Content, structure, and dynamics of personal reputation: The role of trust and status potential within social networks

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Abstract
In this paper we examined the content, structure, and dynamics of reputation, a person’s agreed-upon character that is constructed within social groups. In Study 1, we examined longitudinally the content and structure of an individual’s reputation as distributed across a newly forming group. In Study 2, we examined how the dynamics of reputation shape gossip, a form of reputational discourse. In keeping with theoretical claims about the function of reputation, trustworthiness and status potential proved to be central to reputation content that is shared across a social network and emerged over the course of a year (Study 1). Gossip, a form of reputational discourse, was found to focus upon individuals who are untrustworthy and of questionable and undeserved status (Study 2). We discuss how the results from these studies shed light on how reputation is essential to cooperation and cohesion within groups.

Keywords
cooperation, gossip, reputation, social groups, social status, trust

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Reputation is a central aspect of social identity and thought to convey to others an individual’s likelihood of honoring social norms, role expectations, and duties (Craik, 2008; Frank, 1988). Positive reputations arise from actions that subordinate self-interest in the service of upholding the social contract. The pursuit of positive reputations is a powerful motive of social behavior, as suggested by empirical studies of impression management (De Bruin & van Lange, 1999; Leary & Kowalski, 1990), “face” (Goffman, 1959), social status (Willer, 2009), desirable interpersonal traits (Cottrell, Neuberg, & Li, 2007; Jensen-Campbell, Graziano, & West, 1995), and gossip and teasing (e.g., Feinberg, Willer, & Schultz, 2014; Feinberg,

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Willer, Stellar, & Keltner, 2012; Keltner, Capps, Kring, Young, & Heerey, 2001; Kowalski, 2004; Sommerfeld, Krambeck, & Milinski, 2008; Sommerfeld, Krambeck, Semmann, & Milinski, 2007).

Recently, studies of social networks have revealed that reputational concerns promote cooperative behavior when defection and antisocial competition are compelling alternatives (e.g., Wedekind & Braithwaite, 2002; Wedekind & Milinski, 2000; Yoeli, Hoffman, Rand, & Nowak, 2013). This important work instantiates reputational concerns in the general sense, manipulating whether or not one's behavior is observed or known by others within a social network. However, no studies to date have systematically examined the specific content of personal reputation, as well as how personal reputation is structured within social groups. The present investigation begins to address this by examining the content, structure, and dynamics of reputation in naturalistic groups, guided by the broader theoretical assertion that reputation functions to enable groups to monitor the trustworthiness and status of group members.

**Conceptualizing Reputation**

Following others, we define personal reputation as an individual’s agreed-upon character that is shaped via discussion in a social network (e.g., Axelrod, 1984; Bromley, 1993; Craik, 2008; Emler, 1990; Frank, 1988; Rindova, Williamson, Petkova, & Sever, 2005; van Vugt, Roberts, & Hardy, 2007). This definition highlights that reputation is primarily about the esteem an individual enjoys in the judgments of others, which emerges in communication and that is shared and distributed across group members (e.g., Anderson & Shirako, 2008; Ayim, 1994; Emler, 1990, 1994a; Kenny, 1991; Malloy & Albright, 1990; Tennie, Frith, & Frith, 2010).

Reputational information has been conceptualized as taking two forms, **distributive** and **discursive** (see Craik, 2008). Distributive reputational information refers to the judgments group members arrive at about an individual that are shared amongst members that make up the social network. Distributive reputational information is accessible by simply inquiring about a group member, for example, through reference checks, prompted personal recommendations, peer evaluations, and other kinds of peer reports (Whitmeyer, 2000). Our focus in Study 1 is on distributive reputational information.

Discursive reputational information emerges in active communication amongst group members and is a central determinant of distributive reputational information (Craik, 2008). Various social practices are forms of discursive reputation, including teasing (e.g., Keltner et al., 2001), the idle “chat” about persons in which people so routinely delight (e.g., Craik, 2008), and gossip (e.g., Ben-Ze’ev, 1994; Dunbar, 2004; Emler, 1994b; Feinberg, Willer, & Keltner, 2012; Feinberg et al., 2014; Sommerfeld et al., 2008), the focus of Study 2.

Whereas a person’s sense of personal identity is rooted in that individual’s own beliefs and intrapsychic processes, our analysis suggests that a person’s reputation is constructed in the communication and judgments of group members (Craik, 2008). Groups construct the reputations of individuals, it is theorized, to promote prosocial, cooperative actions that make for strong and cohesive groups (e.g., Feinberg et al., 2014; Wedekind & Braithwaite, 2002; Wedekind & Milinski, 2000; Yoeli et al., 2013). Thus, reputation can facilitate the selection of cooperative partners and the ostracism of noncooperative ones. Given this analysis, we propose that two dimensions will be particularly salient in distributive and discursive reputation.

**Trustworthiness and Status as Foci of Reputation Processes**

Recent conceptual analyses point to two more specific attributes that should be the focus of distributive and discursive reputation. A first attribute is trustworthiness, which captures how likely is that a person will cooperate, or “facilitate smooth interactions,” with other group members (Lount & Pettit, 2012). Groups fare better when
comprised of trustworthy individuals, and when they can readily identify those who are likely to cooperate and those who are likely to defect, free-ride, or not cooperate (e.g., Yoeli et al., 2013). Some scholars have argued that trust is a valuable operational resource within societies (Eisenegger, 2009) and a central aspect of relationships or the “glue that holds most cooperative relationships together” (Limerick & Cunnington, 1993, p. 129).

In more specific terms, an individual’s reputation for cooperation, known by the group through reputational discourse, enables group members to preferentially interact with those individuals who cooperate and avoid those who are defective and adversarial (e.g., Fehr & Schneider, 2010; Milinski, Semmann, & Krambeck, 2002; Mohtashemi & Mui, 2003; Nelissen, 2008; Wedekind & Braithwaite, 2002; Wedekind & Milinski, 2000). The ability to identify noncooperators serves to keep the rewards of mutual cooperation amongst those with reputations for being good to the group (e.g., Hales, 2002; Kurzban & Leary, 2001; Williams & Zadro, 2005), and is associated with cognitive mechanisms such as the perceptual attunement to cheaters (Cosmides & Tooby, 1992), communication (Brown & Moore, 2002; Frank, Gilovich, & Regan, 1993), behavioral signals of trustworthiness (Frank, 1988), and prosociality (Keltner, Kogan, Piff, & Saturn, 2014). In terms of personality, trust was the first category assigned to the personality factor of agreeableness (Norman, 1963). Empirically, prior research with existing groups has linked the broad personality domain of agreeableness with the specific facet of trust (Mooradian, Renzl, & Matzler, 2006). In light of this literature on trust, we hypothesize that an individual’s reputation will be defined by his or her trustworthiness. In the present investigation we test this hypothesis by examining how trait agreeableness, the personality factor most strongly related to trust (Hiraishi, Yamagata, Shikishima, & Ando, 2008) and one of the strongest predictors of cooperation (Graziano & Eisenberg, 1997), figures in both distributive (Study 1) and discursive (Study 2) reputational processes within groups.

A second attribute that we hypothesize will shape the content of an individual’s reputation within a group is what we call social potential, or the prospect of a person attaining status within a group (Anderson, John, Keltner, & Kring, 2001; Craik, 2008). Status refers to the respect, admiration, and deference a person enjoys in the eyes of group members (e.g., Anderson, Hildreth, & Howland, 2015; Boehm, 1997, 1999; Huberman, Loch, & Öncüler, 2004; Washington & Zajac, 2005). Status overlaps with a person’s reputation in that both derive from the individual’s likelihood of engaging in acts that build group cohesion and advance the interests of group members (Willer, 2009). However, a person can have a reputation for many different things unrelated to respect and admiration—for loving crossword puzzles, for doing spot-on imitations of celebrities, or for cooking horrible food. In the most general sense, a person’s social status arises out of actions that make for cohesive and strong social groups—displays of competence, building strong ties and alliances, and enabling goal-directed action that benefits the group (Anderson & Kilduff, 2009). Empirically, a person’s potential for engaging in such status-enhancing behaviors is captured by the trait extraversion, which most powerfully predicts the acquisition of social status within groups of different kinds (e.g., Anderson et al., 2001; Bono & Judge, 2004; Buss, 1987; Judge, Bono, Ilies, & Gerhardt, 2002). Historically, extraversion is linked to status concerns and status striving (e.g., Barrick & Mount, 1991; Barrick, Stewart, & Piotrowski, 2002; Stewart, 1996). Given this literature, we predict that extraversion, a sign of an individual’s status potential, will be a focus in groups’ construction of the individual’s reputation.

Methodological Requirements for the Study of Reputation

The two central predictions motivating the present investigation, then, are that the content and dynamics of distributive and discursive reputation will focus on an individual’s trustworthiness and status potential. Given these predictions, and
our overarching definition of reputation as an individual’s agreed-upon character that is shaped via discussion in the social network, several methodological considerations should guide reputation research. First, empirical research should rely on an open-ended methodology to ascertain the dispositions most relevant to a reputation. Second, reputational information should be gathered both through formal inquiry (distributive reputational information) and in spontaneous conversation (discursive reputational information). Third, judges for reputation reports can, and should, be randomly selected from the social network, thus providing a more realistic and stringent estimate of the degree of social consensus about individuals’ reputations. This kind of data allow for tests of hypothesized properties of distributive reputation, namely that it is shared (as evident in consensus among group members’ reputation reports), that it tracks reputation-relevant social behavior, and that there is some degree of “self–other” or “self–peer” agreement such that individuals have some sense of what their reputations are like within the social network. In theory, an accurate awareness of one’s reputational standing within the social network is necessary in order to guide subsequent behavior to preserve, gain, or repair one’s reputation.

Finally, in Study 2, which focuses on the dynamics of reputation, we expect that gossip, an act of discursive reputational information, will (for the sake of group functioning) target individuals who are untrustworthy and have problematic status potential (Hypothesis 3).

Study 1: Reputation Development in a Naturalistic Group

Study 1 was a 9-month longitudinal study of floor-mates living in university residence halls in a large public university in the United States. As part of a larger study of relationship development (details available upon request), participants provided open-ended narrative reputation reports as well as sociometric ratings of their floormates and engaged in semistructured social interactions. In keeping with Hypothesis 1, we predicted that reputational discourse would concentrate on the personality trait of agreeableness, given that it predicts cooperative behavior (Graziano & Eisenberg, 1997), as well as the personality trait of extraversion, which predicts elevated status (Anderson et al., 2001; Buss, 1987). With respect to Hypothesis 2, we predicted that reputation reports would exhibit both consensus (H2a), as indicated by agreement in reputation reports made by randomly selected group members, and accuracy (H2b), as indicated by the degree to which these reports reflect the opinions of the group as a whole (e.g., Jones & Skarlicki, 2005; Kenny, 1991; Malloy & Albright, 1990; Stiff & van Vugt, 2008). Due to the communicative nature of reputation and according to studies of acquaintanceship effects upon consensus in interpersonal perception (Funder & Colvin, 1988; Kenny, 1991; Paunonen, 1989), we also predicted that social consensus would increase over time. We also examined the validity of peer reputation by comparing reputation reports to coded videotaped target behavior, and examined whether individuals’ self-awareness would be limited to their reputed levels of agreeableness and extraversion, traits that are central to reputation and for which individuals have displayed meta-accuracy in interpersonal perception research (Malloy & Albright, 1990).
Method

Participants

Ninety-four undergraduates (20 males, 74 females; $M_{age} = 18.5$ years) were recruited from two co-ed residence halls at a large public university in the United States. Seventy-eight participants were first-year students (freshmen), 12 were second-year students (sophomores), and four were third-year students (juniors). During the study, eight participants dropped out, leaving a sample of 86 (16 males, 70 females; $M_{age} = 18.2$ years). The diverse sample was 41% Asian American, 36% Caucasian, 10% Latino, and 5% African American (five participants did not identify their ethnic background).

Procedure

Participants were recruited from two residence halls at the beginning of the school year for a 9-month study on “developing relationships and everyday social behavior.” With the consent of the director of the residence halls, residence hall members were recruited by the principal investigator, who spoke to them explaining in broad terms the research project, the benefits that such a project may have for the field, and inviting them to participate.

At three time points during the academic year (August, Time 1; December, Time 2; and May, Time 3), participants completed self-report and sociometric measures (which were distributed in packets of paper-based questionnaires). Twice during the year, participants came to the laboratory to engage in semistructured interactions with a randomly assigned floormate.

Measures

Participants completed a combination of sociometric ratings of their floormates, self-report personality measures, and reputation narratives describing their own and their floormates’ reputations. Participants also engaged in a videotaped laboratory task during which they told stories about their floormates to one another.

Sociometric ratings. To capture floor-wide perceptions of each participant’s reputation quality, status, and cooperativeness, participants completed sociometric ratings of all of their floormates twice, at Time 1 (August), upon just moving in, and at Time 3 (May), after they had been living together all year. Using 5-point Likert scales ($1 = not at all, 5 = very/very much$), participants rated each floormate on the following items: (a) “How well do you know _____?”; (b) “How much do you like _____?”; (c) “How much do you like _____?”; (d) “How often do you socialize with _____?”; (e) “How much social status (influence, respect) does _____ have?”; (f) “How positive is _____’s social reputation?”; (g) “How cooperative is _____?”; and (g) “How much can _____ be trusted to do the right thing?”

Big Five Inventory (BFI). At Time 1, participants completed the Big Five Inventory personality measure (John, Donahue, & Kentle, 1991). Participants indicated their responses in a Likert format ($1 = not at all, 5 = very much so$) to statements beginning with the stem “I am someone who . . .” The inventory assesses the five superordinate traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness) of the five factor model (John et al., 1991). Sample items on the extraversion scale (eight items, three reverse-coded) include: “Is outgoing, sociable” and “Tends to be quiet.” Sample items on the agreeableness scale (nine items, four reverse coded) include: “Likes to cooperate with others” and “Starts quarrels with others.” Alpha reliabilities in this sample were acceptable (ranging from .72 to .86).

Reputation Narratives

In the Time 1 and Time 3 self-report assessments, participants wrote open-ended narratives about their own reputations and those of two floormates who were randomly selected from the sample of male and female participants on their floor. At each assessment, each participant: (a) provided one self-narrative, (b) provided two narratives about other participants, and (c) was the target of two narratives. The narrative instructions were
designed to solicit perceptions of reputation, and not personal opinions about the targets, and read:

In the space below, please take a few minutes to describe the social reputation of ______. By “reputation” we mean what people on your floor generally say about this individual. This description may or may not agree with what you personally think about this person, which is fine. We are just interested in what you perceive this person’s overall social reputation to be.

Three trained coders assessed each narrative for the extent to which it reflected coding themes (described in what follows) using a 0–2 scale (0 = not at all, 1 = somewhat, 2 = very much). Interrater reliabilities for the prominence ratings, calculated as coefficient alpha reliabilities (Crocker & Algina, 1986), are listed for each theme in the descriptions that follow.

**Personality themes.** References to the five personality domains were coded (John et al., 1991). **Extraversion** (α = .91), which is closely related to the status potential of an individual (Anderson et al., 2001), was defined for coders as the degree to which the subject is described as talkative, assertive, or outgoing, rather than quiet, shy, or antisocial. **Agreeableness** (α = .86), which is closely tied to trustworthiness, was defined as the degree to which the subject is described as kind, unselfish, trustful, generous, sweet, nice, or friendly, rather than mean, unfriendly, or selfish. **Conscientiousness** (α = .92) was defined to coders as the degree to which the subject is described as organized, responsible, thorough, hardworking, or punctual, rather than irresponsible, immature, or lazy. **Neuroticism** (α = .78) was defined to coders as the degree to which the subject is described as tense, nervous, unstable, insecure, obsessive, anxious, or unconfident than stable or able to cope well with emotions. Lastly, **openness to experience** (α = .87) was defined to coders as the degree to which the subject is described as more or less imaginative, creative, curious, reflective, sophisticated, or open-minded.

**Coders’ Inferences About Targets’ Personality and Reputation**

While the previous codes allow us to determine the extent to which a target’s reputation focuses on a given trait, for example agreeableness, they do not indicate the extent to which that target is described as actually possessing that trait. Such ratings are therefore necessary to test predictions regarding the validity of social reputation by allowing comparisons of targets’ personalities as described in their reputations with their actual behavior (described in the following lines). For these ratings, coders answered on a 5-point Likert scale (1 = not at all, 5 = very much so) the following eight questions which each beginning with the stem, “Based on the narrative . . .” (a) “how extraverted do you think the target is?” (α = .76); (b) “how agreeable do you think the target is?” (α = .90); (c) “how conscientious do you think the target is?” (α = .89); (d) “how neurotic do you think the target is?” (α = .87); (e) “how open do you think the target is?” (α = .91); (f) “how positive do you think the target’s reputation is?” (α = .96); (g) “how cooperative is the target with others?” (α = .96); and (h) “how much social status (influence, respect) do you think the target has?” (α = .96).

**Storytelling Interaction in the Laboratory**

At both Time 1 and Time 3, participants came into the laboratory to participate in a series of videotaped discussions with a randomly selected floormate. One of these discussions at Time 3 was designed to elicit provocative, reputation-relevant discussion, and entailed participants telling stories about things that took place on their floor. Participants took turns telling stories prompted by the following verbal instructions:

In this discussion, we would like you to take a few minutes to tell us a couple of stories of noteworthy things that have happened on your floor this year. We would like you to share two such stories. Each of you can pick a story to tell and the story can involve anything—something
you observed alone or experienced together. For the story that you pick, you will be the primary talker, but we encourage you to talk about the story much like you would in everyday life, which means the other person can contribute too.

**Coding of Storytelling Task**

Using a 5-point Likert scale (1 = not at all, 5 = very much so), a team of three coders assessed each participant’s storytelling task for the degree to which their story was interesting (α = .71), funny (α = .77), and dramatic (α = .82), which were combined into a single “entertaining” composite (α = .77). Coders also rated the degree to which each participant’s storytelling was embarrassing for the target(s) (α = .85), divulging a secret about the target (α = .77), likely to enhance the target’s reputation (reverse-scored, α = .84), and warm (reverse-scored, α = .84), which were combined into a single “reputation-threatening” composite (α = .80).

**Visibility in reputational discourse.** To assess each floormate’s prominence in the spontaneous reputational discourse, we tallied the number of times each participant appeared as a subject in a floormate’s story, thus deriving a visibility score for each participant.

**Results**

**Preliminary Analyses**

**Gender and ethnicity effects.** We first assessed whether gender or ethnicity differences would be observed in the content of reputation reports or the evaluative ratings made of the targets. No significant patterns emerged and the sample was therefore collapsed across genders and ethnicities for all further analyses.

**Validity of distributive reputation.** To assess the validity of the peer-narratives of reputation, we compared, (a) the peer-narrative accounts of reputation, (b) the observable behaviors coded from the participants’ videotaped storytelling interaction, and (c) the target’s own self-reports of their status potential (extraversion) and trustworthiness (agreeableness). As expected, a group member’s reputation for status potential (extraversion) coded from peer-narratives correlated with that individual’s storytelling behavior that was more dramatic, r(80) = .38, p < .001, and reputationally threatening, r(80) = .28, p < .02, and with the target’s own self-assessments of extraversion on the BFI, r(80) = .32, p < .001. A group member’s trustworthiness (agreeableness) coded from the peer-narratives was marginally correlated with more reputationally threatening storytelling, r(80) = .21, p < .07, but uncorrelated with self-reports of agreeableness. It is also of note that a group member’s reputations for having a positive reputation, r(80) = .31, p < .001; being cooperative, r(80) = .29, p < .001; and having an elevated status, r(80) = .29, p < .001 were positively correlated with the tendency for telling more reputation-threatening stories.

**Hypothesis 1: The Content of Distributive Reputation Focuses on Trustworthiness and Status Potential**

Table 1 shows the mean levels of each of the reputation content themes across all narratives for both self- and peer-narratives at the Time 1 and Time 3 assessments. In the self-narratives, there were more references to agreeableness at Time 1 (1.10) compared to Time 3 (.66), which is most likely due to the fact that the Time 1 self-narratives were longer, as indicated by a higher average number of words (M = 43.37, SD = 27.95) than the Time 3 self-narratives (M = 31.26, SD = 18.39), t(35) = 2.69, p < .04. Therefore, for the remaining content analyses, self- and peer-narratives will be collapsed across the two time points.

When collapsing across time points, results indicated that peer descriptions of reputation were more likely to mention the target’s agreeableness (M = 0.95, SD = 0.38) rather than extraversion (M = 0.53, SD = 0.38), t(82) = 5.41, p < .001. Agreeableness was mentioned more frequently than conscientiousness (M = 0.18, SD = 0.30), t(82) = 7.69, p < .001; openness (M =
Across all themes, indicators of cooperativeness and trustworthiness dominated the content of the reputation narratives—the two most salient themes were agreeableness ($M = 0.94, SD = 0.66$) and extraversion ($M = 0.64, SD = 0.65$), which in part relate to an individual’s status potential.

**Hypothesis 2a: Distributive Reputations Will Demonstrate Consensus Within the Social Network**

Hypothesis 2a pertained to the structure of an individual’s reputation, namely the degree to which it was shared in consensual and accurate fashion across a social network. To assess consensus, the two peer reports of each participant’s reputation were correlated at both time points (Time 1 and Time 3). Due to the indistinguishable nature of the dyad members, the intraclass correlation coefficient (ICC) was used, as it allows for a comparison of the interdyad variance to the sample variance regardless of the ordering of dyad members (Kenny, Kashy, & Cook, 2006).

As evident in Table 2, whereas at Time 1 (August) there was no consensus on the participants’ reputation narratives about other group members, at Time 3 (May) the peers showed significant intraclass correlations (ICCs) for ratings of the target’s extraversion, agreeableness, conscientiousness, positivity of reputation, cooperativeness, and status, suggesting greater consensus at Time 3 regarding the reputations of other group members. To specifically test for the significance of the change in participants’ agreement about other group members between

<table>
<thead>
<tr>
<th>Reputation theme</th>
<th>Self-narratives</th>
<th>Peer-narratives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1 M</td>
<td>Time 3 M</td>
</tr>
<tr>
<td>Openness</td>
<td>0.04</td>
<td>0.08</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.19</td>
<td>0.16</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.64</td>
<td>0.71</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>1.10</td>
<td>0.66</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.05</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Note. *Theme is significantly more prominent ($p < .05$) at Time 1.

<table>
<thead>
<tr>
<th>Reputation rating</th>
<th>Time 1 ICC</th>
<th>Time 3 ICC</th>
<th>$t, p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>.15</td>
<td>.31*</td>
<td>3.07***</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.01</td>
<td>.41***</td>
<td>9.02***</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.10</td>
<td>.35**</td>
<td>12.21***</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-.02</td>
<td>.05</td>
<td>3.03**</td>
</tr>
<tr>
<td>Openness</td>
<td>.01</td>
<td>.01</td>
<td>0.52</td>
</tr>
<tr>
<td>Positivity of reputation</td>
<td>.01</td>
<td>.35**</td>
<td>7.33***</td>
</tr>
<tr>
<td>Cooperativeness</td>
<td>.02</td>
<td>.53***</td>
<td>10.40***</td>
</tr>
<tr>
<td>Status</td>
<td>.05</td>
<td>.41***</td>
<td>6.82***</td>
</tr>
</tbody>
</table>

Note. ICC = intraclass correlations.
*p < .05. **p < .01. ***p < .001.

$0.05, SD = 0.14))$, $\kappa(82) = 10.70, p < .001$; and neuroticism ($M = 0.09, SD = 0.17)$, $\kappa(82) = 9.83, p < .001$.
Time 1 and Time 3, regression analyses were used to assess the degree of shared variance between the peer ratings. The difference in the regression weights at Time 1 and Time 3 was calculated using a $t$ statistic (Cohen, Cohen, West, & Aiken, 2003). The analyses of the differences in the regression weights using the $t$ statistic are shown in the last column of Table 2. These analyses indicate that, as predicted, the degree of peer agreement was significantly greater at Time 3 than at Time 1 for extraversion, agreeableness, conscientiousness, neuroticism, positivity of reputation, cooperativeness, and status—consistent with studies of acquaintanceship and consensus (e.g., Funder & Colvin, 1988).

**Hypothesis 2b: Distributive Reputation Will Demonstrate Accuracy**

Hypothesis 2b pertained to reputational accuracy, or the degree to which reputation reports reflect the opinions of the group they are thought to represent. Three theoretically relevant dimensions coded from the peer-narratives corresponded to sociometric ratings made by all group members: positivity of the targets’ reputations, cooperativeness, and status. Correlations between each target’s average ratings based on the two peer-narratives and the average of the sociometric ratings made by the entire floor reveal that peer reputation reports did indeed accurately reflect opinions held by the entire group. Specifically, significant correlations exist for all three ratings: positivity of reputation, $r(80) = .61$, $p < .001$; cooperativeness, $r(80) = .62$, $p < .001$; and status, $r(80) = .61$, $p < .001$.

**Self-perceptions of reputation.** To further explore the accuracy of reputation (H2b), we examined participants’ self-awareness of their reputations as evident in the correlations between self- and peer-reputation narratives from both time points (Table 3). As one might expect from our analysis of reputation, a significant self–peer correlation emerged for extraversion, $r(60) = .45$, $p < .001$, and a marginal self–peer correlation was found for agreeableness, $r(60) = .23$, $p = .07$.

We further expected participants to be more self-aware of their reputations to the extent that they are salient in group reputational discourse. We tested whether visibility scores (the frequency with which each participant was mentioned in the storytelling task) were a moderator of self–peer correlation on the dependent variables (Aiken & West, 1991). The moderator analyses revealed significant interactions between visibility in the storytelling task and peer reputation narrative descriptions for positivity of reputation, $\beta = 0.38$, $t(58) = 2.98$, $p < .01$; $\beta_{\text{Low visibility}} = -0.19$, $\beta_{\text{High visibility}} = 0.43$, $t(58) = 3.37$, $p < .001$; positivity of reputation, $\beta = 0.43$, $t(58) = 3.69$, $p < .001$; and extraversion, $\beta = 0.31$, $t(58) = 2.43$, $p < .02$; and extraversion, $\beta = 0.31$, $t(58) = 2.43$, $p < .02$; $\beta_{\text{Low visibility}} = -0.10$, $\beta_{\text{High visibility}} = 0.40$. In each case, the interaction represents higher self–peer correlations for participants with high visibility scores, and lower self–peer correlations for those with low visibility scores. Participants who are talked about more by their peers (or for whom there is a greater quantity of discursive reputation information available) seem to have a better sense of the overall quality of their reputations.

**Modesty and truth in reputations.** The nonsignificant self–peer correlations on positivity of reputation call into question reputational accuracy, specifically,

**Table 3. Correlations between self- and peer-reputation narratives (Study 1).**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Self–peer correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>.45***</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.23†</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.13</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>−.09</td>
</tr>
<tr>
<td>Openness</td>
<td>−.23†</td>
</tr>
<tr>
<td>Positivity of reputation</td>
<td>.13</td>
</tr>
<tr>
<td>Cooperativeness</td>
<td>.21</td>
</tr>
<tr>
<td>Status</td>
<td>.19</td>
</tr>
</tbody>
</table>

**Note.** ***p < .001. † p < .07.
whether individuals tend to systematically over- or underestimate the overall quality of their reputations. That is, do individuals self-enhance (e.g., Colvin & Block, 1994; Paulhus, 1998; Sedikides, 1993; Swann, Pelham, & Krull, 1989; Taylor & Brown, 1988), or do they view the self in relatively harsher terms than through the group’s eyes (e.g., Savitsky, Epley, & Gilovich, 2001)? Comparing the average positivity of reputation coded from self-narratives with that coded from peer-narratives reveals that individuals describe their own reputations ($M = 3.03, SD = 0.74$) less positively than their peers ($M = 3.35, SD = 0.68$) describe them, $t(61) = 2.65, p < .02$.

**Discussion**

Study 1 focused on distributive reputation within a social network, testing hypotheses about the content and structure of reputation. In our preliminary analyses we found that those who told more reputationally damaging stories had positive reputations, were seen as cooperative, and of elevated status. One interpretation of these findings point to the validity of a person’s distributive reputation within a group: people who develop reputations for more status potential (extraversion, status) and trust (agreeableness, cooperativeness) in a group may also spontaneously tell stories regarding other group members that focus more intently upon socially threatening and reputationally damaging behavior. The motives for why these particular individuals tell reputationally damaging stories are unclear—is it to continue to elevate their own status (by making others look bad), to maintain their own positive reputation (providing information about others could be a form of reputation management), to fit in with the perceived norm of the group (an act of cooperation), to warn others about the target (a prosocial act), or some other reason? The function of telling these reputationally damaging stories is an important area for future research to examine.

In keeping with Hypothesis 1, our open-ended assessment of the content of reputation found that group members’ reputational discourse systematically focused on characteristics indicative of trustworthiness (agreeableness) and status potential (extraversion). In keeping with Hypothesis 2 about the structure of reputation, reputation narratives about individual group members generated by two randomly selected peers predicted similar evaluations made by the whole group, self-reports of the target individual, and reputation-relevant behavior in a storytelling task. These results were especially true for individuals who were more likely to be mentioned in group-based storytelling, a reputation discursive process. Consistent with the theorizing of the construct of reputation, consensus on group members’ reputations increased overtime, suggesting that reputations are not necessarily formed instantaneously, but take some time to emerge. Additional research on the evolution of reputations in social networks is warranted. Additionally, future research would benefit from understanding whether the formation of reputation occurs through repeated exposure to the target person, through increased group communication regarding the target person, some combination of exposure and group communication regarding the target person, or otherwise.

While exploratory in nature, it is also interesting to note that participants viewed their own reputations in more critical terms than other group members did. This somewhat surprising finding of viewing one’s own reputation in more critical terms than one’s peers may serve an adaptive function. It is possible that perceiving oneself as having a good reputation when one does not is more costly than perceiving oneself to have a bad reputation when the opposite is true. Thus, this “less positive” perception bias may help individuals in regulating their behavior, be more favorable group members, and avoid being socially excluded (thus this “modesty” serves as a form of reputation management and may be protective). Alternatively, it is equally possible that perhaps people are simply unaware of their true reputational standing within a network. This is a fascinating and important area for future research on reputation to examine.

The marginal correlation ($p = .07$) of self–peer reputation narratives on agreeableness can be interpreted in several ways. It is possible that with a larger sample this marginal finding may be
significant. Or, it is possible that there are some differential effects—people may be more aware of their own extraversion and less aware of their agreeableness, relative to their peers’ perceptions. This is another compelling avenue for future research on reputation to further examine. Additionally, future research would be well served by exploring causality—does underestimating one’s reputation enhance one’s reputation in the eyes of others, or does having a favorable reputation in the eyes of others cause one to underestimate his or her reputation? Nevertheless, when taken together, the findings of this study reveal that the content of distributive reputation seems to focus on trustworthiness and status potential, and that the structure of reputation is such that groups share beliefs about each individual’s reputation.

Study 2: Gossip and the Dynamics of Reputational Discourse in a Naturalistic Group

In our second study, we examined the dynamics of how reputations are shaped in real life by studying gossip, the clearest example of reputational discourse (Craik, 2008). Gossip, a common human behavior (Dunbar, Marriott, & Duncan, 1997), is an off-record form of communication between group members that comments upon the reputation of another group member. Gossip has been claimed to be the very foundation of reputation (e.g., Emler, 1994b; Feinberg et al., 2014; Feinberg et al., 2012; Keltner, van Kleef, Chen, & Kraus, 2008) that also enables the monitoring of group members (Beersma & van Kleef, 2012; Dunbar, 2004; Foster, 2004). Within this line of thinking, gossip allows group members to arrive at reliable judgments of each other’s social tendencies, in particular those related to trust and social status (Panchanathan & Boyd, 2003). In Study 2 we tested the following predictions concerning gossip. We expected gossip, an act of discursive reputational information, to focus specifically on individuals who violate rules of trustworthiness—namely those who are highly disagreeable—and those who have a controversial status within the group (Hypothesis 3).

Method

Participants

Female undergraduates were recruited from a sorority at a large public university in northern California. Sororities are all-female social organizations that develop a coherent collective identity through activities such as house dinners, meetings, philanthropic fundraising events, retreats, and social events. Sorority members refer to each other as “sisters” and typically live together throughout college.

To recruit participants, sorority presidents across the university’s campus were contacted and asked whether they thought their house would be interested in being paid $1,000 to participate in a study on gossip. After making arrangements with one house, 55 of the 68 members (81% of the house) completed sociometric ratings of the other sorority sisters and personality questionnaires (described next).

Procedure

Questionnaire Measures

Sociometric ratings of the social network within the sorority. Participants provided information about their sorority sisters on sociometric items using a 5-point scale (1 = none or not at all, 5 = very much). First, participants rated all the members of the sorority on two measures: “How well do you know ________?” and “How much do you like ________?” Based on pilot testing of how long these ratings would take, for the remaining items, participants were asked to rate only those sisters from their same cohort, defined by the semester in which the sisters joined the sorority. Cohort 1 consisted of 20 sisters (third- and fourth-year students; $M_{age} = 20.69 \pm 0.75$ years old), Cohort 2 consisted of 23 sisters (second- and third-year students; $M_{age} = 19.53 \pm 0.62$ years old), and Cohort 3 consisted of 25 sisters (first- and second-year students; $M_{age} = 18.58 \pm 0.58$ years old).
Identifying targets of gossip. The first item assessed the extent to which each sister was the subject of gossip more generally (1 = none or not at all, 5 = very much). Specifically, each participant rated, “In general, how much does ________ get gossiped about?”

Assessment of status potential and reputation. Next, on the same 5-point Likert scale (1 = none or not at all, 5 = very much) each participant rated, (a) “How much status does ________ have?”; (b) “How much status does ________ deserve?”; and (c) “How admirable is ________’s reputation?”

Assessment of social interactions. The next items (1 = none or not at all, 5 = very much) measured various forms of social interactions specifically between the rater and each of her cohort members. Each participant rated, (a) “How much do you gossip about ________ in a critical manner?”; (b) “How much do you think ________ gossips about you in a critical manner?”; and (c) “How much do you tease ________?” Participants did not rate themselves on any of the mentioned items.

Personality measures. As in Study 1, participants completed the Big Five Inventory (BFI; John et al., 1991). To further test our hypothesis that reputational discourse processes target individuals who violate norms of trustworthiness and have controversial statuses, participants also completed the Machiavellianism Scale (Christie, Geis, & Berger, 1970), a 20-item scale measuring a person’s willingness to manipulate others for personal gain and the expectation that others will do the same.

Hypothesis 3 Results and Discussion

We anticipated that, in an effort to preserve group functioning, gossip would target those individuals who are disliked, seen as disagreeable, and have problematic reputations and status. To test our hypotheses regarding frequent targets of gossip, we used the sociometric ratings the sorority sisters provided of the likelihood of being targets of gossip. Table 4 presents the correlations (rs) between participants’ identification as a gossip target and both the sociometric ratings sisters made about each other and the self-report personality measures of theoretical interest. Table 4 reveals that gossip targets individuals with controversial reputations: Those sisters labeled by their peers as gossip targets compared to those less likely to be labeled as gossip targets were rated as being more well-known (.34) but less well-liked (−.33), seen as deserving less status (−.35), and most notably based on effect size, possessing less admirable reputations (−.51).

Given the present conceptualization, to examine whether the three variables of status potential and reputation (i.e., status, status deserved, and admirable reputation) explain variance in being a target of gossip, we conducted a multiple regression analysis. Together, the overall fit was significant, with all three predictors accounting for 62.3% of the variance in being a target of gossip, $R^2 = .62, F(3, 52) = 30.80, p = .000$.

All three independent variables (IVs; status, status deserved, and admirable reputation) were significant predictors of the outcome variable (being the target of gossip).

### Table 4. Correlations between being the target of gossip by other group members and sociometric ratings and self-reported personality measures.

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Target of gossip</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociometric ratings of members</strong></td>
<td></td>
</tr>
<tr>
<td>Well-known</td>
<td>.34**</td>
</tr>
<tr>
<td>Liked</td>
<td>−.33**</td>
</tr>
<tr>
<td>Status in house</td>
<td>−.08</td>
</tr>
<tr>
<td>Status deserved</td>
<td>−.35***</td>
</tr>
<tr>
<td>Admirable reputation</td>
<td>−.51***</td>
</tr>
<tr>
<td>Teased</td>
<td>.24†</td>
</tr>
<tr>
<td>Rater gossips critically about target</td>
<td>.84***</td>
</tr>
<tr>
<td>Target gossips critically about rater</td>
<td>.74***</td>
</tr>
</tbody>
</table>

| **Self-reported personality** |
| Agreeableness | −.39*** |
| Machiavellianism | .28* |
| Extraversion | .22† |

Note. †p < .10. *p < .05. **p < .01. ***p < .001.
Consistent with Hypothesis 3, Table 4 reveals that gossip is a reputational discourse that identifies untrustworthy group members, as sisters who were frequent targets of gossip scored significantly higher on Machiavellianism (.28) and significantly lower on agreeableness (−.39). These sisters were also marginally \( (p = .10) \) more likely to self-report greater extraversion. While the nature of this study design does not allow for a direct causal test, one interpretation of the present findings is that sisters who were the frequent target of gossip were also more likely to engage in manipulative behaviors like lying or back-stabbing, which are assessed by the measure of Machiavellianism, and they were more likely to self-report cold, competitive, and hostile tendencies, as assessed by the significant inverse relationship with agreeableness.

Given the significant inverse association between agreeableness and being the target of gossip \( (r = −.39, p = .003) \), we wanted to better understand this relationship. Thus, we conducted a follow-up regression analysis between the outcome of being the target of gossip and self-reported agreeableness (controlling for Machiavellianism and extraversion). Analysis revealed that 7.5% of the variance in being a target of gossip is explained by agreeableness, \( \Delta R^2 = .08, F(3, 52) = 4.82, p = .005; B = −0.32, SE B = .14, \beta = −0.30, p < .03, 95\% CI [−0.60, −0.03]. \) This means that for each unit increase in agreeableness, there was a .32 unit decrease in being the target of gossip.

An examination of other sociometric ratings finds that frequent targets of gossip were more likely targets of critical gossip (.84). They were also marginally \( (p = .08) \) more likely to be teased by other members of the group (.24), and were also presumed to engage in more critical gossip themselves (.74). In sum, consistent with our hypothesis that gossip focuses on individuals who pose threats to social hierarchy, the gossip targets in the sorority were well-known, but also disliked, seen as deserving less status, presumed to be involved in a variety of unfavorable social interactions, and possessed personality traits (lower agreeableness and higher Machiavellianism) that suggest difficulty cooperating within the social group.

**General Discussion**

Cooperation within social groups depends on interpersonal processes by which group members reinforce the cooperative behavior of other group members (Keltner et al., 2014). We have argued that reputation is one such process, reflecting the group’s assessment of an individual’s character that is stored within the collective judgments of the group (distributive reputational information) and spreads through spontaneous social discourse (discursive reputational information). The focus of reputational discourse, we proposed, is the trustworthiness and status potential of other group members—discourse that enables cooperative alliance formation and hierarchy navigation.

Guided by this conceptual analysis, we presented two studies that tested a series of predictions that derive from our central hypothesis, that trust and status potential would be central to the content and dynamics of reputational discourse. In Study 1, open-ended reputation reports by group members early and later in the formation of the group focused on personality traits related to trust and status (agreeableness and extraversion) and not other traits or properties of the individual. Consensus was established amongst the group on conceptions of others’ reputations, increasing over the course of the year, and while individuals tended to view their own reputations in more critical terms than did the other members of the group, those who were most visible in the social discourse were most aware of the quality of their reputations. In Study 2, we examined gossip within a naturalistic group, finding that frequent targets of gossip, assessed sociometrically, possessed negative reputations, and that these individuals were disagreeable and Machiavellian, that is, they were the ones who violated the rules of trust and status. Taken together, these findings lend support to the contention that reputational discourse (at least in affiliative groups) may focus on dimensions that
are central to the cooperation of groups: trust and status potential.

**Reputations in Different Groups and Contexts**

These studies examined reputation within naturalistic groups of individuals that encounter one another on a daily basis. One concern about the present data is the generalizability of these findings, given that the participants were floormates within a residence hall (Study 1) or female housemates within a sorority (Study 2) at a large, fairly liberal, public university. We took pains to study naturalistic groups, which are organized according to concerns and dynamics (e.g., status, interests, friendship, etc.), that are likely to be observed in groups outside of a university setting. However, the affiliative nature of our groups may raise concerns about the generalizability of our claims that reputations focus on trustworthiness and status potential. It is likely that the focus of reputational discourse will differ for groups and contexts with different functions. For example, groups of individuals in more competitive settings—traders on the floor of the stock market, members of a military unit, teammates on a competitive athletic team—might prioritize aggression over sociability. Even within affiliative groups there may be variation; for example, while Study 2 examined gossip in an all-female sorority group, it stands to reason that this phenomenon in an all-male fraternity group might yield different findings.

In other groups defined by unusual group norms, an individual’s reputation may hinge on other types of qualities (e.g., competence, attractiveness, etc.). Such contextual variation in content would echo the manner in which the determinants of status have been observed to vary in accordance with the goals of a given group (e.g., Spataro & Anderson, 2003; Stiff & van Vugt, 2008). Given that reputation is likely somewhat bound by the group in question, it is possible that some groups and contexts may value certain domains of personality more so than others. This is an empirical question worthy of examination.

Nevertheless, we would contend that while some portion of reputational content may shift from context to context, the general functions remain the same—to identify and track group members who can be trusted to further the group’s interests and fold effectively into the group hierarchy. Recent research examining the prioritization of characteristics across different interdependent relational contexts supports this perspective. For example, Cottrell et al. (2007) found that while some characteristics were perceived as more or less important depending on the type of relationship studied, the traits of trustworthiness and cooperativeness were consistently prioritized across a wide range of relational contexts. In sum, it is possible that there are some important general overlaps and functions in reputations between groups, which can only be addressed by examining and comparing the findings between groups. With continued research on reputation within a variety of groups and contexts we will be able to better understand the generalizability (or lack thereof) of the results from these studies.

**Limitations and Future Directions**

The current findings represent an initial examination of the study of the structure, content, and dynamics of reputation within social networks. We have already noted the need to extend this reasoning and methods to other groups and contexts, in particular those that may privilege other values rather than cooperation and contribution to the group. We note the limitation of relying on the traits of agreeableness and extraversion as proxies for trustworthiness and status potential. These superordinate traits do map onto our more specific social attributes, but also denote other attributes, such as warm heartedness (agreeableness) and social energy and enthusiasm (extraversion). It will be important to explicitly measure trust and status potential with metrics other than personality traits coded from reputation narratives. When eliciting or coding personality traits, future research may choose to use broader, unvalenced descriptions of personality themes. Additionally,
given that we were interested in testing a number
of different aspects related to the content, struc-
ture, and dynamics of personal reputation in
social networks, this yielded several hypotheses
with individual tests, which may be susceptible to
test. Future research with larger samples, using
more specific hypotheses, and fewer tests, will be
important in order to better understand this excit-
ing area of research.

In future research, scholars may also consider
measuring other traits or dimensions of social

cognition such as warmth, competence, or hon-
esty-humility (e.g., Fiske, Cuddy, & Glick, 2007;
Fiske, Cuddy, Glick, & Xu, 2002; Hilbig, Zettler,
Leist, & Heydasch, 2013). Further, it will be
important to examine the content of reputations
in other forms of communication than written
narratives, for example, in spontaneous conversa-
tions, text messaging, or—given the importance
of one’s social network to reputation (Mehra,
Dixon, Brass, & Robertson, 2006)—social media
posts (e.g., Facebook, Instagram, Twitter). Several
of the terms used in the present study have the
possibility to be interpreted in numerous ways by
participants (e.g., “reputation” or “gossip”); future research would benefit by providing par-
ticipants with explicit definitions of these terms
and considering more inclusive operationaliza-
tions of them in an effort to more fully capture
the scope of the phenomenon that may exist
beyond character. Additionally, with larger sam-
ple sizes, researchers will be sufficiently powered
to take into account cohort effects that may exist
within a social network (e.g., employees who
started in an organization at the same time). In
the study of reputation, researchers should move
away from cross-sectional designs (e.g., Study 2, a
cross-sectional examination of discursive reputa-
tion) and instead implement study designs of
social networks that allow for the examination of
the temporal nature of reputations within the
social group. Future research must move beyond
correlational designs in order to accurately
address the causal directions of the findings.

Numerous questions remain within the
domain of reputation for future research to con-
sider. One interesting line of inquiry will be to
explore how the content of discursive and dis-
tributive reputational information differs. While
in Study 1 we primarily tapped distributive reputa-
tional information by soliciting reputation
reports from floormates, in Study 2 we chose to
focus on reports of gossip behavior, which
reflects discursive reputational information, in
order to test our predictions concerning trust-
worthiness and status. Discursive forms of reputa-
tional discourse, such as gossip, are almost
certainly motivated by the desire to bond and
entertain (Fine & Rosnow, 1978), which is likely
to shape the content of reputational discourse.

No such motives have been attributed to reputa-
tion reports in response to formal reputation
inquiry, although it has been argued that conversa-
tional norms will motivate answers to inquiries
that are truthful, relevant, informative, and con-
cise (e.g., Hilton, 1990, 1995). Future research
could benefit from a systematic investigation of
how the various modes of reputation transmis-
sion themselves influence reputation content.

Our focus in the current research has been on
the way that a group’s judgment shapes an indi-
vidual’s social reputation. However, a second area
of inquiry with great potential is the study of
how people’s self-awareness of their own reputa-
tion shapes their behavior and whether individu-
als can effectively manage their own reputations.

While management of reputation can take place
to some degree (e.g., Wu, Balliet, & van Lange,
2016), human social hierarchies are almost cer-
tainly unique in the extent to which an individu-
al’s reputation and status is in the hands and
minds of others, rendering reputation beyond the
manipulation of the individual to some extent
(Emerson, 1962). Our current data suggest that
individuals do have some reputation self-aware-
ness, and that this awareness increases the more
visible the individual is in social discourse. Recent
research investigating the relationship between
self-monitoring, helping behavior, and status sug-
gests that high self-monitors are more aware of
their own status and the requisites for status in a
group, and secure elevated status in part by culti-
vating a reputation for generosity (Flynn, Reagans,
Amanullah, & Ames, 2006). Future research
can build upon this foundation and explore the reciprocal relationship between reputational discourse, behavior, and subsequent reputational content.

In sum, we argue that reputation is a social construct that serves to identify an individual’s tendency for trustworthiness and status potential. Reputation is a relatively understudied topic that underscores processes such as impression management, social exclusion, hierarchy navigation, and alliance formation. The present research provides a viable methodological approach to reputation and demonstrates that reputation is a coherent construct that plays an important role in social decisions. With increased empirical attention to reputational discourse, a more detailed picture of reputation and how it shapes social perceptions, organizes groups, and facilitates cooperation and effective group functioning may soon emerge.

Funding

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Note

1. When controlling for the three personality variables of agreeableness, Machiavellianism, and extraversion, 48% of variance in the dependent variable (being a target of gossip) is explained by the variables of status potential (status and status deserved) and reputation, \( \Delta R^2 = .48, F(6, 49) = 19.09, p = .000. \)

References


Wu, J., Balliet, D., & van Lange, P. A. (2016). Gossip versus punishment: The efficiency of reputation to promote and maintain cooperation. Scientific Reports, 6. doi:10.1038/srep23919