

A Social Network Analysis of Positive and Negative Gossip in Organizational Life

Travis J. Grosser,¹
Virginie Lopez-Kidwell,¹
and Giuseppe Labianca¹

Abstract

The authors use social network analysis to understand how employees' propensity to engage in positive and negative gossip is driven by their underlying relationship ties. They find that expressive friendship ties between employees are positively related to engaging in both positive and negative gossip, whereas instrumental workflow ties, which are less trusting than friendship ties, are related solely with positive gossip. The authors also find that structural embeddedness in the friendship network further increases the chance that the pair will engage in negative gossip. Finally, an employee's total gossiping activity (both positive and negative) is negatively related to supervisors' evaluations of the employee's performance, whereas total gossip activity is positively related to peers' evaluations of the employee's informal influence.

Keywords

gossip, social networks, structural embeddedness

Gossip occurs everywhere in our social world. One need only glance at the covers of magazines in supermarkets or log onto the most popular Internet websites to realize that the gossip market thrives on publishing intimate

¹University of Kentucky, Lexington, KY, USA

Corresponding Author:

Travis J. Grosser, 455E Gatton College of Business and Economics, Lexington, KY, 40506, USA
Email: travis.grosser@yahoo.com

details about the lives of celebrities. Apart from public forums, gossip is also hard to avoid in our face-to-face social interactions. Emler's (1994) empirical work suggests that up to two thirds of all conversations include some reference to third party doings. Dunbar (2004) reports similar findings from a series of studies on the content of everyday conversation, noting that gossip accounts for approximately 65% of speaking time, with only limited variations across age and gender.

Although it is commonplace, gossip has negative connotations for most people (Gluckman, 1963). Many of the world's religions warn against idle gossip, and it has even been the cause of varied punishments throughout history. For example, from the 14th to the 18th centuries, Britain had laws against gossiping and subjected "gossipmongers" to often vicious disciplinary actions (Emler, 1994). Though drastic punishments are seldom applied in the workplace, gossiping is viewed mainly as a nuisance to the proper functioning of organizations. Some organizations link gossip to negative outcomes such as decreased productivity, eroded morale, hurt feelings and reputations, and the turnover of valued employees (e.g., Danziger, 1988). Michelson and Mouly (2004) similarly conclude that "much of the popular business literature tends to treat rumor and gossip as a detrimental activity for organizations. Gossip is assumed to waste time, undermine productivity, and sap employee morale" (p. 196).

Given that gossip is seen as such a socially destructive activity, why is it still so rampant in organizations? Furthermore, what types of relationships and network structures facilitate the flow of various forms of gossip? And do individuals who partake in gossiping derive any benefits from it? Such questions motivated this study. We begin by recognizing that both positive and negative forms of gossip can be spread in organizations, and then we attempt to answer the following research questions: (a) Does positive and negative gossip travel in the same way through different types of social network ties (i.e., expressive friendship networks vs. instrumental workflow networks)? (b) Does an employee's network structure beyond the dyadic level affect the extent to which the employee engages in positive or negative gossip? (c) What, if any, benefits or liabilities does an individual derive from participating in organizational gossip in terms of supervisor-rated performance and peer-rated informal influence? We provide empirical evidence grounded in existing theory on gossip for answering these questions and broadening our understanding of gossip's role in organizational life.

Our results suggest that an individual's relationships and the structure of one's social network have implications for organizational gossip. Previewing our findings, our main contribution will be to show that sharing many of the

same friends with another person in a friendship network is a factor that enhances the transmission of negative gossip between two individuals. In addition, our results suggest three further conclusions. First, we find that negative gossip is more likely to be transmitted between two individuals with expressive friendship ties than between individuals with instrumental workflow ties only. Second, the more a person engages in gossip activity (positive and negative gossip combined), the more informal influence coworkers accord to that person. Third, the more a person engages in gossip activity, the lower the supervisor rates that person's work-related performance.

Defining Gossip

The working definition of *gossip* used in this study is positive or negative information exchanged about an absent third party. In comparison with others, this definition does not assume gossip to be trivial (Rosnow & Fine, 1976), value laden (Noon & Delbridge, 1993), or typically of negative valence. As Rosnow and Fine (1976) point out, the definition of gossip was not always as negatively oriented as it is for some today. The term *gossip* derives from the Old English *godsibb*, meaning "god-parent." The term gets its current meaning from its previous references to the female friends of a child's mother who were present at the child's birth and "idly chattered among themselves" (Rosnow & Fine, 1976, p. 86). These relatively innocuous roots lead one to wonder whether gossip must always be a negative activity. Indeed, many scholars point out that gossip's valence does not necessarily have to be negative. Soeters and van Iterson (2002) differentiate "blame gossip" from "praise gossip" and predict that both forms will occur in differentiated organizational cultures. Ben-Ze'ev (1994) suggests that an even distribution exists between negative and positive information in gossip exchanges and further argues that "contrary to its popular reputation, then, gossip is not basically concerned with detraction, slander, or character assassination. Negative information may be remembered better, and hence the illusory impression of its dominance" (p. 23).

Baumeister, Zhang, and Vohs (2004) also note that gossip is not only about negative instances of rule breaking; it can be about positive instances of rule strengthening. Foster (2004) illustrates that positive as well as negative gossip can have value in the workplace. He contends that "gossip certainly influences reputations; yet there is no logical reason to suppose that this is solely accomplished with negative remarks" (p. 83). These arguments lead us to conclude that, in addition to negative forms of gossip, positive forms of gossip also play an important role in organizations. We therefore differentiate between gossip that is of a positive valence and gossip that is of a negative valence.

Rosnow (1977) argues that gossip serves three fundamental functions: to inform, to entertain, and to influence. To these, we might add that gossip also serves as a norm-enforcing mechanism in groups (Dunbar, 2004; Gluckman, 1963). Additionally, gossip has been found to play a role as a safety valve by providing a means for stress relief and emotional support (Waddington & Fletcher, 2005). It is important to note that whether gossip is viewed as positive or negative depends on the level of analysis employed as well as the point of view from which one is examining gossip. For example, discussing a third party's negative attributes may appear to be a purely negative activity from an individual perspective, but it may serve a positive function at the group level in that this information can potentially protect the group from harmful behavior. This makes each piece of gossip difficult to definitively classify as universally positive or negative. We assume, however, that gossipers, who are embedded in organizations, have an understanding of their social surroundings that makes them reasonable judges of the valence of the gossip they initiate. Therefore, for the purposes of this study, the individual initiating the gossip subjectively determined the valence of gossip.

Theoretical Background and Hypotheses

Gossip Partners and Gossip Valence in Organizations

Dyadic transmission of positive and negative gossip. Two fundamentally different kinds of relational ties exist within organizations: *instrumental ties*, which arise in the course of fulfilling appointed work functions (e.g., Zagenczyk, Gibney, Murrell, & Boss, 2008); and *expressive ties*, which contain a socioemotional component (Lincoln & Miller, 1979). We argue that positive and negative gossip is fundamentally different and that each form travels through instrumental ties and expressive ties differently. That is, an individual will engage in positive and/or negative gossip based on the individual's dyadic relationship ties with others. One primary difference between positive and negative gossip revolves around the level of interpersonal trust in a relationship. Boon and Holmes (1991) define *trust* as "a state involving confident positive expectations about another's motives with respect to oneself in situations entailing risk" (p. 194). In general, trust creates a feeling that one will not be taken advantage of, which enables people to take risks (McAllister, 1995). Trust is a precondition for the transmission of sensitive gossip (Burt & Knez, 1996) because privacy is a crucial factor in the exchange of this type of gossip: a gossipper could find it costly or embarrassing if others were to learn about the exchange (Rosnow, 2001). When exchanging sensitive

gossip with a trusted partner, the gossiper can be reasonably assured that the partner will respect requests to keep the source anonymous or not to repeat it if so desired. Assurances such as these are likely to arise only in relationships marked by high levels of trust. In this article, we assume that the gossip an individual labels as “negative” represents a risky social endeavor that requires an assurance of privacy. Thus, interpersonal trust will be an important factor to consider when selecting partners for sharing negative gossip.

Interpersonal trust has both cognitive and affective foundations (Lewis & Weigert, 1985; McAllister, 1995). Cognition-based trust refers to a judgment based on another’s competence and reliability, which is most likely to develop in instrumental workflow ties (Chua, Ingram, & Morris, 2008). Affect-based trust refers to a deeper level of trust that derives from an emotional bond between individuals, which is more likely to develop only in close expressive friendship network ties (Chua et al., 2008; Tse & Dasborough, 2008).

Because negative gossip is a more sensitive form of gossip, we would expect that the stronger form of trust, affective trust, would be a relational precondition for its transmission. Positive gossip, however, is not as sensitive and therefore should not require a high level of affective trust as a precondition for its exchange. An actor spreading positive gossip has nothing to lose and does not have to fear embarrassment or retribution if targets learn about the positive gossip. On the contrary, an actor spreading positive gossip potentially may gain if others know about it. Kurland and Pelled (2000) point out that if a gossiper spreads positive news about others, gossip recipients are likely to think the gossiper will also spread good news about them and thus confer reward power to the gossiper. Because privacy and trust are not as necessary in the case of positive gossip, affective trust is not a necessary condition for positive gossip to be exchanged. Consequently, individuals with close friendship ties will have the requisite affective trust levels to make them comfortable enough to exchange negative gossip. Individuals having only instrumental ties (e.g., required workflow ties, advice ties), however, will lack affective trust and will therefore be less prone to exchange negative gossip.

Accordingly, we propose that positive and negative gossip will not travel through all network ties in the same way. Negative gossip will require expressive ties for its transmission because affective trust is required; such ties are likely to be found only among friends. However, because affective trust is not required for the exchange of positive gossip, it should flow not only between friends but also between individuals who merely are required to work together and do not consider themselves to be friends. Thus, whereas employees will transmit positive gossip to both their friends and workflow partners, they will trust only their friends with negative gossip.

Hypothesis 1a: A required workflow tie between two individuals will be positively associated with the transmission of solely positive gossip.

Hypothesis 1b: A multiplex tie wherein two individuals share both a friendship tie and a required workflow tie will be positively associated with the transmission of both positive and negative gossip.¹

Evidence shows that individuals tend to share gossip with allies (e.g., relatives, friends) versus sharing it with people considered to be nonallies, such as acquaintances or strangers (McAndrew, Bell, & Garcia, 2007). We would thus expect a negative relationship to exist between gossip activity and individuals who merely share an acquaintance tie with one another (i.e., people who indicate that they merely interact with one another without being friends and without sharing a workflow exchange relationship). In other words, an expressive friendship tie or an instrumental workflow tie must exist between two individuals before any type of gossip will be transmitted. We would expect that individuals with only an acquaintance tie to one another would lack the motivation commonly associated with the transmission of gossip.

Hypothesis 1c: The absence of both a friendship tie and a required workflow tie between two individuals (i.e., the existence of only an acquaintance tie) will be negatively associated with the transmission of both negative and positive gossip.

Third Parties and Gossip Transmission

As explained previously, positive and negative gossip will travel through ties at the dyadic level based on the level of affective trust manifested in those ties. The existence of third party ties is an important factor in determining the level of affective trust between two people. The level of trust an individual has in a partner is derived, in part, by the extent to which they share common ties to third parties in the social network. To examine the role that third party relationships play in gossip transmission, we will investigate the effects of structural embeddedness. In the following discussion we adopt the common terminology of social network analysis to explain structural concepts. The term *ego* refers to a focal actor in a network; the term *alter* refers to a second actor to whom ego has a tie (a relationship).

Gossip and mutual third party ties. “Structural embeddedness” refers to the extent to which ego shares mutual third party ties with alter. The more common third party ties ego and alter have in common, the more structurally embedded ego and alter are with one another (see Figure 1).

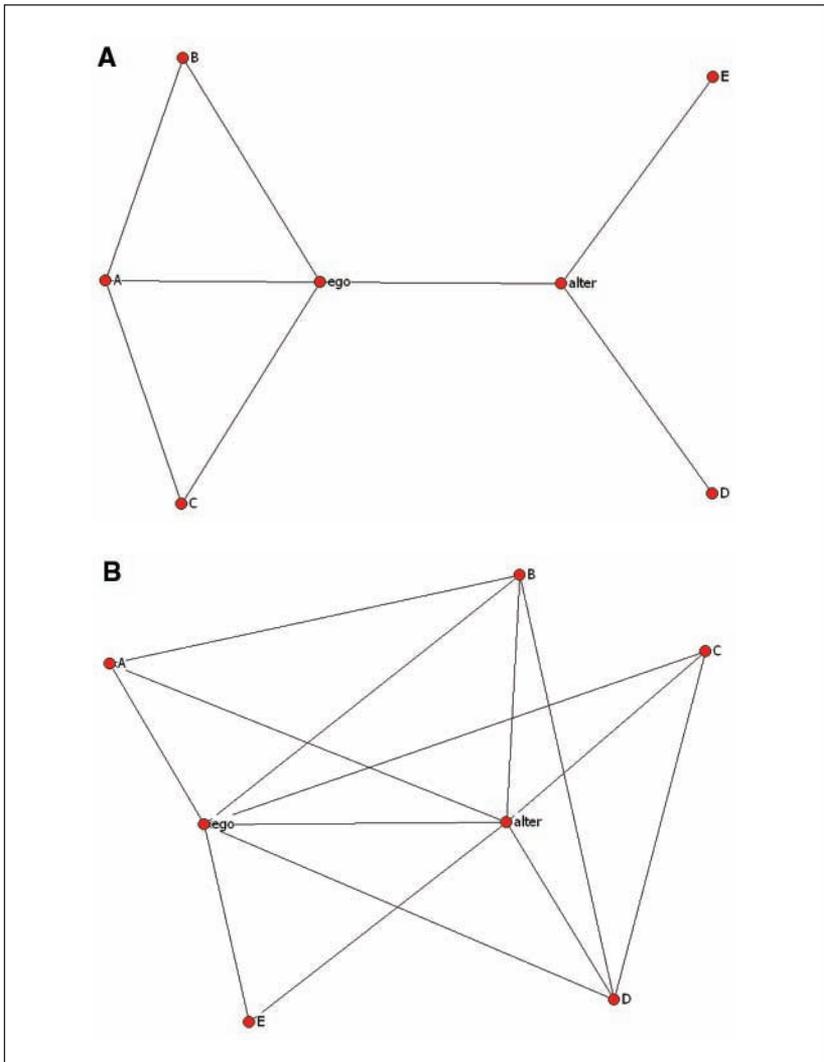


Figure 1. High structural embeddedness versus low structural embeddedness
Note: Nodes are individuals; lines are friendship ties. (A) Low ego–alter structural embeddedness—here ego and alter share no common third party ties. (B) High ego–alter structural embeddedness (ego and alter here share common third party ties with Persons A, B, C, D, and E).

Structural embeddedness can be thought of as a measure of cohesiveness between actors. High levels of structural embeddedness are likely to enhance communication, common goals, trust, cohesion, and the development of

common norms. Sanctions commonly occur when the strong norms for cooperation that exist in embedded relationships are violated. The high levels of monitoring that can occur among individuals involved in embedded relationships help prevent norms from being effectively violated. In addition, embedded relationships are thought to be more stable than nonembedded relationships (Krackhardt, 1999). Moreover, Chua et al. (2008) show that affective trust is positively related to high levels of structural embeddedness in networks of friendship ties. Thus, friends who share a high degree of structural embeddedness (friends who have many mutual friends in common) should share an additional layer of trust because their relationship is embedded in a broader web of friendship. This layer of trust would be absent for friends who share a low degree of structural embeddedness (Burt, 2005; Granovetter, 1992).

We would expect that the enhanced level of trust inherent in highly embedded relationships will be particularly important for the transmission of negative gossip. We should thus see higher rates of negative gossip transmission between friends with high structural embeddedness in comparison with friends who are not embedded in a web of common third party friendships. In contrast, the increased cohesion created by structural embeddedness should not necessarily predict the transmission of positive gossip because cohesion and enhanced trust is not a necessary condition to this form of gossip.

Hypothesis 2: Friends sharing high levels of structural embeddedness will be more likely to engage in negative gossip than will friends sharing low levels of structural embeddedness.

Consequences of Gossip for Individuals

In addition to explaining the structural antecedents to negative and positive gossip, we also sought to understand how participating in gossip networks is related to employees' outcomes in their organization. If we were to find a positive effect for gossiping on employee outcomes, it might explain in part why gossiping is so ubiquitous. Furthermore, we hoped to investigate whether the kind of gossip (positive vs. negative) would lead the gossiper to experience different organizational outcomes. The following discussion examines how gossip relates to two individual outcomes: the employees' in-role performance as rated by their supervisors and the employees' informal influence as rated by their peers. We consider the link between gossiping and these outcomes from three theoretical perspectives: cultural learning, social comparison, and social exchange.

Performance. Gossip has been explained as a venue that helps individuals map their social environments (Hannerz, 1967). Rosnow (1977) claims that one of the three functions of gossip is information gathering, which helps individuals understand their environments. Gossip can convey information—especially sensitive information—that is unavailable through other channels (Ayim, 1994). Seen in this light, gossip functions as an aid to sensemaking in organizations. It can potentially transmit information that will help an individual compete for organizational rewards and promotions (Wert & Salovey, 2004). From a cultural learning perspective, gossip is communication that can teach us about our social environment (Baumeister et al., 2004). Learning about others' misfortunes indicates what behavior will fail in similar situations; hearing about others' successes helps us discern how to flourish in the social system. Gossip can convey valuable information about the rules and boundaries of the culture. This cultural knowledge, in turn, can enhance individual performance.

From a social comparison perspective, gossip is a means by which individuals compare themselves with others. Comparing oneself through direct interaction with another can sometimes embarrass one or both parties (Wert & Salovey, 2004), but gossip can be a way for individuals to gain information about others or to compare themselves with others without having to directly interact with them (Suls, 1977). According to Wert and Salovey (2004), social comparison is motivated not only by the need for self-evaluation but also by the need for self-improvement and self-enhancement. They argue that gossip—especially gossip about a superior other—can lead to self-improvement. As we learn about the achievements of others through gossip, we are motivated to better ourselves to compare favorably with them, which can produce better in-role performance.

Both the cultural learning and the social comparison perspectives suggest that gossip can lead to increased in-role organizational performance. Gossip helps individuals learn how to compete more effectively and to improve their performance as they implicitly compare themselves with the gossip targets. The arguments, however, fail to highlight the negative consequences some types of gossip can have on groups and individuals, and how others, particularly supervisors, might interpret gossiping. Gossip always carries the possibility that it will be malicious. Rather than being used to improve performance, negative gossip potentially ruins reputations and spreads discontent. An individual known to engage in a great deal of negative gossip is unlikely to be seen as a high performer, especially by supervisors who might view gossip as subversive (e.g., De Sousa, 1994; Noon & Delbridge, 1993).

This suggests that individuals can experience both positive and negative performance benefits from gossip. We argue that the extent to which people will benefit from gossip depends on whether they engage in positive or negative gossip. Employees who engage in primarily positive gossip with coworkers will impress supervisors more favorably and enjoy higher performance ratings than will those who engage primarily in negative gossip.

Hypothesis 3a: There will be a positive relationship between the number of people with whom an individual engages in positive gossip (degree centrality) and supervisor-rated performance.

Hypothesis 3b: There will be a negative relationship between the number of people with whom an individual engages in negative gossip (degree centrality) and supervisor-rated performance.

Informal Influence. In addition to providing information to employees (as discussed above), gossip serves another major function—influencing others (Rosnow, 1977). Theorists have pointed out that gossip can lead to power and influence in an organizational context:

For the individual, gossip can be a powerful tool. It provides a person with the opportunity to pass on information about key members of an organization, with the potential to influence opinions and attitudes. One's own position may be enhanced because one is seen as a gatekeeper of "important" information, and because the gossip might seek to lower the prestige and standing of the "victim" in relation to oneself as the gossiper. (Noon & Delbridge, 1993, pp. 32-33)

The quote above appears to assume that negative gossip leads to increased power and influence. Other theorists, however, point out that positive gossip can also lead to increased organizational influence as this form of gossip enhances an individual's reward power, expert power, and referent power (Kurland & Pelled, 2000). Either way, we expect that individuals' abilities to convey both positive and negative gossip should be related to their informal power and influence in the organization.

From a cultural learning perspective, listeners perceive that the gossiper deeply understands the rules and norms that exist in a given system (Baumeister et al., 2004), which gives the gossiper increased social status and influence: The gossiper is portrayed as the expert on how to behave in a given environment. The social exchange view portrays gossip as a transaction between two parties, whereby news is exchanged in return for a desired

resource (Rosnow & Fine, 1976). Assuming that an individual who more actively engages in gossip can gain more hard-to-get information than one who is less engaged in gossip, it would follow that those who gossip more have more “news” to exchange with others in the informal organizational marketplace. Thus, peers should see those who gossip as more influential because of their rich information resources. Based on those arguments, we believe peers will see as influential an individual who engages in positive or negative gossip.

Hypothesis 4a: There will be a positive relationship between the number of people with whom an individual engages in positive gossip (degree centrality) and coworker-rated influence.

Hypothesis 4b: There will be a positive relationship between the number of people with whom an individual engages in negative gossip (degree centrality) and coworker-rated influence.

Method

Sample and Setting

Data were collected in October 2007 at the branch office of a medium-size company specializing in food and animal safety product manufacturing and sales in the Midwestern United States. Before beginning the data collection, we conducted a series of semistructured interviews with employees within the organization regarding their general workplace satisfaction. During these interviews, many respondents spontaneously mentioned that gossip was prevalent and a social focus within the organization. The information obtained from these preliminary interviews led us to include gossip as a topic of study in our research project at this organization. Because multiple employees mentioned gossip without prompting, we concluded that this organization would be particularly well suited for a study on the topic. Furthermore, the organization's size allowed us to conduct an analysis of the entire organizational network using a whole-network approach. A whole-network approach “examines sets of interrelated objects or actors that are regarded for analytical purposes as bounded social collectives” (Marsden, 2005, pp. 8-9). In sum, we asked each respondent (ego) distinct questions about their relationship with coworkers (alters). If enough egos are sampled, this process produces an accurate depiction of the relationships in the entire network (Marsden, 2005).

In all parts of the study, 30 of the 40 full-time employees participated, yielding a response rate of 75% (a response rate this high limits the possible

negative effects of missing data in social network analysis and is considered to be an acceptable response rate for a whole-network approach; see Kossinet, 2006; Wasserman & Faust, 1994). Of the respondents, 57% were female, 23% were supervisors, with an average age of 45.9 years, and an average tenure of 3.2 years. All employees had the same ethnic background (White/Caucasian). We compared respondents and nonrespondents on the following variables: gender, age, tenure, and rank. To do this comparison, we used a chi-squared test on the categorical variables (gender and rank) and a *t* test on the continuous variables (age and tenure). We found no significant differences between respondents and nonrespondents on these variables, suggesting no systematic bias because of nonresponse (Armstrong & Overton, 1977).

Data Collection and Measures

We collected a combination of psychometric and sociometric data. Psychometric data, which include the use of previously validated multi-item scales, were collected to assess individual opinions and perceptions. Sociometric data were collected to assess the expressive friendship and required instrumental workflow ties of each respondent (Scott, 2001). These relational data cannot be accessed through psychometric scales—if we were to ask each respondent for an in-depth description of each relationship they have with each of their coworkers respondent fatigue would become an issue likely leading to unreliable data. Thus, we relied on standard sociometric methods to generate reliable and valid data. For the sociometric portion of our survey, each respondent was provided a roster of the 40 employees at the branch office site and was asked to indicate each coworker with whom the respondent interacts regularly. Rosters were provided to aid recall, to reduce measurement error, and to improve data reliability (Marsden, 1990). The average network size was 6.73, with a standard deviation of 3.36. We then asked additional questions about each coworker listed: Is the person someone with whom you are required to work? (required instrumental workflow ties); Is the person a friend? (expressive friendship ties); Do you engage in gossip with this person? (gossip ties); and finally, How influential do you feel this person is in the organization above and beyond their formal authority? (influence rating).

It is important to note that respondents could nominate alters for more than one relationship. For example, an individual could consider somebody to be both a friend and a coworker. In sociometric questionnaires, researchers often attempt to assess whether a relation exists between two given actors according to the respondent's evaluation of a carefully worded question (Wasserman & Faust, 1994). It is thus common to measure each network

relation using a one-item question (Borgatti & Cross, 2003; Ibarra, 1992, 1995). Although this approach has been criticized (Rogers & Kincaid, 1981), Marsden (1990) concludes that, assuming adequate procedures are employed, such measures are mostly reliable, especially when assessing stable patterns of interaction (Freeman, Kimball, & Freeman, 1987) as we do here. We describe the survey questions in depth below.

Required workflow ties. For each of their coworkers, respondents were asked, Are you required to work directly with this person in order to get your work done (e.g., receiving inputs or providing outputs)? These data were binary coded (1 = *required to work with*, 0 = *not required to work with*) and entered into a 30×30 matrix (missing data cells were left blank). This required workflow matrix was maximally symmetrized (i.e., a tie or relation was assumed to exist if at least one actor in that specific dyad indicated that it exists).²

Friendship ties. After indicating whether they must interact with a coworker to perform work duties, respondents were asked, Do you consider this person to be a close friend (e.g., do you confide in this person)? As with the required workflow ties, these friendship ties were binary coded (1 = *friend*, 0 = *not friend*). The 30×30 matrix was maximally symmetrized.

Required workflow-only ties. For Hypothesis 1b, we had to separate ties that were workflow only, as opposed to ties where respondents indicated that they were both required to work with the person and considered the person to be a friend. To isolate these instrumental-required workflow-only ties, we took the required workflow matrix, multiplied it by the friendship matrix, and subtracted the resultant matrix from the original required workflow matrix, leaving behind required workflow-only ties, which were binary coded (1 = *required to work with only*, 0 = *others*).

Multiplex friendship and workflow ties. This measure was created by running the multiplex routine in UCINET 6.181 (Borgatti, Everett, & Freeman, 2002). This allowed us to create a matrix where ties were counted between two actors only if they shared both an expressive friendship and a required instrumental workflow tie. These multiplex friendship and workflow ties were binary coded (1 = *multiplex relationship—both friendship and workflow tie*, 0 = *no multiplex relationship*).

Acquaintance ties. To test Hypothesis 1c, we had to create a matrix of individuals who share acquaintance ties only. These individuals indicated that they interact with one another but share neither workflow nor friendship ties. This matrix was created by subtracting the friendship and workflow matrices from a 30×30 matrix of who interacts with whom, thus leaving a symmetric 30×30 matrix of acquaintance-only ties. These data were binary coded (1 = *acquaintance*, 0 = *not acquaintance*).

Gossip ties. Although much of the literature on gossip distinguishes between gossip and rumor, we left our respondents a certain degree of latitude in determining the limits of what constitutes gossip. We also left it up to respondents to determine the valence of the gossip shared with each partner. Thus, the sociometric portion of our survey asked each focal individual to indicate the other employees the individual exchanges gossip with and to indicate the valence of the gossip exchanged with each partner (positive or negative). The survey question read: Sharing information about others (what some would call office gossiping) is a natural occurrence in our social life. If you engage in office gossiping with this person (either receiving or sharing), is it most often positive gossip, negative gossip, or an even blend of both? Individuals were then asked to check the most appropriate box (mostly positive gossip, mostly negative gossip, or an even blend of both positive and negative gossip) on the survey for each gossip partner. Positive gossip was coded as 3, negative gossip as 1, and an even blend of positive and negative as 2. This gossip matrix was then further recoded to extract the positive and negative gossip matrices as explained below.

Negative gossip ties. The 30×30 gossip matrix was dichotomized to isolate the negative gossip ties by recoding 2 and 3 as 0, thereby eliminating positive gossip and an even blend of gossip from the matrix. Theorists note that gossip tends to be a two-way exchange, wherein participants respond to receiving novel information by providing other information in return (Ben-Ze'ev, 1994; Emler, 1994). For this reason, we symmetrized the data on negative gossip. For example, if one actor in a dyad indicated exchanging negative gossip with a second actor, it was then assumed that a negative gossip tie exists between those two—even if the second indicated no negative gossip tie.

We aggregated the number of negative gossip ties for each individual by summing across the rows of the symmetrized matrix to generate a negative gossip degree centrality score. *Degree centrality* is a network measure that is calculated by summing an actor's number of incoming and outgoing ties. Degree centrality can also be conceptualized as the "size" of an individual's network. An employee's degree centrality score in the negative gossip network is an indication of the extent to which the employee engages in mostly negative gossip. A higher degree centrality score simply means that this respondent engaged in negative gossip with more peers. Thus, we followed Foster (2003) in interpreting the individual's gossip network size as an operationalization of the individual's overall level of gossip activity.

Positive gossip ties. The positive gossip network was created by recoding gossip ties so that 3 (mostly positive gossip) became 1, and all other numbers became 0, thus eliminating negative and "even blend" gossip ties and leaving

only positive gossip ties in the matrix. We measured the amount of positive gossip exchanged by calculating each actor's degree centrality in the positive gossip network. As above, the positive gossip ties were maximally symmetrized.

Peer-reported influence. In the network questionnaire, we asked each individual to rate each person with whom they interact regularly on a 4-point Likert-type scale regarding the person's level of informal influence within the organization (i.e., Burkhardt & Brass, 1990; Krackhardt, 1990). Regarding those regular interactions, respondents were asked: Rate how much influence this person has in your organization, setting aside their formal title and role in the company. The anchors for this 5-point Likert-type scale were *no informal influence* (0) to *a great deal of informal influence* (5). We created a valued influence network matrix from these data, and each actor's influence score was calculated by summing the column values of the matrix. Because some respondents may not always be able to separate formal title from informal influence, we controlled for formal organizational rank in our analysis.

Structural embeddedness. The level of structural embeddedness for each dyad (i.e., the extent to which ego shares mutual ties to third parties with alter) was calculated by multiplying the friendship matrix by its transpose. This calculation yielded a 30×30 output matrix where the value of each cell X_{ij} represents the number of third party ties Actor i shares with Actor j . The larger the number of common third party ties shared by Actors i and j , the higher the structural embeddedness of the two actors in the network. We calculated structural embeddedness for the friendship network because an expressive network is most consistent with the theoretical argument that third party cohesion has a basis in affect, trust, and obligation (Krackhardt, 1999).

Supervisor-reported performance. On a separate survey, we asked supervisors to rate the performance of the employees who directly report to them. Performance was rated on a 7-item scale of overall employee performance (Tsui, Pearce, Porter, & Tripoli, 1997). The items were asked on a 5-point Likert-type scale, with the anchors being *strongly disagree* and *strongly agree*. Examples of items are the following: This employee is performing his/her total job the way I would like it performed; I am satisfied with the total contribution this employee has made to the organization. Cronbach's α for this scale is .91.

Control variables. All analyses in this study included a set of additional control variables to rule out possible alternate explanations. The control variables used in the multiple regression quadratic assignment procedure (MRQAP) analyses included three demographic attributes of respondents: gender (*male* = 1, *female* = 0), age (in years), and education (1 = *some high*

school, 2 = graduated from high school, 3 = degree or certificate from technical school, 4 = associate's degree, 5 = bachelor's degree, 6 = master's degree, 7 = doctoral degree). Race was not used as a control variable because all respondents were White/Caucasian. Further control variables included tenure (in years), department affiliation (coded as *research and development* = 1, *general administration* = 2, *warehousing and production* = 3), and rank (0 = *employee nonsupervisor*, 1 = *supervisor*). We also controlled for the possibility that the individual's formal position in the organization might dictate access and ability to gossip by controlling for the actor's required instrumental workflow network size (number of coworkers an employee must work directly with to get work done), which was obtained by calculating Freeman's degree centrality measure in UCINET 6.181 (Borgatti et al., 2002) on the symmetrized required workflow network. The control variables used in our ordinary least squares (OLS) regressions included the rank and education variables listed above. We included fewer control variables in our OLS regressions because of the size of our sample. We did, however, also run the OLS regressions with all seven control variables listed above and received results that are nearly identical to those reported.

Analysis

Hypotheses 1a, 1b, 1c, and 2 are at the dyadic level (between pairs of individuals) and use one type of network tie (e.g., friendship) to predict a type of network flow (gossip). Therefore, network regression measures are the most appropriate statistical method for testing them. These network data do not satisfy the assumptions of OLS regression in that the observations are not independent but are instead network autocorrelated (Borgatti & Cross, 2003), therefore requiring the use of the MRQAP to test our hypotheses. As Borgatti and Cross (2003, p. 438) explain, "QAP and MRQAP are identical to their non-network counterparts with respect to parameter estimates, but use a randomization/permutation technique . . . to construct significance tests."

The MRQAP algorithm proceeds in two steps. In the first step, it performs a standard multiple regression across corresponding cells of the dependent and independent matrices. In the second step, it randomly permutes both rows and columns of the dependent matrix and recomputes the regression, storing resultant values of all coefficients. This step is repeated 10,000 times to estimate standard errors for the statistics of interest. For each coefficient, the program counts the proportion of random permutations that yielded a coefficient as extreme as the one computed in Step 1. We used the Y-permutation MRQAP routine in the UCINET program because, of the various different MRQAP routines available (including the default Double Dekker procedure),

Table 1. Summary Statistics

Variable	<i>n</i>	Percentage	<i>M</i>	<i>SD</i>
Gender (% male)	30	43		
Rank (% supervisor)	30	23		
Department				
Research and development		17		
General administration		33		
Warehouse and production		50		
Educational level	30			
Some high school		10		
High school graduate		57		
Vocational/technical certificate		3		
Associate's degree		3		
Bachelor's degree		20		
Master's degree		7		
Doctoral degree		0		
Age in years	29 ^a		45.93	13.16
Tenure in years	29 ^a		3.18	1.24
Supervisor-reported performance	26 ^b		3.58	0.54
Peer-reported influence	30		9.27	11.98
Friendship network size	30		3.33	2.32
Workflow network size	30		6.07	3.21
Multiplex friend and workflow network size	30		2.67	1.94
Acquaintance ties	30		22.27	3.31
Positive gossip ties	30		1.00	1.60
Negative gossip ties	30		0.33	0.55
Total gossip ties	30		4.73	3.10

a. *n* = 29 because of 1 missing value for Age and Tenure from the same respondent.

b. *n* = 26 because of 4 missing values for supervisor-reported performance.

this one is best able to effectively deal with matrices containing missing data. Because Hypotheses 3a, 3b, 4a, and 4b are at the individual level and were not subject to the network autocorrelation issues described above for the dyadic hypotheses, we used OLS regression techniques to analyze these data.

Results

Table 1 shows the summary statistics for the variables used in the analyses for this study. Table 2 contains the correlation matrix for the matrices used in the analyses related to Hypotheses 1 and 2. Table 3 contains the correlation matrix for the variables used in the OLS regressions, which are associated with

Table 2. Correlation Matrix (Bivariate Matrix Correlations for Matrices Used in MRQAP)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age difference	—												
2. Department similarity	-0.05	—											
3. Education similarity	-0.19*	0.22**	—										
4. Gender similarity	0.04	-0.04	-0.01	—									
5. Rank similarity	0.15*	0.04	0.16	0.01	—								
6. Tenure similarity	-0.30**	0.08	0.42**	-0.03	-0.06	—							
7. Friendship ties	-0.07	0.01	-0.03	-0.02	0.00	-0.03	—						
8. Workflow only ties	0.00	0.00	0.03	0.03	0.01	0.07	-0.13**	—					
9. Multiplex friend and workflow ties	-0.06	0.04	0.00	-0.03	-0.03	-0.02	-0.88**	-0.12**	—				
10. Acquaintance ties	0.05	-0.01	0.00	0.00	-0.01	-0.03	-0.66**	-0.66*8	-0.58**	—			
11. Structural embeddedness (friendship network)	-0.09	-0.02	-0.02	0.00	-0.06	0.00	0.45**	0.12*	0.38**	-0.44**	—		
12. Negative gossip ties	0.01	0.05	0.10*	-0.02	0.00	-0.03	0.10*	0.09	0.12**	-0.15*8	0.21**	—	
13. Positive gossip ties	0.03	0.01	0.04	0.04	-0.01	0.07	0.13**	0.24**	0.16**	-0.30**	0.10	-0.02	—

Note: MRQAP = multiple regression quadratic assignment procedure.
 * $p < .05$. ** $p < .01$.

Table 3. Correlation Matrix (Bivariate Correlation for Variables Used in OLS Regressions)

Variables	1	2	3	4	5	6	7
1. Rank	—						
2. Educational level	0.15	—					
3. Performance	-0.23	0.23	—				
4. Influence	0.83**	0.23	-0.17	—			
5. Positive gossip ties	0.30	0.34	-0.15	0.34	—		
6. Negative gossip ties	0.39*	0.42*	-0.14	0.46*	-0.16	—	
7. Total gossip ties	0.48**	0.50**	-0.27	0.65**	0.52**	0.47**	—

Note: OLS = ordinary least squares.

* $p < .05$. ** $p < .01$.

Hypotheses 3 and 4. Table 4 provides a summary of the results for all our hypotheses; it indicates which models are associated with each hypothesis test as well as which table to refer to for the full analysis.

Hypothesis Tests

Hypotheses 1a-1c. Hypothesis 1a states that two individuals who share only a workflow relationship will tend to engage in positive gossip but not in negative gossip with one another. Hypothesis 1b states that two individuals who share both a workflow relationship and a friendship relationship (i.e., a multiplex tie) will tend to engage in both positive and negative gossip. Finally, Hypothesis 1c states that individuals who share only an acquaintance tie will tend to share neither positive gossip nor negative gossip. Table 5 shows the results of the MRQAP regression for these three hypotheses. Each model in Table 5 represents a set of independent variables (network matrices) being included in that particular MRQAP regression onto the corresponding dependent variable (either the positive or negative gossip matrix).

Models 1a and 2a (in Table 5) together suggest support for Hypothesis 1a, in that required instrumental workflow-only ties are positively and significantly associated with the transmission of positive gossip (Model 2a: $\beta = .21, p < .01$) but *not* with the transmission of negative gossip (Model 1a: $\beta = .10, p > .10$).

Models 1b and 2b (in Table 5) each relate to Hypothesis 1b. These models show that multiplex friendship and workflow ties, which have more affective trust associated with them than the workflow-only ties, are significantly

Table 4. Summary of Results

No.	Hypothesis	Table	Model	Analysis	Result
H1a	A required workflow tie between two individuals will be positively associated with the transmission of solely positive gossip	5	1a and 2a	MRQAP	Supported ^a
H1b	A multiplex tie wherein two individuals share both a friendship tie and a required workflow tie will be positively associated with the transmission of both positive and negative gossip	5	1b and 2b	MRQAP	Supported ^a
H1c	The absence of both a friendship tie and a required workflow tie between two individuals (i.e., the existence of only an acquaintance tie) will be negatively associated with the transmission of both negative and positive gossip	5	1c and 2c	MRQAP	Supported ^a
H2	Friends sharing high levels of structural embeddedness will be more likely to engage in negative gossip than will friends sharing low levels of structural embeddedness	5	3 and 4	MRQAP	Supported ^a
H3a	There will be a positive relationship between the number of people whom an individual engages in positive gossip (degree centrality) and supervisor-rated performance	6	5c	OLS	Not supported ^b

(continued)

Table 4. (continued)

No.	Hypothesis	Table	Model	Analysis	Result
H3b	There will be a negative relationship between the number of people whom an individual engages in negative gossip (degree centrality) and supervisor-rated performance	6	5b	OLS	Not supported ^b
H4a	There will be a positive relationship between the number of people whom an individual engages in negative gossip (degree centrality) and coworker-rated influence	6	6c	OLS	Not supported ^b
H4b	There will be a positive relationship between the number of people whom an individual engages in negative gossip (degree centrality) and coworker-rated influence	6	6b	OLS	Not supported ^b
Post hoc Analysis 1	We found a negative relationship between the number of people with whom an individual engages in any gossip activity (both positive and negative gossip combined) and supervisor-rated performance	6	7	OLS	Marginally significant ^c
Post hoc Analysis 2	We found a positive relationship between the number of people with whom an individual engages in any gossip activity (both positive and negative gossip combined) and coworker-rated influence	6	8	OLS	Significant ^c

Note: MRQAP = multiple regression quadratic assignment procedure; OLS = ordinary least squares.

a. $p < .05$ or $p < .01$.

b. $p > .10$.

c. $.06 < p < .10$.

Table 5. Multiple Regression Quadratic Assignment Procedure Results: Models 1 to 4

Variables	Negative Gossip					Positive Gossip			
	Model 1a	Model 1b	Model 1c	Model 3	Model 2a	Model 2b	Model 2c	Model 4	
Department similarity	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Gender similarity	-0.02	-0.01	-0.02	-0.021	0.03	0.04	0.04	0.04	
Age difference	0.02	0.03	0.03	0.04	0.06	0.08	0.08	0.08	
Tenure similarity	-0.01*	-0.08	-0.09*	-0.09	0.05	0.07	0.06	0.05	
Education similarity	0.14**	0.14**	0.14**	0.14**	0.06	0.06	0.07	0.07	
Rank similarity	-0.04	-0.03	-0.04	-0.03	-0.06	-0.06	-0.06	-0.06	
Workflow only ties	0.10	0.12*		0.08	0.21**			0.23**	
Multiplex friend and workflow ties						0.16**			
Acquaintance ties			-0.16**				-0.26*		
Friendship ties				0.02				0.16*	
Structural embeddedness (friendship network)				0.21**				0.01	
<i>n</i>	810	810	810	810	810	810	810	810	

Note: Standardized coefficients are listed in this table.

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

associated with *both* positive (Model 2b: $\beta = .16, p < .01$) and negative gossip (Model 1b: $\beta = .12, p < .05$). Thus, Hypothesis 1b is fully supported.

Models 1c and 2c (in Table 5) relate to Hypothesis 1c. The results from these models indicate that having neither a friendship tie nor a workflow tie (thus, only having an acquaintance tie) is negatively and significantly associated with both positive (Model 2c: $\beta = -.26, p < .05$) and negative gossip (Model 1c: $\beta = -.16, p < .01$) transmission. These results suggest support for Hypothesis 1c.

Thus, overall, we find substantial support for Hypotheses 1a-1c. As noted above, the analyses conducted for Hypotheses 1a-1c were performed at the dyadic level, meaning that we analyzed each possible dyadic relationship in our sample of 30. The formula for ascertaining the total number of possible dyadic relationships in a network is $n(n - 1)$. This means that 870 possible dyadic relationships exist in our sample of 30 people. However, some data points were missing in our network matrices because a limited number of respondents did not answer every survey question, so the total number of observations for these analyses was 810.

Hypothesis 2. Here we state that friends who share high levels of structural embeddedness will be more likely to engage in negative gossip than will friends who share a low level of structural embeddedness. Table 5 shows the results of the analysis that tests this hypothesis. The results for Model 3 in Table 5 ($\beta = .21, p < .01$) show a positive and statistically significant relationship between structural embeddedness in the friendship network and negative gossip, suggesting that the high levels of affective trust generated by sharing third party friendships increase the likelihood of negative gossip transmission. Model 4 in Table 5 ($\beta = .01, p > .10$) shows no statistically significant relationship between structural embeddedness in the friendship network and positive gossip. This suggests that, as expected, the high levels of affective trust created by structural embeddedness are unimportant in the transmission of positive gossip. This set of results suggests support for Hypothesis 2. The analysis conducted for Hypothesis 2 was also at the dyadic level, so 810 observations were available.

Hypotheses 3 and 4. Table 6 shows the results of the OLS regressions that relate to Hypotheses 3a, 3b, 4a, and 4b. Model 5b (in Table 6) shows no significant relationship between negative gossip and supervisor-reported performance ($\beta = -.23, t = -.94, p > .10$; 95% confidence interval $[CI_{95}] = [-.73, .27], r^2 = .04$). Similarly, Model 5c (in Table 6) demonstrates the lack of a significant positive relationship between positive gossip and performance ($\beta = -.12, t = -1.02, p > .10$; $CI_{95} = [-.36, .12], r^2 = .04$). Therefore, no support is found for either Hypothesis 3a or 3b. Furthermore, Model 6b

Table 6. Ordinary Least Squares Regression Results: Models 5 to 8

Variable	Performance					Influence				
	Model 5a	Model 5b	Model 5c	Model 7 (Post hoc)	Model 8 (Post hoc)	Model 6a	Model 6b	Model 6c	Model 6c	Model 8 (Post hoc)
Rank	-0.30 (0.25)	-0.18 (0.28)	-0.30 (0.25)	-0.08 (0.26)		22.67** (2.96)	21.42** (3.17)	22.20** (3.11)		18.59** (2.98)
Education	0.08 (0.07)	0.12 (0.08)	0.10 (0.07)	0.16* (0.08)		0.85 (0.81)	0.48 (0.88)	0.70 (0.87)		-0.34 (0.83)
Negative gossip network size		-0.23 (0.24)				2.92 (2.71)				
Positive gossip network size			-0.12 (0.24)					0.49 (0.88)		
Total gossip network size				0.09+ (0.04)						1.34** (0.46)
Constant	3.71** (0.37)	3.54** (0.41)	3.75** (0.37)	3.63** (0.35)		-21.12** (4.21)	-19.49** (4.46)	-20.60** (4.36)		-19.06** (3.80)
ΔF		0.89	1.04	4.02+		1.16	0.31	0.71		8.37**
R^2	0.11	0.14	0.15	0.25		0.70	0.72	0.71		0.78
ΔR^2		0.03	0.04	0.14+			0.02	0.01		0.08**
Adjusted R^2	0.03	0.03	0.03	0.14		0.68	0.68	0.67		0.75
n	26	26	26	26		30	30	30		30

Note: Values in parentheses represent standard errors. ΔF and ΔR^2 report changes from the previous model.

+ $.06 < p < .10$. * $p < .05$. ** $p < .01$.

(in Table 6) indicates no significant relationship between negative gossip and influence ($\beta = 2.92, t = 1.08, p > .10$; $CI_{95} = [-2.65, 8.49], r^2 = .04$). Model 6c (in Table 6) also shows a nonsignificant relationship between positive gossip and influence ($\beta = .49, t = .56, p > .10$; $CI_{95} = [-1.32, 2.31], r^2 = .01$). This set of results leaves Hypotheses 4a and 4b unsupported as well.³

Post hoc Analyses

The lack of support for Hypotheses 3a, 3b, 4a, and 4b led us to conduct a series of post hoc analyses to examine the effects of total gossip network size on the outcomes of performance and influence (with the “total gossip” network being a combination of both positive and negative gossip). Total gossip network size for each individual was calculated as the degree centrality score in the overall gossip network, which had been maximally symmetrized. This measure captures all types of gossip engaged in by each individual, whether positive, negative, or an even blend of both. Thus, the measure represents the total number of gossip partners, regardless of the gossip valence (see Figure 2 for a visualization of the total gossip network in this organization).

Our first post hoc analysis, shown in Table 6, indicates a marginally significant negative relationship between total gossip and supervisor-rated performance (Model 7: $\beta = -.09, t = -2.00, p < .06$; $CI_{95} = [-.18, .003], r^2 = .15$). This suggests that the more an employee gossips, the worse supervisors rate that employee’s in-role performance. In our second post hoc analysis, also shown in Table 6, we find a significant positive relationship between total gossip and influence (Model 8: $\beta = 1.34, t = 2.89, p < .01$; $CI_{95} = [.39, 2.30], r^2 = .24$). This suggests that the more an employee gossips, the more informal influence that employee’s peers attribute to the person. This finding complements prior research, which has suggested that the most active gossipers in a network are the most influential individuals in social settings (Jaeger, Skelder, Rind, & Rosnow, 1994). We will address the implications of these post hoc findings further in the next section.

Discussion

Although gossip is recognized as a ubiquitous activity in organizations, it remains a relatively understudied phenomenon. This study uses a social network perspective to understand in greater depth the types of relationships through which positive and negative gossip are transmitted, as well as the outcomes for individuals who engage in gossip in terms of their supervisor-related performance and peer-related influence.

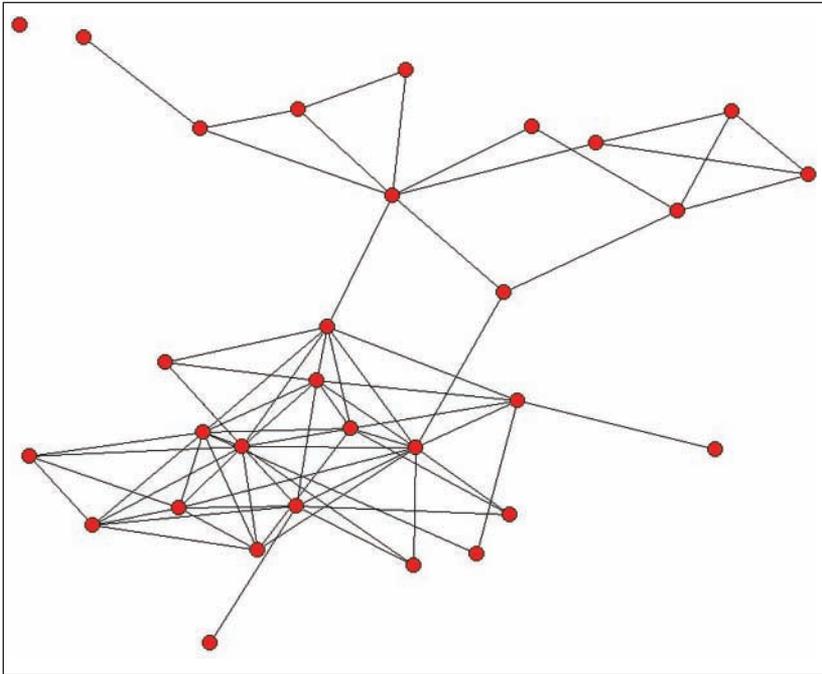


Figure 2. Actual total gossip flow network in the organization

Our results indicate that negative gossip tends to flow only between individuals who share a friendship tie and not between those who are only involved in a work-required instrumental relationship. Furthermore, individuals sharing a multiplex friendship and workflow tie appear to engage in higher levels of both positive and negative gossip than do individuals sharing only one type of relationship. In addition, the strong relational cohesion that comes with high levels of structural embeddedness is also significantly related to the transmission of negative gossip between friends.

Taken together, these findings suggest that the strength of the affective trust surrounding a relationship is an important underlying mechanism at work in the transmission of negative gossip. Our results demonstrate that friendship ties are valuable for predicting whether two actors will exchange negative gossip, but structural embeddedness explains additional variance in whether they will exchange such gossip. Moreover, we were able to predict that employees who have friendship and/or required work ties will exchange positive gossip, but those who do not share a friendship or a required work tie

(coworkers who are only acquaintances) will exchange neither type of gossip. Thus, positive and negative gossip does not travel in the same way through all types of social network ties. We have also considered indirect ties in broader network structures affecting employees' propensity to engage in positive or negative gossip, and we suggest that researchers should move beyond considering gossip from a dyadic perspective to studying it from a network perspective.

Although the hypotheses regarding the relationship between positive gossip, negative gossip, and performance were not supported, post hoc analysis uncovered a significant negative relationship between total gossip and supervisor-rated performance. As mentioned in the introductory paragraphs, gossip as an activity carries negative connotations. Although individual benefits may be gained by engaging in organizational gossip, the findings from this study suggest that managers do not reward the activity. Furthermore, it appears that managers do not distinguish between positive and negative forms of gossip. Our results suggest that managers are aware of only the total gossip activity within the organization; they do not, or cannot, consider its valence. Thus, they penalize total gossip through low performance ratings.

De Sousa (1994) notes that gossip is typically a subversive form of power—an attempt by those in weak positions to use the power of informal knowledge against those in formal positions. Other theorists point out that gossip can lead top management to fear losing control (Michelson & Mouly, 2004); those who are insecure in their positions of power are likely to view gossip as an undermining activity (Ayim, 1994). Thus, gossip is often viewed by managers as an antecedent to a “rite of degradation” (e.g., a demotion or a similar loss of power/status; Islam & Zyphur, 2009, p. 128) for them personally. In a similar vein, Soeters and van Iterson (2002) refer to gossip as a “verbal Molotow cocktail” (p. 35) in that it is an instrument, more democratically distributed than power, that subordinates can use against superiors. Seen in this light, it is not surprising that a negative linear relationship is found between gossip and supervisor-rated performance. This finding becomes even more logical when considered alongside our post hoc finding that total gossip is positively related to informal influence ratings. It appears that gossip leads to informal influence, which managers can perceive as threatening. Managers' negative performance evaluations support the notion that they feel undermined by gossip (regardless of the valence).

Taken together, these findings highlight an interesting juxtaposition of perceptions regarding gossip in organizations. The results reported here suggest that individuals who are highly active gossipers are accorded higher levels of informal influence by their peers. Supervisors, however, tend to regard gossip

as a negative activity, and punishments in the form of low performance ratings are meted out to those who engage in much gossiping activity. These findings would suggest that gossiping at work has multiple, but conflicting consequences on employees' organizational outcomes.

Limitations

One limitation of this study is that we were unable to test the relationship between positive and negative gossip and friendship-only ties because none of the individuals sharing only friendship ties indicated that they engaged in strictly positive or negative gossip with each other. This is not to say that individuals who are friends do not gossip; rather, individuals in this sample with this type of relationship indicated that they engaged in an even blend of both positive and negative gossip, which precluded us from examining positive and negative gossip activity separately. This indicates that in some instances, particularly in close relationships, the richness of the informal communication occurring between individuals necessitates a more nuanced approach to determining the valence of gossip activity.

A second limitation derives from the cross-sectional nature of this study, which prevents us from drawing conclusions about the nature of causality. Negative gossip activity may actually create trust among individuals as opposed to trust being only a precondition for negative gossip. Indeed, some research suggests that sharing negative attitudes can promote greater closeness between people (Bosson, Johnson, Niederhoffer, & Swann, 2006). In addition, negative performance evaluations and informal influence might be antecedents to gossip rather than outcomes of gossip. Further research employing experimental or longitudinal designs can help clarify these issues.

A third limitation of this study is the relatively small sample size available for our large and complex statistical analyses. This sample was restricted to a small number of people in a single industry, which may raise concerns about the generalizability of the findings. Although this is a concern, it is also important to point out that the small sample created a rather conservative test of our hypotheses, suggesting that the effects found were especially strong. Further research should be aimed at determining the generalizability of these findings in various industries and settings (e.g., larger firms and companies with a less hierarchical organizational structure than the present setting). In addition, future gossip research should attempt to gather larger data sets for social network analyses. Alternative social network data gathering methods such as those that collect individual ego-networks (Marsden, 1990) may be more efficient than the whole network approach for collecting large data sets.

A fourth possible limitation is that we did not provide our respondents with a detailed definition of gossip, nor did we attempt to distinguish gossip from rumor in our survey instrument. Although we concur with Michelson and Mouly (2000) that the distinction between gossip and rumor is often one of degree and that it is difficult to distinguish between the two in some cases, our approach leaves open the possibility that what some respondents in this study considered to be gossip has traditionally been defined as rumor. Researchers should be careful to distinguish between these two constructs in future studies.

Additionally, some measurement choices designed to minimize respondent fatigue created some limitations. First, we did not measure directly the level of trust in the relationships, but rather assumed that higher levels of affective trust were present in close-friendship ties versus instrumental-only ties based on prior literature. Furthermore, we let the respondents define what they consider positive versus negative gossip, assuming that negative gossip was more sensitive than positive gossip, again based on prior literature.

A final potential limitation is the nature of social network analysis. First, social network researchers have questioned and continue to debate the construct validity of sociometric measures. However, although little research has been conducted on the construct validity of social network measures, evidence suggests that these measures are valid (Borgatti & Cross, 2003; Ibarra, 1992, 1995; Marsden, 1990; Mouton, Blake, & Fruchter, 1955). Second, the social network approach necessarily entails a high level of abstraction, and this has both benefits and drawbacks. The abstraction inherent in network studies is beneficial for uncovering the structural characteristics of certain phenomena but is deficient in terms of providing context for these phenomena. For example, when conducting a social network analysis of organizational gossip, we can uncover the structural forms that give rise to various types of gossip, but we cannot ascertain much about the content or meaning of those different types of gossip. Thus, our approach provides a high-level view of gossip at the expense of providing a rich description of the construct and how it operates in specific contexts. We believe, however, that every methodology has its shortcomings, and the perspective provided by social network analysis makes an important contribution to the study of organizational gossip.

Future Directions

A number of future directions for subsequent research on gossip are warranted to build on the findings of this article and to further our general understanding of the role of gossip in organizations. First, a study that examines the

relationship between friendship-only ties and both positive and negative gossip is a fruitful avenue to explore in the future. Though the data gathered in this study did not allow us to test the relationship between these variables, we believe that future research will find that friendship-only ties are positively associated with the transmission of both forms of gossip.

Second, we might consider that positive and negative gossip would have different underlying motives, or at least the weightings of those motives would be different for each. Because we provided evidence that gossip serves different individual outcomes (e.g., performance, influence) it is possible that, besides emotional expression, gossip may underlie the instrumental expression of specific goals (e.g., regain power, gain informational competitive advantage). By understanding both the instrumental and expressive bases for gossip in greater detail, we can better capture the organizational context that provides the content, emotional context, and triggers for gossip, as well as the opportunities to gossip (Waddington & Fletcher, 2005).

Finally, an interesting avenue would be to actually map the flow of a particular piece of gossip from the original gossiper to the final gossip recipients. This would shed light on whether gossip is only a local activity in the network or whether gossip is more of a global network activity, reaching to the farthest network ties in an organization over time. Although negative gossip is often more interesting to gossip recipients, it is also more sensitive, so it may be confined to localized clusters only. On the other hand, positive gossip entails less risk but is also considered less interesting, so the question remains as to how widely it will actually be diffused. A study like this could also measure the distortion of gossip as it travels across the network. This would allow greater understanding as to whether gossip gets altered systematically as it gets transmitted and, if so, how and why it is altered.

Conclusion

A number of researchers have noted the potential that exists for social network analysis methods to be applied to the study of gossip (e.g., Foster & Rosnow, 2006; Michelson & Mouly, 2002). In addition, some gossip scholars have noted the existence of both positive and negative forms of gossip. One contribution of this study is an examination of the two forms of gossip through a social network lens. The major empirical finding regarding positive gossip is that it is associated with both expressive friendship and required instrumental workflow relationships, whereas negative gossip is associated only with the more expressive type of relationship—friendship—which conveys the trust necessary for negative gossip to flow. This study also highlights the

importance of the relationship between network embeddedness and negative gossip. As two directly tied actors increasingly share friendship ties with common third parties, the probability of those two actors exchanging negative gossip increases, although this embeddedness does not affect the exchange of positive gossip. This suggests that interpersonal affective trust is a crucial determinant for the transmission of negative gossip but does not necessarily underlay the transmission of positive gossip. Future research should examine this possibility more deeply.

This study also provides evidence for a relationship between total gossip and performance, as well as between total gossip and informal influence. The negative relationship between gossip and supervisor-related performance and the positive relationship between gossip and informal influence illustrates that gossip is associated with important employee outcomes in organizations. This study illustrates the potential paradox that exists for a gossiper: although gossip may lead to beneficial outcomes such as influence among peers and an improved understanding of the social environment, it also carries negative connotations that make it potentially detrimental, particularly when interpreted through the eyes of supervisors. Thus, engaging in gossip in an organization can be a double-edged sword that managers view as subversive (De Sousa, 1994). These findings provide some understanding as to why gossip is so prevalent in organizations even if it is widely considered deviant behavior. Through gossip, employees gain informal influence and can reclaim some sense of control over organizational events that may be outside their control. If organizations wish gossip to be reduced, however, supervisors would be well advised to find the underlying causes for the gossip rather than unilaterally condemning it.

The findings of this study indicate that gossip has important consequences for individuals in organizations. Further study of gossip from a network perspective has the potential to provide practitioners with a greater understanding of this important phenomenon. Insight into how informal organizational communication networks are structured can help managers to minimize the negative drawbacks associated with gossip (e.g., low productivity) and make use of the positive aspects of gossip (e.g., the enforcement of organizational norms, the dissemination of factual positive information). Researchers have argued that information is transmitted more rapidly through organizational grapevines than through formal communication channels (Zaremba, 1988). Thus, managers who understand the organizational gossip network might be better able to more quickly and efficiently disseminate information by using the organizational grapevine rather than by using formal communication channels. In addition, just as short stories (McCarthy, 2008) and rumors

(Bordia, Jones, Gallois, Callan, & DiFonzo, 2006) have been shown to be indicative of the values and concerns of individuals in organizations, the same is true of gossip. Gossip networks can thus serve as a diagnostic tool for managers who are attempting to understand the current state of the workforce. For these reasons, managers in the field are likely to find further research on how gossip functions in organizational networks to be of practical use.

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Notes

1. At the outset of this research we also hypothesized the following: *A friendship tie between two individuals will be associated with the transmission of positive and negative gossip. This hypothesis would have paralleled our instrumental workflow-only hypothesis. Our data, however, did not allow us to test this relationship because no solely positive or solely negative gossip relationships existed between individuals with only a friendship tie. All gossip activities among these individuals were characterized as "an even blend of positive and negative gossip," thus preventing a direct test of the hypothesis. This subhypothesis is therefore not included.*
2. To test for the reliability of our sociometric measures, we ran an MRQAP correlation between each unsymmetrized matrix and the symmetrized one, yielding the following results: required workflow (0.78***, $p < .001$), friendship (.79***), negative gossip (0.71***), positive gossip (.80***), and acquaintance (.78***). All those matrices showed a high degree of correlation with their symmetrized counterpart suggesting some support for reliability of our measures (Wasserman & Faust, 1994).
3. We also ran regressions that included the following control variables: rank, education, department, gender, age, tenure, and workflow network size. Results were similar to those listed in Table 6 and are available from the authors on request.

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Bios

Travis J. Grosser is a doctoral candidate in management at the Gatton College of Business and Economics at the University of Kentucky and is affiliated with the LINKS International Center for Research on Social Networks in Business. His research interests include social networks within organizations, negative workplace relationships, and organizational identity.

Virginie Lopez-Kidwell is a doctoral candidate in management at the Gatton College of Business and Economics at the University of Kentucky and is affiliated with the LINKS International Center for Research on Social Networks in Business. Her research interests include social networks, the role of affect in organizational behaviors, as well as power and dependence in workplace relationships.

Giuseppe Labianca is the Gatton Endowed Associate Professor of Management at the Gatton College of Business and Economics, University of Kentucky, Lexington. His research focuses on understanding organizational behavior from a social network perspective, including projects on interpersonal disliking, social exclusion, social control, gossip, and group performance. He is a founder of the LINKS International Center for Research on Social Networks in Business (linkscenter.org).