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Who are the objects of positive and negative gossip at work? A social network perspective on workplace gossip

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ABSTRACT

Gossip is informal talking about colleagues. Taking a social network perspective, we argue that group boundaries and social status in the informal workplace network determine who the objects of positive and negative gossip are. Gossip networks were collected among 36 employees in a public child care organization, and analyzed using exponential random graph modeling (ERGM). As hypothesized, both positive and negative gossip focuses on colleagues from the own gossiper's work group. Negative gossip is relatively targeted, with the objects being specific individuals, particularly those low in informal status. Positive gossip, in contrast, is spread more evenly throughout the network.

1. Introduction

Gossip is a ubiquitous phenomenon which accounts for approximately 65% of people's speaking time (Dunbar, 2004). This suggests that time spent in the workplace is naturally accompanied by a large proportion of conversations on social topics, including speaking about colleagues. Many organizational goals cannot be accomplished through workflow relationships formally prescribed by management, but instead rely on informal relationships developed organically between employees (Morey and Luthans, 1991; Oh et al., 2004). Gossip is argued to be one of the main mechanisms used by employees to strengthen informal relationships in organizations (Dunbar, 2004; Kniffin and Wilson, 2005; Michelson and Mouly, 2004; Noon and Delbridge, 1993) and is, thus, worthy of study. Indeed, the quality and strength of these informal relationships smooth or impede cooperation within formal work groups, as well as across the entire organization, thereby potentially affecting the entire organization's outcomes.

Workplace gossip is defined as "informal and evaluative talk in an organization about another member of that organization who is not present" (Kurland and Pelled, 2000: p. 429). This definition, which is used widely in the gossip literature, has two crucial implications. First, gossip is "evaluative," which suggests that it can be either positive or negative (Elias and Scotson, 1965; Fine and Rosnow, 1978; Grosser et al., 2010). Second, the member of the organization that is not present – the gossip object – is an important part of gossip episodes, even though the person is not directly involved in the transmission of the gossip. Much of what we know about gossip in organizations tends to be limited to predicting who will be a gossiper (Litman and Pezzo, 2005; Nevo et al., 1994), or who is likely to gossip with whom (e.g., Burt, 2001; Leaper and Holliday, 1995). But less is understood about whom these individuals choose to gossip about, which is the focus of the current study.

The relevance of studying positive and negative gossip is apparent when looking at its consequences for the object of gossip and for the group as a whole. Being the object of positive gossip, such as being praised or defended by others, is similar in its consequences to receiving social support (Dunbar, 2004). Social support is the positive behaviors and actions that foster positive interpersonal relationships (Duffy et al., 2002). Having a favorable reputation, feelings of belongingness, and friendships at work has been found to increase performance and job satisfaction (Morrison, 2004; Sparrowe et al., 2001).

Being the object of negative gossip can cause consequences similar to victimization, such as limiting work-related success and thwarting the fundamental psychological need to belong (Baumeister and Leary, 1995). For example, Burt's (2005) study of bankers found that those about whom negative gossip was spread had difficulties in establishing cooperative working relationships with colleagues, and left the organization sooner than those who did not suffer from a negative reputation. Victimized employees usually find it difficult to cognitively control their social environment and trust others (Aquino and Thau, 2009). Because negative gossip is a light form of victimization, it is more precisely

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categorized as a specific form of social undermining (Duffy et al., 2002). Social undermining is behavior that hinders the establishment and maintenance of positive interpersonal relationships and a favorable reputation for the target.

Gossip also has implications for the overall functioning of the group in which individuals are embedded. For example, despite its harmful consequences for individuals, negative gossip might have beneficial consequences for group outcomes. Empirical studies have shown that negative gossip is used to socially control and sanction uncooperative behavior within groups (De Pinninck et al., 2008; Elias and Scotson, 1965; Merry, 1984). Individuals often cooperate and comply with group norms simply because they fear reputation-damaging gossip and subsequent ostracism.

Despite the ubiquity and importance of positive and negative gossip for employees and organizations, it is surprising how little research exists on who is selected as the objects of gossip. In contrast to previous studies, we will not study consequences but rather the antecedents of becoming the object of gossip. Characteristics of gossip objects have largely been neglected, while considerable effort has been taken to describe objects of more severe but rarer forms of victimization and bullying (Aquino and Thau, 2009; Salmivalli et al., 1996; Vartia, 2001). Asking why some employees are chosen as objects of positive and negative gossip, and others not, helps to identify the beneficiaries of positive gossip and its related social support, as well as the employees who may be victimized through the spreading of negative gossip.

The present study investigates a network of female support workers in a child care organization. The scope of this study is mainly informative for female groups, and links to earlier research on gossip among women (Guendouzi, 2001; Jaeger et al., 1994; Sotirin and Gottfried, 1999). We use the technique of social network analysis. Social network analysis was successfully employed in earlier research on gossip and victimization in organizations (Burt, 2005; Coyne et al., 2004; Jaeger et al., 1994; Keltner et al., 2008; Lamertz and Aquino, 2004). Our contribution, however, is that we specifically focus on the gossip objects' formal group membership and informal social status within an organizational network. To date, there are too few studies to draw firm conclusions about network position in relation to gossip or victimization (Aquino and Thau, 2009). We will argue that being in the same formal work group as another person, even after controlling for the amount of interaction and relationship quality with this person, makes it more likely that both positive and negative gossip is spread about this person. Both gossiping behaviors help in maintaining and reinforcing group solidarity (Dunbar, 2004; Kniffin and Wilson, 2005). Individuals who are low in social status in the organization's overall social network (that is, having few friends and/or being friends with unpopular individuals) are more likely to be victims of negative gossip, and in some cases become scapegoats.

We proceed in the following manner: we first present a theoretical framework and hypotheses about who will be chosen as gossip objects anchored in discussions of group membership and social status. Then we discuss the research design and the analytical methods we used. We next test our hypotheses using social network data collected in a Dutch child care organization that has seven formal groups embedded within it. Finally, we present our results and discuss their theoretical implications, along with a discussion of the need for future research on gossip in organizations.

2. Theoretical background

Organizational gossip behavior is defined as a relational process involving, at minimum, a triad. In a 'minimal' gossip setting, a sender is speaking with a receiver, and the gossip content being spread is about the object, who is not physically present but remains an important part of the relational gossip process (Bergmann, 1993; Kurland and Pelled, 2000). Because there are at least three individuals involved in a gossip episode, researchers have argued that it is useful to think of gossip as a group process, rather than simply treat it as a process between the sending and receiving dyad (DiFonzo and Bordia, 2007; Dunbar, 2004; Foster, 2004; Gluckman, 1963; Merry, 1984).

Most of the previous research that considers gossip as a group process focuses on the transmission of gossip through networks, more specifically the dyadic relationship between the gossip sender and the gossip receiver. Much of it examines the extent to which there is gossiping in a network. For example, previous researchers have argued that as the density of a network increases, it increases the level of interdependence within the group, which makes norm monitoring more important (Hackman, 1992). This increases the transmission of gossip in a network because gossip allows the group members to control their fellow members' actions (Burt, 2005; Kniffin and Wilson, 2005). Another factor increasing the flow of (negative) gossip is trust. The sender must trust that the gossip receiver either keeps the secret, or further spreads the gossip in a manner that protects the original gossip sender (Burt, 2001; Grosser et al., 2010).

While much is known about the relationship between gossip senders and receivers, little research has been done on the objects of gossip. For example, while Heider (1958) notes that gossip about an object increases between the sender and the receiver when they agree in their opinion on the gossip object, no attempt is made to understand how the characteristics of the gossip object might affect that attitude or the propensity to gossip about the object either positively or negatively. Similarly, Wittek and Wielers (1998) showed that gossip flourished in organizational networks that had many 'coalition triads' where the gossip sender and receiver had a positive relationship among themselves but a negative relationship with the object of gossip. Again, no attempt is made to understand why that particular person was singled out by two individuals to be the object of negative gossip.

Because our theoretical perspective is to view gossip as a group phenomenon, we focus on the relationships between the senders and the objects, and on the integration of the object in the overall network. We will focus on two organization-level explanations of why certain individuals are chosen to be the objects of positive or negative gossip. We use formal work groups as one explanatory factor, and informal social status as the other.

2.1. Being the object of positive or negative gossip as a consequence of sharing formal group membership

2.1.1. Being a positive gossip object

We argue that shared formal group membership breeds positive gossip about co-members. Several mechanisms contribute to this effect. Employees in mid- and large-sized organizations are usually asked to specialize in various functional or product-related areas that are often formalized into assigned units that keep employees focused on a specific set of tasks, which are then assembled into a whole at the organizational level. Such formal group structures create and reinforce intensive interaction and high interdependence among employees in the group. But this division of labor also decreases interaction with and dependence on employees from the other formal groups and units in the organization. Interactions beyond these formal group boundaries are therefore usually less prevalent and more voluntary in nature (Granovetter, 1973).

Interdependence between employees in formal working groups is further enhanced by organizational demands to achieve organizationally mandated group goals. Such group goals are more likely to be achieved when all employees of the group cooperate with one another. Formal interdependence increases the likelihood

of informal interaction, socializing and communication, which in turn favors reciprocity norms and cooperation (Oh et al., 2004; Sommerfeld et al., 2008). Informal socializing often involves gossiping either inside the workplace, or while engaging in behaviors such as drinking outside the workplace (Michelson and Mouly, 2002; Noon and Delbridge, 1993). Furthermore, norms of reciprocity are facilitated, so that individuals know that if they assist a fellow work group member, that work group member will be very likely to reciprocate in the future. Informal socializing also increases generalized exchange in groups, such that the group members don't even concern themselves with direct reciprocity when assisting a fellow group member, because they know that someone else in the group will offer assistance in the future. This informal socializing thus encourages group-serving behavior (i.e., cooperation), while also constraining self-serving behavior (Kniffin and Wilson, 2005).

While this existing research is focused on explaining how the gossiping encourages cooperation between the gossip sender and the receiver, it is lacking in terms of explaining how the gossip object becomes involved in this group solidarity-creating process (Dunbar, 2004). The importance of the gossip object in developing and maintaining group solidarity is fairly apparent when we examine the individual as an object of positive gossip. By gossiping positively about other members of our group who are not present, group members stay informed about each other, and demonstrate support and solidarity towards the gossip object and the group (Burt and Knez, 1996; De Backer and Gurven, 2006; Dunbar, 2004; McAndrew et al., 2007). Positive gossip behavior includes, for example, praising the absent individual, providing political or social support for the person, or defending that colleague in their absence. As the gossip object is a reliable partner for social exchange within the informal network, a favorable reputation is built. Research has demonstrated the impact of third-party ties on trust (Burt and Knez, 1996). In a business environment, partners may ask acquaintances for their opinion on the trustworthiness of new business partners before engaging in deals. Positive information is likely to increase trust in others, even when they are fairly unknown to the trustor.

However, also gossip senders may benefit from an improved reputation: by praising group members in their absence, employees signal their commitment to group norms, and that fellow group members can count on this employee when needed (Gambetta, 2006). Having a favorable reputation increases the possibility that this employee will be socially supported when the need arises in the future. Although the gossip objects might not find out about the specific praising event, or even necessarily reciprocate the behavior when they have the opportunity to praise the gossip sender when absent, there is a greater chance that the *group* as a whole will generally reward this behavior. In contexts where individuals are interdependent, individual contributions to the welfare of the group are particularly acknowledged, and confer the contributor (i.e., gossip sender) prestigious status (Willer, 2009).

Research has shown that group affirmation through positive gossip becomes even more likely when the group members are highly interdependent in their goal achievement (Kniffin and Wilson, 2005). Within formal work groups, there is often recognition that fellow group members are interdependent and that group solidarity is important to maintain the proper functioning of the work group. Thus, we would expect that employees would pass along favorable information about absent members of their work group, and that this effect cannot solely be explained by the level of daily interaction that is required and generated by being placed in the same work group.

H1. Gossip senders are more likely to spread positive gossip about a colleague from the sender's work group than a colleague from outside the work group.

The above argument implies that employees are less inclined to gossip positively about people who do not belong to their work group. The group of people outside a person's work group can also be referred to as an 'out-group' (Tajfel, 1974). Theory on inter-group behavior poses that people think and behave positively towards others inside their group, but negatively towards others outside their group (Tajfel, 1974). However, it is also assumed that there is competition between the groups. Scholars using optimal distinctiveness theory argue that in-group favoritism (e.g., demonstrated by positive gossip) does not require hostile behavior towards out-groups (e.g., negative gossip, Brewer, 1999): under conditions where there is no threat from the out-group and no competition, in-groups often simply ignore potential gossip information about people outside their group, because it is not interesting. This means that decreased positive behavior towards out-group members does not necessarily align with an increase in negative behaviors. We now turn to the discussion of negative gossip.

2.1.2. Being a negative gossip object

As described above, spreading positive gossip about an object is a simple and low-risk way of demonstrating social support to the group. In the following we will argue for similar group-serving functions of negative gossip, more specifically, we suggest that gossip is used for reinforcing norms important to members of the group. Previous research has shown that there is often greater interest in hearing negative gossip than there is in hearing positive gossip (Barkow, 1992; Baumeister et al., 2004; Bosson et al., 2006; Davis and Mcleod, 2003; De Backer and Gurven, 2006). First, negative information is hidden from the gossip object and therefore scarcer. Second, negative gossip may contain information about behaviors or intentions that have a damaging impact on the group. Given the heightened thirst for negative gossip, who do gossip senders choose to spread negative gossip about?

Negative gossip will be more focused on colleagues from the sender's work group than outside the group because potential benefits are high. Negative gossip often provides valuable information on uncooperative behavior and norm violation by individuals. Both theoretical and empirical literature on gossip suggests that acts of social control and ostracism involve sharing negative opinions about third parties (De Pinninck et al., 2008; Merry, 1984). By spreading gossip throughout their network group, members warn one another (De Backer and Gurven, 2006; Dunbar, 2004; McAndrew et al., 2007) and signal that they consider the underlying relationship with the group a strong one (Bosson et al., 2006; Burt, 2001). Warning others in some cases leads to an unfavorable reputation or avoidance of the gossip object (Burt, 2005; Tebbutt and Marchington, 1997). Negative information, e.g. on violating the norm of cooperation, is of special value in the context of high interdependence, where group members cannot achieve their goals without the contribution of every individual.

Directly challenging the norm-violating group member, however, can be costly, if not backed by the group or at least parts of the group (Lazega and Krackhardt, 2000). A person detecting norm violations can therefore choose to first discuss the issue with other group members when the norm-violator is absent, and see whether they agree and will support sanctions. This is very important for the gossip sender, who must credibly demonstrate that the gossip behavior is solely motivated by the promotion of group norms (and not the gossip sender's own position). Research has shown an increased likelihood of repercussions for gossipers when other group members perceive the gossip behavior as self-serving behavior (Kniffin and Wilson, 2005).

So far, it has been argued that individuals who violate social norms tend to be the objects of negative gossip, usually targeted by those who want to enforce these norms (Aquino and Thau, 2009). We do not suggest, however, that norm violation is more likely to

occur or to be perceived among in-group members. We only suggest that in-group violation is more important and judged more harshly. Highly interdependent individuals are particularly affected by and sensitive towards norm violations by group members. As a consequence, norm violation is evaluated more extremely than analogous behavior from members outside the group, increasing the likelihood of negative gossip. The harsher judgment of in-group members has been called the "black sheep effect" (Marques and Paez, 1994). There has been empirical support for the black sheep effect in organizational contexts where employees identify with formal group boundaries (Bown and Abrams, 2003). Taking together arguments on the black sheep effect and group benefits, we hypothesize:

H2. Gossip senders are more likely to spread negative gossip about a colleague from the sender's work group than a colleague from outside the work group.

2.2. Positive and negative gossip in relation to social status in the informal network

Until this point in the manuscript, we have examined the costs and benefits of choosing certain gossip objects at the level of the work group. Employees, however, are simultaneously embedded both within particular formal work groups, as well as being members of the overall organizational network (Oh et al., 2006, 2004). While the organization's formal structure imposes unit specialization on the employees, it also creates cross-unit interdependence in order for the organization to achieve its goals. No formal organization structure can entirely manage those cross-unit interdependencies perfectly, which opens the way for informal relationships across units to develop – that is, there will always be times when to get work done, people will need to tap their informal contacts in other groups in order to accomplish their tasks. While these informal relationships serve individuals' expressive purposes, including their needs to find affiliation with others (Baumeister and Leary, 1995), they also serve instrumental purposes, such as providing a means to have goals that cross units accomplished without resorting constantly to the organizational hierarchy. Some of the large variation in the extent to which employees have accesses to cross-unit relationships is determined by the organizational hierarchy, as well as by their function (e.g., some people might be assigned to be cross-unit coordinators). But some of that variation is directly related to their social status within the informal network (Krackhardt, 1994): the more positive relationships employees have with colleagues throughout the organization, the higher the employees' social status within the organization as a whole (Salmivalli et al., 1996), and the more access they have to social resources (Lamertz and Aquino, 2004).

This informal social status within the organization as a whole determines the extent to which an employee is the object of positive or negative gossip. Indirect acts of gossiping negatively about another person can lead to more direct negative actions by the group towards the object, such as bullying this person. An influential study on bullying in classrooms revealed that being the victim of bullying largely depended on the victims' social status in the class – measured as the victim's centrality in the friendship network. Low-status children tended to be victimized, and were not supported by other children who were potential defenders, while high-status children were highly accepted by the group and not bullied (Salmivalli et al., 1996). We argue that the objects' social status determines the costs and benefits of spreading gossip about the object, and thus affects the likelihood of being a positive or negative gossip object.

2.2.1. Being a positive gossip object

We define a person's social status within an organization here as the number of friendship relationships that person has with other members of the organization, weighted in turn by how much status those members have (network researchers will recognize this as having high "eigenvector centrality," Bonacich, 1987). This definition is relative – two people might both have a large number of friendship relationships, but the person who has more relationships is likely to have greater status. The definition also takes into account the status of the people with whom the individual has their relationships. Similarly, Northway (1967) recommends calculating social status not only based on numbers of friendship nominations by others, but also on the relational pattern of who is friends with whom. For example, a person who has a large number of relationships with the most popular individuals in a network will have higher status than an individual with an equal number of relationships, but whose relationships are with individuals who are very unpopular in the network as a whole. Individuals in organizations enhance their status by being perceived to be tied to the most popular members of the organizational network (e.g., Kilduff and Krackhardt, 1994). Scott and Judge (2009) found that employees reliably agreed on which colleagues had high social status in a workplace informal network, and that those colleagues were treated favorably by the group, even after controlling for formal status and interpersonal liking.

We argue that humans strive for social status (Barkow, 1975), and that they will use gossip as a means of trying to attain that social status, both in terms of a central sociometric position in the group and cognitive appraisal by others. Employees will be likely to ingratiate themselves with higher-status people through gossip in an attempt to promote their own social standing. Gossiping positively about high-status people can pay off for a number of reasons. First, gossiping positively about well-embedded others can be a relatively uncontroversial way of associating with other group members who are friends with the gossip object. The gossip senders signal these friends that they notice the good deeds of the high-status gossip object, and by doing so they indicate that they belong to the object's group. Researchers know that the mere perception of being connected to high-status people increases sociometric status regardless of whether this connection actually exists (Kilduff and Krackhardt, 1994). Second, high-status people may have received part of their status because of their contributions to the group (Willer, 2009), which are recognized and appraised by others. Contributions trigger positive evaluations, because the group benefits from this behavior. Mentioning this positive behavior to others also sets standards and clarifies normative expectations, which in turn increases the cognitive appraisal of the contributor's standing.

Though contributions of low-status people also serve the group, gossiping positively about them yields comparatively less benefits than gossip about high-status people: the gossip sender signals affiliation with someone with whom relatively fewer others associate. The sender can be perceived as having unimportant (or even unpopular) friends, which in turn may reflect negatively on the gossip sender. Thus, there can be greater benefits for transmitting positive gossip about a high-status person.

Transmitting positive gossip about high-status colleagues also is affiliated with relatively low costs for gossip senders. High-status colleagues are generally accepted by the group (Salmivalli et al., 1996), meaning that they have many positive informal relationships to other members in the organization. This makes it easy for employees to find gossip recipients that are going to agree with the positive gossip that is being transmitted about the object. The act of connecting with the gossip receiver in agreement over an object through positive gossip adds further to the gossip sender's social status in the informal network (Bosson et al., 2006; Fine and Rosnow, 1978; Jaeger et al., 1994). Thus, when employees are

gossiping positively about another individual outside of their work group, we expect that it will be about people that are high in status in the overall organization's network.

H3. The higher the social status of an employee in the overall organizational network, the more likely this employee is to be the object of positive gossip.

2.2.2. Being a negative gossip object

A corollary to this argument is that high-status people are unlikely to become the objects of negative gossip. Since employees high in social status are embedded in a supportive informal structure with many formidable allies who are themselves highly connected, they are likely to be well defended by other members in the organization (Salmivalli et al., 1996). This greatly increases the potential costs to a gossip sender for engaging in negative gossip about a high-status person. Passing along negative gossip about a high-status object is very risky because the high-status person can better monitor the flow of negative gossip – by definition, the high-status person has more friends, and more friends of friends than a low-status person. Negative gossip is more likely to be reported back to the high-status object as compared to a low-status object, thus increasing the probability of retaliation. The costs for the gossip sender include potential rejection and the loss of social status within the informal network at the hands of the high-status individual, and his or her high-status allies (Heider, 1958). Negative gossip about low-status employees involves relatively low costs for gossiper senders, because their gossip behavior is backed by the members of the informal network, while these employees are unlikely to be defended (Salmivalli et al., 1996). This leads to the expectation that employees with a low social standing in the informal network are easy objects of negative gossip. Because of this, negative gossip is more likely about low-status individuals than high-status ones.

In addition to the greater costs of negatively gossiping about a higher-status object, there are greater benefits to negatively gossiping about a lower-status object. We know that there are some benefits to negative gossip in general. Researchers have often pointed out that one of the roles of negative gossip is to exert social control for the purpose of maintaining and promoting an organization's values (Dunbar, 2004; Elias and Scotson, 1965; Fine and Rosnow, 1978; Foster, 2004; Gluckman, 1963; Merry, 1984; Wittek et al., 2003). By engaging in negative gossip about an object, the gossip sender is signaling an understanding of the organizational norms, a willingness to monitor and enforce them, and an understanding that sanctioning is necessary lest the organization's identity is threatened (De Pinninck et al., 2008; De Vries, 1995; Keltner et al., 2008; Kniffin and Wilson, 2005; Wilson et al., 2000), without damaging the gossip sender's reputation. Deviations from social norms are often seen as betraying the community. Ostracizing the offending individual from the broader community are important mechanisms for norm reinforcement (De Pinninck et al., 2008; De Vries, 1995; Merry, 1984). While some acts of ostracism are directed towards the object itself, such as excluding a person openly from activities, a crucial aspect of negative gossip is that it is mostly unobservable for the object. In their absence, the group coordinates sanctions aimed at employees who do not 'fit' the group's values. By targeting the low-status members of an informal network with negative gossip, the gossip sender is, in essence, playing an impression management game. The individual wants to appear to be upholding the organization's norms through norm monitoring and enforcement (Baumeister et al., 2004). While negative gossip potentially accomplishes this goal, it bears the risk of the gossip object learning of the negative gossip being spread, and thus retaliating. By focusing the negative gossip on the members of the network with the lowest status, the gossip sender can gain the impression management benefits of spreading negative gossip, including reinforcing the belief that the individual deserves to be on the periphery of the network (i.e., they don't have many friends, and not many high-status friends, because their behavior is not in keeping with our norms and values). They might also find that the potential social costs in terms of discovery or retaliation are very low because the low-status individual has few defenders, particularly high-status defenders.

H4. The lower the social status of an employee in the overall organizational network, the more likely this employee is to be the object of negative gossip.

2.3. The relative concentration of positive and negative gossip on particular persons

Is there greater concentration in certain individuals as the objects of negative gossip as compared to positive gossip? That is, do we see certain people becoming preferred targets for negative gossip at a higher rate as compared to the concentration in positive gossip? So far, we discussed how group membership and social status in the network determine gossip about particular employees. We did this separately for positive and negative gossip. In the following, we compare the distribution of positive and negative gossip in an informal network by analyzing a central network characteristic: the relative concentration on particular objects. In some cases, gossip is unevenly distributed and polarized around certain individuals. If the gossip is negative, we can speak of scapegoating, described as polarization of group aggression against individuals (Bonazzi, 1983; Cooke, 2007). One purpose of scapegoating is to preserve the existing status hierarchy in the group (Bonazzi, 1983).

Ostracism becomes feasible when the ostracizing employees represent the majority against a smaller numbers of objects who are left with few or no opportunities to mobilize allies. Continuous negative gossip about colleagues will verify their low social status: a gossip study by Burt (2005) showed how some bankers' negative reputations echoed throughout the organization's networks. Colleagues who potentially had information that could disconfirm the bankers' negative reputations were ignored, and instead the negative reputations became increasingly negative over time, causing the bankers to be permanently ostracized from productive relationships by their colleagues. Ultimately, these bankers were unable to repair their work relationships and were very likely to resign from the organization due to this "character assassination" (Burt, 2005).

Defenselessness, however, is not sufficient for becoming the object of scapegoating. We suggest that (low-status) people will be picked out as scapegoats in only a few cases. Few individuals will engage in very troublesome behavior that threatens essential group values as compared to minor norm violations because the risks that extreme behavior bears with regard to expulsion from the group and other sanctions tend to be so severe. As a result, negative gossip is likely to be more concentrated around few individuals, who are unable to defend themselves socially, than positive gossip. We, thus, hypothesize that negative gossip will not be spread evenly across members of an organization.

H5. Negative gossip in organizational networks is concentrated on a small number of objects ("scapegoats").

3. Research design and setting

3.1. Data

Data were collected in one site within a medium-sized Dutch non-profit organization in Spring, 2008. The organization was a major independent, subsidized, regional child protection institution. These data were collected in a site specializing in treating

children with special needs involving problems with their social, psychological, and/or physical functioning. This site employed 36 female social workers, behavioral scientists, therapists, medical doctors, and administrative staff. The site was an ideal size for this study because there were enough employees for network analyses, but it was still small enough to be able to collect complete network data that asked about gossip sending, receiving, as well as the objects of the gossip. Surveys that employ network questions usually demand more motivation from respondents to fill in the survey than traditional methods, because respondents have to think about their relationships with every single colleague and respond in detail about multiple aspects of their relationships.

This site was autonomous, with the employees rarely engaging in contact with organizational members outside the site. Within the site, the organization was split into seven teams of between three and eight employees, some of which were directly engaged in treating children, and others that were engaged in various support functions. While successful treatment required the team employees to frequently exchange information about the children, it also required the teams to work seamlessly with other teams that had support and professional staff who could assist in treating the children. None of the teams had formally designated team leaders or supervisors; instead, the teams were all managed centrally by one male manager. All of the remaining employees were female, and most were part-time employees.

Data were collected through self-administered computer-based questionnaires. 30 out of 36 employees (83.3%) completed the survey, which on average took 32 min to complete. The mean age of the employees was 38.94 (SD = 11.89), and on average they had been working in the organization for seven and a half years (M = 7.46, SD = 5.68).

3.2. Measures

Measures included network data, which capture the relationships between employees, as well as data on the individual attributes of employees (e.g., whether they were doctors or social workers), as detailed below.

3.2.1. Peer-rated gossip about colleagues

Being the object of gossip was the dependent variable. We presented respondents with a roster of the names of all 36 employees working at the site and the respondents were asked to indicate from whom they had received gossip during the last 3 months, and about whom they had received that gossip. Providing rosters rather than free name recalling is a preferred method of collecting data in social network analysis because it reduces selectivity bias in the answers due to memory effects (Marsden, 1990). Respondents first indicated from which employees they had received gossip. We did not use the term "gossip" in the question, choosing instead to use the wording "informally talking about absent colleagues in an evaluative way," which is taken directly from Kurland and Pelled's (2000) definition of workplace gossip. We asked the respondent to name the person from whom they received gossip (which is called a "peer-rated relationship"), rather than asking self-reported gossip behavior (i.e., to whom they were sending gossip), to minimize the potential effects of self-serving attribution bias and social desirability. Social desirability had been found to affect self-reported gossip in earlier gossip studies (Nevo et al., 1994). The approach of measuring peer-rated relationships instead of self-reported relationships also has been successfully implemented in studies on bullying, which suffer from the same types of potential self-serving attribution bias and social desirability bias (Salmivalli et al., 1996). Note that we acknowledge the possible imperfections of peer-rated data, including having to recall interactions between two other people potentially challenging the respondents' cognitive structure (Bernard et al., 1979). Having said this, we believe that this possible recall bias will have impacted the data less severely than potential social desirability and self-serving attribute biases if we had used a different survey data collection method because the respondents themselves were actually involved in the recalled interactions.

After indicating from which *gossip senders* respondents had received gossip, respondents (*gossip receivers*) were asked to describe *about whom* they received gossip (*gossip objects*) from each of the previously selected gossip senders. The need to capture both the gossip senders' names, as well as the gossip objects' names, prevented us from attempting to collect network data in a larger worksite. Then, the gossip receivers were asked to characterize whether the gossip about the object sent by a particular individual was normally negative, positive, or an even mix of both positive and negative gossip. Thus, our dataset shows that Employee A had received gossip from Employee B about Employee C, and that the gossip about Employee C passed from B to A was either positive, negative, or a positive/negative mix.

Providing the option of characterizing the gossip as mixed gave respondents the opportunity to report gossip that was negative without having to check the negative-only box. We did this for both theoretical and empirical reasons. Theoretically, negative aspects of relationships, including negative gossip, have a larger impact on the perceptions and behaviors of people than positive relationships, and are therefore extremely important to capture, even if they are sometimes less likely to be reported by respondents (Labianca and Brass, 2006). Empirically, purely negative gossip is not reported as readily compared to mixed gossip, which can seriously underaccount for its prevalence. For example, 8.4% of the total gossip reported in this study was negative-only gossip, as compared to mixed gossip, which represented 27.4% of the total gossip (the remaining 64.2% of the gossip was positive-only). Providing the mixed option allows researchers to tap into the negative aspects of relationships while overcoming social desirability biases (Labianca and Brass, 2006).

Finally, we created two directed square network matrices, which served as the dependent variables. The first network matrix contained the gossip sender in the row with the gossip objects in the column. A cell containing the number 1 indicated that an employee had sent gossip about this gossip object, and that the gossip was positive (Positive-Only Gossip Object). The second network was the same, but this time the cell containing the number 1 indicated negative or mixed gossip was spread about the gossip object (Negative Gossip Object). The use of the peer-reporting data collection technique on gossip senders described above had the advantage of making full network data available for all 36 employees in the site, despite the fact that our response rate was less than 100%.[3] For example, when we measured such network variables as social status (see below), we had social status ratings on all employees working at the site. Note that six out of the 36 individuals did not participate in the study, and therefore did not provide information on outgoing ties. However, because incoming ties of these individuals could still be included in the analyses the impact of missing data was limited.

3.2.2. Shared group membership

The organization provided the data on the formal work groups in this site. In addition to the manager, who was not assigned to

[3] Employees who where invited to the study but did not participate could still be nominated as gossip objects and/or friends on the roster by the employees who did participate. In this way, we also retrieved information about non-participants – e.g., whether they had a central position in the gossip and friendship network – so that we could analyze whether being a gossip object depended on social status in the friendship network.

a team, there were seven groups ranging in size from three to eight employees. There were four teams of social workers who supervised children (three teams had four workers, and one team had three workers). Another team consisted of six flexibly working social workers who helped out, for example, in cases of on-call duties or maternal leave. Another team included six support staff members (e.g., secretaries, cleaning personnel). Finally, one team consisted of scientific staff (e.g., behavioral scientists, therapists). Formal group membership was coded for each employee from 1 to 7 (the manager was assigned a code of 8), and then a match on formal group membership was used to test whether being in the same group lead to more often being the object of positive or negative gossip (H1 and H2). This variable was called Shared Group Membership.

3.2.3. Social status

In addition to asking about gossip, respondents were asked to describe their social relationships with every other employee on the following Likert scale: (1) "very difficult," (2) "difficult," (3) "neutral," (4) "friendly," and (5) "good friend."[4] This directed, valued network captures the quality of the dyadic relationships within the network, as reported by each individual. This relationship quality variable was included as a control variable in our models, since it is empirically important to distinguish the relationship quality on the dyadic level from social status in the network to demonstrate that social status influences who is an object of positive or negative gossip (cf. Scott and Judge, 2009).

We then used the same relationship quality matrix to create the social status variable. We recoded all of the "friendly" and "good friend" relationships in the relationship quality matrix as ones, and the remaining types of relationships as zeroes to isolate the friends in the network. Based on this directed, dichotomized friendship network, we calculated the in-eigenvector centrality for every actor, using UCINET VI (Borgatti et al., 2002). Eigenvector centrality considers not only how many friendships an employee has in the workplace, but also whether the employee is connected to others who are themselves popular. For example, two employees might both have five friends in the site, but if the first employee's five friends don't have many friends, whereas the second employee's five friends are extremely popular and well connected, the second employee will have a much higher eigenvector centrality score than the first. Thus, this measure represents each employee's status or rank prestige in the friendship network (Wasserman and Faust, 1994: p. 206), as described by every other member of the network (hence, the term used is "in-eigenvector centrality," which focuses on how others rated the person, which are incoming ratings). A major advantage of this measure is that it accounts for the social rank within the global network in the organization, and not just within local groups, clusters, or cliques. Using the incoming friendship nominations also allowed us to calculate this social status variable for those individuals who did not respond to the survey. This variable was called social status, and was used to test H3 and H4.

3.2.4. Scapegoating

We captured how evenly negative gossip was spread about particular gossip objects within a network using the structural measure called *alternating in-k-stars* (Robins et al., 2007b). A significant positive effect for alternating in-k-stars indicates that the organizational network contains some individuals who are chosen as gossip objects by many employees. These individuals are so-called "hubs" in the network, and there is a tendency that a larger number of employees, who are themselves less frequently chosen as gossip objects, gossip about a smaller number of hubs. In contrast, a negative effect for alternating in-k-stars indicates that there are less hubs than expected by chance, and that there are small variances between employees in the frequency of being chosen as gossip objects. This measure was calculated directly in STOCNET (Snijders et al., 2008). The variable was labeled scapegoating, and was used to test H5. We also tested whether this effect occurred in the positive gossip network for the sake of completeness, although we did not specifically hypothesize this effect.

3.2.5. Control variables

In addition to relationship quality (mentioned above), we used a number of other control variables in our models, including dyadic contact frequency, individuals' levels of job satisfaction, and a number of common network configurations which will be detailed in the analytical approach section immediately following the control variables section. There was no information on job satisfaction and contact frequency for the six non-participants.

3.2.6. Dyadic contact frequency

We needed to rule out differences in potential gossip objects based simply on the amount of interaction the gossip sender had with the gossip object. We did this by controlling for the contact frequency between the gossip sender and the object. We asked each respondent to go down a roster of the site members and rate how often they had formal or informal communication with each colleague during the previous 3 months on a Likert scale that ranged from (1) "never" to (6) "eight or more times per week." This communication network captured repeated patterns of work-related interaction between employees (Brass and Burkhardt, 1993; Scott and Judge, 2009), so that we could control for the employees' amount of contact with the gossip object. This variable was called contact frequency.

3.2.7. Job satisfaction

We also felt it important to control for whether the gossip sender or gossip object was satisfied with his or her job. For example, a gossip sender who was dissatisfied might be expected to engage in a greater amount of negative gossip, particularly since gossip is sometimes used as a catharsis for negative emotion (Fine and Rosnow, 1978; Foster, 2004; e.g., Noon and Delbridge, 1993). Similarly, a gossip object that was very dissatisfied might trigger negative gossip in the individuals to which he or she is tied. We constructed a four-item job satisfaction scale specifically for our organization that was based on qualitative interviews conducted prior to the survey. We asked employees "How satisfied are you with: 'your tasks,' 'your salary,' 'the collaboration with your colleagues,' and 'your workload?'" Respondents rated their satisfaction on a seven-point Likert scale (1 = very dissatisfied, 7 = very satisfied). To check whether the measure was uni-dimensional, we conducted an exploratory factor analysis with principal axis factoring (using the direct oblimin rotation method, which relaxed the assumption that factors are orthogonal). All items loaded on one factor, which had an eigenvalue of 2.67 and explained 67% of the variance. Cronbach's alpha for the job satisfaction scale was 0.81.

3.3. Analytical approach

To test our hypotheses, we used an exponential random graph modeling approach (ERGM), which is also referred to as the p^* model (Robins et al., 2009, 2007a,b; Snijders et al., 2006). We computed the models using the statistical package SIENA-p^* in

[4] The question on relationship quality is roughly translated as follows: "With some colleagues we have a very good relationship. To some we would even confide personal things. With other colleagues, however, we can get along less well. The following question asks about your relationships with your colleagues. How would you describe your relationship with each of the following people?"

STOCNET (Snijders et al., 2008). We could not rely on an ordinary least squares (OLS) regression approach because our data violate its assumptions of observational independence. A major advantage of ERGM is that it investigates the structure within a complete social network. In our case, we look at gossip relations within an organizational network, where a gossip relation represents one employee gossiping about a specific colleague. These network relations do not just form randomly but have a certain underlying pattern. With ERGM it is possible to examine and empirically test these structural patterns, and ask for example whether shared group membership affects the choice of certain gossip objects.

In order to answer this type of question, ERGM proceeds as follows: the observed gossip network is regarded as just one realization out of many possible realizations and might be observed simply by chance. To see to what extent the observed gossip network we collected differs from a gossip network that occurs by chance, a number of random networks are simulated with a Markov chain Monte Carlo maximum likelihood estimation (MCMCMLE). The simulated network is compared to the observed network in terms of parameters. For example, we included shared group membership to predict whether an employee gossips about a colleague. If the simulation does not represent the observation well, the parameter value (previously zero) for shared group membership is adjusted and used for the subsequent simulation. The parameter is changed to a value above zero when gossip was more observed to be about employees of the same group, and changed to a value below zero when less observed than in the random network. This procedure is repeated at least 8000 times until the simulated network provides a good representation of the observed network, indicated by convergence statistics close to zero. We only used models with convergence statistics between −0.10 and 0.10 for every parameter to ensure robust results, as recommended by Robins et al. (2009). We also produced goodness of fit statistics through simulations to assess the quality of the estimated models. Structural statistics of the observed network were compared with the corresponding statistics of networks simulated from the fitted model (thus using parameters of the model estimated earlier). The so-called *t*-statistics should be close to zero and less than 0.1 in absolute value (Robins et al., 2009).

We modeled two exponential random graphs, one for negative gossip about colleagues, and one for positive gossip about colleagues. We entered parameters that represented our three different levels of analysis. We included parameters to test whether individual characteristics like employee social status affected whether they were likely to become the object of gossip. As recommended for ERGM models, we also controlled for the social status of the gossip senders, and for the similarity in social status between the gossip senders and their chosen gossip objects. The second level of analyses regarded dyadic effects as described by our above example on shared group membership. For the third level, we included parameters that described the overall structure of the dependent variable, gossip relations in the organization as a whole. For example, we tested whether the concentration on some gossip objects was higher in the observed network than expected under random conditions (the alternating k-in-stars parameter). Four more network statistics were included that are typically recommended as controls in ERGM: alternating k-outstars, reciprocity, alternating independent 2-paths, and alternating k-triangles (Robins et al., 2007a,b; Snijders et al., 2008). Some models might also include estimates for density. Modeling density, however, was not necessary in our models because we used the conditional maximum likelihood estimation recommended by Snijders et al. (2006), which fixes density to the observed density.

4. Results

Table 1 presents descriptive statistics and intercorrelations for the variables, including the correlations among the networks. Correlations among networks were computed with the Quadratic Assignment Procedure (QAP) algorithm in UCINET VI (Borgatti et al., 2002).

The positive gossip network contained 225 ties (i.e., 225 cases in which employees reported receiving gossip about objects). On average, an employee received positive gossip about six colleagues in the organization. The negative gossip network was somewhat sparser, containing 119 ties. On average, an employee received negative gossip about three colleagues in the organization. As a consequence, network densities differed dramatically for the two types of gossip: the positive gossip network ($\delta = 0.18$) was twice as dense as the negative gossip network ($\delta = 0.09$). There was a positive correlation between positive gossip and group membership ($r = 0.12$, $p < 0.01$), which means that employees tended to gossip positively about colleagues who are in their work group. Furthermore, there was a weaker positive, but significant correlation between negative gossip being spread about members of the gossip sender's own group ($r = 0.08$, $p < 0.05$).

Additional insights on these gossip networks can be gained through visualization, as shown in Fig. 1. In the network of positive gossip (at the top of the figure), circles of the same shades were drawn closely together, suggesting that positive gossip occurred more often about employees from the same team. In the positive gossip network, there were hardly any central objects with a low social status (i.e., small circle size), since most of them were peripheral. In contrast, higher-status employees were less central, and lower status employees were more central in the negative gossip network. Finally, in both networks some employees seemed to be particularly central objects with many arrows directed at them, while others were hardly chosen as objects. A descriptive measure that expresses the variability of object choices in a network is *group indegree centralization* (Freeman, 1979). Centralization reaches its maximum of 1 when one object is chosen by all other employees (as in a star structure), and its minimum of 0 when all employees are equally often chosen as objects. In our study, centralization differed considerably for positive and negative gossip objects: in the negative gossip network, centralization was almost twice as large ($C_D = 0.49$) as in the positive gossip network ($C_D = 0.26$), suggesting that negative gossip was more centrally structured around star-like objects ("scapegoats").

We now turn to discussing the results of our hypothesis testing using the exponential random graph models, as shown in Table 2.

In Hypothesis 1, we argued that employees will gossip positively about colleagues from their own work group. The significant and positive effect of shared group membership in Model 1 ($\theta = 0.74$, $p < 0.001$) suggests support for H1. In Hypothesis 2, we argued that negative gossip would also be spread about colleagues who belong to the gossip sender's work group. Again, the results of Model 2 support our hypothesis ($\theta = 0.55$, $p < 0.05$). Thus, gossip – without regard to whether it is positive or negative – is about colleagues from the gossip sender's work group. This result cannot be attributed to high contact frequency or higher rates of friendship within teams, since we controlled for these effects in Models 1 and 2. Over and above these control effects, then, being a member of the same group leads to being the object of both more positive and negative gossip from group members.

In Hypothesis 3, we argued that employees high in social status in the overall organizational network are likely to be the objects of positive gossip. Results in Model 1 fail to support our hypothesis ($\theta = 0.15$, $p > 0.05$) – they are no more likely to be the objects of positive gossip that those lower in social status. An interesting result, however, is found for the variable that controls for the

Table 1
Means (*M*), Standard deviations (SD), and correlations of networks and individual attributes.

Variable	*N*	*M*	SD	Density	Relationship	Contact freq.	Group member	Positive gossip	Negative gossip	Social status
Relationship quality (in-degree)[a]	30	8.67	3.72	0.31	–					
Contact frequency (out-degree)[b]	30	8.50	7.74	0.32	0.42***	–				
Shared group membership (degree)	36	5.06	2.52	0.13	0.18***	0.24***	–			
Positive gossip (out-degree)	36	6.25	6.46	0.18	0.20**	0.14**	0.12**	–		
Negative gossip (out-degree)	36	3.31	2.97	0.09	0.01	0.17**	0.08*	n/a	–	
Social status (gossip objects)	36	1.55	0.71	n/a	0.26**	0.28***	n/a	0.25**	0.11*	–
Job satisfaction (gossip senders)	30	5.07	0.97	n/a	−0.02	0.10	n/a	−0.13*	−0.12*	−0.48**

[a] The network was dichotomized (1 = friendship; 0 = no friendship) for calculating means, standard deviations, and density.
[b] The network was dichotomized (1 = three or more weekly contacts; 0 = less than three weekly contacts) for calculating means, standard deviations, and density.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

status of gossip senders: high-status employees are more likely to be spreading gossip than those lower in social status ($\theta = 0.35$, $p < 0.01$). In Hypothesis 4, we argued that low-status employees will be more likely to be the objects of negative gossip. The significant negative parameter for social status of gossip objects in Model 2 ($\theta = -0.32$, $p < 0.01$) suggests support for this hypothesis.

In Hypothesis 5, we argued that negative gossip would be concentrated on a small number of scapegoats in the organization. We

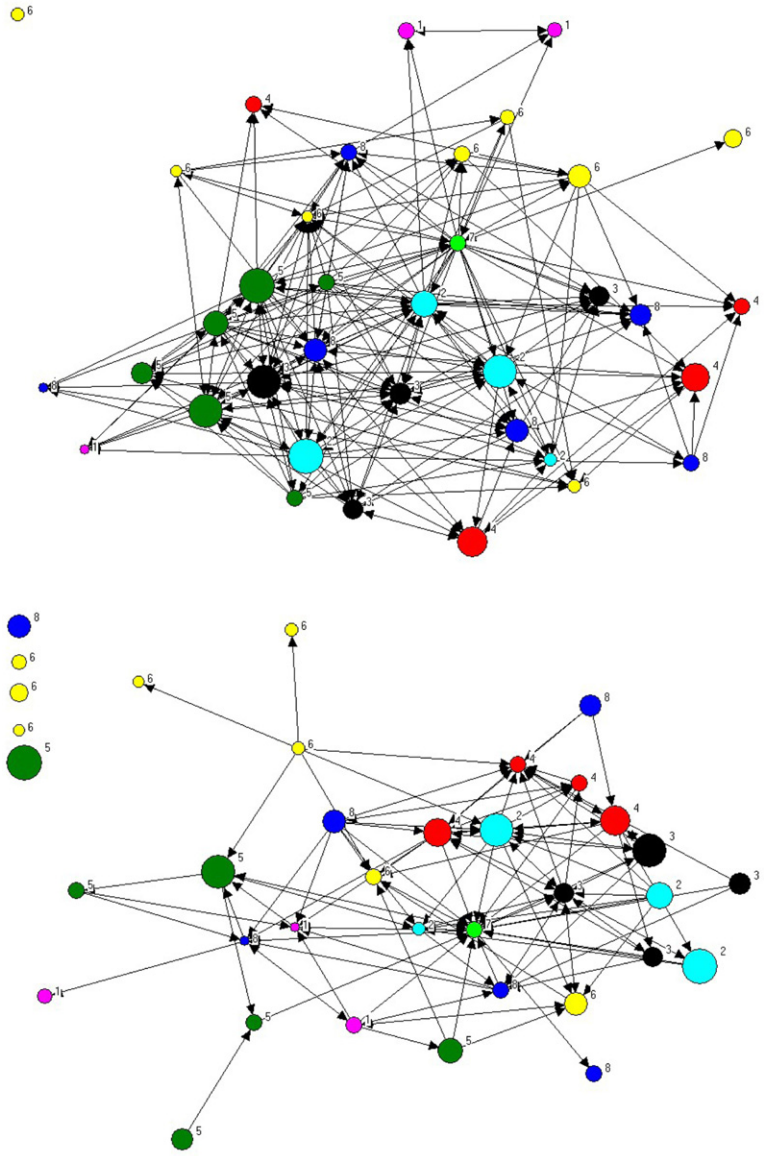

Fig. 1. Networks of positive (top) and negative gossip (bottom).
Note. Each circle represents one employee. Arrows are directed from gossiping employees to their gossip objects. The larger the circle size, the higher the social status of an employee. Employees with the same circle shades and labels belong to the same work group.

Table 2
Positive and negative gossip about colleagues: parameter estimates and standard errors (SE) of exponential random graph models.

	Positive gossip only about colleagues		Negative gossip about colleagues	
	Model 1		Model 2	
Parameter	Estimate	SE	Estimate	SE
Controls on individual level				
Job satisfaction of gossip objects	−0.13	0.08	−0.19	0.11
Job satisfaction of gossipers	0.14^{+}	0.08	−0.46**	0.15
Similarity in job satisfaction (gossiper-object)	0.04	0.34	0.06	0.47
Dyadic relationships				
Shared group membership	0.74***	0.19	0.55*	0.26
Relationship quality between gossiper and object	0.16*	0.08	−0.28**	0.11
Contact frequency between gossiper and object	0.01	0.05	0.30***	0.08
Social status in network				
Social status of gossip objects	0.15	0.13	−0.32**	0.13
Social status of gossipers	0.35**	0.11	0.17	0.16
Similarity in social status (gossiper-object)	−0.13	0.31	0.17	0.41
Network statistics				
Alternating in-k-stars	−0.04	0.34	1.02***	0.27
Alternating out-k-stars	0.42	0.29	0.41	0.30
Reciprocity	0.68*	0.29	1.04***	0.40
Alternating independent 2-paths	−0.18***	0.03	−0.08	0.05
Alternating k-triangles	0.52***	0.14	0.32*	0.15

Note. As conditional maximum likelihood estimation was used, no density parameters were modeled.
$^{+}$ $p < 0.1$.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

tested this by examining the alternating in-k-stars parameter in Model 2 which is significant and positive ($\theta = 1.02$, $p < 0.001$), indicating that there is a tendency for a larger number of employees to gossip negatively about a very small number of colleagues. These employees seem to be magnets for negative gossip in the site. We also performed an ad hoc test to see if the same phenomenon would occur in the positive gossip network – that is, would certain individuals be considered celebrity gossip stars about whom all of the employees would be interested in spreading positive gossip? The parameter in Model 1 is negative and non-significant ($\theta = -0.04$, $p > 0.05$), suggesting that positive gossip is distributed rather evenly among employees. Goodness of fit statistics produced *t*-statistics less than 0.1 in absolute value for all but one variable in the model (the *t*-statistic of one control variable was −0.12), suggesting a good overall fit of the models.[5]

ERG models also include a number of network statistics about which we did not hypothesize. The inclusion of such statistics is necessary to control for interdependencies in a network: ERG models predict social ties between actors (but not actor attributes). Each tie and each configuration of ties is dependent on all other ties in a network (Robins et al., 2007a). Hence, parameter estimates of tie configurations are observed given all other parameters in the model, and must be interpreted together. For example, we controlled for whether there would be a tendency for a gossip object to reciprocate by spreading positive or negative gossip about a gossip sender. This was significant in both the positive and negative gossip networks. The positive, significant parameter for alternating k-triangles together with the negative, significant alternating independent 2-paths in Model 2 indicate that positive gossip is characterized by network closure: employees tend to gossip about one another positively in clique-like clusters. Note that also in the negative gossip network there is a positive and significant alternating k-triangle effect. However, this effect dropped out when we re-ran the model for the (very) small amount of only negative gossip ($n = 40$): out of the total 119 ties, 79 blended ties were removed, leaving in 40 negative ties. The alternating k-triangle turns insignificant ($\theta = 0.06$, SE = 0.29, ns), whereas the alternating in-k-star remains positive and significant ($\theta = 1.49$, SE = 0.31, $p < 0.001$). These findings further support the scapegoat argument for the network of negative gossip.

5. Discussion and conclusion

While gossip is a ubiquitous phenomenon on which individuals spend a large amount of their social time (Dunbar, 2004), relatively little is known about gossip, particularly in the workplace (Grosser et al., 2010; Mills, 2010). As researchers have increasingly turned their attention to this area of inquiry, it is natural that we should begin to move beyond understanding gossip from a dyadic perspective to understanding how it occurs in workplace groups and networks. We contribute to the literature on workplace gossip by focusing on understanding who the objects are of the gossip that is being spread in the workplace. The topic of who are the objects is not often considered, although objects of negative gossip can be affected in similar ways to victimize employees, such as being thwarted in their feelings of belongingness. We argued that the choice of gossip object is driven by considerations for group solidarity and social status, and developed a theory beyond the dyadic level – whether the potential gossip object was in the same work

[5] As Robins et al. (2009) argue, the degree distribution of a network, if skewed, can inflate the parameter estimation of alternating k-stars. To rule out this possibility and check the soundness of the significant alternating in-k-star effect, we re-ran Model 2 controlling for three additional parameters (Robins et al., 2009): isolates (employees neither being object nor sender of gossip), sinks (employees being gossip objects only), and sources (employees being senders of gossip only). Three actor dummy variables were created: one dummy representing zero in- and out-degrees (isolates), one dummy representing zero out-degrees (sinks), one dummy representing zero in-degrees (sources). These dummies were included as sender effects in the model. None of the three additional parameters had a significant effect, so that the overall model (including the alternating in-k-star) remained unchanged with regard to the findings reported here.

group as the gossip sender, and whether the gossip object was high or low in status within the overall organizational friendship network. Our study is also one of the first to examine how positive and negative gossip is distributed across a predominantly female organization's network, and to examine the issue of scapegoating with sociometric methods.

Our results are to some extent counterintuitive: gossip, even negative gossip, is not about out-groups but focuses on in-groups, while high social status protects employees from being the object of negative gossip but does not encourage positive gossip about the prominent individual. In the following, theoretical implications of the results are discussed, first for work group membership and then for social status in the informal network. After that, we briefly mention practical implications, and address limitations of the current study and how future research could contribute to studying gossip in organizations.

As hypothesized, we found that both positive and negative gossip was more likely to be spread about colleagues within the same work group, even after controlling for the greater degree of interaction one would expect from sharing a work group, and even after controlling for the greater likelihood of having friendships within the work group. This supports arguments from interdependence theory and optimal distinctiveness theory (Brewer, 1999): both positive and negative gossip might be used to maintain the control regime within the work group. A set of norms is monitored and enforced within each work group via means of both positive and negative gossip behavior. In contrast, little gossip information is exchanged about out-groups, because it is relatively uninteresting. The organization operated in the child care field and its success relied greatly on highly interdependent women working closely together in a collaborative manner. Our results suggest that interdependence between employees is a predictor of *any* type of gossip about group members. Similarly, in a study on highly interdependent male group members by Kniffin and Wilson (2005), positive and negative gossips were directed in ways that supported group-beneficial rules: gossip was aimed not only at group solidarity, but also at social control within the group. This suggests that the control function of gossip operates similarly in single-gender-dominated groups, without regard to whether the organization is predominantly composed of men or women.

Our theorizing also noted that each work group is dependent on other work groups in order to accomplish the overall organization's goals. This requires individuals to create relationships across groups that ultimately develop into an organizational network. We hypothesized that a potential gossip object's social status within this overall organizational network would be a major determinant of whether the person was chosen as an object for positive or negative gossip, after controlling for being embedded within certain work groups. We hypothesized that passing positive gossip about a high-status individual helps the gossip sender to affiliate with people of this individual's social circle, and establish normative standards. However, we found no evidence for this effect. Instead, we found that the potential gossip object's status mattered only in whether negative gossip was spread about the person, with low-status individuals being chosen at a much higher than expected rate as objects of negative gossip. Results further yielded support for scapegoating theory (Bonazzi, 1983): there was a statistically significant tendency for these low-status individuals to be magnets for negative gossip, so that they were essentially scapegoats within the entire organization. There are some similarities between the negative gossip phenomenon, and some of the work that has been done on bullying – it is precisely the individuals who are lacking in social support and are least able to retaliate that are being selected as objects of negative gossip in a manner that suggests that they are being ostracized from the network as a whole (Salmivalli et al., 1996). The same was not true of positive gossip, which we found to be more evenly distributed across the entire organization. The lack of clear "stars" in the positive network and the presence of clear scapegoats in the negative gossip network is comparable to the structure that has been found in earlier studies on female groups of adolescents (Martin, 2009). Status hierarchies in female groups are more differentiated near the bottom than near the top: female groups often have clear underdogs but no clear leaders. In contrast, male groups exhibit more differentiation at the top of status hierarchies than at the bottom (i.e., men have clear leaders). Keeping in mind that scapegoating is more common in female groups, our study sheds light on the mechanisms that produce scapegoats: negative gossip is one of the means that contributes to the group dynamics of social exclusion.

Our study also introduced a new methodological development to the study of gossip. We applied exponential random graph modeling on gossip data collected from peers reporting on each other, rather than through self-report data. In addition to allowing us to minimize potential social desirability bias, the manner in which the data were collected and analyzed allowed us to examine gossip from several distinct levels of analysis (i.e., the individual, the dyad, and the network levels; Borgatti and Foster, 2003). For example, we saw that dissatisfied individuals gossiped negatively about more people (individual level), that being in the same work group as another employee increased the likelihood of positive and negative gossip being sent about this colleague (dyadic), and that being high in status in the organization as a whole was related to being the object of negative gossip, but not of being the object of positive gossip (whole network), all of this while controlling for triadic network statistics.

Our results imply that organizations interested in reducing negative gossip need to consider the person's status within the whole network, as has also been suggested in the literature on bullying (Salmivalli et al., 1996), and particularly focus their attention on employees who are poorly integrated into the informal network. This seems especially relevant for work settings where employees are required to frequently collaborate and cannot avoid interpersonal contact (Aquino and Thau, 2009): as our results show, frequent contact with a colleague (a control variable in our models) increases the likelihood of negative gossip being spread about that person over and above their common group membership and their social status. In line with this finding, a sociometric study in a sorority by Keltner et al. (2008) found that gossip objects tended to be well-known, but not well-liked, and that their social reputation was perceived as poor. In contrast, the more popular employees are, the more support and the less counterproductive behavior they face from colleagues (Scott and Judge, 2009).

The present study has some limitations which suggest that the results need to be considered with caution. First, our findings might be context-specific to the particular type of organization (a child care organization of mainly female support workers) in which the data were collected. This context is characterized by strong solidarity norms, which might not be the case in other settings. As with nearly every social network analysis, this is a case study of one organization and further research is necessary to test the generalizability of our results. It might be the case that a setting where the solidarity norms were weaker might not produce as much intra-group gossip, and particularly negative gossip against in-group members because of lower levels of group norm monitoring and sanctioning. Negative gossip about out-groups might increase with inter-group dependency and competitiveness. It is necessary to revisit the present findings in various organizational contexts, and in networks with a mixed-gender composition. A second limitation is that the study included only cross-sectional data which do not enable causality tests. For example, we argued that social status will predict whether colleagues become gossip objects. However, one could also argue that social status is, to a large

extent, a consequence of being gossiped about. Theory suggests that gossiping increases interpersonal affection and helps gossip senders to build friendships (Dunbar, 2004; Foster, 2004; Jaeger et al., 1994; Rosnow, 2001). Similarly, being the object of negative gossip can create a vicious cycle. There is some evidence that employees feeling thwarted in their belongingness needs engage in interpersonally harmful behaviors, and are further victimized because of this (Thau et al., 2007).

Finally, another limitation is the exclusion of the gossip receivers in the analytical models, even though they are an essential part of the gossip triad. Ideally, we would have liked to also include the relationships between the gossip receivers and the objects, the relationships between the senders and the objects, as well as attributes of the gossip receivers (e.g., their social status). However, analyzing these types of triadic structures is complex, and there are no current ERG models for directed networks that enable analyzing attribute effects beyond the dyad. More theoretical and methodological developments on ERG models are needed to solve this issue.

Future researchers should also apply a longitudinal design, thus allowing them to study the consequences of positive and negative gossip. For example, the extent to which positive gossip about colleagues actually leads to work group solidarity, organizational citizenship behavior between employees, or in-role cooperation during future interactions would all be interesting gossip outcomes to explore (De Backer and Gurven, 2006; Sommerfeld et al., 2008). Similarly, exploring whether negative gossip objects are being further excluded (i.e., ostracized) from the informal network in an organization over time would be an interesting study for the future, particularly for those interested in understanding whether scapegoating can be overcome, or whether there is an inevitability to the continued targeting of a small subset of individuals as targets of negative gossip. Furthermore, it would be interesting to study the extent to which gossip produces scapegoats in mixed-gender networks, as compared to the predominantly single-gender networks studied here and in other network studies of gossip. Another interesting subject of study would be to compare the sociometric measure of social status we used here (eigenvector centrality in the friendship network) to more psychological measures of social status, such as perceived individual influence or performance, to see whether gossip is oriented more towards sociometric or social psychological measures of social status.

We conclude that it is essential to focus on the objects of gossip when we want to understand why workplace gossip in some cases leads to high integration of employees and cohesion in the informal network, and to low integration and structural holes in other cases (Michelson and Mouly, 2004; Noon and Delbridge, 1993). We found that the antecedents of being the object of gossip differ depending on whether the gossip is positive or negative in its contents. Similarly research on the consequences of workplace gossip would benefit from a systematic distinction between positive and negative gossip. There have been arguments for either detrimental effects (such as decreasing the well-being of victimized employees) or benevolent effects (such as increasing cooperation and social support) of workplace gossip for an organization. Both negative and positive effects can occur simultaneously. Future gossip research is likely to benefit from considering both the positive and negative forms of gossip together as we move forward in conducting this research.

References

Aquino, K., Thau, S., 2009. Workplace victimization: aggression from the target's perspective. Annual Review of Psychology 60, 717–741.

Barkow, J.H., 1975. Prestige and culture – biosocial interpretation. Current Anthropology 16, 553–572.

Barkow, J.H., 1992. Beneath new culture is old psychology: gossip and social stratification. In: Barkow, J., Cosmides, L., Tooby, J. (Eds.), The Adapted Mind: Evolutionary Psychology and the Generation of Culture. Oxford University Press, Oxford, pp. 627–637.

Baumeister, R.F., Leary, M.R., 1995. The need to belong – desire for interpersonal attachments as a fundamental human-motivation. Psychological Bulletin 117, 497–529.

Baumeister, R.F., Zhang, L.Q., Vohs, K.D., 2004. Gossip as cultural learning. Review of General Psychology 8, 111–121.

Bergmann, J., 1993. Toward a theory of gossiping. In: Discreet Indiscretions: The Social Organisation of Gossip. Aldine De Gruyter, New York, pp. 139–153.

Bernard, H.R., Killworth, P., Sailer, L., 1979. Informant accuracy in social networks. Part IV. A comparison of clique-level structure in behavioral and cognitive network data. Social Networks 2, 191–218.

Bonacich, P., 1987. Power and centrality – a family of measures. American Journal of Sociology 92, 1170–1182.

Bonazzi, G., 1983. Scapegoating in complex organizations – the results of a comparative-study of symbolic blame-giving in Italian and French public-administration. Organization Studies 4, 1–18.

Borgatti, S.P., Everett, M.G., Freeman, L.C., 2002. Ucinet for Windows: software for social network analysis. Analytic Technologies, Harvard, MA. Available at: http://www.analytictech.com/ucinet.htm.

Borgatti, S.P., Foster, P.C., 2003. The network paradigm in organizational research: a review and typology. Journal of Management 29, 991–1013.

Bosson, J.K., Johnson, A.B., Niederhoffer, K., Swann, W.B., 2006. Interpersonal chemistry through negativity: bonding by sharing negative attitudes about others. Personal Relationships 13, 135–150.

Bown, N.J., Abrams, D., 2003. Despicability in the workplace: effects of behavioral deviance and unlikeability on the evaluation of in-group and out-group members. Journal of Applied Social Psychology 33, 2413–2426.

Brass, D.J., Burkhardt, M.E., 1993. Potential power and power use – an investigation of structure and behavior. Academy of Management Journal 36, 441–470.

Brewer, M.B., 1999. The psychology of prejudice: ingroup love or outgroup hate? Journal of Social Issues 55, 429–444.

Burt, R.S., 2001. Bandwidth and echo: trust, information, and gossip in social networks. In: Casella, A., Rauch, J.E. (Eds.), Networks and Markets: Contributions from Economics and Sociology. Russel Sag Foundation, pp. 30–74.

Burt, R.S., 2005. Brokerage and Closure: An Introduction to Social Capital. Oxford University Press, Oxford.

Burt, R.S., Knez, M., 1996. Trust and third-party gossip. In: Kramer, R.M., Tyler, T.R. (Eds.), Trust in Organizations: Frontiers of Theory and Research. Sag Publications, pp. 68–89.

Cooke, H.F., 2007. Scapegoating and the unpopular nurse. Nurse Education Today 27, 177–184.

Coyne, I., Craig, J., Chong, P.S.L., 2004. Workplace bullying in a group context. British Journal of Guidance & Counselling 32, 301–317.

Davis, H., Mcleod, S.L., 2003. Why humans value sensational news – an evolutionary perspective. Evolution and Human Behavior 24, 208–216.

De Backer, C.J.S., Gurven, M., 2006. Whispering down the lane: the economics of vicarious information transfer. Adaptive Behavior 14, 249–264.

De Pinninck, A.P., Sierra, Ch., Schorlemmer, M., 2008. Distributed norm enforcement: ostracism in open multi-agent systems. In: Casanovas, P., Sartor, G., Casellas, N., Rubino, R. (Eds.), Computable Models of the Law, LNAI 4884. Springer, Berlin, pp. 275–290.

De Vries, M., 1995. The changing role of gossip: towards a new identity? Turkish girls in the Netherlands. In: Baumann, G., Sunier, T. (Eds.), Post-Migration Ethnicity: Cohesion, Commitments, Comparison. Het Spinhuis Publishers, Amsterdam, pp. 36–56.

DiFonzo, N., Bordia, P., 2007. Rumor, gossip and urban legends. Diogenes 54, 19–35.

Duffy, M.K., Ganster, D.C., Pagon, M., 2002. Social undermining in the workplace. Academy of Management Journal 45, 331–351.

Dunbar, R.I.M., 2004. Gossip in evolutionary perspective. Review of General Psychology 8, 100–110.

Elias, N., Scotson, J.L., 1965. The Established and the Outsiders. Frank Cass, London.

Fine, G.A., Rosnow, R.L., 1978. Gossip, gossipers, gossiping. Personality and Social Psychology Bulletin 4, 161–168.

Foster, E.K., 2004. Research on gossip: taxonomy, methods, and future directions. Review of General Psychology 8, 78–99.

Freeman, L.C., 1979. Centrality in social networks conceptual clarification. Social Networks 1, 215–239.

Gambetta, D., 2006. Codes of the Underworld: How Criminals Communicate. Princeton University Press, Princeton, NJ.

Gluckman, M., 1963. Gossip and scandal. Current Anthropology 4, 307–316.

Granovetter, M.S., 1973. Strength of weak ties. American Journal of Sociology 78, 1360–1380.

Grosser, T.J., Lopez-Kidwell, V., Labianca, G., 2010. A social network analysis of positive and negative gossip in organizational life. Group & Organization Management 35, 177–212.

Guendouzi, J., 2001. 'You'll think we're always bitching': the functions of cooperativity and competition in women's gossip. Discourse Studies 3, 29–51.

Hackman, J.R., 1992. Group influences on individuals in organizations. In: Dunnette, M.D., Hough, L.M. (Eds.), Handbook of Industrial and Organizational Psychology, Vol. 3. Consulting Psychologists Press, Palo Alto, pp. 1455–1525.

Heider, F., 1958. The Psychology of Interpersonal Relation. John Wiley & Sons, New York.

Jaeger, M.E., Skleder, A.A., Rind, B., Rosnow, R.L., 1994. Gossip, gossipers, gossipees. In: Goodman, R.F., Ben-Ze'ev, A. (Eds.), Good Gossip. University Press of Kansas, pp. 154–168.
Keltner, D., Van Kleef, G.A., Chen, S., Kraus, M.W., 2008. A reciprocal influence model of social power: emerging principles and lines of inquiry. In: Advances in Experimental Social Psychology. Elsevier Academic Press Inc., San Diego.
Kilduff, M., Krackhardt, D., 1994. Bringing the individual back in – a structural-analysis of the internal market for reputation in organizations. Academy of Management Journal 37, 87–108.
Kniffin, K.M., Wilson, D.S., 2005. Utilities of gossip across organizational levels – multilevel selection, free-riders, and teams. Human Nature-An Interdisciplinary Biosocial Perspective 16, 278–292.
Krackhardt, D., 1994. Graph theoretical dimensions of informal organizations. In: Carley, K., Prietula, M. (Eds.), Computational Organizational Theory. Lawrence Erlbaum Associaties Inc., Hillsdale, NJ, pp. 89–111.
Kurland, N.B., Pelled, L.H., 2000. Passing the word: toward a model of gossip and power in the workplace. Academy of Management Review 25, 428–438.
Labianca, G., Brass, D.J., 2006. Exploring the social ledger: negative relationships and negative asymmetry in social networks in organizations. Academy of Management Review 31, 596–614.
Lamertz, K., Aquino, K., 2004. Social power, social status and perceptual similarity of workplace victimization: a social network analysis of stratification. Human Relations 57, 795–822.
Lazega, E., Krackhardt, D., 2000. Spreading and sifting costs of lateral control in a law partnership: a structural analysis at the individual level. Quality & Quantity 34, 153–175.
Leaper, C., Holliday, H., 1995. Gossip in same-gender and cross-gender friends conversations. Personal Relationships 2, 237–246.
Litman, J.A., Pezzo, M.V., 2005. Individual differences in attitudes towards gossip. Personality and Individual Differences 38, 963–980.
Marques, J.M., Paez, D., 1994. The 'black-sheep effect': Social categorization, rejection of in-group deviates, and perception of group variability. In: Stroebe, W., Hewstone, M. (Eds.), European Review of Social Psychology. John Wiley & Sons, London, UK, pp. 37–68.
Marsden, P.V., 1990. Network data and measurement. Annual Review of Sociology 16, 435–463.
Martin, J.L., 2009. Formation and stabilization of vertical hierarchies among adolescents: towards a quantitative ethology of dominance among humans. Social Psychology Quarterly 72, 241–264.
McAndrew, F.T., Bell, E.K., Garcia, C.M., 2007. Who do we tell and whom do we tell on? Gossip as a strategy for status enhancement. Journal of Applied Social Psychology 37, 1562–1577.
Merry, S.E., 1984. Rethinking gossip and scandal. In: Black, D. (Ed.), Toward a General Theory of Social Control. Academic Press, New York, pp. 272–302.
Michelson, G., Mouly, S., 2002. "You didn't hear it from us but. . ..": towards and understanding of rumour and gossip in organisations. Australian Journal of Management 27, 57–65.
Michelson, G., Mouly, S., 2004. Do loose lips sink ships? The meaning, antecedents and consequences of rumour and gossip in organisations. Corporate Communications: An International Journal 9, 189–201.
Mills, C., 2010. Experiencing gossip: the foundations for a theory of embedded organizational gossip. Group & Organization Management 35, 213–240.
Morey, N.C., Luthans, F., 1991. The use of dyadic alliances in informal organization – an ethnographic study. Human Relations 44, 597–618.
Morrison, R., 2004. Informal relationships in the workplace: associations with job satisfaction, organisational commitment and turnover intentions. New Zealand Journal of Psychology 33, 114–128.
Nevo, O., Nevo, B., Derech-Zehavi, A., 1994. The tendency to gossip as a psychological disposition: constructing a measure and validating it. In: Goodman, R.F., Ben-Ze'ev, A. (Eds.), Good Gossip. University Press of Kansas, Lawrence, pp. 180–189.
Noon, M., Delbridge, R., 1993. News from behind my hand – gossip in organizations. Organization Studies 14, 23–36.
Northway, M.L., 1967. A Primer of Sociometry. 2nd University of Toronto Press, Toronto.
Oh, H.S., Chung, M.H., Labianca, G., 2004. Group social capital and group effectiveness: the role of informal socializing ties. Academy of Management Journal 47, 860–875.
Oh, H.S., Labianca, G., Chung, M.H., 2006. A multilevel model of group social capital. Academy of Management Review 31, 569–582.
Robins, G., Pattison, P., Kalish, Y., Lusher, D., 2007a. An introduction to exponential random graph (p*) models for social networks. Social Networks 29, 173–191.
Robins, G., Pattison, P., Wang, P., 2009. Closure, connectivity and degree distributions: exponential random graph (p*) models for directed social networks. Social Networks 31, 105–117.
Robins, G., Snijders, T., Wang, P., Handcock, M., Pattison, P., 2007b. Recent developments in exponential random graph (p*) models for social networks. Social Networks 29, 192–215.
Rosnow, R.L., 2001. Rumor and gossip in interpersonal interaction and beyond: a social exchange perspective. In: Kowalski, R.M. (Ed.), Behaving Badly: Aversive Behaviours in Interpersonal Relationships. American Psychological Association, Washington D.C., pp. 203–232.
Salmivalli, C., Lagerspetz, K., Bjorkqvist, K., Osterman, K., Kaukiainen, A., 1996. Bullying as a group process: participant roles and their relations to social status within the group. Aggressive Behavior 22, 1–15.
Scott, B.A., Judge, T.A., 2009. The Popularity contest at work: who wins, why, and what do they receive? Journal of Applied Psychology 94, 20–33.
Snijders, T.A.B., Pattison, P., Robins, G., Handcock, M., 2006. New specifications for exponential random graph models. Sociological Methodology 36, 99–153.
Snijders, T.A.B., Steglich, C., Schweinberger, M., Huisman, M., 2008. Manual for SIENA version 3.3. University of Groningen, ICS–University of Oxford, Department of Statistics, Groningen–Oxford. Available at: http://www.stats.ox.ac.uk/siena/.
Sommerfeld, R.D., Krambeck, H.J., Milinski, M., 2008. Multiple gossip statements and their effect on reputation and trustworthiness. Proceedings of the Royal Society B-Biological Sciences 275, 2529–3253.
Sotirin, P., Gottfried, H., 1999. The ambivalent dynamics of secretarial 'bitching': control, resistance, and the construction of identity. Organization 6, 57–80.
Sparrowe, R.T., Liden, R.C., Wayne, S.J., Kraimer, M.L., 2001. Social networks and the performance of individuals and groups. Academy of Management Journal 44, 316–325.
Tajfel, H., 1974. Social identity and intergroup behaviour. Social Science Information/Sur les Sciences Sociales 13, 65–93.
Tebbutt, M., Marchington, M., 1997. 'Look before you speak': gossip and the insecure workplace. Work Employment and Society 11, 713–735.
Thau, S., Aquino, K., Poortvliet, P.M., 2007. Self-defeating behaviors in organizations: the relationship between thwarted belonging and interpersonal work behaviors. Journal of Applied Psychology 92, 840–847.
Vartia, M.A.L., 2001. Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. Scandinavian Journal of Work Environment & Health 27, 63–69.
Wasserman, S., Faust, K., 1994. Social Network Analysis. Cambridge University Press, Cambridge.
Willer, R., 2009. Groups reward individual sacrifice: the status solution to the collective action problem. American Sociological Review 74, 23–43.
Wilson, D.S., Wilcynski, C., Wells, A., Weiser, L., 2000. Gossip and other aspects of language as group-level adaptations. In: Heyes, C. (Ed.), Cognition and Evolution. MIT Press, Cambridge, pp. 347–366.
Wittek, R., Van Duijn, M., Snijders, T.A.B., 2003. Frame decay, informal power, and the escalation of social control in a management team: a relational signaling perspective. Research in the Sociology of Organizations 20, 355–380.
Wittek, R., Wielers, R., 1998. Gossip in organizations. Computational & Mathematical Organization Theory 4, 189–204.