R* (R Core Team, 2017). The means, standard deviations, composite reliability scores (omegas), and zero-order correlations of the within-person study variables are shown in Table IV and those of the between-person study variables are shown in Table V. Also, we adapted our measurement instructions to reflect that we referred to either the first half of the working day or the second half of it. For example, the instructions for the social undermining measure read 'To what extent have you engaged in the following

Table IV. Means, standard deviations, omegas, and zero-order correlations among within-person variables (Study 3)

Variable	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1. LMXSC (t)	0.54	0.65	(0.90)				
2. Hubristic pride (t)	0.29	0.35	0.21	(0.69)			
3. Social undermining (t)	0.28	0.47	0.18	0.37	(0.83)		
4. Social undermining (t + 1)	0.29	0.44	0.06	0.05	-0.04	(0.93)	
5. Authentic pride (t)	0.70	0.71	0.38	0.16	0.16	0.03	(0.89)

Note: $n = 787$ observations, $k = 131$ participants. LMXSC = leader-member exchange social comparison; t = mid-shift survey; t + 1 = end of shift survey. Omegas are shown in parentheses on the diagonal line and represent the within-person scale reliability. Correlations ≥ 0.16 or ≤ -0.16 are statistically significant at the 0.05 level (two-tailed).

behaviors during the first (second) half of the work day today'. This is in line with Beal and Weiss' point that, when investigating emotion-driven effects, 'by asking participants to reflect on experiences since the previous survey, one can capture a greater number of potentially interesting occurrences' (2003, p. 446). Second, we excluded the LMXSC item 'When my manager cannot make it to an important meeting, it is likely that s/he will ask me to fill in' because we considered it a rare event that would probably not vary much across days. We measured LMXSC and hubristic pride midway through respondents' work shift (t), and we measured social undermining both midway and at the end of participants' shifts (t, t + 1). Trait dominance was measured during the intake survey.

Covariates. We included authentic pride as a covariate using the same measure as in Study 1 to rule out that hubristic pride was confounded with another facet of pride or positive affect more generally. In Study 3, we also assessed LMX using the 7-item LMX scale developed by Graen and Uhl-Bien (1995). An example item is 'I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so'. All responses were given using 5-point Likert scales (1 = 'rarely' to 5 = 'very often'). Authentic pride was measured daily midway through participants' work shift (t), while LMX was measured in the intake survey.

Analyses and Results

Analytical strategy. We used the *lavaan* package (Rosseel, 2012) in *R* (R Core Team, 2017) to estimate a multilevel SEM first-stage moderated-mediation model. We followed recommendations and used latent group-mean centering instead of manifest group-mean centering (in which the person-mean is subtracted from the raw score of the dependent variable) to reduce concerns about low reliability of the person-means (Lüdtke et al., 2008). In latent group-mean centering, the researcher specifies the effects at both the between-person and the within-person level and thereby decomposes the between- and within-person variability of these effects. The decomposition into within-person and between-person parts means that it 'can be viewed as an

Table V. Means, standard deviations, omegas, and zero-order correlations among between-person variables (Study 3)

Variable	<i>M</i>	<i>SD</i>	<i>t</i>	2	3	4	5	6	7
1. LMXSC (t)	3.35	1.53	(0.99)						
2. Trait dominance (intake)	3.39	1.32	0.53	(0.89)					
3. Hubristic pride (t)	1.82	1.72	0.58	0.59	(0.92)				
4. Social undermining (t)	1.80	1.84	0.57	0.57	0.98	(0.99)			
5. Social undermining (t + 1)	1.88	1.89	0.57	0.57	0.97	0.99	(0.99)		
6. Authentic pride (t)	4.30	1.23	0.36	0.08	0.15	0.17	0.17	(0.99)	
7. LMX (intake)	3.75	1.94	0.25	-0.06	0.04	0.06	0.05	0.53	(0.88)

Note: *n* = 131 participants. LMXSC = leader-member exchange social comparison, LMX = leader-member exchange; t = mid-shift survey; t + 1 = end of shift survey. Omegas are shown in parentheses on the diagonal line and represent the between-person scale reliability. Correlations ≥ 0.25 or ≤ -0.25 are statistically significant at the 0.05 level (two-tailed).

implicit, latent group-mean centering of the latent within-level covariate' (Muthén and Muthén, 1998–2017, pp. 274–275). At the within-person level, this implies the removal of all between-person variance in these variables, which means that we can rule out endogeneity bias stemming from stable differences between persons (e.g., demographics and personality traits) (cf. Sonnentag et al., 2008). As was done in previous longitudinal studies on the effects of leader treatment (Barnes et al., 2015; Bono et al., 2007), we included participant data only on days in which participants reported having contact with their supervisor and coworkers. Accordingly, we asked participants (at both t and $t + 1$) to indicate the extent to which they interacted with their supervisor and coworkers, respectively. Respondents rated all items using 5-point Likert scales (1 = 'none' to 5 = 'a high amount of contact'). We excluded observations on those days on which participants had no contact with their supervisor in the morning or no contact with their coworkers in the morning or afternoon, as these employees would not have had the opportunity to make the LMXSC or engage in social undermining (144 observations and two participants). Furthermore, because the focus of this study was to determine whether perceived leader treatment in the first half of the workday is related to employees' coworker-directed behaviour in the second half of the workday, we excluded observations on days on which participants completed only one of the two daily surveys (168 observations and five participants). Thus, our final dataset consisted of 787 observations across 131 participants.

Before testing our hypothesis, we examined whether the measurements of LMXSC (t), hubristic pride (t), and social undermining (t , $t + 1$) were independent between persons. For LMXSC (t), $ICC(1) = 0.85$ ($p < 0.05$), for hubristic pride (t), $ICC(1) = 0.95$ ($p < 0.05$), and for social undermining (t , $t + 1$), $ICC(1) = 0.94$ ($p < 0.05$) and $ICC(1) = 0.95$ ($p < 0.05$), respectively. These analyses show that our observations were not independent, which violates OLS assumptions, and that an approach such as multilevel modelling is necessary (Snijders and Bosker, 1999). Thus, instead of using regular SEM, we estimated a multi-level structural equation model (ML-SEM) in which daily observations were nested within participants (Snijders and Bosker, 1999). Specifically, we included random intercepts in the paths predicting the mediator (hubristic pride) and the dependent variable (social undermining). We set LMXSC (t) as the independent variable, trait dominance (intake) as the first-stage moderator, hubristic pride (t) as the mediator, and social undermining ($t + 1$) as the dependent variable. We looked at the time-lagged effects of hubristic pride (t) on social undermining ($t + 1$) to establish temporal precedence between our mediator and dependent variable, as well as to reduce concerns for common method variance (Podsakoff et al., 2012; West and Hepworth, 1991). Moreover, we included participants' social undermining in the morning (t) as a covariate predicting their social undermining in the afternoon ($t + 1$). This way, we could model changes in social undermining as a result of hubristic pride within the same day to account for the fact that emotional experiences may have short-lived effects (Barsade and Gibson, 2007). Moreover, measures of variables at multiple timepoints allow for more accurate and less biased measures of indirect effects (Cole and Maxwell, 2003; Selig and Preacher, 2009). Furthermore, we included LMX as a covariate to test whether LMXSC explained variance beyond that

of LMX. Lastly, we included the day of the study (i.e., 1 to 10), the day of the week (i.e., Monday to Friday), and fixed slopes for two cyclic time trends (i.e., increasing and decreasing cyclic growth) into our statistical model to control for the possibility of temporal trends in our data, as recommended by Gabriel et al. (2019).

Hypothesis testing. Initial analyses based on our ML-SEM model demonstrated that LMXSC (t) interacts with trait dominance (intake) to predict hubristic pride (t), $\gamma = 0.070$, $p < 0.001$. Follow-up simple-slopes analysis showed that high (+1 SD) trait dominance was associated with significantly increased hubristic pride, $\gamma = 0.203$, $p < 0.001$, but low (-1 SD) trait dominance was not, $\gamma = 0.018$, $p = 0.194$. These findings support Hypothesis 1. Furthermore, hubristic pride (t) was found to positively correlate with social undermining ($t + 1$), $\gamma = 0.73$, $p < 0.001$, supporting Hypothesis 2. The results of this initial analysis are summarized in Table VI (Model 1).

To test Hypothesis 3, we conducted a first-stage moderated-mediation analysis using 100,000 Monte Carlo (MC) simulations. The MC method of calculating conditional indirect effects can be implemented under conditions in which bootstrapping may take a long time to converge or may fail to converge (e.g., multilevel modelling) (Preacher and Selig, 2012). Importantly, the MC method has demonstrated performance comparable to bootstrap methods (Hayes and Scharkow, 2013; MacKinnon et al., 2004; Preacher and Selig, 2012). We therefore based the statistical significance testing of our moderated-mediation analyses on the MC simulations' resulting 95% confidence intervals. The index of moderated mediation was significant, $\gamma = 0.005$, 95% CI [0.002, 0.008], showing that the indirect effect of LMXSC on social undermining was moderated by trait dominance. In particular, the intervals show that LMXSC (t) significantly increases social undermining ($t + 1$) via increased hubristic pride (t) in individuals with high trait dominance, $\gamma = 0.015$, 95% CI [0.007, 0.023], but not in individuals with low trait dominance, $\gamma = 0.001$, 95% CI [-0.001, 0.004].^[2]

Robustness checks. To determine the robustness of our findings, we included authentic pride as a within-person covariate in all paths of the main model described above. The results of this robustness check analysis are summarized in Table VI (Model 2). Initial analyses demonstrated that LMXSC (t) interacts with trait dominance (intake) to predict hubristic pride (t), $\gamma = 0.067$, $p < 0.001$. Follow-up simple-slopes analysis showed that high (+1 SD) trait dominance was associated with significantly increased hubristic pride, $\gamma = 0.178$, $p < 0.001$, but low (-1 SD) trait dominance was not, $\gamma = 0.000$, $p = 0.976$. These findings support Hypothesis 1. Supporting Hypothesis 2, hubristic pride (t) again significantly correlated with social undermining ($t + 1$), $\gamma = 0.74$, $p < 0.001$ (see Table VI). A follow-up first-stage moderation mediation analysis again showed that LMXSC (t) significantly increases social undermining ($t + 1$) via increased hubristic pride (t) in individuals with high trait dominance, $\gamma = 0.013$, 95% CI [0.006, 0.020], but not in individuals with low trait dominance, $\gamma = 0.000$, 95% CI [-0.002, 0.002]. The index of moderated mediation was again significant, $\gamma = 0.005$, 95% CI [0.002, 0.008], providing additional support for

Table VI. Multilevel regression results of diary study (Study 3)

Variables	Hubristic pride (t)				Social undermining (t + 1)							
	Model 1		Model 2		Model 1		Model 2					
	β	SE	p	β	SE	p	β	SE				
Within-Person (Level 1)												
LMXSC (t)	-0.126	0.027	<0.001	-0.140	0.027	<0.001	-0.022	0.031	0.479	-0.022	0.031	0.486
LMXSC (t) × trait dominance (intake)	0.070	0.007	<0.001	0.067	0.007	<0.001	0.019	0.009	0.027	0.019	0.009	0.028
Hubristic pride (t)							0.073	0.019	<0.001	0.074	0.019	<0.001
Social undermining (t)							-0.077	0.016	<0.001	-0.077	0.016	<0.001
Authentic pride (t)				0.052	0.009	<0.001				0.000	0.010	0.980
Sine temporal trend	0.017	0.031	0.581	0.022	0.030	0.471	-0.178	0.034	<0.001	-0.178	0.034	<0.001
Cosine temporal trend	0.046	0.018	0.011	0.048	0.018	0.009	-0.056	0.021	0.006	-0.056	0.021	0.006
Survey day	-0.007	0.002	0.002	-0.008	0.002	0.001	0.003	0.003	0.252	0.003	0.003	0.253
Day of week	0.004	0.019	0.834	0.007	0.029	0.729	-0.100	0.021	<0.001	-0.100	0.021	<0.001
Between-person (Level 2)												
LMXSC (t)	-0.595	0.067	<0.001	-0.613	0.067	<0.001	0.008	0.027	0.770	0.011	0.027	0.692
Trait dominance (intake)	-0.952	0.087	<0.001	-1.030	0.088	<0.001	-0.010	0.036	0.786	-0.003	0.037	0.940

(Continues)

Table VI. (Continued)

Variables	Hubristic pride (t)						Social undermining (t + 1)					
	Model 1			Model 2			Model 1			Model 2		
	β	SE	p	β	SE	p	β	SE	p	β	SE	p
LMXSC(t) × trait dominance (intake)	0.349	0.019	<0.001	0.366	0.020	<0.001	0.000	0.009	0.972	-0.002	0.009	0.871
Hubristic pride (t)							0.163	0.039	<0.001	0.165	0.039	<0.001
Social undermining (t)							0.906	0.036	<0.001	0.907	0.036	<0.001
Authentic pride (t)							-0.175	0.041	<0.001	0.009	0.016	0.560
LMX (intake)	-0.386	0.063	<0.001	-0.251	0.070	<0.001	-0.001	0.025	0.961	-0.008	0.027	0.768

Note: n = 787 observations; k = 131 participants. Abbreviations: LMX = leader-member exchange; LMXSC = leader-member exchange social comparison.

Hypothesis 3. In sum, support for Hypotheses 1 through 3 was robust to the inclusion of authentic pride as a covariate.

GENERAL DISCUSSION

In three studies using different methodologies and different samples, we find consistent support for our theory that LMXSC leads to greater social undermining via hubristic pride in individuals high in trait dominance relative to individuals low in trait dominance. Specifically, results of a causal-experimental design (Studies 1 and 2) demonstrate the causal validity of our claims and rule out endogeneity threats such as being confounded with affect. Furthermore, we demonstrate the external validity of these findings in our field study (Study 3), which were robust to the inclusion of theoretically relevant covariates (i.e., authentic pride and LMX) or unobserved between-level variables. By accounting for the association between authentic pride and hubristic pride, as well as authentic pride and social undermining, we demonstrate that hubristic pride and not authentic pride, or positive affect more generally, account for our findings. Furthermore, by accounting for LMX in our analyses, we show that LMXSC explains variance relating to hubristic pride and social undermining above that offered by LMX alone. This is important because it demonstrates that, regardless of one's LMX with the leader (i.e., whether good or bad), perceiving oneself as having a better relationship with the leader relative to one's coworkers can elicit hubristic pride and a motivation to socially undermine others.

Theoretical Implications

To date, the LMXSC literature has focused predominantly on positive work behaviours resulting from favourable downward social comparisons of LMX (high LMXSC) such as OCB (e.g., Matta and Van Dyne, 2020; Vidyarthi et al., 2010) or negative work behaviours resulting from unfavourable upward social comparisons (low LMXSC) (e.g., Huang et al., 2015; Weng et al., 2020). Thus, the consensus in the literature has converged on the idea that the direction of LMXSC predicts its behavioural outcomes. By challenging this consensus, our work shifts the LMXSC theoretical landscape (cf. Hollenbeck, 2008), demonstrating that, in individuals high in trait dominance, high LMXSC can also lead to negative interpersonal consequences (i.e., social undermining) via its effect on hubristic pride. Thus, contrary to previous assertions that high LMXSC maximizes the performance and citizenship potential of companies in the future (Vidyarthi et al., 2010), we show that LMXSC is not an unmitigated boon for organizations. Researchers investigating LMXSC need to consider that harmful interpersonal behaviour can be found not only in the domain of low LMXSC but also among those who compare favourably with their coworkers. Therefore, an interesting question for future research is to investigate whether the net effects of LMXSC tend to be more negative or positive for companies.

In addition, our findings show that targets of upward comparisons are not the only ones having to fear harmful behaviours from those making social comparisons. Instead, the targets of downward social comparisons may also be victim to interpersonally harmful

behaviours. This is interesting because previous work has emphasized that targets of upward comparisons experience the threat of being envied (Exline and Lobel, 1999; Henagan, 2010). Yet, employees with high trait dominance are particularly motivated to socially undermine those who do less well in terms of LMXSC to maintain their status. Future research should explore how employees high in trait dominance maintain or acquire status in dealing with those who compare better in terms of LMXSC. Our study also heeds the recent call by Matta and Van Dyne (2020) to more closely investigate social comparison emotions related to LMXSC. The authors theorize (but do not test) that downward social comparison emotions (e.g., pride) motivate employees to withhold OCB while upward social comparison emotions (e.g., envy) motivate social undermining. Whereas they refer to pride broadly when discussing the negative consequences of downward social comparisons of LMX, we contribute to their framework by showing the advantage of distinguishing between facets of pride. Specifically, we demonstrate that hubristic pride in particular motivates high LMXSC employees to actively engage in negative coworker-directed behaviour, not simply to refrain from engaging in positive coworker-directed behaviour. Thus, we believe that our study testifies to, and builds on, the core idea of Matta and Van Dyne (2020), which is to investigate LMXSC from a social comparison emotion perspective. Furthermore, our study contributes to theoretical work (Wert and Salovey, 2004) proposing that downward social comparisons in the workplace could lead comparison makers to negatively gossip about their coworkers. It does so by providing empirical evidence that such comparisons are indeed linked to social undermining, which is composed, in part, of employees' negative gossip behaviour (Duffy et al., 2002).

Our study also contributes to the social undermining literature which has argued that social undermining is driven by envy stemming from unfavourable upward social comparisons (Duffy et al., 2012; Eissa and Wyland, 2015) and that LMXSC has a negative relationship with social undermining via envy (Pan et al., 2021). We extend this narrow perspective by introducing favourable downward social comparisons of LMX, and their resulting feelings of hubristic pride, as antecedents of social undermining. In doing so, we demonstrate that employees' favourable downward LMX social comparisons have the potential to harm organizations in the same way that unfavourable upward LMX social comparisons can.

Moreover, our findings taken along with those of Pan et al. (2021) on LMXSC and envy offer a more complete picture of the role played by social emotions in linking LMXSC to social undermining, and, together, they highlight the importance of studying the indirect effects that LMXSC can have on work-relevant outcomes. Importantly, Pan et al. (2021) find a negative indirect effect of LMXSC on social undermining while we find a positive one for people high in trait dominance. Note, it is possible that a variable can have both negative and positive effects on another one because both effects are mediated by different mechanisms. Therefore, it is possible that in certain situations people with low LMXSC will experience envy while those with high LMXSC experience hubristic pride. With this study, we wanted to establish a more counterintuitive path via hubristic pride. However, it may also be that low LMXSC sometimes inspires positive interpersonal behaviours, for example, when people experience admiration for those who have a better relationship with the leader.

Thus, just as social psychological research has converged on the insight that the direction of a social comparison alone is not predictive of its consequences (Collins, 1996), we too think that future research will reveal that both low and high LMXSC can trigger desirable or undesirable consequences depending on a set of moderators that have yet to be explored.

Our study also speaks to the importance of investigating personality traits as moderators of the LMXSC-outcome relationship. Studies into LMXSC have largely ignored the value of psychological traits in determining employees' responses to these social comparisons (for an exception involving perceived self-concepts, see Lapointe et al., 2020). Our findings, therefore, underline the general importance that psychological characteristics (specifically, those related to status maintenance) can have on individuals' LMX-related social comparisons, and we emphasize the need for future work on LMXSC to take individual differences into account when investigating work-relevant outcomes. In this study we focused on trait dominance because previous studies and theory speak to its important role in linking LMXSC to hubristic pride (e.g., Cheng et al., 2010; Johnson et al., 2012). Having said this, other personality traits, such as extroversion or neuroticism, could also play a role (Cheng et al., 2010). Whereas extroverted individuals would be expected to actively seek opportunities to gain status over others, neurotic individuals would be expected to be more vigilant at detecting threats to their status. Thus, it would be interesting to see if extroverted individuals are more motivated to use social undermining as a means of gaining within-group status when LMXSC is low, whereas neurotic individuals are more motivated to use social undermining to maintain their status when their LMXSC is already high. Narcissism is another personality variable with the potential to moderate employee outcomes of LMXSC, and it has been previously associated with hubristic pride and its related status-driven behaviours (Rogoza et al., 2018; Tracy et al., 2009). We did not explore narcissism as a potential moderator of LMXSC's relationship with hubristic pride, however, because narcissism is composed of several factors (Foster et al., 2015), some of which are not clearly related to dominance behaviours (e.g., exhibitionism, vanity). Thus, although the broader psychological trait of narcissism includes individual aspects that likely moderate the relationship between LMXSC and hubristic pride (e.g., exploitativeness; 'If I have to take advantage of somebody to get what I want, so be it'), the primary drive of trait dominance (i.e., a desire to control others) makes it a more logical and parsimonious choice as a moderator. Nonetheless, future research could expand on our study by investigating whether unique factors of narcissism (e.g., entitlement) differently affect employees' emotional and behavioural reactions to high LMXSC. Furthermore, although we argue that high LMXSC subordinates socially undermine their coworkers to maintain their within-group status, future longitudinal studies could examine the extent to which such coworker-directed aggressive behaviour is effective at achieving this aim. If found to be highly effective, such findings would further emphasize the need for supervisors to rethink how they praise and reward their subordinates.

Practical Implications

This study holds practical implications in that we warn supervisors of the negative consequences that can arise when employees with high trait dominance perceive themselves as having a higher-quality relationship with the leader than their coworkers have

with the same leader. Thus, whereas Vidyarthi and colleagues suggest in their inceptive article on LMXSC (2010) that LMXSC can maximize the citizenship potential of high LMXSC employees, we reveal that perceptions of high-quality relationships between leaders and subordinates may potentially do more harm than good, depending on the trait dominance of the high LMXSC employee. Thus, our work offers an additional basis on which leaders may decide to respect the moral standard that everybody should be treated equally well despite research indicating that an employee's desire to be treated better than their peers motivates them to engage in more organizational citizenship behaviours (Thau et al., 2013). We show that the ethical trade-off associated with treating everybody equally versus treating some employees better than others is more nuanced than previously thought because employees with high trait dominance can be specifically motivated by their feelings of hubristic pride to engage in behaviour detrimental to the performance and functioning of the organization. We therefore suggest that practitioners take employees' dominance characteristics into account when hiring. Although employees with a dominant personality may be advantageous under certain conditions or in certain industries, our research suggests that they can take a toll on organizations if working as subordinates in a team context.

Limitations

Despite the strengths of our studies (e.g., use of both experimental and longitudinal designs as well as diverse participant populations), they are limited in various ways. First, self-report measures are susceptible to common methods bias which can skew effect estimates (Podsakoff et al., 2012). Although common methods bias cannot account for the statistically significant interaction effect of LMXSC and trait dominance on hubristic pride reported in Studies 1 and 3 (Podsakoff et al., 2012), it may still skew the estimated effect of hubristic pride on coworker-directed social undermining in Studies 1 and 3. To mitigate this concern, we manipulated hubristic pride in Study 2 and temporally separated measures of hubristic pride and coworker-directed social undermining in Study 3 (i.e., midday hubristic pride was used to predict intraday changes in coworker-directed social undermining). We also took various steps to increase the quality of our data when using online panels that have been recommended by Aguinis et al. (2021). To keep attrition rates low, we kept surveys short (<5 minutes) and paid participants a fair wage (£1 per survey in Great Britain, \$1 to \$1.50 per survey in the USA). To reduce concerns regarding inconsistent English language fluency, we specifically recruited participants from predominantly English-speaking countries based on internet protocol (IP) addresses coming from the USA and Great Britain. This was done using the built-in tools offered by the online platforms themselves. Furthermore, to reduce concerns regarding data quality (e.g., inattentive responding), we used highly qualified MTurkers (Studies 2 and 3) based on their experience and approval rating. Moreover, with the use of CloudResearch (also known as Prime Panels), we were able to specifically recruit from an 'approved' (i.e., high quality) group of users (Hauser et al., 2022). Also, the Prolific platform actively conducts quality assurance checks, removing low-quality responders (Study 1). These appear effective given that all participants recruited from Prolific in our

study reported answering the survey questions honestly. Third and lastly, our vignette experiment (Study 1) is limited by both the hypothetical nature of the experimental manipulation and the use of a behavioural intention measure of the dependent variable (Podsakoff and Podsakoff, 2019). Due to the difficulty in conducting a real-world experiment allocating employees across LMXSC conditions (along with the ethical question such an experiment may pose), we settled for a vignette experiment to provide greater internal validity to our theoretical model. However, and as already noted above, vignette experiments can also increase a study's external validity by enhancing experimental realism (Aguinis and Bradley, 2014).

CONCLUSION

While the consensus in the literature is that positive outcomes arise from favourable LMX comparisons and negative outcomes arise from unfavourable LMX comparisons, we challenge this by demonstrating that high LMXSC can lead to social undermining via hubristic pride in individuals with high trait dominance. Therefore, we caution scholars that LMXSC is not an unmitigated boon for organizations. In doing so, our study shines light on the dark side of high LMXSC while heeding calls for more work on LMXSC-related emotions and emphasizing the role of psychological factors on LMXSC-based outcomes. Importantly, we show when and how uniquely positive treatment of individual employees by their team leaders can backfire, thus offering insight on when the ethical trade-off for treating everyone equally well is reduced or eliminated.

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CONFLICT OF INTEREST

All authors declare that they have no conflicts of interest.

DECLARATION OF INTEREST

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NOTES

- [1] The inclusion of authentic pride as a covariate in our empirical model did not significantly affect our findings or their interpretation. For this reason, we do not discuss them further. The regression results of this robustness check are shown in Table II (Model 2).

- [2] The inclusion of participants who reported having no contact with their supervisor in the morning (t) into our analysis (125 observations and two participants) resulted in a positive conditional indirect effect of LMXSC on social undermining via hubristic pride in individuals with low trait dominance, $\gamma = 0.002$, 95% CI [0.001, 0.004]. However, the conditional indirect effect was larger for individuals with high trait dominance, $\gamma = 0.011$, 95% CI [0.006, 0.016], and this difference was statistically significant, $\gamma = 0.009$, 95% CI [0.005, 0.013]. Furthermore, the index of moderation-mediation remained significant, $\gamma = 0.003$, 95% CI [0.002, 0.005]. Thus, the results did not significantly affect our findings regarding Hypotheses 1 through 3.

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