



# When Do Haters Act? Peer Evaluation, Negative Relationships, and Brokerage

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**Abstract:** In many organizational settings, individuals make evaluations in the context of affect-based negative relationships, in which an evaluator personally dislikes the evaluated individual. However, these dislikes are often held in check by norms of professionalism that preclude the use of personal preferences in objective evaluations. In this article, we draw from social network theory to suggest that only individuals that are network brokers—those who have the cognitive freedom to flout organizational norms—act to down-evaluate the peers they dislike. We evaluate our theory using two complementary studies: one field site study and an experiment. Our results, consistent across two different methodologies, suggest that overlooking an evaluator's negative relationships as well as the network positions that constrain or enable an individual's actions may lead to distortions in ubiquitous organizational peer evaluations processes and outcomes.

**Keywords:** networks; peer evaluation; affect; social structure; brokerage

**Replication Package:** Our experiment was preregistered at ([https://aspredicted.org/YHD\\_W9P](https://aspredicted.org/YHD_W9P)). A replication package has been deposited at (<https://doi.org/10.7910/DVN/4MOJVQ>).

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EVALUATIVE outcomes and their consequences are of interest to scholars in a range of domains. Within organizations, individuals constantly (in)formally assess the merits and contributions of their fellow employees, and these peer evaluations are essential for gaining access to resources, status, advancement opportunities, and pay raises (Kane and Lawler 1978; DeNisi, Randolph, and Blencoe 1983; Ibarra 1992; Podolny and Baron 1997; Schilke and Lumineau 2018; Aadland, Cattani, and Ferriani 2019; Tandon, Ertug, and Carnabuci 2020). Although consequential, purportedly objective evaluations rarely occur in a vacuum (Greenberg 2021; but see Bian et al. 2022). Rather, evaluations are made in a context where organizational members continuously lobby for their own interests. For example, a large literature on social capital suggests that individuals may benefit due to their positive relationships and social capital within the organization (Adler and Kwon 2002).

By contrast, this article examines the consequences of negative relationships on peer evaluations within organizations. We focus on negative relationships because of their potential salience in coloring objective evaluations. Studies suggest that negative ties comprise only one percent to eight percent of all ties within an organization (Labianca and Brass 2006). Yet, as Labianca and Brass (2006:597) eloquently put it, "ironically, the relative rarity of negative events and relationships may be the very force behind the greater relative impact of that negativity on individuals." The relative rarity of negative ties has limited not only their study

(see, e.g., Yang et al. 2019, Offer 2021), but also the examination of moderators that amplify or inhibit the salience of negative ties.

In this article, we extend the literature on negative ties in three ways. First, we examine the consequences of affect-based negative ties in the peer evaluation process, a ubiquitous means of assessment within organizations. Second, we introduce a framework to induce experimental negative ties and examine their consequences. Importantly, the priming of a negative relationship within this experimental framework allows us to increase the number of negative ties, thereby opening a window to examine pretreatment moderators (e.g., Sheagley and Clifford 2023). Third, we suggest that the salience of negative ties is moderated by the evaluator's social structural position and understanding of how to decode and use specific types of social structural positions. Specifically, we propose that evaluators that have open networks (i.e., have contacts that are unconnected to one another) and prior experience decoding and using such structures have the cognitive freedom to flaunt organizational norms of objective evaluation to act upon their dislike of others. *Thus, the central proposition of this article is that evaluators with greater network brokerage have the (self-perceived) freedom to act upon negative ties.*

To evaluate this claim, we designed a real-world evaluation system (study 1) in a business school in which each student evaluated every other student's class contribution, and this peer assessment had a substantial bearing on each student's final course grade. This research site afforded us the opportunity to collect a complete set of naturally occurring negative relationships among a bounded (and measurable) population. Moreover, we were able to measure everyone's network positions, as well as collect several critical control variables (e.g., sociodemographic characteristics, peer effects, test grades). In this context, peer evaluations accounted for a considerable component of students' comparative grades that were allocated on a fixed curve further heightening the verisimilitude of the setting, as well as the stakes.

To buttress our archival and descriptive analysis, we also developed an experimental methodology to induce negative (vs. positive) ties between randomized test subjects. An experimental framework on negative ties affords three distinct advantages. First, in turning to an experimental protocol, we circumvent empirical issues associated with the collection and analysis of relatively rare but consequential events such as negative ties. Second, an experimental framework allows us to address concerns about endogeneity that are endemic to network studies (Mouw 2006; Greenberg 2021). Because our interest lies in the intersection of an evaluator's social structure and a negative relationship, there is the possibility that these explanatory variables are correlated, and our observed inferences may be biased. By developing an experimental methodology whereby negative ties are randomly assigned, we circumvent this issue of endogeneity (e.g., van de Rijt et al. 2016).

Lastly, our experimental approach allows us to assess a potential mechanism for this effect: we find that only evaluators randomly assigned to a negative tie and who occupy brokerage positions in their real-world circle of friends can be induced to act upon the negative tie. This finding is consistent with the notion that having a brokered network results in greater freedom, enabling the individual to believe they can flout social norms.

Across the two complementary studies, we find that when dislike arises naturally or is primed as a condition in an experiment, individuals, on average, do not act upon this affect-based negative tie in the evaluation process. However, as predicted by social network theories of structural autonomy, we find that brokers perceive the freedom to exploit their structural holes and evaluate the peers with which they have a negative tie critically. Lastly, we note that the magnitude of these effects is consistent across our two settings, lending credence to the economic magnitude of our results. Taken together, this article draws attention to the presence of negative relationships in evaluative contexts, as well as the conditions under which these relationships may affect seemingly objective evaluation outcomes using experimental and survey data to substantiate a causal claim informed by real-world processes.

## Prior Research on Peer Evaluation

A particularly transparent window into potential distortions of organizational assessments is peer evaluation, an increasingly prevalent form of performance feedback within organizations. Estimates indicate that roughly 66 percent of employers use performance appraisal systems, and between one-third and one-half of U.S. companies, and nearly every Fortune 500 company, employ some variant of peer-based evaluation (London and Beatty 1993; Ghorpade 2000). Peer evaluation and its study have also proliferated in academic settings (Double, McGrane, and Hopfenbeck 2020). In some settings, such as banking, these peer-based evaluative tools focus on identifying collaborative networks and measuring the extent to which different peers provided “value” to the focal individual as a basis of determining one’s bonus compensation (Burt 2004; Gargiulo, Ertug, and Galunic 2009).

Given their prevalence, a burgeoning body of literature on peer evaluation has evolved, broadly emphasizing either the *characteristics* or the *connections* of the evaluator and the evaluated or evaluatee (i.e., the “evaluation dyad”). Underlying key facets of this literature is a fundamental social scientific question: what factors undermine objective evaluations in general, and within organizations in particular? Scholars have focused on characteristics of the evaluator and the evaluated, whether these are traits of everyone (Tsui and Gutek 1984; Greenhaus, Parasuraman, and Wormley 1990; Stoll, Raphael, and Holzer 2004; Castilla 2012; Rivera 2012), or those characteristics the two individuals share such as gender or race (Giuliano, Levine, and Leonard 2009; Abraham 2017).

The first approach considers the preferences and biases of the evaluator (e.g., Biernat and Manis 1991; Dovidio and Gaertner 2000). Laboratory, audit, and field-work methods have all been employed. Whereas laboratory experiments reveal that (unconscious) biases shape decisions in controlled experiments, it remains unclear when and to what extent said biases permeate evaluation systems in real organizations. Audit studies have also demonstrated how biases manifest at the screening interface, allowing preferential entry to a subset of prospective employees (e.g., Pager, Western, and Bonikowski 2009). However, these studies are not designed to pierce processes operating within the corporate veil (Petersen and Saporta 2004).

Field work in organizations has, in turn, generated inconsistent findings about bias effects (Tsui and Gutek 1984; Castilla 2011).

A second set of approaches considers the common characteristics of the evaluator and the evaluated (see generally McPherson, Smith-Lovin, and Cook 2001). Individuals with similar characteristics tend to share common values (Lazersfeld and Merton 1954). Homophily between the evaluator and evaluated may thus follow from similar underlying preferences about what constitutes an important idea or insight, and this concordance results from common experience or training (Ibarra 1992). For example, a female student is likely to be more capable of relating to, and appreciating, the added value of a female peer commenting on an experience in a case discussion. Homophily-based biases in peer evaluation may also be rooted in theories of psychological self-enhancement such that evaluating favorably others with similar traits impacts an individual's sense of self-worth (Pfeffer and Fong 2005; Fiske 2017). A common outcome of shared characteristics is friendship (Marmaros and Sacerdote 2006; Reagans 2011). In evaluation, friends tend to refrain from judging each other (Goffman 1959), emphasize the positive (Blumberg 1972), and "echo" common beliefs in discourse, which increases the odds of favorable evaluation of friends (Burt 2001).

A third approach to evaluation considers "peer effects," which are a form of social influence (Ibarra and Andrews 1993; Galunic, Ertug, and Gargiulo 2012; see also Azoulay, Liu, and Stuart 2017). The key idea here is that third parties provide information and can influence the perspectives of the evaluator. Recently, using longitudinal data in a quantitative case study of 2,271 employee performance evaluations, Castilla (2011) examined how evaluators' peers (the evaluated prior managers) may influence their appraisals. Castilla found evidence for homophily effects between current and prior managers, as well as between the manager and employee. He also found evidence of a social network peer effect in which the prior managers' evaluations of employees influenced the current managers' evaluations of the employees. Similarly, using an experimental approach, Greenberg (2021) demonstrated that subjects randomly assigned to brokerage *positions* may influence the degree to which individuals incorporate or ignore the evaluations of their peers when they update their own evaluations. More precisely, the article investigated how the valence of network content—particularly (randomly assigned) peers' negative evaluations—and network positions have an interactive impact on how one updates one's evaluation. Taken together, we have learned much about how one individual evaluates another, as well as the factors that distort this process.

Across this growing body of literature, researchers have largely built upon the presumption that relationships between peers within organizations are positive and collegial, as negative relationships are rarely observable to the researcher (for exceptions, cf. Roulet 2020). Positive relationships result in associative forces, strengthening the bonds between organizational members and yielding a range of individual outcomes, including increased job satisfaction (Chiaburu and Harrison 2008). Moreover, positive relationships within the organization provide a mechanism towards which individuals can mobilize action, allowing individuals with broad sets of friendships to reap the benefits of social capital (Adler and Kwon 2002).

## Negative Relationships within Organizations

Against this backdrop of positive relationships within organizations, it has also been widely observed that the inverse is true: negative relationships lead to negative consequences (for reviews, see Yang et al. 2019 and Offer 2021). For individuals, negative ties have been linked to a wide range of detrimental individual outcomes including poor physical health (see Rook 2015) and depression (Fiori and Consedine 2013). Negative gossip can lead to victimization (Ellwardt, Labianca, and Wittek 2012), as well as bullying within the workplace (Yap and Harrigan 2015). At the extreme, negative ties may induce employees to engage in behavior that is harmful to the organization (Venkataramani and Dalal 2007) or is associated with deviant and even criminal behavior at the organizational level (Aven 2015). To summarize, there is a growing literature and interest on negative relationships within organizations (Merluzzi 2017).

In recognition of their detrimental effects, individuals tend to avoid circumstances that are stressful or unpleasant whenever possible (Yap and Harrigan 2015), often redesigning work to move away from colleagues an individual dislikes (Jehn 1995). Negative ties can also lead to decreased exchange of information (Humphrey et al. 2017) and workplace satisfaction (Venkataramani, Labianca, and Grosser 2013). When left unresolved, this can lead to low organizational commitment and turnover (Venkataramani et al. 2013).

Yet, organizations themselves are a commonly cited source of negative ties as negative ties occur more often in settings where interactions are unavoidable and competitive incentives and forces exist (see generally Chown and Liu 2015; Liu and Srivastava 2015). For example, negative relationships often occur within familial relationships where kin are drawn together not by choice but through bonds within family groups and social norms that promote interactions among family members (Krause and Rook 2003). In contrast to other foci with significant individual leeway such as voluntary (e.g., religious) organizations (Feld, Knighton, and McGail 2021), the workplace serves as a salient setting where interactions are often decreed to individuals (Labianca 2014), at times resulting in negative relationships between coworkers (Offer and Fischer 2018).

Although the literature on the consequences of negative ties has largely viewed them as liabilities, a small but emerging stream of research suggests that negative ties can be beneficial. The benefits of task conflict are often cited as potentially positive, leading to advice-seeking and improved decision-making (Marineau 2017) with successful conflict resolution leading to feelings of empowerment (Jehn 1997).

The varied consequences of negative ties suggest, to us, that negative ties originating from diverse sources and of distinct types may entail differential costs and benefits. For example, one typology of negative ties that has been put forward entails the parsing of ties into (1) behavior, (2) affect, or (3) cognition-based attributes of negative ties (Labianca and Brass 2006; Yang et al. 2019). In this article, which focuses on distortions of one individual's evaluative assessment of another, we hew most closely to research on affect-based negative ties that hinge upon dislike as these are most likely to be enduring. For example, negative ties based upon behaviors such as avoidance may be mitigated through work redesign (Jehn 1995). Similarly, when cognition-based negative ties arise due to incompetence (Kim and

Glomb 2014), training and upskilling can limit the salience of the assessed relationship. By contrast, affect-based negative ties that are built upon an innate dislike of one for another are often difficult to overcome.

### Social Factors Affecting the Relative Impact of Negative Relationships

Moreover, we focus on affect-based (vs. behavior or cognition-based) negative ties and evaluative outcomes because it is often counter-normative to act upon them within an organization. Despite an individual's desire to act against another he or she dislikes, there are often formal and informal rules and norms prohibiting individuals from acting upon affect-based negative ties (Greenberg and Cropanzano 2001; but see also Merton 2004). For example, antidiscrimination laws formally prohibit the introduction of personal affect and preferences into the selection of new hires or decisions concerning compensation. Violating these rules may result in legal sanctions and significant remuneration for the aggrieved party. Although these sanctions rely upon the rule of law for enforcement, the shadow of these legal constraints often refracts back upon the behavior of individuals themselves, determining behavior that is (and is not) socially acceptable (for a review, see Hebl, Cheng, and Ng 2020). For example, in a time of increasing political polarization within the United States, the negative evaluation of a colleague because their task-irrelevant political views (e.g., pro-life or pro-choice) conflict with one's own is counter to organizationally accepted norms.

A baseline assumption across these legal strictures, and one adhered to within this article, is that peers within organizations are determined through task interdependence as a byproduct of organizational design, rather than primarily through individual choice. As a result, when personal dislike arises between two individuals, those individuals are likely to still be required to interact, and one of the purposes of organizational culture and norms is to induce organizational members to set aside their personal preferences in favor of objective evaluations.

Within this context, individuals strive to align their behaviors to their internal set of preferences, beliefs, and prejudices. Misalignment between beliefs and behaviors results in cognitive dissonance, which individuals strive to minimize. Within organizations, individual behaviors are often held in check by organizational norms, which raise the social costs of acting on one's individual beliefs when the individual beliefs are at odds with those of the organization. This misalignment—the deviation between the organization's desire to adhere to norms of professionalism where individuals set aside personal prejudices and an individual's affect-based dislike of another—is a necessary condition for our theory to hold. In the discussion section, we return to this issue to speak about issues of generalizability.

In lieu of formal, legal sanctions, normative control exerted by an individual's coterie of social relationships often serves as a strong enforcement mechanism. One of the most prominent theories applicable to this question is the notion that dense social ties can influence an individual's behavior. When a focal individual's relationship partners are also connected to one another, information and opinions are reinforced (Grosser, Lopez-Kidwell, and Labianca 2010), inducing shifts in

behavior such as substituting exploration for exploitation (Tandon et al. 2020), to cite one example among many.

There are not only behavioral but also cognitive changes induced by one's network position. When a focal individual's relationship partners are also connected to one another, information and opinions are reinforced (Eder and Enke 1991; Grosser et al. 2010). By contrast, evaluators with less constrained networks (i.e., those having contacts that are not directly connected themselves) may have greater cognitive freedom of action. Rather than feeling dirty (Casciaro, Gino, and Kouchaki 2014), brokers have diminished pressure to change dissonant opinions and in fact may be more reactive to negative information (Greenberg 2021). Individuals with nonoverlapping sets of contacts have much greater tolerance for conflicting opinions among their (unconnected) contacts. Recently, Burt (2010:10) has suggested that being a broker has cognitive implications as well, enabling the broker to manage contradictory relationships and to become "less troubled by differences in opinion or practice." These individuals are not faced with the attendant cognitive apprehension that comes with structurally induced normative obligations (Shelley et al. 1995; Strahilevitz 2004; Cowan 2014; Aven 2015).

When differences in opinion do occur among connected individuals, uncoordinated individuals often alter the valence of their relationships and, in this manner, reduce the odds of conflict and the stress and discomfort that inconsistent opinions bring about (Heider 1977; Cartwright and Harary 1977; Davis 1963). As a result, individuals with overlapping sets of relationships are subject to strong normative expectations and are held accountable by an effective, informal sanctioning mechanism that limits an individual's degrees of freedom to act (Simmel 1964 [1902]; Portes and Sensenbrenner 1993; Portes 1998; Coleman 2003). As one example, Barker (2005) famously provided evidence that in the absence of hierarchical leadership structures, the concertive control of individual behaviors could even exert stronger pressure on organizational members than formal sanctions. Thus, we hypothesize that:

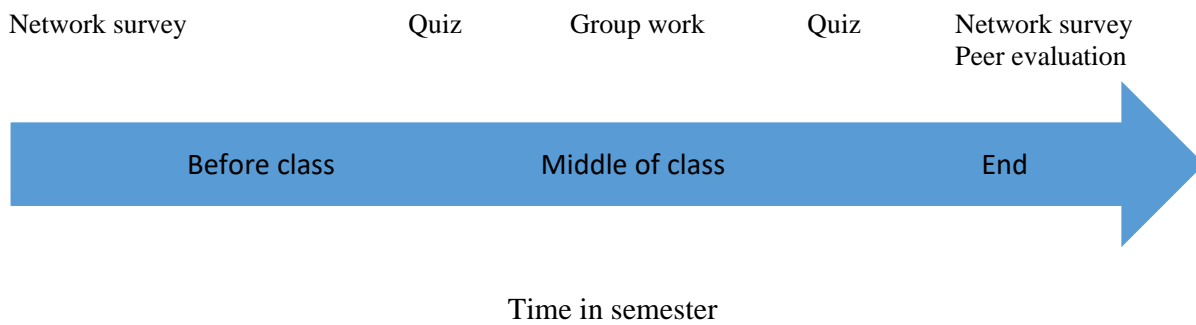
*Evaluators with less constrained (i.e., brokered) networks will more critically evaluate peers with which they have a negative relationship.*

## Methods

We deployed two complementary methods to assess this prediction: an archival analysis of peer evaluation in a classroom followed by an experiment of peer evaluation in the laboratory.

### Study 1: Classroom Data

We first designed and implemented a peer evaluation system at a business school in the Northeastern United States. The design was informed by existing systems employed in large professional services organizations. Although there are differences between the classrooms we study and formal organizational settings, especially concerning the age distribution of the respective members, there are also similarities.



**Figure 1:** Timeline for classroom data collection (study #1).


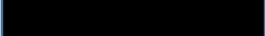
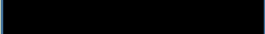
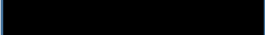
The most prominent parallel between the two is a common emphasis on competition for a limited set of organizational resources. Just as “typical” organizational members compete for limited attention (Ocasio 1997), resources (Burgelman 1996), and jobs (Bidwell and Briscoe 2010), students compete with one another for grades that they believe are integral to securing full-time employment in desirable organizations. Because student grades *are* disclosed to prospective employers, students are justifiably concerned about their (relative) performance.


The study of peer evaluation in a classroom setting affords some design and control advantages. First, close contact with this research setting enabled the collection of detailed covariates, including sociodemographics (e.g., gender, ethnicity, major) and an objective measure of performance in the class. Thus, we can include a rich set of controls to account directly for alternative explanations. Second, the social system—notably positive friendships and negative relationships—emerged *de novo* over the course of four months. Only a very small number of students were friends or familiar with each other at the beginning of the semester. Thus, we were able to capture the social network at its conception and at its end with pre- and post-semester surveys. We used the former to establish a baseline for understanding the social system. Each survey included a complete roster and picture book of students to aid recall and questions concerning the student’s dyadic social relationships (e.g., close friend, stranger). The survey also included an additional array of binary (yes/no) questions, notably whether a student was “not fond” of another student to capture dislike between the evaluator and the evaluated. In an analogous manner, we also asked the evaluator whether the evaluator held the other student in “high regard” to capture the degree to which the evaluated individual was esteemed. In the second survey, we not only reprised the questions as above, but also implemented a peer-to-peer evaluation system where everyone assessed the contribution of their colleagues (see Figure 1 for a timeline and Figure 2 for the network questions).


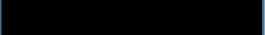
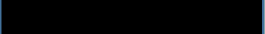
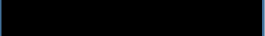
The researchers involved in this work spent considerable time and effort ensuring that all students were apprised and aware of the norms of the classroom and school more generally, which began on the first day of class as we highlighted this evaluation system as a unique feature and obligation of this specific class. In-



\* 1. This portion of the survey has a list and corresponding pictures of all the students enrolled in your section of the class. For each student please click on the box that applies

	Close Friend	Friend	Acquaintance	Stranger
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* 2. Using the following scale, please evaluate the contribution each of your peers made to the classroom experience in . When you consider what score to assign to each student think about both the quantity and especially quality of each of your peers' contributions. Do not evaluate yourself.

	1 Poor Contribution	2	3	4 Average contribution	5	6	7 Exceptional contribution
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Figure 2:** Key survey questions (study #1). Note: Student and class information blacked-out to preserve confidentiality, anonymity, and privacy.

structions stressed that all students are expected to adhere to the school's honor code, including basing their assessment on the "merits and nothing else," such as personal feelings or animosity (see, e.g., Gargiulo et al. 2009 for the evaluative instructions provided to bankers when assessing the value-add of their peers).

## Measures

As peer evaluation is an inherently dyadic social phenomenon (Homans 1950; Blau 1960; McPherson et al. 2001), we conducted our analysis at the evaluator-evaluated (i.e., dyadic) level of analysis so that we could include measures of the evaluator, the evaluated, and characteristics they share, as well as classroom effects.

*Dependent variable.* The key outcome measure in the field data reflects how one student, the "evaluator," appraised a peer—the "evaluated's"—contribution to class discussion, measured on a scale where 1 = poor contribution and 7 = exceptional contribution. These assessments necessarily entail subjectivity, a characteristic inherent in social evaluation (e.g., Cattani and Ferriani 2008; Galunic, Ertug, and Gargiulo 2012; see also Couzin-Frankel 2013).

A potential analytical complication arises from variation in a student's beliefs about what constitutes a "poor" or "exceptional" contribution. For example, one evaluator's median evaluation may be five, whereas another evaluator's may be

three. To address this heterogeneity, we calculate for each evaluator,  $I$ , her mean evaluation of all students in the class (see also Gargiulo et al. 2009). We then center her evaluation of each specific peer student,  $j$ , around this overall mean:  $Class\ contribution\ score_{ij} - Mean\ contribution\ score_i$ . Alternative operationalizations of this dependent variable (e.g., relative to a raw mean) yielded consistent results, as did the use of fixed-effects (i.e., within-evaluator) models that purge evaluator-invariant inclinations.

*Independent variable.* To examine the social structure surrounding the evaluator and to evaluate our hypothesis in the field, we generated a *count of the evaluator's open triads* (i.e., the evaluator's friendship ties to two alters who are not friends of one another). Although this is our preferred measure capturing network disconnection and brokerage opportunities, using Burt's (2004) network constraint measure yielded comparable results.

We also generated an indicator variable set to one if the *evaluator* had an affect-based negative relationship with the evaluated, and zero otherwise, using the question concerning dislike (i.e., not fond of) referred to above. Our key independent variable is thus an interaction between the evaluator's open triad count and her negative relationship with a particular evaluated classmate. This measure captures the contingent nature of an evaluator's network structure as well as that individual's willingness to act upon her personal dislike towards the evaluated contrary to explicit norms.

*Control variables.* To account for potential homophily (e.g., McPherson et al. 2001; Greenberg and Mollick 2017) at the dyadic level, we include indicators set to one for evaluator-evaluated pairs that are on the same team; share the same gender, ethnicity, or major; are both born in the United States; or sit in the same partition of the classroom to get at localized geographic sorting and effects.

To account further for the implications of particular social relationships, we generated dichotomous indicators set to one if the evaluator: (1) had a friendship with the evaluated (i.e., indicated the evaluated as a close friend or friend) or (2) had high regard for the evaluated, based on questions from a complete roster of classmates with associated pictures to aid recall and identification. We also included the evaluator and evaluated's number of friends to account for network size and each one's count of "high-regards" to account for status and reputation. To account for the in-group assessments of the evaluated, we included the mean assessment of the evaluated individual by the evaluator's friends. Lastly, we included a measure of each student's "objective" facility with the course material as determined by exam scores. This measure provides an additional control for everyone's theoretical capacity to contribute to class discussion, which is strongly correlated with the peer evaluation score.

*Estimation.* We employ the following dyad-level model where  $i$  indicates the evaluator and  $j$  the evaluated:

$$E[Y_{ij}|X_{ij}] = f\left\{\beta_0 + \sum_{p=1}^P + \beta_1(OTC)_i + \beta_2(Negative\ relationship)_{ij} + \beta_3(OTC)_i * (Negative\ relationship)_{ij} + \beta_4(Social)_{ij} + \beta_5(OTC)_j + \beta_6(X)_{ij} + \beta_7(X)_i + \beta_8(X)_j + E_{ij}\right\} \quad (1)$$

Where  $y_{ij}$  is the evaluator's mean-adjusted evaluation of the evaluated,  $OTC_i$  is the evaluator's count of open triads,  $Negative\ relationship_{ij}$  indicates the evaluator's ( $i$ ) negatively valenced dislike towards the evaluated as captured in the survey ( $j$ ), and  $OTC_i * Negative\ relationship$  is the interaction between the two that we use to evaluate our proposition above. Our proposition predicts a negative coefficient for  $\beta_3$ : individuals with more brokered (i.e., greater # of OTCs) networks will assess individuals they have dislike towards more negatively. As network constraint is a negative correlate of brokerage, the negative prediction for  $\beta_3$  is predicted to be positive when we swap network constraint for OTC.  $Social_{ij}$  is the social relationship (e.g., friendship) between evaluator-evaluated from the evaluator's perspective because this should more forcefully predict evaluation, and  $OTC_j$  is the evaluated's open triad count. For both dyad-level and individual-level controls,  $X_{ij}$  is a vector of covariates that vary across dyads (e.g., same race, same gender),  $X_i$  is a vector of covariates reflecting  $i$ 's characteristics such as status in the classroom and number of friends, and  $X_j$  reflects the same for  $j$ .

For dyad-level models that incorporate evaluator fixed effects,  $\beta_1$  and  $\beta_7$  are not identifiable. Modeling dyad-level outcomes statistically is complicated because of structural autocorrelation arising from the dependency between observations (Krackhardt 1988). We thus employed multiway clustered standard errors to address this issue (Kleinbaum, Stuart, and Tushman 2013).

*Results: study #1.* We begin with a description of the data. Table 1 in the online supplement, panel (A) describes the individuals in our data set. The sample was ethnically diverse, comprising 43 percent Caucasians, 48 percent Asians, 2 percent Hispanic, and 5 percent Black; 42 percent of the individuals were female, and just over one-third of the population was born outside of the United States. Importantly, at the inception of the study, the typical individual had very few connections: 43 percent of the individuals did not have any friends and another 22 percent only had one friend at the beginning of the semester in the class. Ninety-four percent of the class did not express dislike for anyone (for an analogue see Burt and Knez 2006). This provides a sharp baseline in which social relationships can be observed as developing (or not), and where factors that affect peer evaluation should emerge from a neutral starting point. At the conclusion of the study, the typical individual had four to five friends, and seven percent of the class listed no friends at the second time point, consistent with the notion that classroom settings are salient focal points for new social ties (Feld et al. 2021).

A simple point of entry in the analysis is to describe variation across subsamples of the population. As evaluation scores are de-meaned for everyone, an average evaluation score of 0 follows by construction. Across the entire sample, evaluators assess their friends 0.50 points, or 0.42 of a standard deviation, higher than

**Table 1:** LPM regression of open triad count (OTC) determinants of peer evaluation (study #1).

	(1)	(2)	(3)	(4)	(5)	(6)
Evaluated disliked by evaluator		-0.201 (0.248)	-0.189 (0.252)	0.446 (0.210)	-0.192 (0.249)	-0.934 <sup>†</sup> (0.292)
Evaluator's open triad count			-0.000 (0.001)	0.000 (0.001)		
Evaluated disliked by evaluator × Evaluator's OTC				-0.015 <sup>†</sup> (0.003)		
Evaluator's constraint					0.128 <sup>†</sup> (0.042)	0.083 (0.054)
Evaluated disliked by evaluator × Evaluator's constraint						3.368 <sup>†</sup> (0.925)
Evaluated is a friend of evaluator	0.247 <sup>†</sup> (0.085)	0.243 <sup>†</sup> (0.086)	0.251 <sup>†</sup> (0.089)	0.245 <sup>†</sup> (0.090)	0.252 <sup>†</sup> (0.089)	0.251 <sup>†</sup> (0.089)
Evaluated's open triad count	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.002)
Evaluator has high regard for evaluated	0.585 (0.160)	0.582 (0.160)	0.581 (0.160)	0.583 (0.160)	0.582 (0.159)	0.582 (0.160)
Evaluated test grade	0.016 <sup>†</sup> (0.006)	0.015 <sup>†</sup> (0.005)	0.016 <sup>†</sup> (0.005)	0.016 <sup>†</sup> (0.005)	0.016 <sup>†</sup> (0.005)	0.016 <sup>†</sup> (0.005)
Evaluator test grade	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)	0.002 (0.003)	0.002 (0.003)
Evaluator's # of friends	-0.004 (0.004)	-0.004 (0.004)	-0.003 (0.005)	-0.004 (0.005)	-0.001 (0.005)	-0.002 (0.005)
Evaluated's # of friends	0.030* (0.014)	0.029* (0.014)	0.029* (0.014)	0.029* (0.014)	0.029* (0.014)	0.030* (0.014)
Evaluator's # of high regards	-0.004 (0.007)	-0.004 (0.008)	-0.003 (0.008)	-0.004 (0.008)	-0.003 (0.010)	-0.003 (0.010)
Evaluator's friends' average score for evaluated	0.414 (0.059)	0.415 (0.059)	0.414 (0.059)	0.415 (0.059)	0.414 (0.059)	0.415 (0.059)
Constant	-1.184 (0.221)	-1.173 (0.216)	-1.173 (0.216)	-1.180 (0.217)	-1.214 (0.212)	-1.194 (0.213)
Controls	YES	YES	YES	YES	YES	YES
N	3,971	3,971	3,971	3,971	3,971	3,971
R <sup>2</sup>	0.253	0.253	0.253	0.255	0.254	0.255

†  $p < 0.01$ ; \*  $p < 0.05$ .

Indicators for classroom; same classroom side, both born in the United States, same major, same team, same gender, same ethnicity included but not shown. Two-way clustered errors in parentheses. Source: Proprietary data from two classes of a management class at a large, private school of business in the northeastern United States.

nonfriends. Close friends receive an additional 0.25-point boost in peer evaluation. Surprisingly, initial analysis did not indicate a penalty if the evaluator expressed dislike towards the evaluated.

To illustrate conditional relationships, we first present a baseline regression model in Table 1, model 1. Evaluators rate those that they has high regard for 0.59 points higher, or the equivalent of shifting the median evaluation to the 73rd percentile. Similarly, an evaluator's friends are rated higher, shifting from the median to the 67th percentile. We also observe that individuals with higher objective test grades are recognized in peer evaluation with higher evaluations, on average. Individuals that have a higher amount of regard from their peers receive higher evaluations. Lastly, we observe a correlation between the evaluator's assessment and the assessments of the evaluator's friends.

In model 2, we examine whether individuals who are disliked by an evaluator receive lower evaluations. Across the entire class population, this does not appear to be the case. Similarly, in model 3, we find no correlation between evaluators with brokered networks rich in open triads and their evaluations.

We evaluate our core proposition in model 4. Here, we find that the evaluator's social structure and affect jointly determine evaluation. Specifically, evaluators with a standard deviation increase in open triad counts penalize those they have dislike towards by 0.3 points. Substantively, this would drop an individual from the 50th to the 31st percentile.

As an alternative to an individual's count of open triads, we demonstrate equivalent results using Burt's (2004) measure of network constraint (models 5 and 6). As this measure is negatively correlated with brokerage, a positive coefficient on the interaction term provides support for our proposition. To put the magnitude of this effect in perspective, the "penalty" associated with judgment by someone with a more "brokered" network who holds a negative relationship towards a focal peer is equal to the *premium* an evaluator gives to a friend.

*Robustness checks.* We run several robustness tests. It remains possible that several unobservable factors, such as an evaluator's status (beyond our measure of "high regard"), drives our findings. To account for both observed and unobservable characteristics of the evaluator, we included evaluator fixed effects with no change to the results presented above (Appendix Table A1).

Finally, we compare these brokers with their peers in terms of observable characteristics. We find few meaningful differences save for the fact that brokers—like their peers whom they regard negatively and evaluate accordingly despite the high regard in which these students are held by others (often including the professor)—tend to score well on exams (Appendix Table A2). Considered collectively, these results provide evidence consistent with our argument. There is, on the other hand, little evidence to bolster a selection story.

## Experimental Considerations and Approach

Endogeneity concerns often undermine social network studies (Mouw 2006; Hasan and Bagde 2013; Greenberg 2021). In large part, endogeneity concerns stem from the fact that social relationships are the product of both *opportunities* for social

interaction and the *choices* of multiple actors (Sewell 1992; Emirbayer and Goodwin 1994; Burt 2010, 2012). How actors *choose* to shape their networks is likely a function of their own social characteristics, personality, prior networking experience, and networking style, preferences, and abilities (Mehra, Kilduff, and Brass 2001; Burt 2012; Smith, Menon, and Thompson 2012; Canales and Greenberg 2016), as well as the characteristics of those the focal actor seeks to interact with. Hence, it is often exceedingly difficult to clarify mechanisms in network studies because social networks are the outcomes of complex decisions enacted by many individuals (see, e.g., Jackson 2003).

To address these empirical challenges, we developed a simple laboratory experiment to provide suggestive causal evidence on social structure, negative ties, and evaluation outcomes. The goal of this second study was twofold. First, we wanted to reproduce and test the robustness of our results using an empirical framework where we could derive causal inference. The second purpose of this study was to evaluate for potential mechanisms (e.g., embeddedness) underlying our baseline effects.

*Sample.* We fielded an experimental study at a college in the Northwestern United States. A majority of the 141 participants (59.57 percent) were male, from the United States (89.38 percent), White (82.27 percent), and enrolled in undergraduate courses. Overall, 87 percent of those agreeing to participate submitted responses on the necessary measures, resulting in a final analytical sample of 123 participants.

*Procedure and primed relationship valences.* All participants were assigned a vignette that first described, in writing, a fictitious entrepreneur who was about to pitch a business idea for a gourmet coffee-related business at a competition at which the participant would be a judge (i.e., evaluator). Participants were then randomly assigned to one of two conditions priming their relationship with the fictitious entrepreneur: in one condition the entrepreneur was described as likable and warm (see Fiske et al. 2002), and in an alternative condition the entrepreneur was described as cold and rude (see Figure 3 for specifics on the conditions). These conditions corresponded to a negative (rude/cold) or a positive (warm/likable) prime and translated to a randomized negative or positive valence between the evaluator and the evaluated individual.

*Embeddedness.* To prime the participant concerning the extent to which the evaluator was embedded in a set of shared connections, we randomly assigned the individual to one of two conditions, orthogonal to the negative or positive valence above (see Figure 3 for specifics on the conditions). In the first condition, the evaluator received a text from a friend that stated: "... no one else we know is also judging." In an alternative condition, the text stated: "... we should ALL get together to talk about the pitches..." These randomized conditions corresponded to nonembedded (no acquaintance present) or embedded (friends get together) contexts within which the participant made evaluative decisions. We incorporated this second dimension to the experiment under the logic that cognitive processes relating to embeddedness might need to be activated on the part of the participant. As such, we generated a measure for nonembeddedness that corresponded to receiving the first priming condition above, with the variable set to 0 otherwise (for those receiving the embedded prime).

INSTRUCTIONS: “You will be asked to read a brief pitch from an aspiring entrepreneur. This aspiring entrepreneur, Jake Elwood, is describing his small business--a coffee business. Jake is one of 10 people attending a pitch competition. Pitches will occur on Saturday. There will be a welcome dinner the evening before.”

1. Warm/likable condition: “At the welcome dinner, Jake greeted the other attendees with a hug. He had long conversations with the other people present. It was clear that he loved socializing with other people, and was a friendly person.”
2. Rude/unlikeable condition: “At the welcome dinner, when Jake was greeted by the other attendees, he did not respond. Reliable information also circulated that Jake was rude and mean, and screamed at several people for no reason.”

Imagine that the following day you are a judge of the pitches provided by each of the aspiring entrepreneurs. You receive a text message from a friend saying:

1. "Hey! I hear that you are a judge at the competition today. Very cool! Too bad I couldn't make it, and no one else we know is also judging."
2. "Hey! I hear that you are a judge at the competition today. Very cool! Some of our friends will also be judges. We should ALL get together to talk about the pitches and trade notes after the competition."

#### PITCH/PRESENTATION

##### **ROGUE COFFEE CO.**

We're excited to announce our brand new line of Rogue Coffee blends. Roasted locally in Oregon and shipped directly to you. Perfect for an at-home drip coffee, espresso drink, or pour-over. At Rogue, we love our customers and our community.

##### **Our Barista Blend**

Rogue's original blend -- a blend of Ethiopian and Guatemalan 100% Arabica beans that were carefully chosen for their harmonious relationship in your cup. Roasted with the perfect everyday taste in mind, Rogue's Barista Blend combines the mountainous regions of Ethiopia with the ideal growing climates of Guatemala. The end result is a coffee that is delicate yet flavorful, without giving up any complexity. This coffee is wonderful for both homebrew and pour-overs.

##### **The Rogue Story & More About Us:**

Rogue was founded in 2019 with the goal of revolutionizing how people access high-quality coffee. We pride ourselves in the work we have done to build a coffee community across our Eugene locations. In such a short amount of time, our baristas have been able to connect with our customers on a personal and professional level.

*From the beginning, our baristas have been paid an above-market wage and given access to health benefits not normally available to hourly workers. We recognize that our baristas responsibilities go far beyond our four walls. Our baristas are mothers, sons, daughters, students, artists and more; their livelihood and their families' livelihood depend on their ability to continue to work and serve coffee.*

##### **Expansion Plans:**

We hope to expand our Rogue product-line, as well as our ability to ship our product line across the country. We are thus seeking investors to help us grow our business.

**Figure 3:** Images of questions and conditions used in experimental study.

*Evaluator social structure.* To measure the extent to which the evaluator understands how to decode and operate in specific social structures (i.e., broker or nonbroker), we queried the participant to determine their self-reported, pretreatment real-world network structures (Sheagley and Clifford 2023). Specifically, we asked, “Which of the following statements is the best description of your current friendships?” Choices included: (1) “I have a group of friends in which everyone knows each other”; (2) “I have two or more groups of friends. The groups are separate but within each group everyone knows each other”; (3) “I have one best friend”; (4) “I am a ‘loner’”; and (5) “other.” We equated individuals who responded indicated answer (2), to be “real-world brokers” and generated a dichotomous measure accordingly.

No other information (e.g., demographics, photographs) was presented to the evaluator that might introduce other bases of evaluation (and possible bias). Because

each combination of conditions was randomly assigned to individual evaluators, we can isolate and observe the impact of valences, experimentally assigned embeddedness, and real-world brokerage experience and understanding while holding constant the objective quality of the evaluated content (e.g., Bavelas 1950; Shore, Bernstein, and Lazer 2015).

*Manipulation checks.* We only included participants that passed the manipulation and attention checks concerning the purpose of the app and vignette conditions pertaining to networks and valence. However, our results did not differ substantively when we included the full sample (see Appendix Table A3).

*Outcome measure.* Participants (i.e., evaluators) were asked to assess a written pitch for an App (application), using a scale ranging from one (poor) to seven (exceptional). The specific question was: "On a scale from one (very poor) to seven (exceptional), how would you rate the pitch?" We used this measure to provide a measure consistent with that provided in study 1 (i.e., the classroom study above). However, in this study, we also included several questions (using the same Likert scale) concerning various facets of the pitch including the quality of its writing, presentation format, the underlying idea, its commercial business potential, and its social impact. As an alternative outcome measure, we calculated a scale based on the combination of these measures ( $\alpha = 0.83$ ). The correlation between the scale and overall quality measure is high ( $r = 0.8267, p = 0.0000$ ), which suggests the single item is also a valid measure of the participants' overall assessment of the pitch.

*Control variables.* We include controls to assess predetermined characteristics that may be associated with evaluative baselines. These include the participants' gender, race, college major, and year of birth. We also include several measures that proxy for their networks. These include the number of friends they have in school and the number of friends they have on Facebook.

*Analytical strategy.* Our core argument suggests that evaluators with brokerage positions assigned to negative valences will evaluate an identical product more harshly net of the main effect of a negative relationship. As the assessment of the entrepreneurial pitch was assessed on a seven-point Likert scale, we used an ordered logit model as our preferred model (Long and Freese 2014). However, we also estimated linear regression and fractional logit models that yield similar conclusions.

*Results.* Descriptive statistics and a correlation table for the experiment are available in the online supplement. Table 2 reports regression coefficients from an ordered logit model predicting evaluation. The first model presents a series of control variables before introducing the main independent variables in model 2. We observe that being assigned to the negative condition did not affect an evaluator's assessment of the entrepreneurial pitch, consistent with evidence from study 1 suggesting that individuals have a central tendency to refrain from acting upon dislike within the evaluation process. Similarly, the extent to which the evaluator is nonembedded in a friendship group did not affect the assessment. Individuals with real-world brokerage network structures gave higher evaluations than those without these network structures, but we did not theorize about the main effects of our experimental study.



**Table 2:** Ordered logit regression coefficients predicting evaluation as a function of experimental and real-world brokerage (RWB) (study #2).

Subsample	(1) All Single	(2) All Single	(3) All Single	(4) All Single	(5) Non-RWB Single	(6) RWB Single	(7) All Comp
Real-world broker (RWB)		1.220 <sup>†</sup> (0.369)	1.074* (0.459)	0.637 (0.816)			0.875 (0.853)
Negative		-0.336 (0.401)	-0.548 (0.630)	-1.278 (1.012)	-1.099 (1.235)	0.647 (0.624)	-1.199 (0.890)
Non-embedded		0.228 (0.408)	0.219 (0.407)	0.068 (0.756)	0.390 (0.847)	0.830 (0.698)	-0.323 (0.729)
Negative × RWB			0.345 (0.749)	2.064 (1.172)			1.619 (1.071)
Negative × Non-embedded				1.388 (1.159)	1.450 (1.231)	-2.091* (0.938)	1.526 (1.040)
RWB × Non-embedded				0.887 (0.973)			1.124 (0.976)
Negative × RWB × Non-embedded				-3.550* (1.520)			-3.008* (1.381)
Non-White	-0.016 (0.554)	0.158 (0.524)	0.166 (0.516)	0.149 (0.524)	-0.482 (1.139)	0.473 (0.583)	0.401 (0.376)
Female	0.363 (0.355)	0.551 (0.395)	0.535 (0.395)	0.459 (0.397)	0.724 (0.659)	0.232 (0.512)	0.419 (0.352)
Facebook Friends	-0.034 (0.080)	-0.051 (0.084)	-0.047 (0.085)	-0.028 (0.083)	0.101 (0.174)	-0.082 (0.092)	0.032 (0.068)
U.S.-raised	-0.031 (0.935)	-0.139 (0.887)	-0.183 (0.920)	-0.280 (0.895)	-0.817 (1.614)	-0.165 (0.969)	0.032 (0.553)
Observations	123	123	123	123	46	77	123
Log-pseudolikelihood	-166.4	-160.5	-160.4	-156.4	-63.0	-91.3	-333.1

†  $p < 0.01$ ; \*  $p < 0.05$ .

Source: Experiment conducted at a college in the Northwestern United States.

In model 3 we introduce an interaction between the real-world broker variable and the negative prime and observe no effect. In model 4, we introduce a three-way interaction between having a negative prime, being a real-world broker, and being nonembedded within a group of evaluators. The three-way interaction term is negative and statistically significant ( $b = -3.550$ ,  $SE = 1.520$ ,  $p < 0.05$ ). Interpreted, this suggests that the odds of having a more positive evaluation are 97 percent lower for those with the three-way interaction than those who do not, net of other factors. Phrased differently, the odds of having a more positive evaluation are almost 30-fold greater for nonbrokers than for brokers.

Why might we see results for the three-way interaction and not for the two-way (i.e., Negative X real-world broker)? We stipulate that only those individuals who have real-world experience with brokerage positions in their external friendship group have the (latent) sensitivity and ability to decode what the nonembeddedness condition implies and affords. In the absence of incentives to downgrade peers in a fixed-sum system (such as the classroom study above), there is little extrinsic motivation to act upon dislike towards another. As we theorized that brokers have less apprehension in flouting normative rules, we suspect that the nonembedded priming was necessary to activate participants with brokered networks into acting upon their dislikes.

As an alternative way of assessing our results, in models 5 and 6 we split the sample to represent those participants whose real-world networks are *not* characterized by brokerage (model 5) or are (model 6). As becomes evident in these split samples, it is only the real-world brokers that act upon the negative priming as well as the embedded friendship group provided when evaluating the pitch. The interaction term for real-world brokers in model 6 is  $b = -2.091$ ,  $SE = 0.938$ ,  $p < 0.05$ . In model 5, the corresponding estimate is positive but not statistically significant. In model 7, we re-estimate our model using an alternative, composite outcome scale drawn from assessments of facets of the pitch including the quality of its writing, presentation format, the underlying idea, its commercial business potential, and its social impact, with minor change in our theoretical conclusions.

## Discussion

In this article, we demonstrated that only evaluators that occupy brokerage positions act on their dislikes in the peer evaluation process. Drawing on both archival data that include complete social structures and peer evaluations within two classrooms, as well as a laboratory experiment that randomly induces relationship valences and embeddedness primes on a different population of participants, we find that evaluators with less network constraint assess those individuals for whom they have negative relationships more critically.

This article makes three contributions. First, we highlighted a missing facet of the evaluation literature: that peer evaluations are likely to occur in the context of negative ties and dislike between peers. Second, we examined the moderated salience of these negative relationships, conditioned by the social structure surrounding the evaluator. Social structure, in turn, shapes the extent to which individuals are willing to flout organizational norms and take personal preferences into considera-

tion. Third, we employed a simple experimental approach to study negative ties, a phenomenon that has been difficult to study due to their scarcity.

We examined how social structure intersects with the enforcement of organization norms of professionalism, precluding the introduction of personal views (e.g., dislike) into the evaluation process. Although norms of professionalism are applied uniformly across all individuals, we hypothesized that it is only the brokers who possess the freedom to set aside these groups norms and act upon their dislikes. In essence, this article has theorized a schism within the organization between brokers and nonbrokers, with nonbrokers adhering to (or even amplifying) organizational norms.

An underlying assumption in our theory is the notion that individuals have a baseline adherence to their personal beliefs, rather than the beliefs of the organizations within which they are embedded. There is a reciprocity of social influence between the individual and the organization, with each influencing the other in turn. As individuals engage in a sustained relationship with an organization, it would be interesting to examine the extent to which the organization may exert ever greater influence over the individual, resulting in a subsumption of the beliefs of the organizational members. Alternatively, the disparity between organizational and individual norms, and by extension the implications of this article, may vary across demographic and compositional lines. One example that comes to mind are the normative changes that occur as minority groups move beyond “token” numbers to become a distinct minority with their own set of behaviors and beliefs (Kanter 2008). We suspect that these issues may be interesting future avenues of study.

It is important to note that our theorizing does not rest upon the specific nature of the organizational norm itself. For example, if organizations were to adopt a distinct set of norms (e.g., we will only hire dog-lovers), these might continue to be amplified by nonbrokers embedded within the organization. However, a necessary assumption underlying our theorizing is a divergence between the norms espoused by the organization and the personal views of a broker (e.g., a hater of dogs). It is this disparity in beliefs between the organization and the individual, coupled with the lack of embeddedness on the part of brokers that allows the divergence of behavior between nonbrokers and brokers. If this disparity did not exist, we would likely not see the effects presented in this article.

With this disparity in mind, we focused this article on affect-based negative ties in which one individual has a personal dislike of another. However, it is worth reflecting on the applicability of our theorizing to other types (i.e., behavioral and cognition-based) of negative ties. For example, cognition-based negative ties may arise when one individual perceives another as incompetent. In the context of peer evaluations within organizations, the failure to successfully do one’s job is likely to be grounds for negative evaluations. Thus, without a misalignment between organizational norms and personal preferences, our theory predicts that we would not observe the moderating effect of social structure.

This necessary scope condition—the misalignment between organizational normal and personal preferences and considerations—also suggests avenues where our theory may be generalized. Specifically, it is worth speculating on the applicability of our theory when this misalignment occurs more generally. In fact, one could

argue that a central purpose of hierarchy within organizations is to align individual behavior with that of the organization by designing incentive systems to reward (and punish) adhering employees. Framed in this manner, one could envision a wide range of behaviors besides peer evaluations, ranging from workplace punctuality to dress codes to cite examples, where the interests of the organization are orthogonal to the interests of the individual. Across this set of behaviors, this article would suggest that adherence to organizational norms may be predicated upon the social structure that surrounds the focal employee.

This study has limitations that should be addressed in future work. We began developing our thinking of this study with a focus on peer evaluations in the organizational context of a classroom. We chose this setting because it afforded us the opportunity to implement a peer-based evaluation system and collect the necessary data to rigorously evaluate our arguments. Close contact with the setting allowed us to: observe social relationships at the onset of the study; to include objective (i.e., exam scores) and subjective (i.e., high regard) measures of everyone's capacity to contribute; and measure detailed ascriptive characteristics, as well as project team and friendship networks, that also enabled the calculation of network measures of status. Moreover, we could customize our survey instrument to capture not only positive friendship ties, but also instances where individuals expressed dislike for one another. Finally, we were able to set the organizational cultural blueprint and observe how participants reacted to it. In short, we collected a rich data set not normally available in organizational settings (e.g., Petersen, Saporta, and Seidel 2000; Fernandez, Castilla, and Moore 2000).

It is a given that these advantages come with costs. A first concern is scope conditions, and the extent to which our classroom setting represents other organizational venues. We do note, however, that to the extent that the stakes are higher in certain organizational contexts (e.g., banking, consulting), the underlying mechanisms invoked in this article may be heightened, particularly within organizations that are structured as a tournament with structurally equivalent employees competing for slices of a fixed pie or the possibility of up-or-out promotion opportunities. With this as context, we emphasize that as is the case of most organizational network research, this study is a quantitative case study of a particular organizational setting and time.

A second concern is the ability to derive causal inference. To buttress the classroom study, we developed and deployed a simple experiment to establish causal inference. Although this second empirical approach lacks the verisimilitude of the classroom setting, it has the advantage of experimental control. Specifically, we can hold constant the quality of the evaluated work-product, to induce negative valences on the evaluator-evaluated dyad, and to prime the extent to which normative controls apply. In this manner, the experiment allows us to establish more compelling yet still imperfect causal inference and the examination of potential mechanisms for our effects. However, we regard the results of this experiment as suggestive given the small samples (and thus cell sizes) available to us and thus our inability to flesh out, experimentally manipulate, and formally assess the linkages in a causal chain.

In our consideration of the juxtaposition between archival work on organizations and experimental work in the laboratory, we believe that it is important to highlight the intersection of the two: namely that experimental subjects are humans who occupy roles and positions across a multitude of real-world situations. Human research participants, moreover, invariably bring into the lab a host of priors and variable ways of thinking and approaching questions and problems rendering them heterogeneously susceptible and inclined towards different experimental primes and conditions. Moreover, humans have an exceptional capacity to extrapolate, learn, and adapt based on the various information, incentives, and stimuli presented to them. Given these two issues—heterogeneity of prior human experiences and the capacity to learn and adapt—we endeavored to determine the extent to which prior social relational experience could plausibly alter parameters in our models. This is based on the idea, noted above, that psychosocial processes concerning social relational perceptions and action are conditioned by prior social relationships and experiences (e.g., Cartwright and Harary 1977; Heider 1958; Shelley et al. 1995; Burt 2001; Strahilevitz 2004; Burt 2010; Cowan 2014; Aven 2015).

Taken together, we believe that the juxtaposition of real-world empirical data with a laboratory experiment is a compelling combination. Specifically, we focus on a phenomenon that is difficult to observe in archival analysis (i.e., negative ties) while bringing that phenomenon into the controlled environment of the experimental laboratory. Each of these approaches has its drawbacks. Given the scarcity of naturally occurring and measurable negative ties within organizations, studies of this phenomenon are often difficult to execute or replicate. Given the brief period and contrived nature of the laboratory experiment, causal inference derived from these experiments may not be relevant in all real-world settings. However, by juxtaposing these complementary approaches, we have greater confidence in the validity of our findings. Although articles constructed in this manner are still relatively rare, one of our hopes is the more widespread adoption of multimethod empiricism.

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