NORWEGIAN BUSINESS SCHOOL

Follower jealousy at work: A test of Vecchio's model of antecedents and consequences of jealousy

Abstract

The present study tests the validity of Robert P. Vecchio's seminal work on antecedents and consequences of jealousy. Specifically, we examine whether antecedents such as in-group status, supervisory considerateness, and supervisory differentiation of subordinates are associated with jealousy. In addition, we examine whether jealousy is associated with the outcome variable of social loafing. Leaders ($n = 73$) and their followers ($n = 303$) working in business organizations in Norway contributed data. Multilevel analyses showed that a high-quality working relationship with one's supervisor was inversely related to reports of jealousy. In addition, supervisors who displayed high levels of considerateness, for example by providing followers with positive emotional support, were better able to reduce subordinate jealousy. This is a novel observation since previous research failed to demonstrate such a relationship. Finally, jealousy was positively associated with social loafing, suggesting that jealous followers engaged in an active counter-productive resistance response. The present study contributes to the extant literature by identifying unexamined antecedents of jealousy and a dysfunctional behavioral response to jealousy in the form of social loafing in the workplace.

Keywords: jealousy, in-group status, supervisory considerateness, supervisory differentiation, social loafing.

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Introduction

For decades, researchers have explored antecedents and consequences of jealousy in family and romantic relationships (Theiss & Salomon, 2006; Aylor & Dainton, 2001; Bevan & Hale, 2006; Pines & Friedman, 1998). Typically, jealousy involves three individuals, one of whom fears losing someone to another (Smith & Kim, 2007). Social scientists have contributed significantly to understanding the negative impact of jealousy on individuals and relationships, studying feelings of anger, fear, sadness or inferiority to others and decreased self-esteem (Mathes, Adams, & Davies, 1985; Pines & Aronsen, 1983; Salovey & Rodin, 1994). But workplace jealousy, as opposed to intrapersonal jealousy, is defined by Robert P. Vecchio (1995, p. 203) as "a pattern of thoughts, emotions, and behaviors that results from the loss of self-esteem and/or the loss of outcomes associated with a relationship." The threat of loss involves the intrusion of a perceived rival with the potential to undermine a valued relationship. As such, workplace jealousy is triadic in nature, with three individuals involved: the focal employee, the rival, and the valued target. Although the available literature may offer some insight as to likely responses to the experience of workplace jealousy, it does not address which particular reaction is most likely to occur (Vecchio, 1995). It seems that work settings are sufficiently unique to warrant individual treatment, and the assumption that jealousy is much the same regardless of social context is probably not valid. However, any study specifically focused on the role of jealousy in organizations is rare. We are aware of only five empirical studies examining the dynamics of jealousy and outcomes in organizations (Vecchio, 1999; Vecchio, 2000; Kim, Jung, & Lee, 2013; Gunalan & Ceylan, 2014; Wang & Sung, 2016). The Vecchio studies (1999; 2000) were designed to test the validity of his theoretical framework on antecedents and consequences of

jealousy. Results of these studies were partially supportive of the predicted relationships identified by the model. Later studies also applied variables that were included in Vecchio's model. Kim, Jung, and Lee (2013) found jealousy to moderate the relationship between the leader-member exchange (LMX) and deviant behaviors, while Gunalan and Ceylan (2014) found that employee jealousy was positively associated with turnover intention consistent with predictions deduced from Vecchio's model. Finally, Wang and Sung (2016) found jealous followers were less inclined to be involved in prosocial activities.

While partial support has been obtained for Vecchio's (1995) model, further empirical examination is needed. LMX theory posits that while some followers develop a close working relationship with their leader, others have a deprived connection with that same leader. Hence one purpose of the present study is to contribute to the jealousy literature by examining whether the unique qualities of social exchange that develop between each individual and their supervisor influence employees' perception of jealousy. We examine whether low quality LMX relationships enhance the manifestation of jealousy. In addition, Vecchio's model predicts that supervisor considerateness, characterized by supervisory friendliness, openness, and availability, with concern for followers' well-being and needs, should be negatively associated with follower jealousy. However, empirical testing has been inconsistent, with one study showing a negative relationship with jealousy (Vecchio, 2000), and one study failing to demonstrate such a relationship (Vecchio, 1999). One possible explanation for not obtaining support in Vecchio's (1999) study, where data was collected from a private hospital located in the Midwestern US, is that hospital leaders were managing a large span of supervision with 27.55 as mean and 16.85 as SD, thus limiting their ability to give equal and supportive consideration to all their followers. Accordingly, we examine whether 'span of supervision,' the number of subordinates formally and directly supervised by a given manager (Schyns, Maslyn, & Weibler, 2010), has a moderating effect on the consideration/jealousy association, and to see whether the context determinant 'span of supervision' represents a condition under which supervisor

considerateness inhibits jealousy in the workplace. Furthermore, there is a paucity of research examining the effects of differentiation with regard to the feelings of employees (Bolino & Turnley, 2009). Differentiation may represent a means for best utilizing the knowledge, skills, and abilities of members. On the other hand, differentiation may lead to perceptions of unfairness or unhealthy factions of members which result in lower group cohesiveness and productivity (Martin, Thomas, Legood, & Russo, 2017). Accordingly, we examine whether preferential treatment of subordinates relates to jealousy, as differentiation implies the leader may prefer some followers over others, thus generating jealousy among subordinates. Finally, Vecchio (2000) suggests that coping responses to jealousy represent an important avenue for future research, as there is little empirical evidence on coping responses as a reaction to jealousy. Vecchio (1999; 2000), and Gunalan and Ceylan (2014), focused on propensity to quit, and found it to be positively associated with jealousy. However, research in family and romantic relationships has found direct and aggressive expression, including arguing and sarcasm, to be positively related to jealousy (Guerrero et al., 1995). Thus a more active counter-productive response to experienced jealousy has yet to be formulated within the organizational context. We have chosen the concept of 'social loafing,' "a condition in which workers reduce or withhold effort on a group task" (Bass 2008, p. 1216), to contribute to our understanding of how jealousy prompts dysfunctional behavior that harms individuals and groups in organizations.

Taken together, the present study was designed to further our understanding of jealousy by including untested variables adopted from Vecchio's (1995) theoretical framework. His theory integrates existing organizational theories that relate to negative emotions such as jealousy, and identifies specific, testable hypotheses involving individual influences, and how they relate to behavioral variables such as social loafing. Building on this, the present study aims to advance the empirical literature on jealousy in the workplace through focusing on unexamined antecedents of jealousy and dysfunctional behavioral responses. Furthermore, this study also focuses on a contextual determinant that has not been examined as

a potential catalyst for jealousy: namely, span of supervision. In doing so, we also answer the call for more research into the intermediate linkages between jealousy, antecedents, and outcomes (for example, from Kim, Jung, and Lee, (2013) and Wang and Sung (2016). Furthermore, applying data from profit-oriented firms may allow us to see whether Vecchio's model of jealousy is valid in this type of setting. The business context is particularly interesting because it is characterized by more intense competition for resources, status and wealth than not-for-profit organizations.

Theory and Hypotheses

In 1995, Vecchio introduced his seminal model of the nature and dynamic of employee workplace jealousy arising from precipitating events that represent either an actual or potential threat. Whether or not an event is interpreted as a threat involves a cognitive appraisal of loss that is expected to be influenced by (1) individual differences attributes, such as self-monitoring, in-group status, self-esteem, and OCB, and (2) work unit attributes, such as job autonomy, supervisory considerateness, and supervisory differentiation of subordinates (Vecchio, 1995). Moreover, jealousy is associated with a set of personal response dependent variables both affective and behavioral in kind. According to Vecchio (1995), the magnitude of jealousy is directly related to the magnitude of affective response, which comprises anger and resentment (primary response) in conjunction with reduced job satisfaction, fear, sense of rejection, and distress (secondary response). Jealous individuals experience a reduced sense of self-esteem and control and may react with denial/avoidance, seeking emotional support, or other coping strategies.

Vecchio (1995) applies the concept of LMX to identify how in-group status may influence jealousy. LMX is founded on vertical dyad linkage theory, where leaders are expected to treat each follower individually according to their various needs, personalities, attitudes and behaviors (Graen & Uhl-Bien, 1995). LMX theory posits that some followers develop a high-quality LMX relationship with their direct

report based on mutual trust, respect, and obligation, while others have a low-quality working relationship with the same leader based solely on a contractual work/pay basis. They experience less socio-emotional support from their leader. In addition, their leader shows less trust and does not respond positively when they experience setbacks. Having a high-quality working relationship with one's supervisor (i.e., higher scores on the LMX scale) should therefore be inversely related to reports of jealousy, while followers in low-quality working relationships should have increased negative emotional responses and jealousy be more likely to arise. Several social scientists seem to support this notion by arguing that followers in lower-quality LMX relationships would be jealous of individuals in higher-quality LMX relationships (e.g., Lee, 2001). Similar notions have been presented by Tse, Dasborough, and Ashkanasy (2005), who argue that followers in low-quality LMX relationships can experience negative emotional responses towards their co-workers in more beneficial high-quality LMX relationships. This leads to our first hypothesis:

> H1: *Employees who are members of a supervisor's in-group (operationalized as high LMX) will experience less jealousy than members of an out-group (operationalized as low LMX).*

According to Vecchio (1995), lack of supervisory considerateness can affect feelings of jealousy. Supervisory considerateness includes involving followers in decision-making, listening to the problems of the follower (job or non-job related), asking for suggestions, encouraging the follower, praising good performance, taking personal interest in employees, providing feedback, and listening to subordinate opinions. According to Vecchio's (1995) model, supervisors who display high levels of consideration instigate less negative emotion in their employees. Considerate supervisors should be better able to reduce follower fears of loss or threat. Leader considerateness, as conceptualized within the Ohio State University framework (Bass, 1990), should also tap sensitivity to fairness and equal treatment. Hence, leader

considerateness may reduce follower jealousy by encouraging a greater sense of inclusivity in unit

activities. Finally, supervisory warmth and supportiveness may help to alleviate concerns of reward

allocation influenced by rivals and prevent feelings of jealousy among followers. Even though we expect a

negative relationship between supervisor considerateness and jealousy, highly considerate leaders may

experience challenges in offering followers support in larger groups than in smaller work groups. As stated

by Antonakis and Atwater (2002), a leader's ability to influence followers fluctuates with span of control.

With larger span of control, leaders can appear distant and have limited interpersonal contact with

followers. Accordingly, we hypothesize:

> H2: *The negative association between supervisor considerateness and follower jealousy is*
>
> *attenuated by span of supervision.*

Another supervisory attribute in Vecchio's (1995) model is supervisory differentiation of

subordinates. In this respect, LMX theory serves as a useful framework. According to Henderson et al.

(2009, p. 517) the main premise of LMX theory is "that leaders develop differential relationships among

the subordinates who report directly to them in their work groups—a practice referred to as LMX

differentiation." Specifically, they define LMX differentiation as "a process by which a leader, through

engaging in differing types of exchange patterns with subordinates, forms different quality exchange

relationships to evaluate the dynamics and outcomes of their own dyadic relations in comparison to those

of other leader–subordinate dyads in the group (ranging from low to high) with them" (p. 519). As such,

LMX differentiation involves some form of within-group variability in the nature and quality of the leader-

member relationships, which are likely to be associated with follower comparisons of their own LMX

status to that of others (and not just evaluations of the quality of their own LMX relationship). According

to Vecchio's model, supervisory differentiation of subordinates should generate jealousy among

subordinates. Differentiation of followers implies that the leader may give preferential treatment, such as pay increases, choice job assignments, or promotions to particular followers (see Vecchio, 1995; 2000). In addition, preferential treatment of followers means that some followers are given more opportunities to contribute to decision-making. They may feel more confident about their position within the group and less sensitive to potential threats (Vecchio, 1995). In contrast, other followers may discover they receive comparatively less reward and support, arousing greater fear and competitiveness among subordinates. According to Vecchio (2000), competition should enhance the perception of threat, which can generate strong and sometimes dysfunctional emotions such as jealousy. Similar arguments have been presented by Sparrowe and Liden (1997), who maintain that differentiation may lead some employees to feel disenfranchised, and Yukl and Van Fleet (1992) argue that preferential differentiation is likely to create feelings of resentment among those excluded. In addition, members' feelings about differentiation could have important implications in terms of their own attitudes and performance and for the effective functioning of the larger work group (Boies & Howell, 2006; Ford & Seers, 2006; Maslyn & Uhl-Bien, 2005). Therefore, we can reasonably expect that supervisor differentiation will be positively associated with jealousy:

H3: *Supervisory differentiation of subordinates is positively associated with jealousy.*

Finally, we turn to behavioral responses to jealousy. According to Vecchio (1995), envious individuals may feel compelled to make some form of response to reduce the level of perceived threat and thereby reduce their stress and negative feelings. The choice of response is the result of a complex decision-making process influenced by constraints set by the individual, the unit, and the culture, as well as by estimates of the likelihood of effectiveness. Previous research has focused on affective responses to

jealousy, such as negative work affect and decreased self-esteem (Vecchio, 1999; 2000). In addition, researchers have focused on propensity to quit, as jealousy may provide a strong source of influence on an employee's openness to quitting, and a search for alternative employment represents a form of coping response (Vecchio, 2000). The present study focuses on a more active counter-productive resistance response to jealousy, namely social loafing. According to Nelson and Campbell Quick (1997) some scholars argue that "social loafing, or free riding, is rational behavior from the individual's standpoint to restore an experience of inequity" (p. 253). Nonetheless, research has clearly shown that social loafing is a question of motivation and effort. Followers high on achievement motivation are less likely to engage in social loafing (Karau & Hart, 1998; Bonaccio, 2017). However, we hypothesize that jealous followers experience a reduction in work motivation and consequently withhold effort. This hypothesis is also founded in the affective events theory of Weiss and Cropanzano (1996), which posits that undesirable workplace events can result in negative emotional affect which may overwhelm the individual involved. Analogous to that, we expect followers experiencing jealousy to limit their personal effort and contribution to the firm. By engaging in social loafing, jealous subordinates may even sacrifice personal beneficial outcomes in order to harm and weaken the organization and the supervisor. This leads to our final hypothesis:

H4: *Follower jealousy will be positively associated with social loafing.*

Method

Participants and Procedures

Data were collected from followers and their supervisors at medium to large business organizations located in Norway. All organizations were traditional in nature, with a hierarchical organizational structure

and work groups that were functional and leader-managed. Data were collected using questionnaires distributed electronically and separately to supervisors and subordinates. Via the electronic system 'Confirmit' we sent each respondent a unique access link to the questionnaires. A covering letter informed respondents that data would be used solely for academic research purposes, with the goal of better understanding various aspects of the leader-follower relationship. The respondents were assured of the confidentiality of their responses and that aggregate data only would be used. Respondents were not compensated for participation in the survey, but were given the opportunity to complete the survey during work hours. The employees were instructed to complete the questionnaire individually without discussion with others. Responses to the items were collected electronically. A total of 303 full-time respondents participated (response rate was approximately 81%). Of the followers, 15.9% were female and 84.1% were male. The mean age was 44.3 (SD = 10.11) and the reported average education was 13.19 (SD = 2.40) years. Of the 73 leaders, 81.3 % were male, 18.7% female. Their mean age was 42.72 (SD = 8.50) with a mean educational level of 14.54 years (SD = 2.82). They were employed as shift supervisors, team leaders, executive directors, sales directors, service center managers, managing directors, marketing supervisors, and logistics managers.

Measures

Supervisor assessments. To avoid same source bias, the supervisors were asked to rate each of their followers' *social loafing*, which was measured using a four-item scale developed by Kidwell and Robie (2003). Sample items: "This group member takes it easy if others are around to do the work;" "This group member does <u>not</u> do a fair share of the group's work;" anchors: 1 = Very inaccurate, 7 = Very accurate.
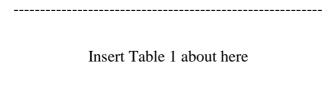
Subordinate assessments. *Member of supervisor's in-group*, was measured with the seven-item version of the Leader-Member Exchange (LMX 7) scale (Graen & Uhl-Bien, 1995). Sample item: "My

supervisor has enough confidence in me that he/she would defend my decisions if I were not present to do so;" anchors: 1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly agree. Leader Behavior Description Questionnaire (LBDQ) XII (Stogdill, 1963) was used for measuring *supervisor supportiveness*. A four-item scale composed of items taken from the LBDQ-XII instrument was employed - (sample item: "My supervisor's relations with me can be described as friendly and approachable;" "My supervisor values my advice;" anchors: 1 = Never, 2 = Seldom, 3 = Occasionally, 4 = Often, 5 = Always). A six-item measure of employee *jealousy* (Vecchio, 2000) was used. Sample items: "When my supervisor pays attention to other employees I feel irritated;" "I sometimes worry that my supervisor will feel that another employee is more competent than I;" anchors: 1 = Never, 2 = Rarely, 3 = Seldom, 4 = Occasionally, 5 = Often. *Supervisory differentiation of subordinates.* Following Ma and Qu (2010), we created a supervisory differentiation measure by using the standard deviation of supervisor rated LMX within groups. As such, supervisory differentiation was operationalized as a group-level phenomenon, where a higher standard deviation represents a greater dispersion of LMX quality in the respective groups. The instruments applied in the present study were originally developed in the English language. Hence, we used a translation-back translation conversion process to ensure equivalence of item meaning. Also, this translation process was used to avoid the risk of misunderstanding or misconception (Brislin et al., 1973; Cavusgil & Das, 1997). Finally, we controlled for the *age*, *gender* and *education* of the follower, which could provide alternative explanations for the relationships outlined in our hypotheses, since for example age among females has been found to be negatively related to jealousy (Seiffge-Krenke & Burk, 2012). All control variables were measured by self-reports.

Results

Prior to testing our hypotheses, we performed a preliminary confirmatory factor analysis (CFA) on a five-factor model representing in-group status (follower-reported LMX), leader consideration, jealousy,

social loafing, and supervisory differentiation of subordinates (supervisor-rated LMX). This was done in order to test the extent to which the items mirrored the underlying concept they were supposed to measure. The results of this CFA model indicated good fit with the data: χ^2 [242] = 306.74, p < 0.01; RMSEA = 0.026; CFI = 0.99; NNFI/TLI = 0.98. However, a closer inspection of the factor loadings revealed one non-significant factor loading (λ = .06, *n.s.*) relating to the reversed jealousy item ("If my supervisor were to single out another employee for recognition, it would make me feel good"). To ensure an adequate measurement model, this item was deleted. The descriptive statistics and intercorrelations among the study variables are presented in Table 1. All factors showed high internal consistency, with Cronbach's alphas ranging from .71 to .88. As can be seen in Table 1 and in line with our expectations, in-group status (r = -.22, p < .01) and consideration (r = -.20, p < .01) were negatively associated with jealousy. In addition, jealousy was positively associated with social loafing (r = .15, p < .01). However, supervisory differentiation (r = .04, *n.s.*) was not significantly related to jealousy (although it was in the predicted direction).

Insert Table 1 about here

Hierarchical Linear Modeling (HLM) analyses

Due to the nested nature of the data (followers nested within leaders), we tested our hypotheses using hierarchical linear modeling (HLM). Preceding the analyses we estimated unconditional models for the dependent variables (social loafing, jealousy). Although the unconditional model for jealousy did not reveal significant between-group variability in subordinate ratings of jealousy (τ_{00} = .00, *n.s.*), the results of the unconditional model for social loafing suggested significant between-group variability in subordinate

ratings of social loafing (τ_{00} = .34, p < .01). Furthermore, in support of our decision to employ HLM, the intraclass correlation coefficient (ICC) for social loafing (ICC = .17), suggested that 17% of the variability in social loafing was attributable to between-group variability. Table 2 shows the HLM analyses used to test Hypothesis 1. In support of Hypothesis 1, we observed a negative relationship between followers' perception of in-group status and jealousy (γ = -.17, p < .01). Table 3 shows the HLM analyses used to test Hypotheses 2 and 3. As can be seen, we observed a significant relationship between leader considerateness and jealousy (γ = -.14, p < .01). However, the non-significant interaction term did not show that the relationship was moderated by span of supervision. Accordingly, we did not receive support for Hypothesis 2. Furthermore, contrary to our expectations, we did not uncover a significant relationship between supervisory differentiation and jealousy (γ = -.00, *n.s.*). Hence, Hypothesis 3 was not supported. Finally, as can be seen in Table 4, and in support of Hypothesis 4, there was a positive relationship between jealousy and social loafing (γ = .48, p < .01).

Insert Table 2, Table 3, and Table 4 about here

Discussion

With the purpose of furthering our knowledge of jealousy, the present study was designed and conducted with guidance provided by Vecchio's model. Specifically, two sets of influences (individual differences and work unit attributes) were used to identify variables that might be associated with jealousy: in-group status, supervisor considerateness, and supervisory differentiation of subordinates. In addition, social loafing was applied as a likely coping response to jealousy. In a sample of leaders and their followers from profit-oriented firms, we found that jealousy was associated with in-group status,

supervisory considerateness and social loafing. As such, our study contributes to the theoretical extension of the research on jealousy by identifying unexamined antecedents of jealousy and a dysfunctional behavioral response to jealousy in the workplace. In this section we outline the theoretical and practical implications of the results, present the limitations of our study, and suggest directions for future research.

Theoretical and practical implications

As suggested in Hypothesis 1, our findings supported the contention that members of a supervisor's in-group were less likely to experience jealousy. Although tentative, this may indicate that in-group members were less vulnerable to potential threats to their relationship with their supervisor relative to other work group members. Several social scientists seem to support our finding by arguing that followers in lower-quality LMX relationships would be jealous of individuals in higher-quality LMX relationships (Lee, 2001; Tse, Dasborough, & Ashkanasy, 2005). In addition, our finding seems to complement research on LMX. Bolino and Turnley (2009) state that most research on LMX has been concerned with its outcomes, and a number of studies indicate that LMX is associated with positive outcomes like higher levels of job satisfaction, organizational commitment, less role conflict, higher objective performance, and better performance ratings from their supervisors. In our study, we focus on another type of outcome, the dysfunctional emotion of jealousy, and find LMX has a positive influence on the destructive dynamic that occurs with jealousy, such that employees who are members of a supervisor's in-group experience less jealousy than members of an out-group.

Recall that Vecchio's (1999) study failed to demonstrate that supervisor considerateness was negatively associated with jealousy. We expected span of supervision would moderate the association between leader considerateness and jealousy. While support was obtained for a negative association

between supervisor considerateness and jealousy, we failed to receive support for the moderating role of span of supervision. One possible explanation is that span of supervision in the present study had a mean of 9.02 and SD = 6.59, which is modest compared to Vecchio's (1999) study. This is an interesting observation since, to our knowledge, no other study has obtained a negative association between supervisor supportiveness and jealousy in the workplace. Still, the observation aligns well with theoretical assumptions recently published elsewhere (e.g., Ratih & Yunus, 2016). Specifically, Ratih and Yunus (2016) argue that inequities in the provision of reward and punishment, which tends to favor a particular position group, will cause jealousy in other groups. Furthermore, Othman, Roose, and Lim (2013) argue that by receiving support, jealous employees can increase their self-esteem, overcome negative social comparison, and help to realize their own strengths. Finally, our finding is consistent with Vecchio (2000) who applied self-reported data from part-time students. A negative relationship was found between supportiveness and jealousy.

While we did not uncover a significant relationship between supervisory differentiation and jealousy, we found that members of a supervisor's in-group were less likely to experience jealousy. This suggested that the quality of the relationship employees had with their immediate supervisor mattered the most, and not whether they had a better or worse relationship with their supervisor than did others. While we expected supervisory differentiation to have negative implications for jealousy, there are opposing arguments in favor of high supervisory differentiation. As noted by Martin et al. (2017, p. 7) group members "vary in terms of their ability, skills, and motivation to effectively perform the more challenging aspects of their roles; thus differentiation may allow a more optimal fit between followers' capability and their work assignments culminating in better individual and team performance."

Finally, in accordance with Hypothesis 4, we found that follower jealousy was positively associated with social loafing. This suggests that jealousy can be viewed as a source of cognitive tension that activates counter-productive resistance responses. The present study focused on social loafing, which represents a

powerful strategy for followers to simultaneously impair a rival's performance and manifest hostility in a passive-aggressive manner. Our findings supported the notion that jealousy has an impact on the personal response variable social loafing. Previous studies on social loafing have identified several antecedents, such as team sizes (Alnuaimi et al., 2010), task visibility (McAvoy & Butler, 2009), injustice (Price, Harrison, & Gavin, 2006), organizational culture (Kim, Sutton, & Gong, 2013), task complexity (Strong & Anderson, 1990) and laissez-faire leadership (Bass, 1998). Our study has investigated another type of antecedent of social loafing, which to our knowledge has not been surveyed earlier. Specifically, followers experiencing jealousy seemed to engage in social loafing, thereby limiting their personal effort and contribution to the firm. As such, the present study makes an important contribution to understanding the dynamic of jealousy, but also contributes to the literature on social loafing.

In practical terms, our study makes important contributions too. Comprehending the antecedents and consequences of jealousy is essential, because it provides the basis for developing specific intervention techniques aimed at combating jealousy in the workplace. In that regard, the present study obtained evidence that jealous followers may respond with social loafing, a counterproductive act that can harm the individual, their colleagues, and the organization. Hence, it is essential for leaders to effectively prevent and manage jealousy at work. Here we emphasize that leaders too will undoubtedly experience competition and rivalry, and consequently suffer negative emotions such as jealousy from time to time. The present study obtained evidence that members of a supervisor's in-group were less likely to experience jealousy, and supervisory considerateness was associated with lower levels of jealousy. These findings suggest important avenues for handling jealousy. For instance, with respect to considerateness, behaviors that have been identified as crucial involve expressing concern for followers' welfare, showing trust in the followers, consulting followers in decision processes, giving attention, encouraging followers, and valuing followers' advice (Fernandes & Vecchio, 1997). Similarly, research suggests that in-group status, operationalized as

LMX, can be fostered by means of transformational leadership behaviors such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (e.g., Gottfredson & Aguinis, 2016). Fostering open and informative communication may counteract negative emotion. Creating a work environment where employees can approach their manager if they experience problems would also be favorable. Dogan and Vecchio (2001) suggest managers should practice an open-door policy coupled with regular meetings. This would give managers the opportunity to address a broad range of problems, including tension among employees rooted in jealousy, and give employees an opportunity to voice their concerns and discuss measures to encourage a more harmonious and effective workplace. Another practical implication of the present study would be to include jealousy in the workplace as a theme in leadership programs, to increase awareness of this dysfunctional dynamic and learn preventive approaches.

Strengths, Limitations, and Suggestions for Future Research

Some strengths and limitations must be acknowledged to be inherent in the present study. Our evidence should be considered in the context of these limitations, which in turn suggest opportunities for future research. First, as a strength, the study used multisource data (supervisory rating of follower social loafing, matched with follower rating of in-group status, supervisory consideration, and supervisory differentiation of subordinates), and common method variance should have little influence on the findings (Podsakoff, MacKenzie, & Podsakoff, 2012). Nonetheless, future research should obtain ratings on supervisory differentiation of subordinates, from both leaders and their direct reports. This approach could strengthen the validity of the measures applied in this study. Second, the present study suggests that jealousy's proposed dynamics should occur over time, where out-group status and lack of supervisory supportiveness should arouse follower jealousy and evoke responses like social loafing. Hence, further assessment of such developmental notions would require a longitudinal research design for substantiating possible causal links. The longitudinal approach appears essential, as follower coping behavior is often

understood as a response to jealousy. Obviously, a time-lagged view is important, as jealousy requires some time to materialize. However, Vecchio's (1995) model does not explicitly theorize regarding the dynamics of time. Third, an agenda for future research could be collecting longitudinal evidence of antecedents and consequences of workplace jealousy in both public and business settings. Such an approach would provide the opportunity to determine whether the findings in our study hold across various contexts, but also allow for comparative studies. Finally, the present study has focused on a destructive coping reaction to jealousy. To help employees manage jealousy, future research should also study the effects of more constructive coping responses in reaction to jealousy. For example, White and Mullin (1989) have identified nine major coping strategies where the cognitions and actions goals are directed at altering the situation, such as by reducing the threat, managing associated affects, or both. Although White and Mullin's (1989) suggestions offer some insight into follower responses to the experience of workplace jealousy, they do not predict which course of action is most likely to occur (Vecchio, 1995). Testing constructive coping strategies would therefore be an important topic for future research.

In conclusion, the present study has adopted support for the importance of followers' in-group status and need for supervisory considerateness in limiting the role of jealousy among employees. Jealousy is linked to powerful dysfunctional acts like social loafing in the workplace, and thus signals supervisors to recognize and address this force. Hopefully the present study will encourage researchers to seek out further insight into determinates of jealousy in the workplace and to provide the basis for developing guidelines for reducing this counterproductive behavior.

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Table 1

Means, standard deviations, reliabilities and intercorrelations

		Mean	SD	1	2	3	4	5	6	7	8	9
1.	Follower education	13.19	2.40									
2.	Follower age	44.30	10.11	-.20**								
3.	Follower gender [a]	.29	.46	-.05	.04							
4.	Follower perception of in-group status	3.91	.59	.04	.04	-.02	(.88)					
5.	Span of supervision	9.02	6.59	-.08	-.03	.04	.03	-				
6.	Leader considerateness	3.99	.65	.04	.03	-.02	.69**	-.05	(.81)			
7.	Supervisory differentiation	.66	.34	-.02	.09	.12*	-.05	.56**	-.05	-		
8.	Jealousy	1.93	.51	-.06	-.00	.11*	-.22**	.05	-.20**	.04	(.71)	
9.	Social loafing	2.51	1.43	.05	.04	-.15**	-.28**	-.09	-.27**	-.01	.15**	(.86)

Note. $N = 303$. Cronbach's alpha estimates on primary diagonal; * $p < .05$; ** $p < .01$.

Table 2

Results of Hierarchical Linear Modeling Analyses of Employee Attributes

	Jealousy
Variables	*Est.*
Intercept	1.31***
Span of supervision	.01
Follower education	-.01
Follower age	-.00
Follower gender [a]	.07
Follower perception of in-group status	-.17**
Model deviance χ^2	456.09
Decrease in deviance: $\Delta\chi^2$ [b]	68.93***

Note. $N = 303$. Non-standardized coefficients are displayed.

  *p < .05.
 **p < .01.
***p < .001.

[a]Male = 0; female = 1.
[b]The full ML estimator was used to calculate this decrease in deviance ($\Delta\chi^2$) which can be considered a way of expressing effect size in multilevel modeling.

Table 3

Results of Hierarchical Linear Modeling Analyses of Work Unit Attributes

Variables	Jealousy Step 1	Jealousy Step 2
Intercept	1.32***	1.32***
Follower education	-.01	-.01
Follower age	-.00	-.00
Follower gender [a]	.08	.08
Supervisory differentiation	.00	.00
Leader considerateness	-.14**	-.09
Span of supervision	.01	.00
Leader considerateness × Span of supervision		-.01
Model deviance χ^2	449.13	448.53
Decrease in deviance: $\Delta\chi^2$ [b]	75.89***	.60

Note. $N = 303$. Non-standardized coefficients are displayed.

*p < .05.
**p < .01.
***p < .001.

[a]Male = 0; female = 1.
[b]The full ML estimator was used to calculate this decrease in deviance ($\Delta\chi^2$) which can be considered a way of expressing effect size in multilevel modeling.

Table 4

Results of Hierarchical Linear Modeling Analyses

	Social loafing
Variables	*Est.*
Intercept	2.85***
Follower education	.04
Follower age	.01
Follower gender [a]	-.44*
Jealousy	.48**
Model deviance χ^2	1095.15
Decrease in deviance: $\Delta\chi^2$ [b]	275.96***

Note. N = 303. Non-standardized coefficients are displayed.

p < .05.
**p* < .01.
***p* < .001.

[a]Male = 0; female = 1.
[b]The full ML estimator was used to calculate this decrease in deviance ($\Delta\chi^2$) which can be considered a way of expressing effect size in multilevel modeling.