

Singapore Management University

## Institutional Knowledge at Singapore Management University

---

Research Collection Lee Kong Chian School Of  
Business

Lee Kong Chian School of Business

---

1-2023

### Biting the hand that feeds: A status-based model of when and why receiving help motivates social undermining

Kenneth TAI

*Singapore Management University, kennethtai@smu.edu.sg*

Katrina Jia LIN

*Hong Kong Polytechnic University*

Catherice K. LAM

*Wilfrid Laurier University*

Wu LIU

*Hong Kong Polytechnic University*

Follow this and additional works at: [https://ink.library.smu.edu.sg/lkcsb\\_research](https://ink.library.smu.edu.sg/lkcsb_research)



Part of the [Applied Behavior Analysis Commons](#), [Organizational Behavior and Theory Commons](#), and the [Social Psychology Commons](#)

---

#### Citation

TAI, Kenneth; LIN, Katrina Jia; LAM, Catherice K.; and LIU, Wu. Biting the hand that feeds: A status-based model of when and why receiving help motivates social undermining. (2023). *Journal of Applied Psychology*. 108, (1), 27-52.

Available at: [https://ink.library.smu.edu.sg/lkcsb\\_research/7106](https://ink.library.smu.edu.sg/lkcsb_research/7106)

This Journal Article is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email [cherylds@smu.edu.sg](mailto:cherylds@smu.edu.sg).

Biting the Hand That Feeds: A Status-Based Model of When and Why Receiving Help  
Motivates Social Undermining

Kenneth Tai  
Singapore Management University  
Email: kennethtai@smu.edu.sg

Katrina Jia Lin  
The Hong Kong Polytechnic University  
Email: katrina.lin@polyu.edu.hk

Catherine K Lam  
Wilfrid Laurier University  
Email: calam@wlu.ca

Wu Liu  
The Hong Kong Polytechnic University  
Email: wu.liu@polyu.edu.hk

In press, *Journal of Applied Psychology*

Author Note: Kenneth Tai and Katrina Jia Lin contributed equally to this article and the order of authorship was determined randomly. This research was supported by the Early Career Scheme (#25508618) awarded to Katrina Jia Lin and the General Research Fund (#11503520) awarded to Catherine K Lam from the Hong Kong Research Grants Council. We would like to thank the participants of seminars organized by The Hong Kong Polytechnic University, Tsinghua University, and Nanjing University for their insightful comments and helpful suggestions. An earlier version of this article using different methods and samples was presented at the 79<sup>th</sup> Annual Meeting of the Academy of Management in 2019 and was published in the Best Paper Proceedings.

Correspondence concerning this article should be addressed to Kenneth Tai, Lee Kong Chian School of Business, Singapore Management University, 50 Stamford Road, 178899, Singapore; or Katrina Jia Lin, Faculty of Business, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong. Email: kennethtai@smu.edu.sg or katrina.lin@polyu.edu.hk

© 2022, American Psychological Association. This paper is not the copy of record and may not exactly replicate the final, authoritative version of the article. Please do not copy or cite without authors' permission. The final article will be available, upon publication, via its DOI: 10.1037/ap10000580

**Biting the Hand That Feeds: A Status-Based Model of When and Why Receiving Help  
Motivates Social Undermining**

## ABSTRACT

Social exchange theory suggests that after receiving help, people reciprocate by helping the original help giver. However, we propose that help recipients may respond negatively and harm the help giver when they perceive helping as a status threat and experience envy.

Integrating the helping as status relations framework and the social functional perspective of envy, we examine when and why receiving help may prompt help recipients to undermine help givers. Across four studies, we find progressive support for our results which show that when individuals receive task-related help from help givers who are perceived to be more, rather than less, competent than them, they experience greater status threat and envy. As help recipients experience envy toward help givers, they are likely to undermine help givers, and this positive relationship becomes stronger for help recipients who have higher status striving motivation. Our findings underscore the status dynamics implicated in helping interactions by highlighting that help recipients, especially those with higher status striving motivation, may paradoxically undermine help givers when they perceive status threat from and feel envious of help givers, as a result of receiving help from more competent help givers.

*Keywords: receiving help; status threat; envy; relative competence; social undermining; status striving motivation*

## **Biting the Hand That Feeds: A Status-Based Model of When and Why Receiving Help Motivates Social Undermining**

Organizational life requires that employees engage in help exchanges that support coworkers and enhance work relationships and work performance (Van Dyne et al., 1995). Given that helping is conceptualized as “actions by which individuals *positively* affect others” (Mossholder et al., 2011, p.33), researchers have largely anchored on social exchange theory (Cropanzano & Mitchell, 2005; Konovsky & Pugh, 1994) and focused on the beneficial impact of being helped, including perceptions of being supported, which facilitate reciprocal helping (Halbesleben & Wheeler, 2015; Spence et al., 2014).

Despite the universal norm of reciprocity that one ought to reciprocate what they have received (Gouldner, 1960), help recipients do not always return the favor, especially when they develop negative perceptions of the help givers (Thompson & Bolino, 2018). Worse yet, as the old saying goes, “No good deed goes unpunished,” help givers are sometimes even punished for helping. For example, employees who benefit from a supportive relationship might sabotage the person who supports them in the relationship (Eby et al., 2008; Eby & McManus, 2004). Despite the prevalence of this “biting the hand that feeds” phenomenon, it is unclear when and why receiving help may induce recipients to behave negatively toward help givers. This is an important issue to address, given that coworker helping is the most prevalent form of helping interactions at work (Lim et al., 2020) and negative consequences of helping interactions may affect critical functions in organizations, including resources distributions (Blau, 1963; Kaplan, 1984) and cooperation (Kollock, 1994). By providing an answer to this question, we can glean deeper theoretical insights into the boundary conditions and core psychological mechanisms that explain when and why receiving help may ironically prompt negative interpersonal treatment directed toward help givers.

Specifically, we integrate the helping as status relations framework (Nadler et al., 2010) and the social functional perspective of emotions (Fischer & Manstead, 2008; Keltner & Haidt, 1999) to develop a status-based model of receiving help. The helping as status relations framework suggests that helping interactions reflect potential status imbalances between the help recipient and the help giver (Nadler, 2015; Nadler et al., 2010). By receiving help, one may potentially experience diminished status, especially when receiving help highlights the recipient's negative self-image. Help recipients' perception of status threat further influences their willingness to receive help and reduces their tendency to seek help to avoid subsequent status loss (Nadler, 2020). While prior research has built on this model to understand help receiving, giving, and seeking dynamics (e.g., Nadler & Halabi, 2006), we propose that the notions of potential status threat and subsequent status maintenance reactions underlying this model are particularly useful for understanding the "biting the hand that feeds" phenomenon. This is because negative interpersonal treatment often stems from status threatening situations as a means to regain status (Greco et al., 2019; Reh et al., 2018).

Extending the helping as status relations model, we argue that relative competence of the help giver, defined as recipient's perception of help giver's work competence in relation to themselves (Fiske et al., 2002), serves as critical social comparison information that increases the salience of status differences and influences the relation between receiving task-related help<sup>1</sup> and status threat—the help recipient's perception of prominence, prestige, and respect in a team being threatened by the help giver (Anderson et al., 2015). Consequently, status threat may trigger *envy*, a painful emotion resulting from a threat to social status in which an individual desires to have superior qualities and achievements (Lange et al., 2018).

According to the social functional perspective of emotions, emotions evolve to help humans maintain their positions in the social hierarchy and coordinate the maintenance of social relationships (Fischer & Manstead, 2008; Keltner & Haidt, 1999). From this

perspective, envy serves a social function by signaling to individuals that they may suffer a loss in social standing and directing resources toward the potential status threat to resolve it (Smith & Kim, 2007). However, envy may prompt maladaptive behavioral responses, in particular social undermining behaviors directed toward the envied help giver, as a spontaneous and short-term strategy to diminish the status discrepancy between themselves and the envied help giver. This is because social undermining behaviors reduce a target's ability to create and maintain positive relationships with others, achieve work-related success, and gain favorable reputation (Duffy et al., 2002).

We further argue that the tendency of help recipients to undermine their help givers to cope with envy and close the status gap might vary across individuals. Building on the social functional perspective of envy, factors associated with status maintenance and acquisition should significantly affect how envious help recipients behave toward envied help givers as a response to the status threat and maintain their relative status. Specifically, we propose that envious help recipients who have higher status striving motivation—the motivation to obtain power and dominance within a status hierarchy at work (Barrick et al., 2002)—are more likely to undermine their status-threatening help givers. In other words, the pain of envy is likely to be amplified for these individuals, such that they are more motivated to reduce their envy and status of envied help givers and close the status gap by socially undermining help givers. Figure 1 illustrates our theoretical model.

-----  
Insert Figure 1 about here  
-----

Our research extends the helping and envy literatures in three ways. First, we challenge the predominant notion that receiving help evokes positive reciprocity (Halbesleben & Wheeler, 2015) by demonstrating that receiving help may prompt help recipients to undermine help givers. We offer a new perspective to the helping literature by going beyond traditional social exchange dynamics and highlighting the negative

interpersonal consequences for the help givers, in particular, providing support for the phenomenon of “biting the hand that feeds.” Second, we integrate the helping as status relations framework and the social functional perspective of envy to explain when and why help recipients may undermine help givers. This model allows us to expand the scope of inquiry and uncover key cognitive, emotional, and behavioral reactions to receiving task-related help from a more competent coworker. Relatedly, we test whether our theoretical model only pertains to receiving task-related help, rather than receiving person-related help. In doing so, we underscore the importance of examining distinct types of help in organizational research (Dalal & Sheng, 2019). Third, our research contributes to the envy literature by highlighting that envy may be elicited in cooperative contexts. Given that envy tends to be associated with competition, empirical studies largely focus on how competitive contexts and situations (e.g., promotions, organizational rewards) may elicit envy (Bamberger & Belogolovsky, 2017; Schaubroeck & Lam, 2004). Although helping interactions signal cooperative and benevolent intentions (Halbesleben & Wheeler, 2015), our research demonstrates that receiving task-related help from a more competent help giver may induce help recipients to experience status threat and subsequent feelings of envy.

## **THEORETICAL BACKGROUND AND HYPOTHESES**

### **Receiving Help from a More Competent Coworker and Status Threat**

The helping as status relations model suggests that helping relations are inherently imbalanced social relations, such that the help giver has sufficient resources to direct toward the help recipient who is dependent on the help giver’s benevolence (Nadler, 2020). On one hand, receiving task-related help may enable individuals to tackle work problems and get ahead of others (Lim et al., 2020). On the other hand, receiving task-related help may signal dependency (Fisher et al., 1982). The mixed experience of receiving task-related help may prompt the help recipient to compare themselves with the help giver and search for



information to reevaluate one's status (Nadler, 2015, 2020). Therefore, social comparison information is a critical contingent factor that influences the linkage between receiving task-related help and status threat.

Implicated in the helping as status relations model, receiving task-related help is more likely to evoke status threat when the recipient perceives unfavorable social comparison information (Nadler, 2020). One primary contingency of whether receiving task-related help conveys such unfavorable social comparison information and results in status threat is the help recipient's perceived relative competence of the help giver (Suls et al., 2002). In organizational settings where coworkers share similar backgrounds and perform similar tasks, employees are likely to regard them as social comparison targets (Festinger, 1954) and compare themselves with coworkers in terms of competence (Greenberg et al., 2007). In a helping interaction, this comparison of perceived competence can influence how the recipient makes sense of and responds to the task-related help received from the help giver. Overall, this suggests that receiving task-related help from coworkers of varying perceived relative competence<sup>2</sup> may trigger different social comparison processes that influence whether receiving help may prompt help recipients to experience status threat.

When the help recipient perceives the help giver as more competent than themselves, it indicates that the help giver may be an upward comparison target. Upward comparison may threaten one's self-image and self-esteem (Major et al., 1993). In our context, the status threatening effect of receiving task-related help is more salient when the help is from a more competent help giver because upward comparison highlights a negative self-image to the recipient. Furthermore, the combination of receiving help and upward comparison indicates the recipient's inferior position not only in the social relations between the two parties, but also in their influence within the team (Bowler & Brass, 2006; Anderson & Kilduff, 2009). Such double whammy of negative self-evaluations may amplify the help recipient's status

threat perceptions. Overall, we propose that when help recipients perceive help givers to be more competent than themselves, they are more likely to perceive the task-related help received as unfavorable to their self-evaluations and threaten their status.

When the help recipient perceives the help giver as less competent than themselves, he/she is likely to engage in downward comparison as he/she receives help. Downward comparison enhances one's self-worth and perceived status (Collins, 1996). The help recipient may perceive task-related help from a less competent coworker as status affirmation, rather than as status threat. This is because task-related help provided from less competent individuals to more competent others tends to be considered as an ingratiation strategy (Turnley & Bolino, 2001), as well as an attempt to impress the competent help recipients and concur with the high status that these individuals possess in the asymmetric relationship (Bowler & Brass, 2006). In this respect, receiving help from a less competent help giver reflects a recognition of the recipient's status and influence, which is unlikely to evoke the recipient's status threat. Furthermore, there are implicit group norms where employees should help those who are perceived to be experts (Van der Vegt et al., 2006). Since receiving task-related help from less competent help givers tends to be regarded as normative behavior, help recipients are less likely to experience status threat.

*Hypothesis 1: Help recipient's perceived relative competence between help giver and help recipient moderates the relationship between receiving task-related help and recipient's perceived status threat, such that this relationship is more (less) positive when one receives task-related help from a more (less) competent help giver.*

### **Receiving Help from a More Competent Coworker and Envy via Status Threat**

We further theorize that the perception of status threat triggered by receiving task-related help from a more competent coworker is likely to increase help recipient's envious feelings. Whereas some scholars view envy as a singular emotion that may result in both

positive and negative outcomes contingent on key moderators (e.g., Cohen-Charash & Larson, 2017; Tai et al., 2012), some scholars view envy as having two distinct forms—benign and malicious envy (e.g., Lange & Crusius, 2015; Van de Ven et al., 2009)—that can explain its diverse outcomes. In our research, we adopt the position and conceptualization of envy as a singular emotion as it is more parsimonious and aligned with the original as well as recent conceptualizations of envy (Cohen-Charash & Larson, 2017; Lange et al., 2018; Plato 2007/360 BCE) in management research (e.g., Duffy et al., 2012; Lee & Duffy, 2019).

We propose that when people perceive that their status is threatened, they are likely to experience strong affective reactions, in particular, envy. Scholars suggest that people have an innate desire for status as there are numerous benefits to having high status and people are averse to losing status (Anderson et al., 2015; Marr & Thau, 2014). Studies have shown that employees report higher levels of envy when the object of envy connotes higher status, such as task performance (Kim & Glomb, 2014) and job promotion (Schaubroeck & Lam, 2004). Hence, envy may be an affective response to status threat and alert people of the need to regain status (Crusius & Lange, 2017). Supporting this perspective, Reh and colleagues (2018) find that future status threat, operationalized as the perception of relative status difference in the future, is related to higher envy. Overall, research evidence suggests that as help recipients experience heightened status threat, they may feel more envious. Hence, we further theorize that receiving task-related help from a more competent coworker is likely to increase the help recipient's status threat and envy toward the help giver.

*Hypothesis 2: Help recipient's perceived relative competence moderates the indirect effect between receiving task-related help and recipient's envy via recipient's perceived status threat, such that this indirect effect is more (less) positive when one receives task-related help from a more (less) competent help giver.*

## **Envy and Social Undermining**

Envy further influences help recipients' behavioral reactions toward their help givers. We suggest that help recipients may attempt to cope with envy through social undermining that thwarts the success and unsettles the positions of their help givers (Lee & Duffy, 2019, Tai et al., 2012). As social undermining involves behaviors such as sabotaging someone's effort to be successful on the job and giving someone the "silent treatment", it is an instrumental form of aggressive behavior to aggrandize the self at the expense of the target. Furthermore, social undermining is a particularly attractive strategy to cope with envy as it is covert and insidious, and hence entails less interpersonal costs for envious individuals as compared to more overt negative interpersonal behaviors (Duffy et al., 2002). In addition, social undermining can impair the target's task performance (Duffy et al., 2006) and social connections (Duffy et al., 2002). By socially undermining envied targets and hence decreasing their overall effectiveness, envious individuals aim to bring down envied targets and reduce their status, and to that end, resolve their feelings of envy. Replicating past research documenting the positive relationship between envy and social undermining (Duffy et al., 2012; Lee & Duffy, 2019), we hypothesize:

*Hypothesis 3: Help recipient's envy is positively related to social undermining directed toward the help giver.*

### **The Moderating Role of Status Striving Motivation**

Although envious help recipients might attempt to sabotage the envied help givers' status through social undermining, some recipients might be more motivated to do so. In particular, we propose that status striving motivation may influence how likely envious recipients would close the perceived social status gap between themselves and the envied help giver by bringing down the envied help giver.<sup>3</sup> When envious help recipients are higher on status striving motivation, we suggest that they are more likely to display threat-oriented action tendencies focused on undermining others. This is because individuals with higher

status striving motivation are more attuned to status related cues and status dynamics in social interactions (Blader & Chen, 2011), have a stronger behavioral tendency to get ahead of others and have others defer to them (Foulek et al., 2019), and are more likely to take control and be dominant (Barrick et al., 2003). Taken together, this suggests that envious help recipients with higher status striving motivation are even more likely to reduce the status threat induced by envy and close the perceived social status gap between themselves and the envied help giver by undermining envied help givers. In contrast, when envious help recipients have lower status striving motivation, they are less concerned about and motivated to regain status. Therefore, envy is less likely to motivate these individuals to engage in social undermining to reduce help givers' status.

*Hypothesis 4: Help recipient's status striving motivation moderates the relationship between recipient's envy and social undermining directed toward the help giver, such that the positive relationship is stronger for help recipients with higher status striving motivation, compared to those with lower status striving motivation.*

In sum, our theoretical model explains when and why receiving task-related help may prompt help recipients to undermine help givers. Overall, our arguments point to a moderated mediation model where help recipient's perceived relative competence accentuates the relationship between receiving task-related help and their perceived status threat, and recipient's status striving motivation strengthens the relationship between their envy and social undermining directed toward the help giver. Therefore, we hypothesize:

*Hypothesis 5: Help recipient's perceived relative competence and status striving motivation moderate the indirect effect between receiving task-related help and social undermining directed toward the help giver via recipient's perceived status threat and envy sequentially. In particular, this indirect effect is the strongest when a help*

*recipient with higher status striving motivation receives task-related help from a more competent help giver.*

## **OVERVIEW OF STUDIES**

We conducted four studies to investigate when receiving task-related help induces status threat and triggers envy, and whether envy subsequently results in social undermining. Study 1 used a sample of student teams with a round robin design. We examined whether receiving task-related help would result in help recipient's status threat when the help giver is perceived to be more competent than the help recipient, and whether status threat in turn would induce envy (Hypotheses 1 and 2). Study 2, a four-wave study of employees across various companies, sought to constructively replicate Study 1 and test the overall proposed theoretical model. We further examined (1) whether envious recipients were more likely to undermine help givers (Hypothesis 3), (2) whether the relationship was stronger for help recipients with higher status striving motivation (Hypothesis 4), and (3) the overall moderated mediation model (Hypothesis 5). To replicate these results and provide support for causal relations, we conducted two pre-registered experiments using an experimental causal chain design (Spencer et al., 2005), in which we manipulated our independent, mediating and moderating variables in separate studies (e.g., Hill et al., 2021) to test different parts of our theoretical model. In Study 3A, we tested Hypotheses 1 and 2 by manipulating the type of help receipt and relative competence, and measuring status threat and envy. In Study 3B, we examined Hypotheses 3 and 4 by manipulating envy and measuring status striving motivation as well as the intention to engage in social undermining.<sup>4</sup> Finally, we conducted four supplementary studies to provide more robust evidence of our findings (see online supplementary materials for more information). Our studies were approved by The Hong Kong Polytechnic University Institutional Review Board (Project title: "The consequences of

receiving help”; Protocol #HSEARS20171214004-01 for Study 2 and #HSEARS20201011005 for Study 1, Study 3A, and Study 3B).

### **Transparency and Openness**

We described our sampling plan, data exclusions, manipulations, measurements and statistical software packages used in each study’s respective sections, and we adhere to the *Journal of Applied Psychology* methodological checklist. Research materials are detailed in the appendixes. Data and analysis codes are available from the authors upon request. Studies 1 and 2 were not pre-registered. Studies 3A and 3B were pre-registered (Study 3A: <https://aspredicted.org/s8c5u.pdf>; Study 3B: <https://aspredicted.org/dj7mq.pdf>).

## **STUDY 1**

### **Method: Sample and Procedure**

We collected data from second or third-year undergraduate business students at a major university in Hong Kong. Working in teams of five to seven members, the students had to complete a team project in one semester as part of the evaluation component in a business module. Similar to work teams in organizations where team performance has a significant impact on individual performance, helping interactions in student project teams are necessary to ensure the progress of the project and the quality of work each member puts in. Students are invited to participate in a two-wave study. In the first survey, which was administered in the eighth week of the thirteen-week semester, we measured their demographic information, receipt of task-related help from team members since the start of the semester, and perceived relative competence. We administered the second survey one month later (i.e., in the last week of the semester), where we measured perceptions of status threat from and feelings of envy toward each team member. We measured all key variables at the dyadic level.

Before we collected data, one of the authors introduced the study, assuring students that participation was voluntary and confidential, and that participation was unrelated to

performance evaluations. We sent out online surveys to 85 students across 14 teams from two classes, and reminded the students to complete the survey within one week. Fifty-six students (response rate = 66%) submitted the first survey, and fifty-nine students (response rate = 69%) submitted the second survey. After listwise deletion to remove participants who submitted only one survey and dropping incomplete dyads (e.g., in an A-B dyad, A filled in the survey but B did not), our final sample included 255 dyads from 52 students within 14 teams. Participants averaged 19.69 years old; 64.3% were women. Team members had known one another for an average of 7.75 months.

## **Measures**

Since the original survey items were in English, we followed the translation/back-translation procedure (Brislin, 1980). In particular, one bilingual speaker translated the measures into Chinese and another bilingual speaker translated the Chinese items back into English. Upon translation and back translation, they discussed and resolved discrepancy in wordings to ensure equivalence. We then sent the translated surveys to several undergraduate research assistants to ensure they could understand the measurement items. We report the full items of our study variables (including anchors) in all four studies in Appendix A.

***Receiving task-related help (Time 1).*** To measure task-related help, we used four items with the highest factor loadings from the task-focused dimension of the interpersonal citizenship behavior scale developed by Settoon and Mossholder (2002). We asked each participant to assess the frequency of each team member's task-related helping behaviors directed toward him/her ( $\alpha = .96$ ).

***Relative competence (Time 1).*** We adapted three items from Ouyang et al. (2018) to capture participants' (i.e., help recipients') perception of each team member's (i.e., help giver's) competence in comparison to their own competence on three dimensions, including efficiency, capability, and skills ( $\alpha = .92$ ). A higher score on relative competence indicates



that the help giver's competence is higher than that of the help recipient's based on the help recipient's perception.

**Status threat (Time 2).** We measured status threat by adapting two items from Djurdjevic and colleagues (2017). We asked participants to evaluate the extent to which each team member posed a threat to their status and prominence in the team ( $\alpha = .98$ ). We initially selected three items based on the highest factor loadings. However, the Chinese translation for prestige is very similar to prominence. Therefore, we did not include this item.

**Envy (Time 2).** We measured target-specific envy with nine items from the episodic envy scale developed by Cohen-Charash (2009) based on participants' interactions with their team members ( $\alpha = .88$ ).

**Control variables (Time 1).** Following prior studies, we controlled for gender and length of acquaintance because these demographic variables may influence peer helping interactions as well as their perceptions of social status and envy (Flynn, 2003; Lam et al., 2016; Ouyang et al., 2018). We also controlled for class membership and team size because data were collected from two sessions, which might have different class dynamics and affect interpersonal interactions. Team size has also been shown to influence group processes (Richter et al., 2006; Zenger & Lawrence, 1989). It is conceivable, for example, that the interpersonal consequences of receiving task-related help differ between smaller and larger teams because members may generally have closer, more personal contact in smaller teams, and social comparison among peers is more likely to occur in smaller teams (Hu et al., 2015; Thomas & Fink, 1963). In addition, we controlled for the effect of receiving person-related help to demonstrate the unique effect of receiving task-related help in our model. We measured receiving person-related help with four items with the highest factor loadings from the person-focused dimension of the interpersonal citizenship behavior scale (Settoon & Mossholder, 2002;  $\alpha = .98$ ). We also controlled for relationship quality, which was measured

using one item asking participants to evaluate their relationship with each team member (Liu et al., 2015), because it has been shown to influence individual's perceptions of relative status and envy (Lam et al., 2016; Liu et al., 2015). As a caveat, we note that the results for Hypothesis 1 were different when including versus excluding these control variables. We discuss these findings in more details below.

### **Analytical Strategy**

The individual data were nested both within dyads and within teams. Following past studies using a similar design (e.g., Liu et al., 2015), we tested Hypotheses 1 and 2 using a multilevel social relations modeling (SRM, Kenny, 1994) approach with a MLwiN software package (Snijders & Kenny, 1999). The methodology allows us to partition variance of the mediator (status threat) and dependent variable (envy) attributed to the characteristics of the actor (help recipient), the target (help giver), the dyadic relationship, and the team. For example, we are able to partition the total variance in the help recipient's envy toward the help giver that may be attributed to the help recipient's characteristics (i.e., A tends to envy other coworkers), the help giver's characteristics (i.e., B is often envied by other coworkers), the relationship between the help recipient and the help giver (i.e., A always envies B), and the team (i.e., A and B work in a team where envy is prevalent among team members).

To test the moderating effect of relative competence (Hypothesis 1), we first standardized the independent variable and the moderator (i.e., receiving task-related help and relative competence), and computed the interaction term by multiplying the two standardized terms. We plotted the interaction at high and low levels of the standardized independent variable and the standardized moderator (i.e., 1 and -1) and covered the full range of the dependent variable reported in the data. We estimated a series of models to test the moderating effect on status threat and computed the difference of two chi-square scores from nested models to evaluate whether additional predictors improved the model fit. To test the

conditional indirect effect (Hypothesis 2) of receiving task-related help on envy through status threat (conditional on relative competence), we followed Selig & Preacher's (2008) Monte Carlo procedure and used R to compute indirect effects and generate 95% confidence intervals (CIs) around the estimated indirect effects based on 20,000 re-samples.

## Results

Before we tested our hypotheses, we assessed whether our study variables are empirically distinct from each other by running confirmatory factor analysis (CFA; see Table 1). Given the small sample size relative to the large number of items (Landis et al., 2000), we used a parceling strategy to create item parcels for episodic envy based on the feeling component and the comparison component (e.g., Sass & Smith, 2006). Results showed that our hypothesized four-factor model fit the data significantly better ( $\chi^2 = 128.48, p < .001, df = 47$ , comparative fit index (CFI) = .98, Tucker-Lewis index (TLI) = .97, standardized root-mean-square residual (SRMR) = .07, root-mean-square error of approximation (RMSEA) = .08) than any alternative models (the best fitting alternative is a three-factor model combining status threat and envy;  $\Delta\chi^2 = 28.35, \Delta df = 4, p < .001, CFI = .97, TLI = .96, SRMR = .09, RMSEA = .09$ ).

-----  
Insert Table 1 about here  
-----

Table 2 presents the means, standard deviations, and correlations among the study variables. Individuals were more likely to envy interaction partners who threatened their status in the work team ( $r = .51, p < .001$ ). As shown in Table 3, 33.3% of the total variance in status threat and 23.3% of the variance in envy resided at the dyadic level. These findings indicate that a substantial portion of the variance in status threat and envy were explained by the characteristics of the dyadic relationship. Thus, it is meaningful and appropriate to use SRM to understand how dyadic interactions influence status threat and envy.

Insert Tables 2 & 3 about here

Table 4 presents the results of our hypothesis test. Hypothesis 1 predicted that relative competence would moderate the relationship between receiving task-related help and help recipient's perceived status threat from the help giver. Results from Table 4 (Model 1b) showed that the interaction between receiving task-related help and relative competence significantly predicted status threat ( $B = .09, SE = .04, p = .04$ ). Simple slope analyses showed that when one received help from a more competent team member, receiving task-related help was positively related to status threat (simple slope =  $.19, p = .04$ ). In contrast, when one received help from a less competent team member, receiving task-related help was not related to status threat (simple slope =  $.01, p = .95$ ; see Figure 2a). Thus, Hypothesis 1 was supported. Notably, however, this interaction was not significant when we excluded all of the control variables ( $B = .06, SE = .04, p = .13$ ). Hence, our findings for Hypothesis 1 should be considered preliminary and regarded with caution.

Insert Table 4 & Figure 2a about here

As shown in Table 4 (Model 2b), status threat was positively related to envy ( $B = .24, SE = .03, p < .001$ ). We examined the indirect relation between receiving task-related help and envy via status threat at higher and lower levels of relative competence. Supporting Hypothesis 2, results showed that the indirect effect of receiving task-related help on envy through status threat was  $.05 (SE = .02, 95\% CI: [.004, .092])$  when the help giver was perceived to be more competent than the help recipient. In contrast, this indirect relationship was not significant when the help giver was perceived to be less competent than the help recipient (indirect effect =  $.002, SE = .02, 95\% CI: [-.043, .046]$ ).<sup>5</sup>

### **Exploratory Analyses**

To examine whether our status-based model only applies to receiving task-related help that might jeopardize one's social status, we conducted exploratory analyses to test

whether relative competence would moderate the effect of receiving person-related help on status threat. Results showed that receiving person-related help was not related to status threat ( $B = -.06, SE = .09, p = .54$ ); however, relative competence moderated this relationship ( $B = .12, SE = .05, p = .01$ ). Simple slope analyses revealed that the relationship between receiving person-related help and status threat approached significance (simple slope =  $-.19, p = .08$ ) when the help giver was perceived as less competent. However, this relationship was not significant (simple slope =  $.04, p = .94$ ) when help giver was perceived as more competent. Although receiving person-related help from a less competent peer may result in lower status threat, we are cautious with this interpretation given that the receiving person-related help–status threat linkage only trended toward statistical significance when relative competence was perceived as lower. Furthermore, the indirect relationship between receiving person-related help and envy via status threat was not significant in either conditions of lower (indirect effect =  $-.05, SE = .03, 95\% CI: [-.102, .006]$ ) or higher relative competence (indirect effect =  $.01, SE = .02, 95\% CI: [-.044, .071]$ ). Thus, our results showed that the interactive pattern of relative competence with receiving person-related help is different from its interaction pattern with receiving task-related help. Overall, this suggests that only receiving task-related help, but not receiving person-related help, from a more competent peer elicits status threat.

In addition, one may argue that the moderating effect of relative competence is driven by the possibility that more competent team members are likely to provide more unsolicited help, which induces the status threat effect. To test this idea, participants rated the extent to which the task-related help they received from each team member was unsolicited or solicited (1 = *all unsolicited* to 5 = *all solicited*). Participants did not receive more unsolicited help from a more competent coworker ( $r = -.00, p = .95$ ). Furthermore, the level of help solicitation did not moderate the relationship between receiving task-related help and status

threat ( $B = .05$ ,  $SE = .05$ ,  $p = .34$ ). Importantly, the hypothesized interaction between receiving task-related help and perceived relative competence remained significant ( $B = .09$ ,  $SE = .04$ ,  $p = .04$ ) after controlling for the interaction between receiving task-related help and help solicitation. Taken together, we did not find empirical support for the ideas that help solicitation could explain the moderating effect of relative competence, or the stronger status threatening effect of receiving unsolicited help (versus receiving solicited help).

## **Discussion**

The findings from Study 1 supported Hypotheses 1 and 2. Specifically, receiving task-related help was more likely to elicit help recipient's status threat when one received task-related help from a more competent team member. In addition, relative competence moderated the indirect effect between receiving task-related help and envy via status threat, such that the indirect effect was stronger in dyads when the help recipient perceived the help giver to be more competent than themselves. Furthermore, results from our exploratory analyses showed that relative competence moderated the relationship between receiving person-related help and status threat. However, the interactive pattern of receiving person-related help with relative competence was different from that of receiving task-related help.

While these findings were encouraging, we note several limitations. First, although results from Study 1 showed that relative competence moderated the relationship between receiving task-related help and status threat, we loath to conclude as such because this relationship was only significant when we included the control variables. Hence, further examination of this interaction would be informative. Second, the findings may have been limited to the specific student team setting where students are organized in a social hierarchy reinforced by a forced ranking system, which typically reflects a student's status in the comparison of one's relative competence. That is, our obtained effects might be more pronounced due to the specific setting. Third, it is theoretically and practically important to

examine the downstream behavioral consequences of receiving task-related help from a more competent coworker and the resultant perceived status threat and envy. Therefore, we conducted Study 2 to address these issues and test the full model. In particular, using a time-lagged design, we collected data from employees working in various companies.

## STUDY 2

### **Method: Sample and Procedure**

We recruited participants who reside in the United Kingdom through Prolific Academic, an online crowdsourcing community which produces data that are comparable to other online research platforms, such as Amazon's Mechanical Turk (MTurk; Peer et al., 2017). Participants were invited to take part in a four-wave study within a period of two weeks spanning three weekends (see Appendix B for a flowchart of data collection). We followed Lin and colleagues (2016) and measured the baseline evaluations, predictor, mediators, and outcome at different time points to minimize common method biases. Rather than administering the surveys on consecutive days, we measured behaviors in consecutive weeks to allow helping interaction with and social undermining directed toward a specific coworker to emerge. To be eligible for this study, participants have to (1) work full-time, (2) work closely with coworkers in a team, and (3) work mostly in office during our study period to ensure sufficient coworker interaction. We posted a recruitment survey four days before the main study, in which we introduced the detailed procedure of our study and measured basic demographic and work information. We also instructed participants to provide the initials or nicknames of up to 10 coworkers, which is approximately the average number of coworkers Prolific participants have in their work teams ( $M = 9.5$ ,  $SD = 7.7$ ). Four hundred and seventy-two participants were eligible, expressed their interest in the subsequent four-wave study, and provided coworker information. Participants would receive up to £3.6 (US\$5) upon completing all of the surveys.

Time 1 survey was administered to the participants at 5PM on Friday. Participants accessed their customized surveys using their Prolific IDs and were allowed to complete the surveys over the weekend (by Sunday midnight). As the questions pertain to the dyadic interaction between participants and one of their coworkers, we randomly selected one coworker from the initials/nicknames they provided in the recruitment survey and piped the name of the coworker in the questions. We took precautions to ensure the validity of the data. First, we asked participants if they could identify the selected coworker by the initial/nickname. Second, we asked if the selected coworker was a subordinate or a peer (same level).<sup>6</sup> Given that the effect on status threat, potentially elicited by receiving help from a more competent subordinate, might be confounded by the hierarchical difference between a supervisor and a subordinate, participants who were matched with a subordinate or could not identify the initial of the selected coworker were not allowed to proceed. For those who were qualified, we measured their status striving motivation, relationship quality with the selected coworker, relative competence, and baseline levels of status threat, envy, and social undermining. Three hundred and nineteen participants completed Time 1 survey.

Time 2 survey was administered at 5PM on the subsequent Friday and participants were again allowed to complete the survey before Sunday midnight. We measured receiving task- and person-related help from the selected coworker in the past one week. On the Monday that followed, we administered Time 3 survey at 6AM and required participants to complete the survey before 3PM on the same day. In this survey, we measured participants' perceived status threat and envy based on their interaction with the selected coworker in the past one week. We set the time window to minimize the impact of Time 3 survey on participants' work as well as their interaction with the selected coworker on that day, while allowing sufficient time (e.g., including the lunch break) for them to complete the survey. The last survey, Time 4 survey, was sent to participants on the following Friday using the



same protocol as Time 2 survey. In this survey, we measured social undermining toward the selected coworker in the past one week.<sup>7</sup>

Of the 319 participants who completed Time 1 survey, 301 completed T2 survey, 226 completed T3 survey, and 284 completed T4 survey (response rate = 94%, 71%, and 89%). After listwise deletion of cases who failed to complete any of the survey, we had a sample of 213 participants who completed all four surveys (an overall 67% response rate that is comparable to that in a previous study with a similar design; Lin et al., 2016). To assess whether our data are subjected to response and self-selection biases, we compared participants who failed to complete all four surveys with those who completed all four surveys on demographic variables (age, gender, organizational tenure) and all study variables measured at Time 1. There were no significant differences between these two samples on these variables, suggesting that participant attrition is less of a concern. In our final sample, 61.5% were women, with an average age of 36.2 years old ( $SD = 8.9$ ). Majority were Caucasian (93.4%). They have been working in their current organizations for an average of 5.9 years ( $SD = 5.8$ ) and have 9.5 coworkers ( $SD = 7.7$ ) in their teams. Around half of the participants (54%) joined the team later than the selected coworker, 36% of them joined the team earlier than the selected coworker, and 10% joined the team at about the same time.

## Measures

***Receiving task-related help (Time 2) and relative competence (Time 1).*** We assessed these two constructs using the same measures as in Study 1 (receiving task-related help:  $\alpha = .93$ ; relative competence:  $\alpha = .80$ ).

***Status threat (Time 1 & Time 3).*** Similar to Study 1, we used three items to measure participants' perceived status threat from the selected coworker. As mentioned earlier, participants rated their levels of perceived status threat in both Time 1 survey ( $\alpha = .96$ ), which served as the baseline level of status threat, and Time 3 survey ( $\alpha = .96$ ). We used

different reference points for each survey. In Time 1 survey, participants responded to the items that were anchored in general terms, whereas in Time 3 survey, participants responded to the items that were anchored in the past one week.

*Envy (Time 1 & Time 3).* We measured envy with the same scale as in Study 1. Similar to status threat, we measured envy twice using two different reference points ( $\alpha = .82/.85$ ). Participants rated their levels of agreement on each item.

*Status striving motivation (Time 1).* Status striving motivation was measured with eleven items from the Motivation Orientation Inventory (Barrick et al., 2002;  $\alpha = .93$ ). We adapted the items to fit our research context by replacing words related to sales in the items to those representing performance in general.

*Social undermining (Time 1 & Time 4).* We selected five items with the highest factor loadings from Duffy et al.'s (2002) scale. Participants rated how often they undermined the selected coworker in general (Time 1:  $\alpha = .67$ ) or in the past one week (Time 4:  $\alpha = .63$ ).

*Control variables.* We controlled for the baseline levels of the dependent variables mentioned above because this method can provide insights on the incremental variance in the endogenous variables over and beyond individuals' general feelings, perceptions, and behavioral patterns. As in Study 1, we also controlled for receiving person-related help, which was measured using the same four items in the Time 2 survey ( $\alpha = .91$ ), as well as relationship quality between the participants and the coworker. We note that the overall pattern and interpretation of our findings remained unchanged, albeit with lower statistical significance levels, when we excluded all of the control variables.

## **Results**

We conducted CFA following the same procedure as in Study 1. For status striving motivation, we created five empirically balanced parcels (Hall et al., 1999). Results in Table

1 showed that our hypothesized six-factor model fit the data better ( $\chi^2 = 353.38, p < .001, df = 194, CFI = .95, TLI = .94, SRMR = .06, RMSEA = .06$ ) than any alternative models (the best fitting alternative is a five-factor model combining envy and social undermining;  $\Delta\chi^2 = 31.84, \Delta df = 5, p < .001, CFI = .94, TLI = .93, SRMR = .07, RMSEA = .07$ ).

Table 5 shows the descriptive statistics associated with our study variables. We found some preliminary support for our hypotheses. Status threat was positively related to envy ( $r = .34, p < .001$ ), which further correlates with social undermining ( $r = .43, p < .001$ ).

-----  
Insert Table 5 about here  
-----

Table 6 shows the results of hypotheses tests from path analysis using Mplus 7 (Muthén & Muthén, 1998-2012), where we tested all the hypotheses simultaneously. We first present a baseline model where we regressed the dependent variables on the control variables. Second, we tested all of our hypotheses by adding additional predictors to the baseline model. We followed the same method used in Study 1 to test and plot the interaction effects.

Supporting Hypothesis 1, relative competence moderated the relationship between receiving task-related help and the help recipient's perceived status threat from the help giver ( $B = .14, SE = .06, p = .03$ ; Figure 2b). Simple slope analyses showed that when one received task-related help from a more competent help giver, receiving task-related help was positively related to perceived status threat from the help giver (simple slope =  $.32, p < .001$ ). In contrast, when one received task-related help from a less competent help giver, receiving task-related help was not related to status threat (simple slope =  $.05, p = .65$ ).

-----  
Insert Table 6 & Figure 2b about here  
-----

Hypothesis 2 indicated a conditional indirect effect, such that relative competence moderated the indirect effect between receiving task-related help and envy via status threat. First, as shown in Table 6, after controlling for baseline envy, status threat still positively

predicted envy towards the help giver measured at Time 3 ( $B = .15, SE = .05, p = .004$ ).

Second, we tested the conditional indirect effect via Monte Carlo simulation using R to create the 95% confidence intervals (CI) for the estimated effects based on 20,000 re-samples.

Results showed that when one received task-related help from a more competent help giver, the indirect effect of receiving task-related help on envy via status threat was stronger (indirect effect =  $.049, SE = .02, 95\% CI: [.012, .099]$ ) as compared to when one received task-related help from a less competent help giver (indirect effect =  $.007, SE = .02, 95\% CI: [-.026, .044]$ ). Therefore, Hypothesis 2 was supported.

Hypothesis 3 stated a positive relationship between envy and social undermining. We found support for this hypothesis, as envy was positively related to social undermining even after controlling for baseline social undermining ( $B = .06, SE = .01, p < .001$ ). Furthermore, status striving motivation moderated the positive relationship between envy and social undermining ( $B = .03, SE = .01, p = .02$ ; Figure 3a). Results from simple slope analyses showed that envy was positively related to social undermining directed toward the envied help giver only among help recipients with higher status striving motivation (simple slope =  $.08, p < .001$ ), but not among those with lower status striving motivation (simple slope =  $.03, p = .10$ ). Thus, Hypothesis 4 was supported.

-----  
Insert Figure 3a about here  
-----

Hypothesis 5 stated a conditional indirect effect of receiving task-related help on social undermining towards the help giver via status threat and envy sequentially when one with higher status striving motivation received task-related help from a more competent help giver. Supporting Hypothesis 5, results showed that the serial indirect effect of receiving task-related help on social undermining through status threat and envy is  $.004 (SE = .002, 95\% CI: [.001, .009])$  when the help giver was perceived to be more competent than the help recipient and the help recipient had higher status striving motivation. For the indirect effects

associated with all other combinations of relative competence and status striving motivation, their respective 95% CIs included zero, indicating a lack of indirect effect (i.e., high relative competence and low status striving motivation: 0.002,  $SE = .001$ , 95% CI: [0,0.005]; low relative competence and high status striving motivation: 0.001,  $SE = .001$ , 95% CI: [-0.002, 0.004]; and low relative competence and low status striving motivation: 0.0002,  $SE = .001$ , 95% CI: [-0.001, 0.002]).

### **Exploratory Analyses**

As in Study 1, we performed exploratory analyses to examine whether relative competence moderated the effect of receiving person-related help on status threat. In contrast to the significant moderating effect found in Study 1, we did not replicate this effect in Study 2 ( $B = -.03$ ,  $SE = .08$ ,  $p = .74$ ). Therefore, it remains equivocal whether receiving person-related help from a less competent coworker results in lower perceived status threat, as shown in Study 1. Nevertheless, the overall pattern of these additional analyses is in line with our expectation that the status threatening effect of receiving help from a more competent coworker only applies to task-related help, but not person-related help.

We also examined whether status striving motivation may condition the link between receiving task-related help and status threat because receiving task-related help signals inferiority and dependency and may pose more of a status threat for individuals with higher status striving motivation. However, status striving motivation did not moderate the relationship between receiving task-related help and status threat ( $B = .03$ ,  $SE = .07$ ,  $p = .70$ ), or the hypothesized interaction between receiving task-related help and relative competence on status threat (for the three-way interaction product term:  $B = -.01$ ,  $SE = .07$ ,  $p = .89$ ). We also tested whether status striving motivation may moderate the relationship between status threat and envy and did not find support for the moderation ( $B = -.07$ ,  $SE = .06$ ,  $p = .22$ ).

### **Discussion**

Study 2 conceptually replicated the findings of Study 1 using a sample of employees with a time-lagged design. Furthermore, we found that envious help recipients were more likely to engage in social undermining directed toward the help giver and this relationship is stronger among help recipients with higher status striving motivation. Overall, our proposed moderated mediation model is also supported. Importantly, our results held after accounting for baseline control variables. In addition, we did not find a moderating effect of relative competence on the link between receiving person-related help and status threat.

We note that our social undermining measure has relatively low reliability. However, it is not uncommon to observe low reliabilities in abbreviated measures of instigated deviant behaviors (e.g., Koopman et al., 2020; Restubog et al., 2011) due to some assumptions, such as the normal distribution of item scores and tau equivalence, being violated in applied research (McNeish, 2018). We followed McNeish's recommendation to calculate Omega and Coefficient H as alternative reliability indicators and found higher reliability scores (T1: .78 and .85; T4: .76 and .88). To address this limitation more directly, we used the original social undermining measure in our follow-up study (Study 3B). Although we also note the low means for social undermining and small effect size in our study, they are comparable to previous research (e.g., Duffy et al., 2006; Duffy et al., 2012). Despite social undermining being a low-base rate phenomenon, it has notable effects on employee well-being and job-related outcomes (Duffy et al., 2002). Finally, given that Study 2 is correlational in nature, we attempted to enhance the internal validity of our findings and demonstrate causal relations by conducting two experiments in an experimental causal chain design (Spencer et al., 2005).

### **STUDY 3A**

Employing an experimental causal chain design, we tested our research model in parts across Studies 3A and 3B and aimed to provide causal evidence for our model. In this study,

we manipulated the type of help received and relative competence, and tested whether their interaction predicted higher status threat and ultimately higher envy (Hypotheses 1 and 2).

## **Methods**

### ***Participants***

A total of 1502 British citizens from Prolific Academic participated in this experiment in exchange for financial compensation of £0.4 (US\$0.55). After excluding 39 participants who failed two attention check questions (see Appendix A), we had a final sample of 1463 participants (842 women;  $M_{\text{age}} = 38.11$ ,  $SD_{\text{age}} = 11.74$ ; 91.87% White).

### ***Materials and Procedure***

We had a 3 (type of help received: task-related help, person-related help, no help received) x 2 (relative competence: high vs. low) between-participant factorial design. Participants were randomly assigned to read one of six scenarios which were modified from scenarios on receiving advice developed by Landis and colleagues (2022). All participants read a scenario (see Appendix C) that asked them to assume the role of an employee working in a media agency. They also read that they had just finished a meeting with a client after which they interacted with a peer coworker who shared the same job title and similar rank.

**Relative Competence Manipulation.** In the high (low) perceived competence condition, the coworker is usually more (less) organized and efficient than them.

**Type of Help Received Manipulation.** In the received task-related help condition, the focal participant then asked this coworker for help to finish a report. In the received person-related help condition, the focal participant asked this coworker to hear them out and shared their frustration about the client. In the no help received (control) condition, the focal participant asked the coworker to join them for a coffee break.

After reading the scenario, participants completed the same measures of perceived status threat ( $\alpha = .96$ ), envy ( $\alpha = .88$ ), and relative competence (as a manipulation check,  $\alpha =$

.90) as in Study 2. They then rated their levels of agreement on three other statements, which served as the manipulation checks for the type of help received, anchored on a 5-point scale. Specifically, they rated whether the coworker “provided help with my work,” “listened to my frustration about the client,” and “joined me for a coffee break.”

## Results

### *Manipulation Check*

Two-way analyses of variance (ANOVAs) on the manipulation check items showed significant main effects of the manipulations in the expected directions (on perceived relative competence:  $F(1, 1457) = 1193.40, p < .001, \eta_p^2 = .45$ ; on perceived receipt of task-related help:  $F(2, 1439) = 407.03, p < .001, \eta_p^2 = .36$ ; on perceived receipt of person-related help:  $F(2, 1443) = 520.58, p < .001, \eta_p^2 = .42$ ; on perceived receipt of no help:  $F(2, 1441) = 565.10, p < .001, \eta_p^2 = .44$ ).<sup>8</sup> Overall, our manipulations are effective. Table 7 summarizes the results of the post hoc comparisons.

-----  
Insert Table 7 about here  
-----

### *Main Analyses*

Table 8 shows the descriptive statistics and intercorrelations for the study variables. A two-way ANOVA on status threat revealed a significant main effect of type of help received  $F(2, 1457) = 42.73, p < .001, \eta_p^2 = .06$ . Specifically, perceived status threat was the highest in the received task-related help condition ( $M = 2.28, SD = 0.88$ ), followed by the no-help received condition ( $M = 1.95, SD = 0.79$ ),  $t(969) = 6.31, p < .001$ , Cohen’s  $d = 0.40$ , and the received person-related help condition ( $M = 1.82, SD = 0.77$ ),  $t(970) = 8.69, p < .001$ , Cohen’s  $d = 0.56$ . There was also a main effect of relative competence  $F(1, 1457) = 33.62, p < .001, \eta_p^2 = .02$ , such that perceived status threat was higher in the high relative competence condition ( $M = 2.14, SD = 0.92$ ) as compared to the low relative competence condition ( $M = 1.90, SD = 0.73$ ),  $t(1461) = 5.59, p < .001$ , Cohen’s  $d = 0.29$ . Importantly, there was a



significant interaction between type of help received and relative competence,  $F(2, 1457) = 3.18, p = .04, \eta_p^2 = .004$  (see Figure 2c). Simple effect analyses showed that within the high relative competence group (i.e., more competent helper), participants in the received task-related help condition ( $M = 2.47, SD = 0.97$ ) perceived greater status threat from the helper compared to those in the no-help received condition ( $M = 2.00, SD = 0.85$ ),  $t(481) = 5.67, p < .001$ , Cohen's  $d = 0.52$ . However, within the low relative competence group (i.e., less competent helper), the difference in perceived status threat between participants in the received task-related help condition ( $M = 2.10, SD = 0.73$ ) and those in the no-help received condition ( $M = 1.89, SD = 0.73$ ) was smaller,  $t(486) = 3.17, p = .002$ , Cohen's  $d = 0.29$ . Hence, Hypothesis 1 was supported.

-----  
Insert Table 8 and Figure 2c about here  
-----

As in Studies 1 and 2, we conducted post hoc comparisons to examine whether receiving person-related help from a more competent coworker would result in a higher perception of status threat. Within the high relative competence group, there was no difference in perceived status threat between the received person-related help condition ( $M = 1.95, SD = 0.84$ ) and the no-help received condition ( $M = 2.00, SD = 0.85$ ),  $t(488) = -0.70, p = .49$ , Cohen's  $d = 0.06$ . However, within the low relative competence group, participants in the received person-related help condition ( $M = 1.70, SD = 0.67$ ) perceived lower status threat compared to those in the no-help received condition ( $M = 1.89, SD = 0.73$ ),  $t(491) = -2.97, p = .003$ , Cohen's  $d = 0.27$ . Therefore, consistent with Studies 1 and 2, our results showed that the status threatening effect of receiving help from a more competent coworker applied to task-related help, but not person-related help.

We tested Hypothesis 2 using the PROCESS macro with 20,000 bootstrap samples (Model 7; Hayes, 2017) and multicategorical indicator coding. As predicted, status threat was positively related to envy ( $B = .52, SE = .02, p < .001$ ) and relative competence moderated

the indirect effect between receiving task-related help and envy via status threat (*index of moderated mediation* = .13, *SE* = .06, 95% CI [.02, .24]). The overall positive indirect effect was stronger when one received task-related help from a more competent coworker (indirect effect = .24, *SE* = .04, 95% CI [.16, .33]) as compared to when one received task-related help from a less competent coworker (indirect effect = .11, *SE* = .03, 95% CI [.04, .18]). Thus, Hypothesis 2 was supported. In contrast, relative competence did not moderate the indirect effect between receiving person-related help and envy via status threat (*index of moderated mediation* = .07, *SE* = .05, 95% CI [-.03, .17])

### STUDY 3B

In this study, we measured status striving motivation and manipulated envy to test (1) whether envy affected the intention of social undermining (Hypothesis 3) and (2) whether status striving motivation moderated this effect (Hypothesis 4).

#### Methods

##### *Participants*

We recruited 600 British citizens via Prolific Academic who participated in our experiment in exchange for financial compensation of £0.4 (US\$0.55). After excluding five participants who failed the attention check and another sixteen participants who failed the comprehension check (see Appendix A for the items), we had a final sample of 579 participants (289 women;  $M_{\text{age}} = 36.46$ ,  $SD_{\text{age}} = 9.85$ ; 91.7% White).

##### *Materials and Procedure*

Participants first filled in the same status striving motivation scale as in Study 2 ( $\alpha = .91$ ). They were then randomly assigned to one of two scenarios which we modified from a workplace situation developed by Montal-Rosenberg and Moran (2022). All participants read a scenario (see Appendix D) that asked them to assume the role of an employee working in an IT company, “S. K. Franklins”, as a sales executive responsible for generating net new

business as well as maintaining and growing relationships with existing accounts. They also read that they had a coworker, Chris, who was working on the same team and both of them were on the same career track with similar interests and opportunities.

**Envy Manipulation.** In the high envy condition, the division head decided to give the promotion to Chris whereas the participant came in second. In the low envy condition, the division head decided to give the promotion to one of the other three candidates, whereas the participant came in second and Chris came in third.

After reading the scenario, participants rated the extent to which they would engage in social undermining behaviors toward Chris, measured by the social undermining scale (Duffy et al., 2002;  $\alpha = .91$ ). As a manipulation check, participants also completed the same envy scale used in Studies 1 to 3A ( $\alpha = .92$ ).

## **Results**

### ***Manipulation Check***

Results from independent-samples t test showed that participants in the high envy condition ( $N = 296$ ,  $M = 2.75$ ,  $SD = 0.75$ ) felt more envious as compared to those in the low envy condition ( $N = 283$ ,  $M = 1.83$ ,  $SD = 0.63$ ),  $t(577) = 15.95$ ,  $p < .001$ , Cohen's  $d = 1.33$ .<sup>9</sup> Therefore, our manipulation was successful.

### ***Main Analyses***

Table 9 shows the descriptive statistics and intercorrelations for our study variables. Supporting Hypothesis 3, an independent-samples t test showed that participants in the high envy condition ( $M = 1.51$ ,  $SD = 0.57$ ) reported a greater intention to undermine Chris than participants in the low envy condition ( $M = 1.26$ ,  $SD = 0.34$ ),  $t(577) = 6.32$ ,  $p < .001$ , Cohen's  $d = 0.53$ . We tested Hypothesis 4 using the PROCESS macro with 20,000 bootstrap samples (Model 1; Hayes, 2017). We found significant main effects of envy ( $B = .23$ ,  $SE = .04$ ,  $p < .001$ ) and status striving motivation ( $B = .12$ ,  $SE = .02$ ,  $p < .001$ ) as well as a

significant interaction ( $B = .10, SE = .05, p = .045$ ; see Figure 3b). Simple slope analyses showed that the relationship between envy and social undermining was stronger among participants with a higher status striving motivation (simple slope =  $.31, p < .001$ ), than among those with a lower status striving motivation (simple slope =  $.16, p = .004$ ). Therefore, Hypothesis 4 was supported.

-----  
Insert Table 9 & Figure 3b about here  
-----

## **GENERAL DISCUSSION**

Across four studies, we find progressive support for our proposed relationships based on the integration of helping as status relations framework and the social functional perspective of envy. That is, we show that receiving task-related help can evoke status threat when one receives help from a more competent help giver, and status threat in turn induces envy. To cope with envy and maintain their status, help recipients, especially those with higher status striving motivation, react negatively by socially undermining the help givers.

### **Theoretical Implications**

Our research makes several major contributions to the helping and envy literatures. While existing research mostly anchors on social exchange theory and identifies reciprocity as a common interpersonal dynamic after one receives help, our study is amongst the first empirical studies to demonstrate that receiving help may paradoxically prompt social undermining from the help recipient directed toward the help giver, supporting the notion that one might bite the hand that feeds. Although prior research has found that receiving help might not be unequivocally positive and beneficial for recipients (e.g., Deelstra et al., 2003; Nadler, 2015), our understanding regarding how it may induce negative consequences for help givers is still somewhat limited. Our study thus broadens this line of research by uncovering the negative interpersonal consequence of receiving help for help givers. This extension is important because social undermining harms help givers' psychological well-

being (Duffy et al., 2002), potentially triggers negative reciprocal exchanges and spirals that impair the dyadic relationship (Andersson & Pearson 1999), and ultimately impedes the development of a positive helping climate in organizations in the long term. To that end, our research sheds light on the dark side of helping (Bolino & Grant, 2016), by considering the interpersonal dynamics between help giver and help recipient, and detailing the characteristics of the help recipient (i.e., relative competence and status striving motivation) which would prompt negative interpersonal reactions toward the help giver.

Our study also offers a novel status-based model to understand how individuals react to receiving help by integrating the helping as status relations framework and the social functional perspective of envy. While the status dynamic between help giver and help recipient has been implicated in theory and research (Nadler, 2015, 2020; Nadler et al., 2010), organizational studies mostly focus on whether and how giving help influences help givers' social status (Flynn, 2003; Ouyang et al., 2018). In contrast, our status-based model provides another piece of the puzzle by focusing on receiving help and examining how receiving help influences recipients' status-related cognitive, emotional, and behavioral reactions to restore their status at the cost of the help givers, as well as the critical boundary condition of relative competence that implies social comparison to underlie the purported relationships. Our finding that envy is an emotional response to status threat that is elicited by receiving help from a more competent coworker also adds to the predominant view that receiving help evokes gratitude (Lawler & Thye, 1999), and the limited research documenting that receiving help triggers general negative affect (Deelstra et al., 2003).

Relatedly, our exploratory findings in Studies 1 and 2 and findings in Study 3A lend credence to our status-based explanation that only receiving task-related help, and not person-related help, from a more competent coworker is likely to induce help recipient's status threat and envy. These findings echo Nadler's (2020) observations that the characteristics of the

help giver and help recipient as well as the nature of the help are critical to resolving the inconsistencies between the social support and comparison stress research in predicting individual reactions to seeking and receiving help. Specifically, people may react more positively when they receive social support or person-related help, but react more negatively when they receive task-related help because unfavorable social comparison becomes more salient. To that end, our research also answers the call for studies on distinct types of help in understanding helping interactions in organizational settings (Dalal & Sheng, 2019).

Furthermore, our study also extends the envy literature by demonstrating that envy may not only be elicited in competitive contexts (Bamberger & Belogolovsky, 2017; Schaubroeck & Lam, 2004), but also in cooperative contexts. Although helping interactions promote cooperation and specifically receiving help induces reciprocity, our findings show that receiving task-related help from a more competent help giver may trigger status threat and subsequent envy. It appears that envy is ubiquitous in social interactions, even if those interactions are supposedly positive in nature. Given that contemporary organizations typically operate on the basis of team collaborations, it is of theoretical and practical significance to understand how to limit the occurrences of envy and its repercussions in helping interactions. We also add to the research showing that envy is associated with greater social undermining (Duffy et al., 2012; Lee & Duffy, 2019) by highlighting status striving motivation as a critical moderator that strengthens the relationship between envy and social undermining.

### **Limitations and Future Research**

As with all studies, our studies have limitations that point to promising ideas for future research. We assess status threat and envy at the same time point in Studies 1-3A, which raises potential concerns for common method variance (CMV) bias (Podsakoff et al., 2012). However, given that prior research (Reh et al., 2018) and our online Supplemental

Material Study S3 find that status threat triggers envy, this suggests that our findings may not be solely attributable to CMV. We also acknowledge our small sample size at the individual level in Study 1 (N = 52). Nonetheless, we note that the level of our analyses in Study 1 is at the dyadic level (N = 255 dyads). Our sample size at the dyadic level is comparable to other studies that examined coworker interpersonal behavior at the dyadic level using a similar design (e.g., N = 132 in De Jong et al., 2007; N = 278 in Van der Vegt et al., 2006). In addition, although we demonstrated causal relations among our hypothesized relationships in Studies 3A and 3B, we relied on participants' reactions to hypothetical scenarios, which may raise concerns about external validity. Although our studies complement one another to address these concerns, we recommend future research to replicate our findings using a multiwave and multisource design with a larger sample and including behavioral measures.

Although we find that relative competence moderates the effect of receiving task-related help on status threat across our studies, one might argue that other characteristics of the help, such as help solicitation, may explain this moderating effect. Compared to solicited help, unsolicited help might be more likely to signal that the help recipient is dependent and inferior (Deelstra et al., 2003; Harari et al., 2021) and prompt help recipients to view help givers more as a foe, rather than as a friend. In turn, this may elicit higher status threat and envy. To test this possibility, we collected data on help solicitation in Study 1, but did not find support for the moderating effect of help solicitation on the relationship between receiving task-related help and status threat. If we did find that receiving unsolicited (versus solicited) task-related help from a more competent help giver resulted in higher status threat, then our studies would represent a conservative test of our status-based model. Given that help is mostly solicited at work (Burke et al., 1976), it is likely that our field studies captured more receipt of solicited help than receipt of unsolicited help. Study 3A also focuses on the less status threatening but more common type of help - solicited help. Future research could

directly measure the frequency of solicited versus unsolicited help (Harari et al., 2021; Lee et al., 2019) and examine whether help recipients tend to perceive help givers as a friend (foe) when they receive solicited (unsolicited) task-related help and their downstream impacts.

Future studies could also examine other potential moderators of the link between receiving task-related help and status threat, such as the characteristics of the help giver. The stereotype content model suggests that people are less likely to feel threatened and envious of targets who are perceived to be both warm and competent (Fiske et al., 2007). Thus, in our context, the combination of warmth and competence may affect the relationship between receiving task-related help and status threat. For example, when the help recipient perceives the help giver to be warm (cold), it may weaken (strengthen) the status threatening effect of receiving task-related help from a more competent help giver. We recommend future research to explore how help giver's characteristics may influence the help recipient's cognitive, emotional, and behavioral reactions toward the receipt of task-related help.

Furthermore, future studies could also investigate the psychological mechanisms underlying the interactive effect of receiving task-related help and relative competence on status threat. For example, one potential mechanism could be perceived status distance. Receiving help from a more competent help giver increases the salience of upward social comparison by highlighting the perceived status distance between the help recipient and help giver (Doyle et al., 2016). To the extent that the perceived status distance becomes moderately large, the help recipient is more likely to experience status threat.

Finally, the "biting the hand that feeds" effect documented in our studies opens doors to new areas of inquiries about the paradoxical implications of giving and receiving help. Recent research finds that employees may be motivated to both help and harm their coworkers (Melwani & Rothman, 2021). Similarly, receiving task-related help from a more competent help giver may prompt the envious help recipient to help and undermine the



envied help giver, suggesting that people may “bite and hold the hand that feeds.” By helping back, help recipients show that they have sufficient resources to share (Ouyang et al., 2018). Such reciprocal help signals competence, deters feelings of inferiority and envy, and reestablishes the dyadic status balance. However, status striving motivation might determine whether the envious help recipient provides dependency-oriented help or autonomy-oriented help (Montal-Rosenberg & Moran, 2022). Given that envious help recipients with higher status striving motivation are more motivated to exercise power and influence over others (Barrick et al., 2002), they are more likely to return the favor with dependency-oriented help to foster future dependence from the envied targets, signal their superiority, and effectively close the status gap. In contrast, envious help recipients with lower status striving motivation may be less concerned about rebalancing the status relation and hence more likely to provide autonomous-oriented help to enable the envied targets. Future studies may explore whether status striving motivation may affect how envious help recipients balance their status relations and cope with envy by helping the source of the threat in different ways.

### **Practical Implications**

New technologies and information science have increased the dynamic nature of work and pushed organizations to cultivate collaborative and helping cultures (Amabile et al., 2014). Employees should recognize that when they receive task-related help from a coworker who is perceived to be more competent, they may experience status threat and envy *only* because the help received was from a more competent coworker. Thus, to limit the paradoxical “biting the hand that feeds” effect, help recipients have to overcome their tendency of competence comparison and instead focus on processing the value of the help received. In addition, managers could offer more training opportunities, support, and resources for less competent employees to strengthen their expectations of improving their competence in the future (Lam, et al., 2011). By effectively managing factors that highlight

relative competence, organizations may reduce the likelihood that receiving help elicits status threat and envy. Finally, although employees may be implicitly encouraged by managers to adopt higher levels of status striving motivation because employees with higher levels of status striving motivation are likely to achieve better job performance (Barrick et al., 2002) and perceive greater meaningfulness in their jobs (Barrick et al., 2013), we suggest that envious help recipients with higher status striving motivations should be mindful of how they may socially undermine envied help givers and potentially invite negative reciprocity that harms the dyadic relationship in the long run.

## **CONCLUSION**

Integrating the helping as status relations framework and social functional perspective of envy, we provide a fresh and nuanced understanding of helping dynamics by showing when recipients of task-related help will experience status threat and envy, which paradoxically motivates help recipients to respond negatively toward help givers. We find that individuals who receive task-related help perceive that their status is threatened when they receive help from a more competent help giver, and status threat in turn triggers feelings of envy. Envy further motivates greater social undermining directed at the help givers, especially among recipients with higher status striving motivation. Despite a relative paucity of empirical research examining the dark side of giving and receiving help, we hope that our theoretical and empirical approach provides a starting point for future research on the complex effects and critical implications of helping interactions.

## REFERENCES

- Anderson, C., & Kilduff, G. J. (2009). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology*, 96(2), 491–503. <https://doi.org/10.1037/a0014201>
- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin*, 141(3), 574–601. <https://doi.org/10.1037/a0038781>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452–471. <https://doi.org/10.5465/amr.1999.2202131>
- Amabile, T., Fisher, C. M., & Pillemer, J. (2014). IDEO's Culture of Helping. *Harvard Business Review*, 92, 54–61.
- Barrick, M. R., Mitchell, T. R., & Stewart, G. L. (2003). Situational and motivational influences on trait–behavior relationships. In M. R. Barrick & A. M. Ryan (Eds.), *Personality and work: Reconsidering the role of personality in organizations* (pp. 60–82). JosseyBass.
- Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *The Academy of Management Review*, 38(1), 132–153. <https://doi.org/10.5465/amr.2010.0479>
- Barrick, M. R., Stewart, G. L., & Piotrowski, M. (2002). Personality and job performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology*, 87(1), 43–51. <https://doi.org/10.1037/0021-9010.87.1.43>
- Bamberger, P., & Belogolovsky, E. (2017). The dark side of transparency: How and when pay administration practices affect employee helping. *Journal of Applied Psychology*, 102(4), 658–671. <https://doi.org/10.1037/apl0000184>
- Blader, S. L., & Chen, Y.-R. (2011). What influences how higher-status people respond to lower-status others? Effects of procedural fairness, outcome favorability, and concerns about status. *Organization Science*, 22(4), 1040–1060. <https://doi.org/10.1287/orsc.1100.0558>
- Blau, P.M. (1963). *The dynamics of bureaucracy: Study of interpersonal relations in two government agencies* (Rev. ed.). University of Chicago Press.
- Bolino, M. C., & Grant, A. M. (2016). The bright side of being prosocial at work, and the dark side, too: A review and agenda for research on other-oriented motives, behavior, and impact in organizations. *The Academy of Management Annals*, 10(1), 599–670. <https://doi.org/10.1080/19416520.2016.1153260>
- Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of Applied Psychology*, 91(1), 70–82. <https://doi.org/10.1037/0021-9010.91.1.70>
- Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of Cross-Cultural Psychology* (pp. 389–444). Allyn & Bacon.
- Burke, R. J., Weir, T., & Duncan, G. (1976). Informal helping relationship in work organizations. *Academy of Management Journal*, 19(3), 370–377. <https://doi.org/10.5465/255604>
- Bunderson, J. S. (2003). Recognizing and Utilizing Expertise in Work Groups: A Status Characteristics Perspective. *Administrative Science Quarterly*, 48(4), 557–591. <https://doi.org/10.2307/3556637>
- Cohen-Charash, Y. (2009). Episodic envy. *Journal of Applied Social Psychology*, 39(9), 2128–2173. <https://doi.org/10.1111/j.1559-1816.2009.00519.x>

- Cohen-Charash, Y., & Larson, E. C. (2017). An emotion divided: Studying envy is better than studying “benign” and “malicious” envy. *Current Directions in Psychological Science*, 26(2), 174–183. <https://doi.org/10.1177/0963721416683667>
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin*, 119(1), 51–69. <https://doi.org/10.1037/0033-2909.119.1.51>
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900. <https://doi.org/10.1177/0149206305279602>
- Crusius, J., & Lange, J. (2017). How do people respond to threatened social status? Moderators of benign versus malicious envy. In R. H. Smith, U. Merlone, & M. K. Duffy (Eds.), *Envy at work and in organizations: Research, theory, and applications* (pp. 85–110). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780190228057.003.0004>
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, (pp. 61–149). Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(07\)00002-0](https://doi.org/10.1016/S0065-2601(07)00002-0)
- Dalal, R. S., & Sheng, Z. (2019). When is helping behavior unhelpful? A conceptual analysis and research agenda. *Journal of Vocational Behavior*, 110 (Part B), 272-285. <https://doi.org/10.1016/j.jvb.2018.11.009>
- De Jong, S. B., Van der Vegt, G. S., & Molleman, E. (2007). The relationships among asymmetry in task dependence, perceived helping behavior, and trust. *Journal of Applied Psychology*, 92(6), 1625–1637. <https://doi.org/10.1037/0021-9010.92.6.1625>
- Deelstra, J. T., Peeters, M. C. W., Schaufeli, W. B., Stroebe, W., Zijlstra, F. R. H., & van Doornen, L. P. (2003). Receiving instrumental support at work: When help is not welcome. *Journal of Applied Psychology*, 88(2), 324–331. <https://doi.org/10.1037/0021-9010.88.2.324>
- Djurdjevic, E., Stoverink, A. C., Klotz, A. C., Koopman, J., da Motta Veiga, S. P., Yam, K. C., & Chiang, J. T.-J. (2017). Workplace status: The development and validation of a scale. *Journal of Applied Psychology*, 102(7), 1124–1147. <https://doi.org/10.1037/apl0000202>
- Doyle, S. P., Lount Jr, R. B., Wilk, S. L., & Pettit, N. C. (2016). Helping others most when they are not too close: Status distance as a determinant of interpersonal helping in organizations. *Academy of Management Discoveries*, 2(2), 155-174. <https://doi.org/10.5465/amd.2014.0104>
- Duffy, M. K., Ganster, D., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, 45(2), 331–351. <https://doi.org/10.2307/3069350>
- Duffy, M. K., Ganster, D. C., Shaw, J. D., Johnson, J. L., & Pagon, M. (2006). The social context of undermining behavior at work. *Organizational Behavior and Human Decision Processes*, 101(1), 105–126. <https://doi.org/10.1016/j.obhdp.2006.04.005>
- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. *Academy of Management Journal*, 55(3), 643–666. <https://doi.org/10.5465/amj.2009.0804>
- Duffy, M. K., Shaw, J. D., Scott, K. L., & Tepper, B. J. (2006). The moderating roles of self-esteem and neuroticism in the relationship between group and individual undermining behavior. *Journal of Applied Psychology*, 91(5), 1066–1077. <https://doi.org/10.1037/0021-9010.91.5.1066>
- Eby, L. T., Durley, J. R., Evans, S. C., & Ragins, B. R. (2008). Mentors' perceptions of negative mentoring experiences: Scale development and nomological validation.

- Journal of Applied Psychology*, 93(2), 358-373. <https://doi.org/10.1037/0021-9010.93.2.358>
- Eby, L. T., & McManus, S. E. (2004). The protégé's role in negative mentoring experiences. *Journal of Vocational Behavior*, 65(2), 255-275. <https://doi.org/10.1016/j.jvb.2003.07.001>
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36(6), 1577–1613. <https://doi.org/10.5465/256822>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140. <https://doi.org/10.1177/001872675400700202>
- Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotions* (pp. 456–468). The Guilford Press.
- Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). *Recipient reactions to aid*. *Psychological Bulletin*, 91(1), 27–54. <https://doi.org/10.1037/0033-2909.91.1.27>
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77–83. <https://doi.org/10.1016/j.tics.2006.11.005>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. <https://doi.org/10.1037/0022-3514.82.6.878>
- Flynn, F. J. (2003). How much should I give and how often? The effects of generosity and frequency or favor exchange on social status and productivity. *Academy of Management Journal*, 46(5), 539–553. <https://doi.org/10.2307/30040648>
- Foulk, T. A., Lanaj, K., & Krishnan, S. (2019). The virtuous cycle of daily motivation: Effects of daily strivings on work behaviors, need satisfaction, and next-day strivings. *Journal of Applied Psychology*, 104(6), 755–775. <https://doi.org/10.1037/apl0000385>
- Greco, L. M., Whitson, J. A., O'Boyle, E. H., Wang, C. S., & Kim, J. (2019). An eye for an eye? A meta-analysis of negative reciprocity in organizations. *Journal of Applied Psychology*, 104(9), 1117–1143. <https://doi.org/10.1037/apl0000396>
- Greenberg, J., Ashton-James, C. E., & Ashkanasy, N. M. (2007). Social comparison processes in organizations. *Organizational Behavior and Human Decision Processes*, 102(1), 22–41. <https://doi.org/10.1016/j.obhdp.2006.09.006>
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178. <https://doi.org/2092623>
- Halbesleben, J. R., & Wheeler, A. R. (2015). To invest or not? The role of coworker support and trust in daily reciprocal gain spirals of helping behavior. *Journal of Management*, 41(6), 1628-1650. <https://doi.org/10.1177/0149206312455246>
- Hall, R. J., Snell, A. F., & Foust, M. S. (1999). Item parceling strategies in SEM: Investigating the subtle effects of unmodeled secondary constructs. *Organizational Research Methods*, 2(3), 233–256. <https://doi.org/10.1177/109442819923002>
- Harari, D., Parke, M. R., & Marr, J. C. (2021). When helping hurts helpers: Anticipatory versus reactive helping, helper's relative status, and recipient self-threat. *Academy of Management Journal*. Advance online publication. <https://doi.org/10.5465/amj.2019.0049>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hill, E. T., Matta, F. K., & Mitchell, M. S. (2021). Seeing the glass as half full or empty: The role of affect-induced optimistic and pessimistic states on justice perceptions and

- outcomes. *Academy of Management Journal*, 64(4), 1265-1287.  
<https://doi.org/10.5465/amj.2018.1282>
- Hu, J., Erdogan, B., Bauer, T. N., Jiang, K., Liu, S., & Li, Y. (2015). There are lots of big fish in this pond: The role of peer overqualification on task significance, perceived fit, and performance for overqualified employees. *Journal of Applied Psychology*, 100(4), 1228–1238. <https://doi.org/10.1037/apl0000008>
- Jansen, K. J., & Kristof-Brown, A. L. (2005). Marching to the beat of a different drummer: Examining the impact of pacing congruence. *Organizational Behavior and Human Decision Processes*, 97(2), 93–105. <https://doi.org/10.1016/j.obhdp.2005.03.005>
- Kaplan, R. (1984). Trade routes: The manager's network of relationships. *Organizational Dynamics*, 12(4), 37-52. [https://doi.org/10.1016/0090-2616\(84\)90010-X](https://doi.org/10.1016/0090-2616(84)90010-X)
- Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition & Emotion*, 13(5), 505-521. <https://doi.org/10.1080/026999399379168>
- Kenny, D. A. (1994). *Interpersonal perception: A social relations analysis*. Guilford Press.
- Kenny, D. A. & Wong, M.-N. (2016, August). SRM\_R: An interactive tool for estimating the Social Relations Model from directed dyadic data with round-robin-like designs [Computer Software]. Available from [https://davidakenny.shinyapps.io/SRM\\_R/](https://davidakenny.shinyapps.io/SRM_R/)
- Kim, E., & Glomb, T. M. (2014). Victimization of high performers: The roles of envy and work group identification. *Journal of Applied Psychology*, 99(4), 619–634.  
<https://doi.org/10.1037/a0035789>
- Kollock, P. (1994). The emergence of exchange structures: an experimental study of uncertainty, commitment, and trust. *American Journal of Sociology*, 100(2), 315-345.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, 37(3), 656-669. <https://doi.org/10.5465/256704>
- Koopman, J., Lin, S.-h. (J.), Lennard, A. C., Matta, F. K., & Johnson, R. E. (2020). My coworkers are treated more fairly than me! A self-regulatory perspective on social justice comparisons. *Academy of Management Journal*, 63(3), 857–880.  
<https://doi.org/10.5465/amj.2016.0586>
- Lam, C. K., Huang, X., Walter, F., & Chan, S. C. H. (2016). Coworkers' relationship quality and interpersonal emotions in team-member dyads in China: The moderating role of cooperative team goals. *Management and Organization Review*, 12(4), 687–716.  
<https://doi.org/10.1017/mor.2016.19>
- Lam, C. K., Van der Vegt, G. S., Walter, F., & Huang, X. (2011). Harming high performers: A social comparison perspective on interpersonal harming in work teams. *Journal of Applied Psychology*, 96(3), 588–601. <https://doi.org/10.1037/a0021882>
- Landis, B., Fisher, C. M., & Menges, J. I. (2022). How employees react to unsolicited and solicited advice in the workplace: Implications for using advice, learning, and performance. *Journal of Applied Psychology*, 107(3), 408-424.  
<http://dx.doi.org/10.1037/apl0000876>
- Landis, R. S., Beal, D. J., & Tesluk, P. E. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3(2), 186–207. <https://doi.org/10.1177/109442810032003>
- Lange, J., & Crusius, J. (2015). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, 41(2), 284–294. <https://doi.org/10.1177/0146167214564959>
- Lange, J., Weidman, A. C., & Crusius, J. (2018). The painful duality of envy: Evidence for an integrative theory and a meta-analysis on the relation of envy and schadenfreude. *Journal of Personality and Social Psychology*, 114(4), 572–598.  
<https://doi.org/10.1037/pspi0000118>

- Lawler, E. J., & Thye, S. R. (1999). Bringing emotions into social exchange theory. *Annual Review of Sociology*, 25, 217–244. <https://doi.org/10.1146/annurev.soc.25.1.217>
- Lee, H. W., Bradburn, J., Johnson, R. E., Lin, S.-H. (J.), & Chang, C.-H. (D.). (2019). The benefits of receiving gratitude for helpers: A daily investigation of proactive and reactive helping at work. *Journal of Applied Psychology*, 104(2), 197–213. <https://doi.org/10.1037/apl0000346>
- Lee, K., & Duffy, M. K. (2019). A functional model of workplace envy and job performance: When do employees capitalize on envy by learning from envied targets? *Academy of Management Journal*, 62(4), 1085–1110. <https://doi.org/10.5465/amj.2016.1202>
- Lim, J. H., Tai, K., Bamberger, P. A., & Morrison, E. W. (2020). Soliciting resources from others: An integrative review. *Academy of Management Annals*, 14(1), 122–159. <https://doi.org/10.5465/annals.2018.0034>
- Lin, S.-H. (J.), Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology*, 101(6), 815–830. <https://doi.org/10.1037/apl0000098>
- Liu, W., Tangirala, S., Lam, W., Chen, Z., Jia, R. T., & Huang, X. (2015). How and when peers' positive mood influences employees' voice. *Journal of Applied Psychology*, 100(3), 976–989. <https://doi.org/10.1037/a0038066>
- Major, B., Sciacchitano, A. M., & Crocker, J. (1993). In-group versus out-group comparisons and self-esteem. *Personality and Social Psychology Bulletin*, 19(6), 711–721. <https://doi.org/10.1177/0146167293196006>
- Marr, J. C., & Thau, S. (2014). Falling from great (and not-so-great) heights: How initial status position influences performance after status loss. *Academy of Management Journal*, 57(1), 223–248. <https://doi.org/10.5465/amj.2011.0909>
- McNeish, D. (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods*, 23(3), 412–433. <https://doi.org/10.1037/met0000144>
- Melwani, S., & Rothman, N. B. (2021). The push-and-pull of frenemies: When and why ambivalent relationships lead to helping and harming. *Journal of Applied Psychology*. Advance online publication. <https://doi.org/10.1037/apl0000811>
- Montal-Rosenberg, R., & Moran, S. (2022). Envy and help giving. *Journal of Personality and Social Psychology*, 122(2), 222–243. <https://doi.org/10.1037/pspi0000340>
- Mossholder, K. W., Richardson, H. A., & Settoon, R. P. (2011). Human resource systems and helping in organizations: A relational perspective. *Academy of Management Review*, 36(1), 33–52. <https://doi.org/10.5465/amr.2009.0402>
- Muthén, L.K. and Muthén, B.O. (1998-2012). Mplus User's Guide. Seventh Edition. Muthén & Muthén.
- Nadler, A. (2015). The other side of helping: Seeking and receiving help. In D. A. Schroeder & W. G. Graziano (Eds.), *The Oxford handbook of prosocial behavior* (pp. 307–328). Oxford University Press.
- Nadler, A. (2020). *Social psychology of helping relations: Solidarity and hierarchy*. Wiley Blackwell.
- Nadler, A., & Halabi, S. (2006). Intergroup helping as status relations: Effects of status stability, identification, and type of help on receptivity to high-status group's help. *Journal of Personality and Social Psychology*, 91(1), 97–110. <https://doi.org/10.1037/0022-3514.91.1.97>
- Nadler, A., Halabi, S., Harapz-Gorodeisky, G., & Ben-David, Y. (2010). Helping relations as status relations. In M. Mikulincer & P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 181–200). American Psychological Association. <https://doi.org/10.1037/12061-010>

- Ouyang, K., Xu, E., Huang, X., Liu, W., & Tang, Y. (2018). Reaching the limits of reciprocity in favor exchange: The effects of generous, stingy, and matched favor giving on social status. *Journal of Applied Psychology, 103*(6), 614–630. <https://doi.org/10.1037/apl0000288>
- Parrott, W. G., & Smith, R. H. 1993. Distinguishing the experiences of envy and jealousy. *Journal of Personality & Social Psychology, 64*(6), 906–920. <https://doi.org/10.1037/0022-3514.64.6.906>
- Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology, 70*, 153–163. <https://doi.org/10.1016/j.jesp.2017.01.006>
- Plato (2007/360 BCE). *Philebus*. (Translated by B. Jowett.) BiblioBazaar
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures, 6*(2), 77–98. doi: 10.1080/19312458.2012.679848
- Reh, S., Tröster, C., & Van Quaquebeke, N. (2018). Keeping (future) rivals down: Temporal social comparison predicts coworker social undermining via future status threat and envy. *Journal of Applied Psychology, 103*(4), 399–415. <https://doi.org/10.1037/apl0000281>
- Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of contextual factors and psychological distress in predicting employees' responses to abusive supervision. *Journal of Applied Psychology, 96*(4), 713–729. <https://doi.org/10.1037/a0021593>
- Richter, A. W., West, M. A., Van Dick, R., & Dawson, J. F. (2006). Boundary spanners' identification, intergroup contact, and effective intergroup relations. *Academy of Management Journal, 49*(6), 1252–1269. <https://doi.org/10.5465/AMJ.2006.23478720>
- Sass, D. A., & Smith, P. L. (2006). The effects of parceling unidimensional scales on structural parameter estimates in structural equation modeling. *Structural Equation Modeling, 13*(4), 566–586. [https://doi.org/10.1207/s15328007sem1304\\_4](https://doi.org/10.1207/s15328007sem1304_4)
- Schaubroeck, J., & Lam, S. S. K. (2004). Comparing lots before and after: Promotion rejectees' invidious reactions to promotees. *Organizational Behavior and Human Decision Processes, 94*(1), 33–47. <https://doi.org/10.1016/j.obhdp.2004.01.001>
- Selig, J. P., & Preacher, K. J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from <http://quantpsy.org/>.
- Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person- and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology, 87*(2), 255–267. <https://doi.org/10.1037/0021-9010.87.2.255>
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin, 133*(1), 46–64. <https://doi.org/10.1037/0033-2909.133.1.46>
- Snijders, T. A., & Bosker, R. J. (2011). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage.
- Snijders, T. A., & Kenny, D. A. (1999). The social relations model for family data: A multilevel approach. *Personal Relationships, 6*(4), 471–486. <https://doi.org/10.1111/j.1475-6811.1999.tb00204.x>



- Spence, J. R., Brown, D. J., Keeping, L. M., & Lian, H. (2014). Helpful today, but not tomorrow? Feeling grateful as a predictor of daily organizational citizenship behaviors. *Personnel Psychology*, 67(3), 705-738. <https://doi.org/10.1111/peps.12051>
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89(6), 845–851. <https://doi.org/10.1037/0022-3514.89.6.845>
- Suls, J., Martin, R., & Wheeler, L. (2002). Social comparison: Why, with whom, and with what effect? *Current Directions in Psychological Science*, 11(5), 159–163. <https://doi.org/10.1111/1467-8721.00191>
- Tai, K., Narayanan, J., & McAllister, D. J. (2012). Envy as pain: Rethinking the nature of envy and its implications for employees and organizations. *The Academy of Management Review*, 37(1), 107–129. <https://doi.org/10.5465/amr.2009.0484>
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 181-227). Academic Press.
- Thomas, E. J., & Fink, C. F. (1963). Effects of group size. *Psychological Bulletin*, 60(4), 371–384. <https://doi.org/10.1037/h0047169>
- Thompson, P. S., & Bolino, M. C. (2018). Negative beliefs about accepting coworker help: Implications for employee attitudes, job performance, and reputation. *Journal of Applied Psychology*, 103(8), 842-866. <https://doi.org/10.1037/apl0000300>
- Turnley, W. H., & Bolino, M. C. (2001). Achieving desired images while avoiding undesired images: Exploring the role of self-monitoring in impression management. *Journal of Applied Psychology*, 86(2), 351–360. <https://doi.org/10.1037/0021-9010.86.2.351>
- Van Der Vegt, G. S., Bunderson, J. S., & Oosterhof, A. (2006). Expertness diversity and interpersonal helping in teams: Why those who need the most help end up getting the least. *Academy of Management Journal*, 49(5), 877–893. <https://doi.org/10.5465/AMJ.2006.22798169>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009). Leveling up and down: The experiences of benign and malicious envy. *Emotion*, 9(3), 419–429. <https://doi.org/10.1037/a0015669>
- Van Dyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors-in pursuit of construct and definitional clarity (a bridge over muddied waters). In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 215-285). JAI Press.
- Vogel, R. M., Rodell, J. B., & Lynch, J. W. (2016). Engaged and productive misfits: How job crafting and leisure activity mitigate the negative effects of value incongruence. *Academy of Management Journal*, 59(5), 1561-1584. <https://doi.org/10.5465/amj.2014.0850>
- Zenger, T. R., & Lawrence, B. S. (1989). Organizational demography: The differential effects of age and tenure distributions on technical communication. *Academy of Management Journal*, 32(2), 353–376. <https://doi.org/10.2307/256366>
- Zhang, Z., Wang, M. & Shi, J. (2012). Leader-follower congruence in proactive personality and work outcomes: The mediating role of leader-member exchange. *Academy of Management Journal*, 55(1), 111-130. <https://doi.org/10.5465/amj.2009.0865>

## Footnotes

1. In our research, we focus on task-related help because it presumably solves task-related issues and highlights help givers' task expertise—an indicator of status (Bunderson, 2003). As such, we design our studies to demonstrate that our status-based model only pertains to receiving task-related help, instead of receiving person-related help.
2. Organizations may expect employees to receive help from more, rather than less, competent coworkers, although research suggests otherwise. For example, Van der Vegt et al. (2006) find that individuals are more likely to help those who are perceived to have higher expertise. Similarly, Doyle and colleagues (2016) show that employees are more likely to help higher-performing team members. Consistent with these findings, the helping literature also suggests that in asymmetric/imbalanced social relationships, less influential individuals tend to engage in more interpersonal helping directed toward more influential others (Bowler & Brass, 2006). Therefore, it is as likely in the workplace that one may receive help from a less (versus more) competent coworker.
3. We test whether status striving motivation moderates the relationship between envy and social undermining in our studies. However, we also report alternative models in our exploratory analyses in Study 2, looking at different placements of status striving motivation in our theoretical model.
4. We also conducted two supplementary pre-registered experiments. In the first supplementary study ([https://aspredicted.org/ZBJ\\_PMC](https://aspredicted.org/ZBJ_PMC)), we manipulated status threat and measured envy using a recall design. Our results showed that participants in the high status threat condition reported higher levels of envy than participants in the low status threat condition (see online supplemental material Study S3). In the second supplementary study ([https://aspredicted.org/CYU\\_VJF](https://aspredicted.org/CYU_VJF)), we manipulated both envy and status striving motivation and measured social undermining intention and obtained support for our hypothesis (see online supplemental material Study S4).
5. We conducted another round-robin study to test Hypotheses 1 and 2 using the polynomial approach. In this study, we operationalized relative competence by using the incongruence between the help recipient's and giver's academic performance score and examined whether receiving help moderated this incongruence. Results of this study provide further support for our hypotheses (see online supplemental material Study S1 for details).
6. Coworker typically refers to a person whom one works with, especially someone with a similar job or level of responsibility. Therefore, we did not anticipate participants to nominate their supervisors or subordinates. We included this additional question because some participants indicated their occupations as supervisor, director, or manager in the recruitment survey, and this implied that they might have nominated their subordinates. Thus, we only asked if the nominated coworker was a subordinate or a peer. To further rule out the possibility that one might have nominated their supervisors, we contacted the participants again and asked if the selected coworker was their supervisor during the study period. Among the 213 participants contacted, 9 did not return the survey and 3 had nominated their supervisors, leaving us with a sample size of 201 participants. Our findings remained the same when we excluded these 12 participants from the data analysis.

7. To ensure data quality, we included an attention check question in all four surveys (where we asked participants to select a designated anchor). All the participants passed this attention check question in the first three surveys, but three failed this attention check question in T4 survey. We did not exclude them from our data analyses. However, our results remained the same when we excluded these three participants.

8. We note that results from the full factorial analyses of the manipulation checks showed three unexpected significant effects. First, the type of help received manipulation had a main effect on perceived relative competence,  $F(2, 1457) = 9.43, p < .001, \eta_p^2 = .01$ . There was also an interaction effect between the two manipulations on perceived relative competence,  $F(2, 1457) = 6.64, p < .001, \eta_p^2 = .01$ . Post hoc comparisons (see Table 7) showed that participants in the received task-related help from a more competent coworker condition reported the highest level of perceived relative competence, which seemed to suggest that our manipulations are not orthogonal. However, we note that this may be attributed to our research design where participants answered the manipulation check items after the status threat and envy measures, the perceptions of which could have spilled over to influence their evaluations of the help giver's relative competence. Second, perceived relative competence manipulation had a main effect on perceived receipt of task-related help,  $F(1, 1439) = 34.82, p < .001, \eta_p^2 = .02$ . However, results from post hoc comparisons showed that this effect was driven by the received person-related help condition and the no-help received condition. To further establish that our manipulations of type of help received and relative competence are orthogonal, we conducted a separate manipulation check study. In this study, participants filled in manipulation check items right after being exposed to the manipulations without rating status threat and envy items. Therefore, this served as a cleaner test of our manipulations. Results showed that there is no main effect of type of help received or interaction effect, thus allaying concerns of our manipulations. Please see online supplemental material Study S2 for more details.

9. We used PROCESS macro with 20,000 bootstrap samples (Model 1; Hayes, 2017) to test whether status striving motivation would moderate the relationship between the envy manipulation and perceived envy. The interaction effect of status striving motivation and envy was non-significant ( $B = .08, SE = .07, p = .25$ ), suggesting that our envy manipulation was not perceived differently by participants with lower versus higher scores on status striving motivation.

Table 1  
*Main Results of Confirmatory Factor Analyses*

Models	$\chi^2$	<i>df</i>	$\Delta\chi^2$	$\Delta df$	CFI	TLI	SRMR	RMSEA
<i>Study 1</i>								
4-factor model	128.48	47			.98	.97	.07	.08
3-factor model (combining status threat and envy)	156.83	51	28.35**	4	.97	.96	.09	.09
3-factor model (combining receiving task-related help and relative competence)	715.45	51	586.97**	4	.80	.74	.09	.23
2-factor model (combining status threat and envy, as well as receiving task-related help and relative competence)	721.39	53	592.91**	6	.80	.75	.10	.22
<i>Study 2</i>								
6-factor model	353.38	194			.95	.94	.06	.06
5-factor model (combining envy and social undermining)	385.22	199	31.84**	5	.94	.93	.07	.07
5-factor model (combining status threat and envy)	426.98	199	73.60**	5	.93	.91	.09	.07
5-factor model (combining receiving task-related help and status threat)	1102.96	199	749.58**	5	.71	.67	.12	.15
4-factor model (combining status threat, envy, and social undermining)	652.80	203	299.43**	9	.85	.83	.11	.10
4-factor model (combining receiving task-related help, status threat, and envy)	1173.01	203	819.63**	9	.69	.64	.13	.15
4-factor model (combining receiving task-related help and status threat, as well as envy and social undermining)	1110.91	203	757.53**	9	.71	.67	.12	.15
3-factor model (combining receiving task-related help, status threat, envy, and social undermining)	1389.60	206	1036.22**	12	.62	.57	.14	.16

*Note.* CFI = comparative fit index, TLI = Tucker-Lewis index, SRMR = standardized root-mean-square residual, RMSEA = root-mean-square error of approximation. \*\* $p \leq .01$ .

Table 2  
*Study 1: Means, Standard Deviations, and Correlations among Study Variables*

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Class	0.24	0.43	-													
2 Team size	6.21	0.80	-.85**	-												
3 R's gender	1.36	0.48	-.13*	.02	-											
4 H's gender	1.34	0.37	-.15*	.06	.08	-										
5 R's age	19.69	1.17	.26**	-.29**	.29**	.11†	-									
6 H's age	19.62	0.94	.40**	-.37**	.08	.12*	.23**	-								
7 Length of acquaintance	7.75	10.95	.15*	-.23**	-.05	-.11†	-.12†	-.05	-							
8 Relationship quality	3.40	0.66	.28**	-.26**	-.19**	-.20**	-.05	-.03	.35**	-						
9 R receiving person-related help from H	1.87	1.11	.11†	-.11†	-.17**	-.17**	-.10	-.04	.42**	.69**	<b>(.98)</b>					
10 R receiving task-related help from H (RTH)	2.12	1.02	.37**	-.32**	-.15*	-.14*	.07	.11†	.35**	.59**	.75**	<b>(.96)</b>				
11 Relative competence (RC)	3.16	0.59	.24**	-.17**	-.11†	-.17**	.05	.03	-.11†	.27**	.16*	.28**	<b>(.92)</b>			
12 RTH*RC	0.20	1.05	.17**	-.10	-.08	-.10	-.05	-.06	.001	.36**	.21**	.25**	.26**	-		
13 R's status threat from H	1.87	0.99	-.19**	.07	.33**	.04	-.07	-.05	.05	-.03	-.02	.02	-.01	.11†	<b>(.98)</b>	
14 R's envy toward H	1.73	0.67	-.02	-.11†	.27**	.03	.10	.06	.11†	-.04	.06	.07	-.09	.05	.51**	<b>(.88)</b>

*Note.*  $N = 255$  dyads from 52 individuals within 14 teams. †  $p \leq .10$ , \*  $p \leq .05$ , \*\*  $p \leq .01$ . Cronbach's alpha coefficients are presented on the diagonal in bold. For class, 0 = class 1, 1 = class 2. For gender, 1 = woman, 2 = man. R = help recipient, H = help giver.

Table 3

*Study 1: Variance Partitioning for R's Status Threat from and Envy toward H*

Variables	R's status threat from H		R's envy toward H	
	B (%)	SE	B (%)	SE
Group variance	.03 (3.1%)	.08	.00 (0%)	.00
Actor (R) variance	.54 (56.3%)	.14	.31 (72.0%)	.06
Partner (H) variance	.07 (7.3%)	.03	.02 (4.7%)	.01
Dyadic variance	.32 (33.3%)	.04	.10 (23.3%)	.01
Deviance	580.79		303.44	

*Note.*  $N = 255$  dyads from 52 individuals within 14 teams; R = help recipient, H = help giver.

Table 4

*Study 1: Results of Social Relations Model Analyses*

Dependent variables	R's status threat from H				R's envy toward H			
	Model 1a		Model 1b		Model 2a		Model 2b	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Predictors								
Control variables								
Class	-.75	.45	-.78	.44	-.48	.35	-.29	.30
Team size	-.25	.25	-.27	.25	-.35	.20	-.28	.17
R's gender	.64**	.22	.63**	.22	.30	.17	.15	.15
H's gender	.08	.12	.10	.12	-.04	.07	-.07	.06
Length of acquaintance	-.00	.01	.00	.01	-.01	.00	-.01	.00
Relationship quality	-.05	.11	-.12	.11	-.14*	.06	-.14*	.06
R receiving person-related help from H	-.04	.09	-.01	.09	.09	.05	.11	.04
Main effects								
R receiving task-related help from H (RTH)	.11	.08	.10	.08	.06	.04	.02	.04
Relative competence (RC)	.08	.06	.07	.06	-.00	.03	-.02	.03
R's status threat from H							.24**	.03
Interaction								
RTH*RC			.09*	.04				
$\chi^2$								
	561.21		556.95		283.77		236.48	
$\Delta\chi^2 (df)$								
	19.58*(9)		4.26*(1)		19.69*(8)		47.29**(1)	
$\Delta R^2$								
	.03		.01		.07		.17	

*Note.*  $N = 255$  dyads from 52 individuals within 14 teams; \*  $p \leq .05$ , \*\*  $p \leq .01$ .  $\Delta R^2$  values were calculated following Snijders & Bosker (2011). For gender, 1 = woman, 2 = man. For class, 0 = class 1, 1 = class 2. SE = standard error, R = help recipient, H = help giver

Table 5  
*Study 2: Means, Standard Deviations, and Correlations among Study Variables*

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Team size	9.53	7.67	-																		
2 Gender	0.62	0.49	-.05	-																	
3 Age	36.24	8.88	.03	-.02	-																
4 Race	0.93	0.25	.04	.06	.14*	-															
5 Organizational tenure	5.89	5.82	-.04	-.08	.50**	.03	-														
6 Relative team tenure	0.18	0.94	.02	.14*	-.10	.05	-.37**	-													
7 Relationship quality	4.33	0.76	.02	.17*	-.07	-.08	-.03	.06	-												
8 Status striving motivation (SSM)	3.06	0.82	.03	-.01	-.22**	.08	-.08	-.002	-.19**	<b>(.93)</b>											
9 Relative competence (RC)	2.91	0.83	.05	.12†	-.12†	-.08	-.21**	.32**	.29**	-.27**	<b>(.80)</b>										
10 Status threat <sub>T1</sub>	1.65	0.66	-.06	.07	-.09	.004	-.05	-.04	-.09	-.02	.07	<b>(.96)</b>									
11 Envy <sub>T1</sub>	1.67	0.63	.004	-.08	-.04	.09	-.05	.03	-.46**	.16*	.18**	.34**	<b>(.82)</b>								
12 Social undermining <sub>T1</sub>	1.10	0.25	-.03	-.12†	-.004	.04	.02	.06	-.48**	.20**	-.22**	.03	.49**	<b>(.67)</b>							
13 Received person-related help	3.06	1.15	.05	.24**	-.11	-.02	-.10	.06	.54**	-.01	.23**	-.10	-.18*	-.15*	<b>(.91)</b>						
14 Received task-related help (RTH)	2.02	1.02	-.04	.16*	-.21**	.06	-.13†	-.06	.38**	.06	.21**	-.004	-.14*	-.16*	.56**	<b>(.93)</b>					
15 RTH*RC	0.18	0.84	-.08	.07	.04	.02	-.03	-.03	-.18*	.09	.001	-.15*	.06	.15*	-.07	.05	-				
16 Status threat <sub>T3</sub>	1.52	0.65	-.02	.07	-.05	.09	-.06	-.02	-.14*	.03	.06	.38**	.28**	.09	.01	.15*	.12†	<b>(.96)</b>			
17 Envy <sub>T3</sub>	1.55	0.61	.06	.01	-.02	.04	-.09	.10	-.34**	.16*	.16*	.21**	.67**	.43**	-.08	-.03	.05	.34**	<b>(.85)</b>		
18 Envy <sub>T3</sub> * SSM	0.08	0.53	.09	-.18*	.09	.02	-.04	.03	-.19**	-.06	-.05	-.13†	.22**	.34**	-.07	-.04	.05	.001	.26**	-	
19 Social undermining <sub>T4</sub>	1.06	0.19	-.07	-.03	-.14*	-.02	-.13†	-.03	-.36**	.12†	-.13†	-.003	.39**	.47**	-.20**	-.12†	.09	.06	.43**	.33**	<b>(.63)</b>

Note.  $N = 213$ ; †  $p \leq .10$ , \*  $p \leq .05$ , \*\*  $p \leq .01$ . Cronbach's alpha coefficients are presented on the diagonal in bold. For gender, 0 = non-woman, 1 = woman. For race, 0 = non-white, 1 = white. For relative team tenure, -1 = "I joined the team earlier than X did", 0 = "We joined the team at about the same time", 1 = "I joined the team later than X did."



Table 6  
*Study 2: Results of Hypothesis Tests*

Dependent variables	Baseline model with control variables						Final model					
	Status threat <sub>T3</sub>		Envy <sub>T3</sub>		Social undermining <sub>T4</sub>		Status threat <sub>T3</sub>		Envy <sub>T3</sub>		Social undermining <sub>T4</sub>	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Predictors												
Control variables												
Status threat <sub>T1</sub>	.57**	.09					.59**	.09				
Envy <sub>T1</sub>			.94**	.09					.93**	.10		
Social undermining <sub>T1</sub>					.27**	.05					.18**	.05
Relationship quality	-.23*	.10	-.15†	.09	-.04*	.02	-.23*	.10	-.15	.09	-.02	.02
Received person-related help	.12†	.06	.08	.05	-.01	.01	.03	.07	.05	.06	-.02	.01
Main effects												
Received task-related help (RTH)							.18*	.08	.02	.06	.01	.01
Relative competence (RC)							.04	.06	.06	.06	-.02	.01
Status threat <sub>T3</sub>									.15**	.05	-.01	.01
Envy <sub>T3</sub>											.06**	.01
Status striving motivation											-.001	.01
Interactions												
RTH*RC							.14*	.06				
Envy <sub>T3</sub> * Status striving motivation											.03*	.01
<i>R</i> <sup>2</sup>	.17		.42		.23		.22		.47		.32	
$\Delta R^2$ (compared to baseline model)							.05		.05		.09	

Note. *N* = 213; SE = standard error; †  $p \leq .10$ , \*  $p \leq .05$ , \*\*  $p \leq .01$ .

Table 7  
*Study 3A: Mean Scores for Manipulation Checks Across Experimental Conditions*

Dependent variables			Manipulation check: Relative competence		Manipulation check: Received task-related help		Manipulation check: Received person-related help		Manipulation check: Received no help	
	More competent coworker	Less competent coworker	More competent coworker	Less competent coworker	More competent coworker	Less competent coworker	More competent coworker	Less competent coworker	More competent coworker	Less competent coworker
Received task-related help	Condition 1	Condition 2	3.66 <sup>23456</sup> (0.55)	2.39 <sup>1356</sup> (0.69)	4.33 <sup>3456</sup> (0.64)	4.18 <sup>3456</sup> (0.70)	2.85 <sup>3456</sup> (1.17)	2.91 <sup>3456</sup> (1.12)	2.59 <sup>3456</sup> (1.14)	2.56 <sup>3456</sup> (1.13)
Received person-related help	Condition 3	Condition 4	3.44 <sup>1246</sup> (0.55)	2.45 <sup>1356</sup> (0.63)	3.27 <sup>12456</sup> (1.11)	2.88 <sup>12356</sup> (1.07)	4.49 <sup>1256</sup> (0.67)	4.45 <sup>1256</sup> (0.64)	2.88 <sup>1256</sup> (1.25)	2.82 <sup>1256</sup> (1.21)
Received no help	Condition 5	Condition 6	3.45 <sup>1246</sup> (0.66)	2.23 <sup>12345</sup> (0.76)	2.69 <sup>12346</sup> (1.14)	2.34 <sup>12345</sup> (0.99)	2.55 <sup>1234</sup> (1.19)	2.49 <sup>1234</sup> (1.08)	4.67 <sup>1234</sup> (0.58)	4.58 <sup>1234</sup> (0.64)

*Note.* Superscripts indicate which conditions are significantly different ( $p < .05$ ) from the focal condition in post hoc comparisons. Condition 1 (N = 238) refers to “received task-related help from a more competent coworker;” Condition 2 (N = 242) refers to “received task-related help from a less competent coworker;” Condition 3 (N = 245) refers to “received person-related help from a more competent coworker;” Condition 4 (N = 247) refers to “received person-related help from a less competent coworker;” Condition 5 (N = 245) refers to “received no help from a more competent coworker;” Condition 6 (N = 246) refers to “received no help from a less competent coworker.”

Table 8  
*Study 3A: Means, Standard Deviations, and Correlations among Study Variables*

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Age	38.11	11.74	-													
2 Gender	0.56	0.50	-.13**	-												
3 Race	0.92	0.27	.12**	.03	-											
4 Manipulation: Received task-related help (RTH)	0.33	0.47	.01	.03	.04	-										
5 Manipulation: Received person-related help (RPH)	0.34	0.47	-.02	-.03	-.06*	-.50**	-									
6 Manipulation: Relative competence (RC)	0.50	0.50	.03	.004	.01	-.002	.001	-								
7 Interaction: RTH*RC	-0.00	0.23	-.06*	.004	-.01	-.002	.001	.000	-							
8 Interaction: RPH*RC	0.00	0.24	.02	.01	.01	.001	.000	.000	-.50**	-						
9 Status threat	2.02	0.84	.03	-.03	.03	.22**	-.16**	.15**	.05*	.002	<b>(.96)</b>					
10 Envy	1.98	0.66	-.05 <sup>†</sup>	.02	.03	.15**	-.11**	.27**	.07**	.03	.65**	<b>(.88)</b>				
11 MC: Received task-related help	3.27	1.21	-.004	.04	-.02	.57**	-.12**	.12**	-.05 <sup>†</sup>	.03	.06*	.06*	-			
12 MC: Received person-related help	3.30	1.31	-.03	.005	-.06*	-.22**	.64**	.004	-.02	.01	-.15**	-.09**	.14**	-		
13 MC: Received no help	3.35	1.37	-.001	.02	-.05*	-.40**	-.26**	.03	-.01	-.003	-.08**	-.05 <sup>†</sup>	-.24**	-.13**	-	
14 MC: Perceived relative competence	2.93	0.87	-.02	.01	-.03	.07*	.01	.67**	.05 <sup>†</sup>	-.07**	.19**	.29**	.16**	.02	-.06*	

*Note.*  $N = 1463$ ; <sup>†</sup>  $p \leq .10$ , \*  $p \leq .05$ , \*\*  $p \leq .01$ . Cronbach's alpha coefficients are presented on the diagonal in bold. For gender, 0 = non-woman, 1 = woman. For race, 0 = non-white, 1 = white. For manipulation of received task-related help (RTH), 0 = received person-related help or received no help, 1 = received task-related help. For manipulation of received person-related help (RPH), 0 = received task-related help or received no help, 1 = received person-related help. For manipulation of relative competence (RC), 0 = less competent helper/interaction partner, 1 = more competent helper/interaction partner.

Table 9

*Study 3B: Means, Standard Deviations, and Correlations among Study Variables*

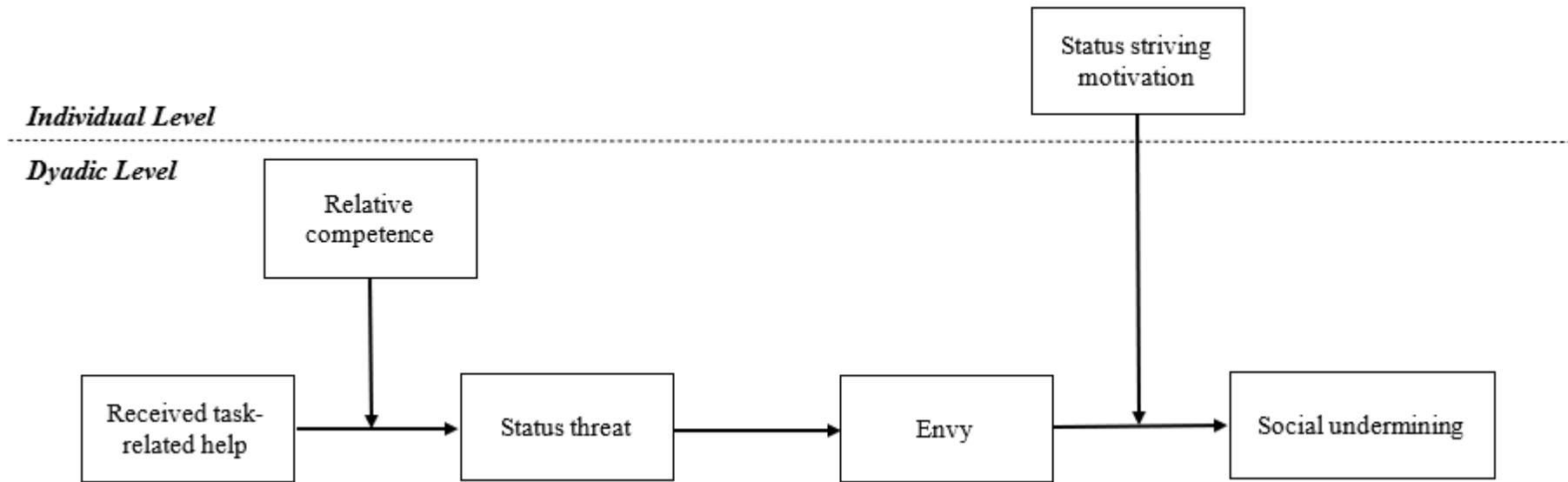
Variables	M	SD	1	2	3	4	5	6	7	8
1 Age	36.46	9.85	-							
2 Gender	0.50	0.50	-.23**	-						
3 Race	0.92	0.28	.10*	-.01	-					
4 Manipulation: Envy	0.51	0.50	-.03	-.05	.08*	-				
5 Status striving motivation (SSM)	3.10	0.77	-.19**	-.06	-.01	.07 <sup>†</sup>	<b>(.91)</b>			
6 Interaction: Envy * SSM	0.03	0.38	.003	-.02	.001	-.003	-.07 <sup>†</sup>	-		
7 Social undermining	1.38	0.48	-.05	-.13**	.02	.25**	.20**	.07	<b>(.91)</b>	
8 MC: Perceived envy	2.30	0.83	-.14**	.01	.03	.55**	.24**	.02	.55**	<b>(.92)</b>

Note.  $N = 579$ ; <sup>†</sup>  $p \leq .10$ , \*  $p \leq .05$ , \*\*  $p \leq .01$ . Cronbach's alpha coefficients are presented on the diagonal in bold.

MC = manipulation check. For gender, 0 = non-woman, 1 = woman. For race, 0 = non-white, 1 = white.

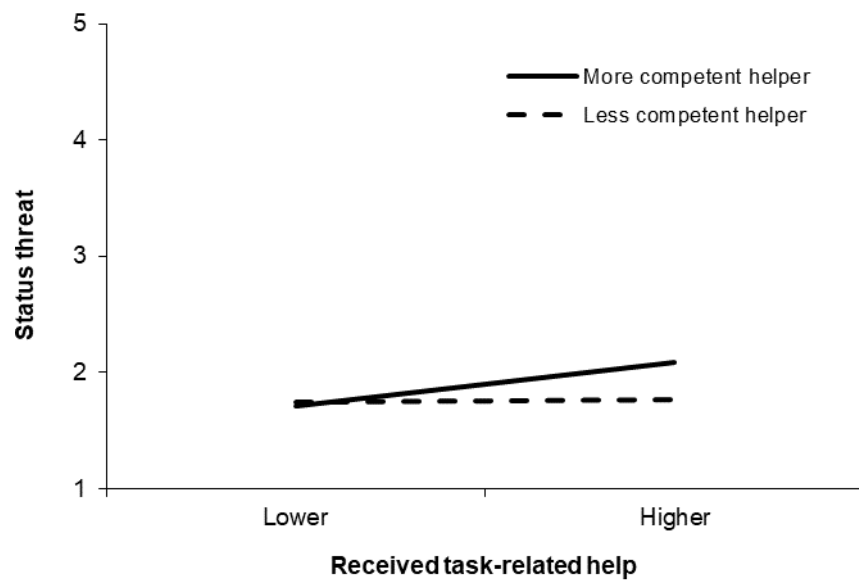
For Manipulation: Envy, 0 = low envy, 1 = high envy.

Figure 1  
*Proposed Theoretical Model*

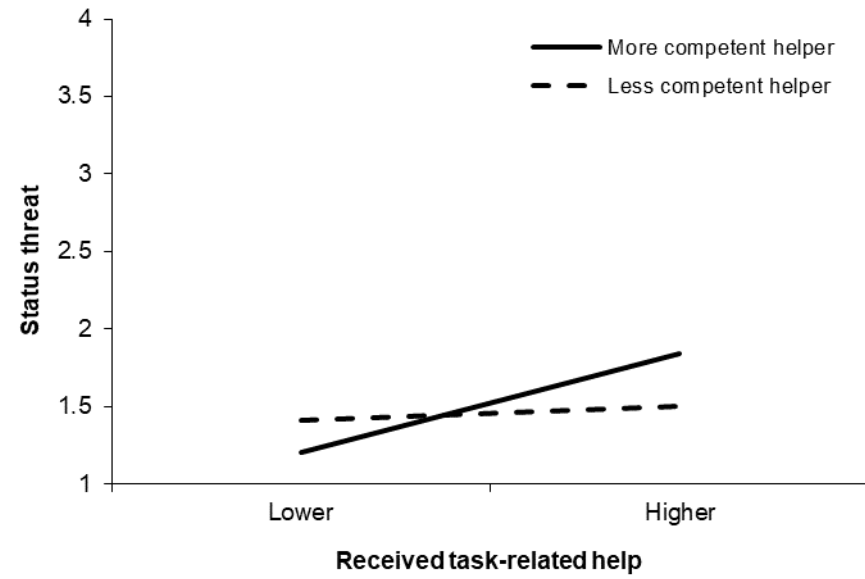


*Note.* Variables at the dyadic level refer to help recipient's perceptions of, and emotion and behavior toward help giver.

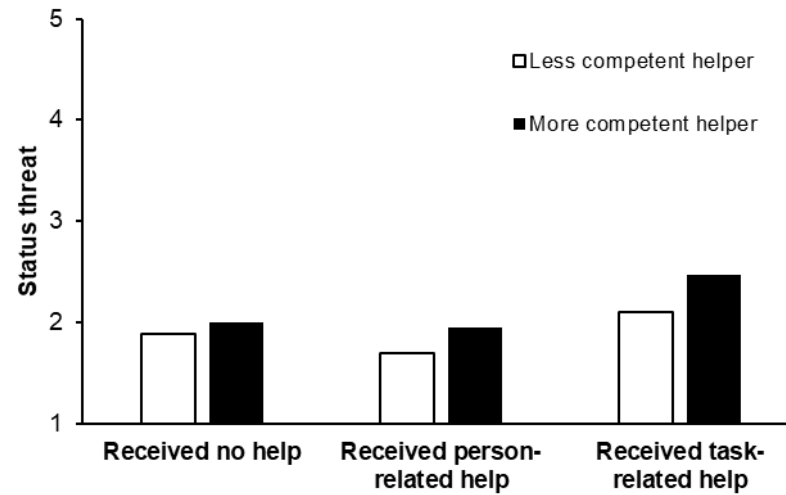
Figures 2  
*Interaction between Receiving Task-related Help and Relative Competence on Status Threat*



**Figure 2a Study 1**

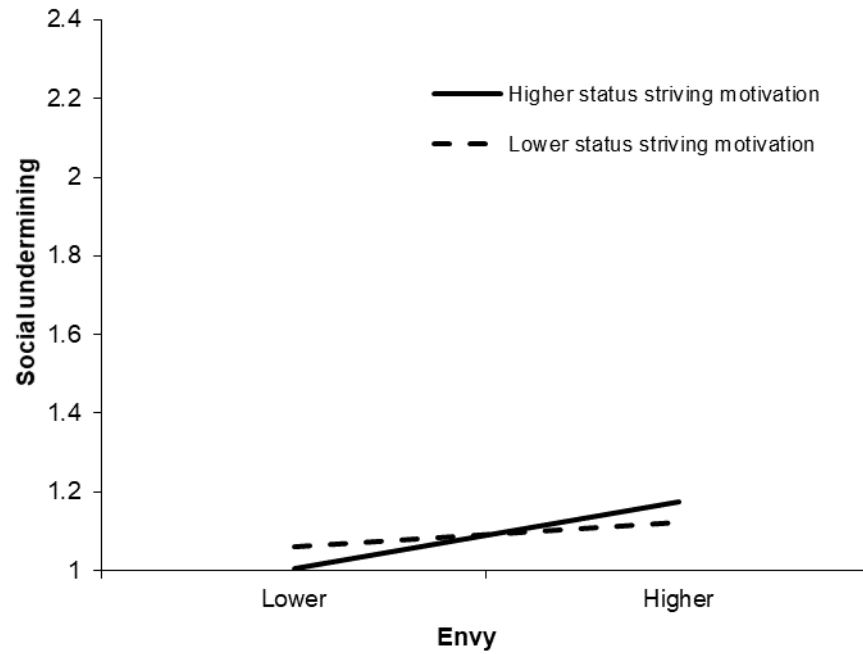


**Figure 2b Study 2**

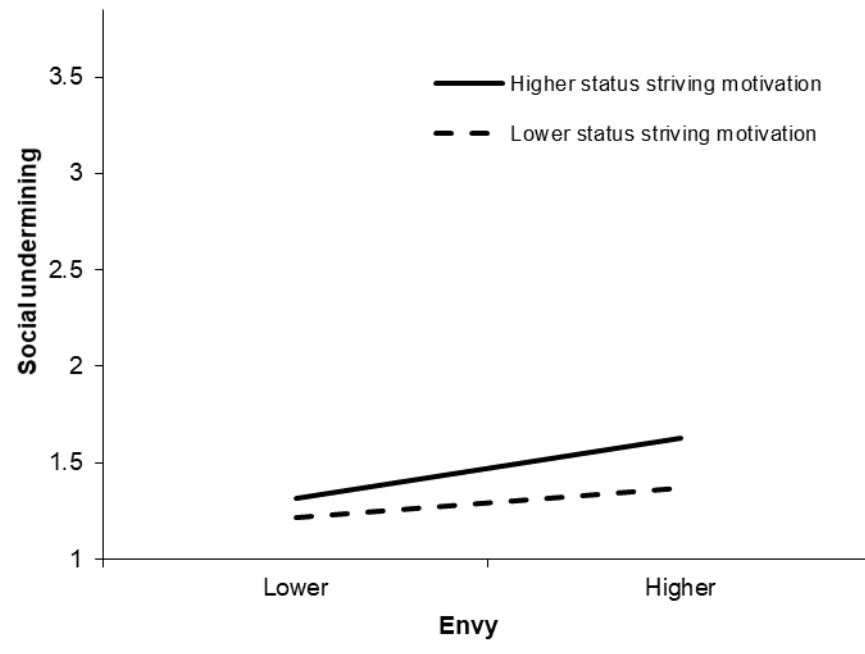


**Figure 2c Study 3A**

Figures 3  
*Interaction between Envy and Status Striving Motivation on Social Undermining*



**Figure 3A Study 2**



**Figure 3B Study 3B**

Appendix A. Study Measurements and Anchors

Variable	Study 1	Study 2	Study 3A	Study 3B
Received task-related help	<p>Anchor: 1-5 (1 = <i>never</i> to 5 = <i>all the time</i>)</p> <p>(1) X took on extra responsibilities in order to help me when things got demanding at work.</p> <p>(2) X helped me with difficult assignments.</p> <p>(3) X assisted me with heavy workloads in the team.</p> <p>(4) X helped me when I was running behind in my work activities.</p> <p>Note: Items referred to study or coursework (instead of work) in Study 1.</p>		<p>Manipulation check:</p> <p>Anchor: 1-5 (1 = <i>strongly disagree</i> to 5= <i>strongly agree</i>)</p> <p>(1) This coworker provides help with my work.</p> <p>(2) This coworker listens to my frustration about the client.</p> <p>(3) This coworker joins me for a coffee break.</p>	N.A.
Relative competence	<p>Anchor: 1-5 (1 = <i>X is much less efficient/capable/skilled than I am</i> to 5 = <i>X is much more efficient/capable/skilled than I am</i>)</p> <p>(1) How is X's work efficiency compared to yours?</p> <p>(2) How is X's capability at work compared to yours?</p> <p>(3) How is X's work skills compared to yours?</p> <p>Note: Items referred to study (instead of work) in Study 1.</p>		<p>Manipulation check:</p> <p>Same as Study 2.</p>	N.A.
Status threat	<p>Anchor: 1-5 (1 = <i>strongly disagree</i> to 5= <i>strongly agree</i>)</p> <p>(1) X threatens my status in our team.</p> <p>(2) X threatens my prominence in our team.</p> <p>(3) X threatens my position of prestige in our team.</p> <p>Note: Item 3 was not included in Study 1 because its Chinese translation is the same as Item 2. In Study 3A, items started with "This coworker poses a threat to my..."</p>			N.A.
Envy	<p>Anchor: 1-5 (1 = <i>strongly disagree</i> to 5= <i>strongly agree</i>)</p> <p>(1) I feel some hatred toward X.</p> <p>(2) I have a grudge (resentment, bitterness) against X.</p> <p>(3) I feel rancor (resentment, ill will) against X.</p> <p>(4) I feel bitter toward X.</p>			<p>Manipulation check:</p> <p>Same as Studies 1, 2, and 3A</p>

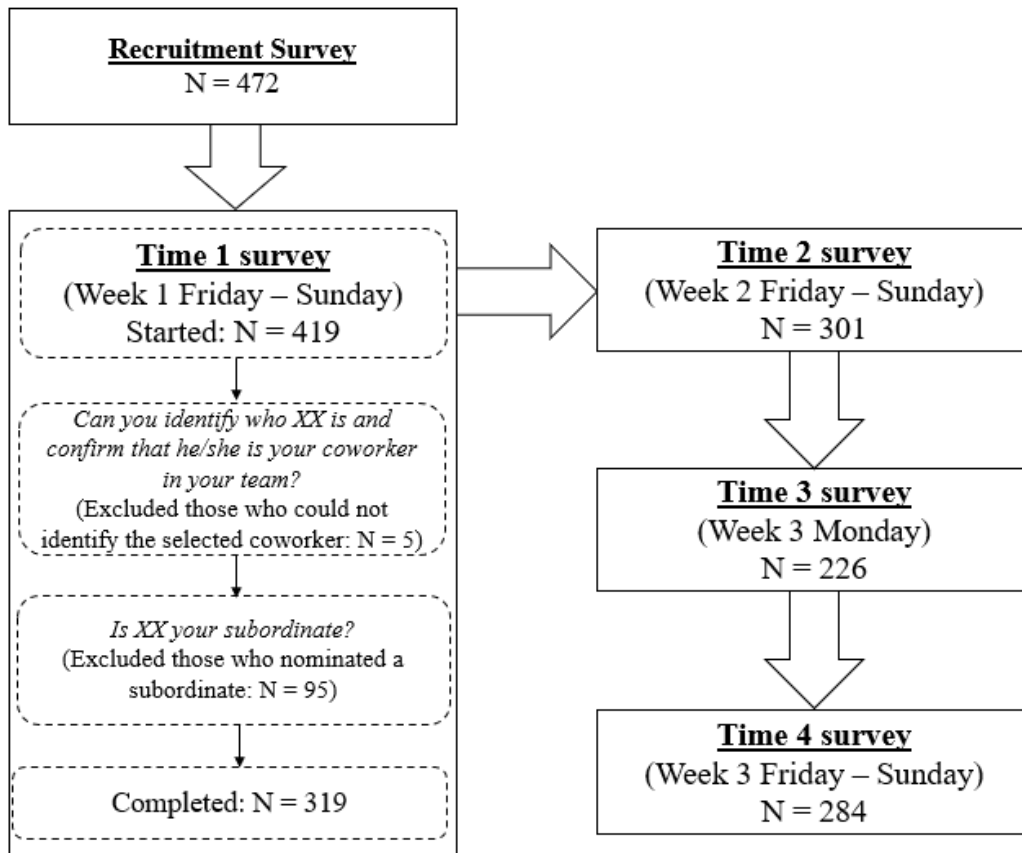


	<p>(5) I feel gall (irritated, annoyed) toward X.  (6) I have a desire to have what X has.  (7) I feel lacking some of the things X has.  (8) X has things going better for him/her than I do.  (9) I feel envious toward X.</p>			
Status striving motivation	N.A.	<p>Anchor: 1-5 (1 = <i>strongly disagree</i> to 5= <i>strongly agree</i>)  (1) I frequently think about ways to advance and obtain better pay or working conditions.  (2) I focus my attention on being the best performer in my team.  (3) I set personal goals for obtaining higher performance than anyone else.  (4) I spend a lot of time contemplating ways to get ahead of my coworkers.  (5) I often compare my work accomplishments against coworkers' accomplishments.  (6) I never give up trying to perform at a level higher than others.  (7) I always try to be the highest performer.  (8) I get excited about the prospect of being the most successful one in my team.</p>	N.A.	Same as Study 2

		<p>(9) I feel a thrill when I think about getting a higher status position at work.</p> <p>(10) I am challenged by a desire to perform my job better than my coworkers.</p> <p>(11) I get worked up thinking about ways to become the highest performer in the team.</p>		
Social undermining		<p>Anchor: 1-5 (1 = <i>never</i> to 5 = <i>all the time</i>)</p> <p>(1) I intentionally insulted X.</p> <p>(2) I intentionally spread rumors about X.</p> <p>(3) I intentionally criticized the way X handled things on the job in a way that was not helpful.</p> <p>(4) I intentionally gave X the silent treatment.</p> <p>(5) I intentionally talked bad about X behind his/her back.</p>	N.A.	<p>Q: How likely would you intentionally engage in the behaviors below toward Chris?</p> <p>Anchor: 1-5 (1 = <i>extremely unlikely</i> to 5 = <i>extremely likely</i>)</p> <p>(1) Insult Chris.</p> <p>(2) Spread rumors about Chris.</p> <p>(3) Talk bad about Chris behind his/her back.</p> <p>(4) Criticize the way Chris handles things on the job in a way that is not helpful.</p> <p>(5) Give Chris the silent treatment.</p> <p>(6) Delay work to make Chris look bad or slow him/her down.</p> <p>(7) Belittle Chris or his/her ideas.</p> <p>(8) Hurt Chris' feelings.</p> <p>(9) Not defend Chris when people speak poorly of him/her.</p> <p>(10) Not give Chris as much help as I promise.</p> <p>(11) Give Chris incorrect or misleading information about the job.</p> <p>(12) Let Chris know I do not like him/her or something about him/her.</p>

				(13) Compete with Chris for status and recognition.
Received person-related help	Anchor: 1-5 (1 = <i>never</i> to 5 = <i>all the time</i> ) (1) X listened to me when I had to get something off my chest. (2) X took time to listen to my problems and worries. (3) X took a personal interest in me. (4) X showed concern and courtesy toward me, even under the most trying business situations.		See the manipulation check for received task-related help above.	N.A.
Relationship quality	Anchor: 1-5 (1 = <i>very bad</i> to 5 = <i>very good</i> ) (1) How would you describe your working relationship with X?		N.A.	N.A.
Attention Check	N.A.	(1) Please choose "Agree" for this item.	(1) Please choose "Strongly Agree" for this item. (2) Please skip this item.	(1) Please choose "Agree" for this item.
Comprehension Check	N.A.	N.A.	N.A.	Did Chris receive promotion in the scenario? (a) Yes, senior management decided to promote Chris. (b) No, senior management decided to promote another person. (c) No, senior management decided to promote me.

Appendix B. Flowchart of Study 2 data collection



## Appendix C. Study 3A Scenario

Please imagine you are working in a media agency and you just finished a meeting with a client. *[insert manipulation of relative competence, then manipulation of the type of help received here]*

### **Manipulation of relative competence**

***More competent coworker:*** After returning to your office, you run into a coworker who is usually more organized and efficient than you are at work.

***Less competent coworker:*** After returning to your office, you run into a coworker who is usually less organized and efficient than you are at work.

### **Manipulation of the type of help received**

***Received task-related help:*** You then ask this coworker for help to finish the report. This coworker says, "Okay, I will help you put together the report for this client, to make sure that our recommendations are evidence-based. We should keep the report streamlined and easy to follow."

***Received person-related help:*** You then ask this coworker to hear you out and share your frustrations about the client. This coworker says, "I am so sorry to hear that. This client gave me a hard time before and I was very frustrated for days, so I totally understand your feeling. I am always here for you if you need a listening ear. Just let me know."

***No help received:*** You then ask this coworker to join you for a coffee break. This coworker says, "Sure, let's go. We just heard that you closed the deal with our largest client today, awesome! With this deal, our team will win the best team award this year for sure."

## Appendix D. Study 3B Scenario

Imagine yourself in the following scenario:

You work at "S. K. Franklins," a large IT company that provides cloud platform hosting and consulting services. You are a sales executive, working at company headquarters in the sales department. Your primary responsibility is to help S. K. Franklins generate net new business as well as maintain and grow relationships with existing accounts.

You and Chris are working on the same team, at S. K. Franklins, and both of you are on the same "career track" (i.e., both of you have similar interests and opportunities).

A few months ago, a position opened up that you find very attractive. It fits perfectly with your long-term goals and would increase your annual salary by a significant amount. You know Chris has also expressed interest in the position.

Three months after the position opened up, the division head calls you into his office. At this meeting, you learn that you, Chris, and three other candidates were considered for the promotion. *[insert manipulation of envy here]*

### **Manipulation of envy:**

***High envy:*** You also learn senior management decided to give the promotion to Chris, whereas you came in second. The promotion is effective in one month.

***Low envy:*** You also learn senior management decided to give the promotion to one of the other three candidates, whereas you came in second and Chris came in third. The promotion is effective in one month.