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Bless her heart: Gossip phrased with concern provides advantages in female intrasexual competition[☆]

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ABSTRACT

Although many women report being victimized by gossip, fewer report spreading negative gossip. Female gossipers might be unaware they are gossiping if they disclose such statements out of concern for targets. Four studies (N = 1709) investigated whether women believe their gossip is motivated by concern and whether expressing concern for targets insulates female gossipers against social costs, while simultaneously impairing targets' reputations. Study 1 examined sex differences in gossip motivations. Compared to men, women endorsed stronger concern than harm motivations, especially when gossiping about other women, suggesting these motivations characterize female intrasexual gossip. In Study 2, female gossipers who phrased their negative gossip with concern (versus maliciously or neutrally) were evaluated as more trustworthy and desirable as social and romantic partners. Study 3 replicated the favorable evaluations of concerned female gossipers. Female participants especially disliked malicious female gossipers, suggesting professions of concern might help to avoid women's scorn. Male participants reported lower romantic interest in female gossip targets when they learned concern (versus malicious or no) gossip, suggesting concerned gossip can harm female targets' romantic prospects. Study 4 revealed these patterns extend to face-to-face interactions. A female gossiper was preferred as a social partner when she phrased her gossip with concern versus maliciously. Moreover, concerned gossip harmed perceptions of the female target as effectively as malicious gossip. Altogether, findings suggest that negative gossip delivered with concern effectively harms female targets' reputations, while also protecting gossipers' reputations, indicating a viable strategy in female intrasexual competition.

1. Introduction

When interviewing women about female competition, Tracy (1991) found many women claimed they had been victimized by each other's negative gossip, but denied propagating it. Relatedly, meta-analyses uncover wider sex differences in indirect aggression—such that girls and women were more aggressive than boys and men—when using others' reports compared to self-reports (Archer, 2004; Card et al., 2008). This disparity suggests others more readily detect women's indirect aggression (which includes gossip) than do female perpetrators themselves. Together, these patterns are puzzling; they suggest women are either denying or unaware of their tendency to gossip negatively about others.

The current investigation forwards one potential solution to this

puzzle: women deny (or are unaware) of their gossip propagation because they deliver their negative gossip out of concern for targets. Specifically, women who neither espouse nor express malicious motivations when gossiping can effectively transmit reputation-harming information while preserving their own reputations. If social partners generally distrust, dislike, or penalize malevolent gossipers, then women who conceal such motivations and instead portray benevolent ones while spreading reputation-harming information might achieve better social outcomes. Women who portray their negative gossip as concern for their targets might avoid the social costs of engaging in reputation-based competition, while reaping the competitive benefits. The current investigation sought to test these hypotheses.

 $^{^{\}star}\,$ This paper has been recommended for acceptance by Nicholas Rule.

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1.1. Women's intrasexual competition

Although gender stereotypes depict women as passive and yielding (Bem, 1974), women can be quite agentic and competitive. For example, in a meta-analysis of economic games, women behaved more competitively than did men, but only in same-sex interactions (Balliet et al., 2011). Similarly, women aggressively targeted one another in over 90 % of 137 cultures (Burbank, 1987).

Although girls and women are much less physically aggressive than boys and men, sex differences disappear and occasionally reverse in the domain of indirect aggression (Archer, 2004; Card et al., 2008; Crick & Nelson, 2002; Cullerton-Sen & Crick, 2005). Through tactics such as ostracism, gossip, and disclosed secrets, perpetrators can damage victims' reputations and social standing (Archer & Coyne, 2005; Crick & Grotpeter, 1995). Indeed, defamatory gossip effectively impairs victims' reputations, social relationships, and access to resources (Fisher & Cox, 2009; Gawronski & Walther, 2008; Reynolds et al., 2018; Sommerfeld et al., 2007). Of note, culpability is difficult to ascertain with indirect aggression, so perpetrators can inflict harm, while minimizing the risk of retaliation or escalation to physical violence (Benenson, 2014; Bjorkqvist et al., 1992). It should be noted that although gossip can be positive or neutral, the current investigation centered on negative (reputation harming) gossip to assess its efficacy as indirect aggression.

Evidence suggests negative gossip is a favored tactic in female intrasexual competition. Competitive women report heightened motivation to spread reputation-tarnishing gossip about same-sex peers (Reynolds et al., 2018). In adolescence, girls report observing more gossip than do boys (Coyne et al., 2006). Across cultures, women report stronger inclinations to gossip than do men (Nevo et al., 1993; Watson, 2012). Compared to men, women report greater willingness to share gossip with and about same-sex peers (Hess & Hagen, 2006b; McAndrew et al., 2007). Analyses of social conversations reveal women prefer same-sex conversations more than do men (Dunbar, 2016). Women are especially interested in potentially harmful information about same-sex peers (McAndrew et al., 2007; McAndrew & Milenkovic, 2002) and in free recall tasks, remember this information better than do men (DeBacker et al., 2007). These patterns suggest women regularly seek out, remember, and disclose same-sex peers' reputation-harming information.

Although men undoubtedly gossip, gossip may be especially viable as a competitive tactic for women. Indirect forms of aggression allow women to compete while minimizing the risk of physical injury or death (Campbell, 1999). Because women are the primary caregivers of children around the globe (Hrdy, 1999), physical aggression risks not only the lives of women, but also their dependent children. Indeed, children experience heightened mortality when their mothers are deceased (Hill & Hurtado, 1996; Moucheraud et al., 2015; Sear et al., 2000). Women's critical role in child-rearing may have favored female competitive tactics that conceal culpability, thereby minimizing the likelihood of retaliation or escalation to physical violence. Thus, gossip tactics that further obscure female gossipers' culpability should be favored over those that clearly identify them as malevolent perpetrators.

1.2. Constraints on female intrasexual competition

Although negative gossip can offer competitive advantages by damaging rivals' reputations, it also carries costs. Children and adults alike generally disapprove of negative gossip (Beersma & Van Kleef, 2012; Kuttler et al., 2002). When gossip appears explicitly self-interested or gratuitously negative, it can harm the gossiper's reputation even more than the target's (Wilson et al., 2000). Gossipers who express disapproval or discuss a target's negative traits are evaluated as less likeable, nice, and credible than those who express approval, discuss positive traits, or do not gossip at all (Farley, 2011; Fisher et al., 2010; Gawronski & Walther, 2008; Turner et al., 2003). Thus, transmitting negative gossip risks disapproval and ostracism.

Female gossipers may be particularly penalized by other women. Women perceive female gossipers as unfriendly, unkind, unattractive, and untrustworthy (Fisher et al., 2010). Among both American sorority and Bolivian Tsimane women, those known as frequent gossipers are generally disliked (Jaeger et al., 1994; Rucas et al., 2006). Compared to men, women are more willing to end friendships over disclosed secrets or rumors (Felmlee et al., 2012; Vigil, 2007). Among female adolescents, "secrecy and friendship [a]re so inextricably intertwined among girls that when they contemplated what made someone a desirable friend, the ability to keep a secret was at the top of the list" (p. 116, Merten, 1999). In response to social transgressions, women are more likely than men to believe one should stay quiet (Wilson et al., 2000). Girls and women also express greater skepticism towards gossipers' motives than do boys and men (Hess & Hagen, 2006a; Kuttler et al., 2002). One experiment found that compared to men, women more strongly disliked female gossipers using third- (e.g., "Amy did X to Karen") versus first-person gossip statements (e.g., "Amy did X to me"), suggesting a female bias against women engaging in overt forms of gossip (Reynolds & Palmer-Hague, 2022). If women distrust and eschew female gossipers, those who blatantly share negative gossip risk losing female allies.

Women competing for desirable social partners are thus met with a dilemma: nefarious gossip can grant relative advantages by harming same-sex competitors' social desirability. However, disseminating in malicious gossip may also harm the gossiper's appeal, thereby negating or reducing the efficacy of defamatory gossip. The current investigation therefore tested the prediction that relative to men, women would endorse stronger concern motivations for their gossip and diminished motivations to besmirch their targets' reputations.

1.3. Self-deception: the optimal strategy

The social penalties for women's overtly negative gossip suggest incentives for women to minimize or conceal any malicious motivations when discussing others. All else equal, women who appear conspicuously nefarious while gossiping should be less desired as social partners than women who instead appear kind. However, the most effective way to appear kind is to genuinely believe one's kindness—self-deception (Trivers, 2011; Von Hippel & Trivers, 2011). Humans deceive themselves about their own intentions, behaviors, or traits, to more effectively convince others of their beliefs (Krebs & Denton, 1997; Trivers, 2011; Von Hippel & Trivers, 2011). That is, if people are earnestly convinced of their positive qualities and motivations, they will not emit cues associated with intentional deception (e.g., nervousness, avoidance of eye contact), which enhances the credulity of their proclamations.

The social benefits of self-deception may similarly apply to women's reputational competition (Reynolds, 2022). For example, a gossiper who truly believed she was gossiping out of concern might better convince others of her benevolent motivations than a gossiper consciously concealing malicious motivations. Social partners might favor women who are self-deceived about their intentions for sharing reputation-harming gossip. If so, women might achieve similar outcomes—tarnishing a rival's reputation—without consciously desiring this defamation. Women who believe they are earnestly concerned about their gossip targets might avoid the social costs and reap the competitive rewards of negative gossip.

A plethora of data support that women are not consciously aware of their competitive or harmful motivations (Reynolds, 2022). Compared to men, women show stronger social desirability biases (Dalton & Ortegren, 2011; Kowalski et al., 2018; Surbey & McNally, 1997), indicating a reluctance to acknowledge antisocial inclinations. Meta-analyses reveal that although women rate themselves a more ethical decision-makers than men, this disparity is largely attributable to social desirability (Yang et al., 2017).

Patterns of indirect aggression reveal girls and women are more aggressive than boys and men according to others' reports, but not when relying on people's reports of their own behaviors (Archer, 2004; Card

et al., 2008). This discrepancy suggests others more readily detected women's indirect aggression than do women themselves. When reporting their motivations for gossiping, women were slightly less likely than men to cite negative social influence (i.e., reputational harm; Lyons & Hughes, 2015). One recent study suggested women's gossip might often manifest as complaints about same-sex friends' poor treatment (Reynolds & Palmer-Hague, 2022), providing some initial support that women's gossip portrays the gossiper as innocent (or at minimum, not malevolent). However, whether women actively proclaim benevolent intentions when gossiping has yet to be examined empirically.

2. Research overview

The current investigation examined whether expressions of concern for one's gossip target grant women social advantages in reputational competition. It sought to test two hypotheses: (1) women believe their gossip is motivated by concern rather than malice and (2) framing negative gossip with concern is socially advantageous.

Study 1 examined the first hypothesis by comparing men's and women's reports of their conversation motivations. Studies 2–4 examined the second hypothesis. Study 2 compared perceptions of female gossipers who phrased their negative gossip with concern, malice, or neutrally. Study 3 tested whether negative gossip, phrased either with concern or malice, effectively harms perceptions of a gossip target, compared to when nothing was said about her. Study 4 examined whether these patterns would extend to face-to-face interactions. All studies, measures, manipulations, and data/participant exclusions are reported. See supplementary materials for additional measures and analyses across studies (https://osf.io/uzdk2/?view_only=1296a3778ab64bb99bee5357f2836800).

3. Study 1

Study 1 examined whether compared to men, women would report heightened concern and diminished malicious motivations for gossiping. If concern motivations grant women advantages in intrasexual competition, then women should more strongly endorse concern and deny malice when discussing same-sex, rather than opposite-sex, peers.

3.1. Participants

Seven hundred and seventy-five individuals from the United States responded to an online survey placed on Amazon's Mechanical Turk. After removing those who did not complete the survey (N=64) or failed an attention check (N=48), the final sample comprised 663 participants¹ [264 (40 %) men; $M_{\rm age}=37.3$, SD=13.2, Range 18–80 years].

3.2. Procedure

Most Recent Gossip Conversation. Participants wrote a few sentences about their "most recent conversation with someone about the behaviors, characteristics, or tendencies of someone who was not present". Then, participants indicated the sex of their interlocutor and discussed target, along with their motivations for the conversation.

Concern versus harm motivations. To measure reputation-harming motivations, participants completed the 4-item Negative Social Influence subscale from Beersma and Van Kleef's (2012) Motivations to Gossip Questionnaire (1 = not at all, 7 = definitely). A sample item reads: "to damage the reputation of the person we talked about." To assess

concern motivations, four novel items were generated: "I was worried about what was going on in the target's life," "I was concerned the target might not be making good decisions," "I wanted to come up with a solution to help the target," and "I wanted to see if the other person had the same concerns about the target." These four items cohered well together within participants' most recent and general gossip conversations (see below; α 's = 0.763 and 0.842, respectively). To capture whether the motivations were antisocial (i.e., reputation harm) or prosocial (i.e., concern), participants' endorsement of each motivation item was regressed onto a benevolence motivation effect code (1 = concern, $-1 = {\rm reputation\ harm}).$

Harm Intentions. Participants responded to the item, "were your intentions to hurt the reputation of the person you talked about?" $(1 = not \ at \ all, 7 = definitely)$.

Gossip Label. Participants responded to the item, "would you consider that conversation gossip?" (1 = not at all, 7 = definitely).

General Gossip Conversations. Participants were also prompted to consider their general gossip behavior, described as "conversations [they]'ve had in the past when [they] discussed someone who wasn't present."

Gossip characteristics and motivations. Participants again completed the four reputation-harming and four concern motivation items, the single item measuring intentions to harm targets' reputations, and whether they would label these conversations as gossip.

3.3. Results

Supporting hypotheses, compared to men, women reported diminished intentions to harm their gossip targets' reputations during their most recent and general gossip conversations (see Table 1). Women were less willing than men to label their most recent conversation, but not general conversations, as gossip.

To test whether women espoused stronger concern than harm motivations compared to men, two-level hierarchical linear models examined sex differences (HLM 8; Raudenbush et al., 2013). Level 1 accounted for within-subject differences (i.e., participants responded to eight motivation items) by regressing participants' eight motivation endorsements onto a benevolence effect code (concern = 1, harm = -1), which captured whether the motivations were antisocial (i.e., denigration) or prosocial (i.e., concern). Level 2 of models accounted for between-subject differences, including participants' sex (dummy coded; 0= female, 1= male). If these level 2 variables significantly interacted with the benevolence dummy code, such a finding would suggest males and females differed in whether they endorsed concern versus harm motivations. All terms were allowed to vary across models.

The first model examined participants' most recent conversations.

Table 1
Study 1's descriptive and inferential statistics.

Conversation Type	Dependent Measure	Female ps (N = 399) M (SD)	Male ps (N = 264) M (SD)	Comparison	Cohen's d (or φ for x^2)
Own Recent	Intention to harm	1.54 (1.26)	1.98 (1.61)	<i>t</i> (468.2) = 3.74, <i>p</i> < .001	0.31
	Label as gossip	2.86 (2.16)	3.21 (2.13)	t(661) = 2.08, p = .038	0.16
Own General	Intention to harm	1.86 (1.37)	2.31 (1.60)	t(500.8) = 3.79, p < .001	0.30
	Label as gossip	3.87 (2.01)	3.85 (1.88)	t(661) = -0.13, p = .898	0.01

 $^{^1}$ Post-hoc sensitivity analyses indicated greater than 99 % power to detect sex differences in Study 1's primary analyses of concern versus harm motivations for participants' most recent and general conversations. Indeed, we achieved 80 % power to detect a coefficient as low as B=-0.17 and B=-0.11 for participants' most recent and general conversations, respectively.

Table 2Study 1's predictors of concern-versus-harm motivations.

Context	Variable				_
Own Recent	Sex Difference		B = -0.28, SE = 0.08	t(661) = -3.32	p < .001, r = 0.13
		Female Ps	B = 0.97, SE = 0.05	t(661) = 18.38	p < .001, r = 0.58
		Male Ps	B = 0.69, SE = 0.07	t(661) = 10.38	p < .001, r = 0.37
	P Sex by Interlocutor Sex		B = 0.12, SE = 0.17	t(657) = 0.72	p = .473, r = 0.03
	P Sex by Target Sex		B = 0.44, $SE = 0.17$	t(657) = 2.55	p = .011, r = 0.10
		Same Sex	B = -0.46, $SE = 0.11$	t(657) = -4.25	p < .001, r = 0.16
		Opposite Sex	B = -0.02, $SE = 0.13$	t(657) = -0.16	p = .870, r = 0.01
Own General	Sex Difference		B = -0.33, $SE = 0.08$	t(661) = -4.25	p < .001, r = 0.16
		Female Ps	B = 1.33, $SE = 0.05$	t(661) = 26.87	p < .001, r = 0.72
		Male Ps	B = 1.00, SE = 0.06	t(661) = 16.28	p < .001, r = 0.53

Consistent with predictions, participant sex significantly moderated the benevolence effect code (Table 2), such that women more strongly espoused concern over harm motivations than did men. A second model examining general conversation motivations uncovered a similar sex difference, with women endorsing stronger concern over harm motivations than men.

Next, models examined whether features of participants' most recent conversations predicted espoused motivations. Whether the interlocutor was the same sex did not differently affect women's versus men's motivations. However, whether participants discussed a same-sex target significantly interacted with participant sex to predict motivations. When discussing a same-sex target, women endorsed more concern motivations than men did. However, when discussing an opposite-sex target, men and women did not differ in their motivations. This

pattern suggests women are especially likely to convey concern over malice when discussing same-sex peers.

3.4. Discussion

Study 1 supported the investigation's first hypothesis: women were more likely than men to report that their most recent and general gossip conversations were motivated by concern rather than malice. Moreover, women were more likely than men to endorse benevolent motivations when discussing same-sex (but not opposite-sex) peers, indicating ostensible concern characterizes female intrasexual gossip. The remaining studies examined whether professions of concern might effectively transmit reputation-damaging information, while minimizing cues of ill intent, thereby preserving gossipers' social appeal.

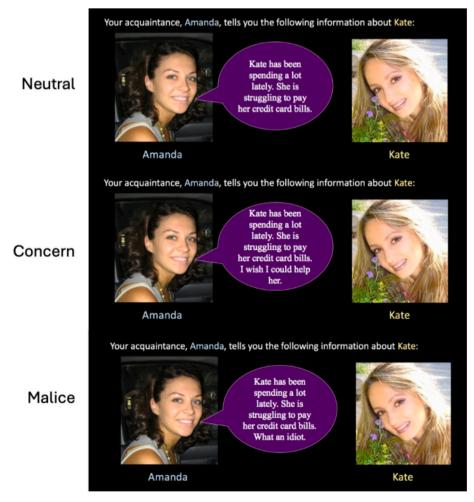


Fig. 1. Example of one of Study 2's Gossip scenarios across conditions.

4. Study 2

Study 2 investigated the efficacy of professed concern by testing the prediction that negative gossip framed with concern insulates female gossipers against the social costs of negative gossip, relative to delivered neutrally or with malice.

4.1. Method

Participants. Four hundred and nine individuals responded to a survey posted on Amazon's MTurk. After removing those who failed the attention check (n=25) or were underage (n=2), the final sample comprised 382 individuals² (183 men; $M_{\rm age}=36.81$; range: 18–77 years).

Procedure. Participants viewed three gossip scenarios and were randomly assigned to one of three phrasing conditions for each. Each scenario depicted the name and photo of a female gossiper, her gossip statement, and the name and photo of her female target (see Fig. 1 for an example). The statements' phrasing was experimentally manipulated to convey concern, malice, or no evaluative tone (neutral). The maliciousand concern-phrasing conditions presented identical content as the neutral condition, but with the addition of an evaluative statement (see Table 3).

Each participant viewed one scenario framed with concern, one framed with malice, and one framed neutrally, with presentation randomized to control for order effects. In response to each of the three scenarios, participants provided their perceptions of the gossipers and their targets using seven-point scales $(1 = not \ at \ all, 7 = extremely)$.

Gossiper's Concern. Participants rated the extent to which gossipers were concerned for their targets.

Table 3Study 2's experimental conditions.

	Neutral	Concern	Malicious
Scenario 1	Lisa has been having sex with a lot of men lately without using condoms.	Lisa has been having sex with a lot of men lately without using condoms. I am worried about her.	Lisa has been having sex with a lot of men lately without using condoms. What a dirty slut.
Scenario 2	Becky can't tell when men are being genuine and when they are taking advantage of her.	Becky can't tell when men are being genuine and when they are taking advantage of her. I just hope she doesn't get hurt.	Becky can't tell when men are being genuine and when they are taking advantage of her. What a bimbo.
Scenario 3	Kate has been spending a lot lately. She is struggling to pay her credit card bills.	Kate has been spending a lot lately. She is struggling to pay her credit card bills. I wish I could help her.	Kate has been spending a lot lately. She is struggling to pay her credit card bills. What an idiot.

Note. Phrases are italicized to highlight differences across conditions. However, these statements were not italicized when presented to participants.

Gossiper's Trustworthiness. Participants rated the degree to which they trusted the gossipers and the truth of the gossipers' statements, which were combined to form a 'trustworthiness' composite ($\alpha = 0.80$).

Interpersonal Desirability. Participants indicated the extent to which they liked the gossipers and targets, desired each as a friend, and perceived each as moral, smart, and nice. These five items were averaged to form an 'interpersonal desirability' composite for both gossipers ($\alpha = 0.953$) and their targets ($\alpha = 0.913$).

Romantic Desirability. Male participants completed three additional items for gossipers and targets: the extent to which they desired to have sex with, date, and marry each. Male participants were instructed to assume they were single when responding. These three ratings were averaged to form 'romantic desirability' composites for gossipers ($\alpha = 0.826$) and targets ($\alpha = 0.82$).

Last, participants completed basic demographic information.

4.2. Results

To account for participants' responses to the three scenarios, twolevel models assessed perceptions of gossipers and targets. To test whether perceptions differed across the three gossip framing conditions, participants' ratings were regressed onto two condition dummy codes within level 1. These codes treated the condition of interest as 1 and remaining conditions as 0. Thus, by entering two condition dummy codes into models, each code compared the condition of interest to the remaining third condition (represented as 0 across both dummy codes). Subsequent models changed which dummy codes were entered to assess comparisons across all three conditions. Level 1 accounted for withinperson variance (i.e., participants evaluated three scenarios) and level 2 accounted for between-person variance (e.g., participant sex). To test whether participant sex moderated gossip framing conditions, we entered a participant sex dummy code (0 = female, 1 = male) into level 2. If participant sex significantly interacted with a condition dummy code, this would suggest female and male participants differed in their evaluations of gossipers or targets between the two conditions under comparison. All terms were allowed to vary across models. See Table 4 for descriptive results and Table 5 for comparisons across conditions.

Supporting the manipulation's efficacy, participants perceived gossipers as more concerned for their targets in the concern versus neutral and malicious framing conditions. Congruent with predictions, participants evaluated gossipers as more trustworthy when they framed their gossip with concern compared to neutrally or maliciously. Likewise, participants perceived gossipers as more interpersonally desirable when they couched statements with concern compared to neutrally or maliciously. Furthermore, male participants rated female gossipers as more desirable romantic partners when they gossiped with concern, compared to neutrally or maliciously.

Perceptions of gossip targets changed less substantially across conditions. Targets were perceived as more interpersonally desirable when discussed with concern relative to maliciously or neutrally. However, male participants' assessments of the female targets' desirability as romantic partners did not differ significantly across framing conditions, suggesting the possibility all phrasings were similarly harmful to targets'

Table 4Study 2's descriptive statistics across conditions.

	Neutral		Malicious		Conce	rn
	В	SD	В	SD	В	SD
Gossipers' Concern	4.02	1.83	2.17	1.62	5.35	1.54
Gossipers' Interpersonal Desirability	3.90	1.47	2.70	1.37	4.73	1.44
Gossipers' Trustworthiness	3.99	1.38	2.80	1.31	4.64	1.42
Gossipers' Romantic Desirability	3.57	1.65	2.83	1.57	3.94	1.61
Targets' Interpersonal Desirability Targets' Romantic Desirability	4.02 3.56	1.13 1.58	3.89 3.59	1.21 1.66	4.19 3.66	1.19 1.78

² Post-hoc sensitivity analyses indicated greater than 99 % power to detect condition effects within the primary examination of gossipers' social desirability across conditions. Indeed, we achieved 80 % power to detect a coefficient as low as B=-0.3 for these comparisons. However, when it came to examinations of targets' social desirability, we achieved 97.75 power to detect the comparison between the concern and malicious condition, but only 58 % power to detect the comparison between the concern and the neutral condition. This is because we had 80 % power to detect coefficients as low as B=-0.21, which is larger than the coefficient of B=-0.16 we detected. Thus, larger samples might uncover significant differences between concern and neutral gossip on targets' desirability.

Table 5Study 2's comparisons across gossip framing conditions.

	Concern vs. Neutral		Malicious vs. N	Malicious vs. Neutral		Concern Vs. Malicious	
	B (SE)	t(df) r	B (SE)	t(df) r	B(SE)	t(df) r	
G Concern	1.33 (0.10)	t(380) = 13.15 p < .001 r = 0.56	-1.85 (0.11)	t(380) = -17.17 p < .001 r = 0.66	3.18 (0.11)	t(380) = 28.59 p < .001 r = 0.83	
G Interp	0.83 (0.08)	t(381) = 9.91 p < .001 r = 0.45	-1.20(0.08)	t(381) = -15.16 p < .001 r = 0.61	2.03 (0.10)	t(381) = 20.90 p < .001 r = 0.73	
G Trust	0.65 (0.08)	t(380) = 8.07 p < .001 r = 0.38	-1.02(0.08)	t(380) = -13.33 p < .001 r = 0.56	1.66 (0.09)	t(380) = 18.02 p < .001 r = 0.68	
G Rom	0.36 (0.12)	t(182) = 3.09 p = .002 r = 0.22	-0.74(0.12)	t(182) = -6.20 p < .001 r = 0.42	1.10 (0.15)	t(182) = 7.56 p < .001 r = 0.49	
T Interp	0.16 (0.07)	t(381) = 2.43 p = .015 r = 0.12	-0.13(0.07)	t(381) = -1.94 p = .053 r = 0.10	0.30 (0.07)	t(381) = 4.00 p < .001 r = 0.20	
T Rom	0.10 (0.13)	t(181) = 0.76 p = .447 r = 0.06	0.04 (0.13)	t(181) = 0.27 p = .786 r = 0.02	0.06 (0.14)	t(181) = 0.44 p = .660 r = 0.03	

Note. G refers to gossipers. T refers to targets. Interp refers to interpersonal desirability. Rom refers to romantic desirability.

romantic prospects. To test whether female or male participants were more sensitive to the gossip framing manipulations, a participant sex dummy code (0 = female, 1 = male) was entered into level 2 of models (see supplemental materials). These analyses revealed that compared to male participants, female participants evaluated malicious gossipers as especially lacking concern and concerned gossipers as more likeable and trustworthy.

4.3. Discussion

Study 2 supported the second of the investigation's primary predictions: professions of concern offer competitive social advantages to female gossipers. Across three scenarios, negative gossip framed with concern enhanced a gossiper's trustworthiness, interpersonal desirability, and desirability as a romantic partner, relative to gossip stated neutrally or with malice. Because the content of the statements was held

constant across framing conditions, these patterns suggest a social and romantic advantage to speakers who couch their gossip in benevolent terms. Female participants were more sensitive than male participants to gossipers' phrasing when forming impressions of female gossipers. This finding may suggest professions of concern are particularly effective at insulating female gossipers against other women's scorn.

Contrary to expectations, female targets were perceived as more interpersonally desirable when the gossip was phrased with concern relative to maliciously or neutrally, suggesting a slight social benefit to those who are discussed with concern. Thus, gossip delivered with concern might be especially effective at insulating gossipers against social costs, but less injurious to targets. However, because all three gossip conditions included the reputation-harming information, it remains unclear whether gossip phrased with concern still harms targets' reputations, compared to when nothing is said about them.

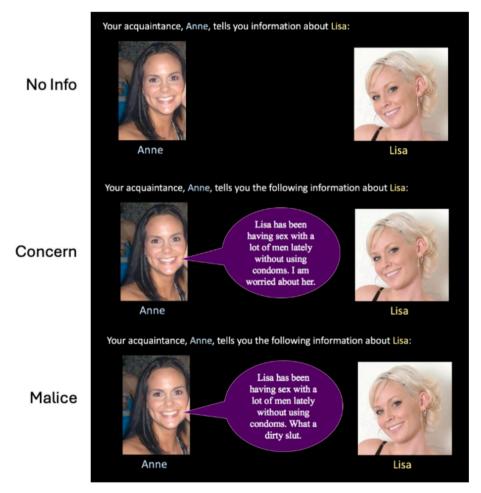


Fig. 2. Example of one of Study 3's gossip scenarios across conditions.

Table 6Study 3's descriptive statistics across conditions.

	No information		Malicious		Concern	
	\overline{B}	SD	В	SD	В	SD
Gossipers' Concern	3.72	1.27	2.16	1.62	5.32	1.53
Gossipers' Interpersonal Desirability	3.99	1.12	2.45	1.24	4.62	1.38
Gossipers' Trustworthiness	3.76	1.17	2.73	1.26	4.51	1.42
Gossipers' Romantic Desirability	3.56	1.51	2.69	1.39	3.94	1.70
Targets' Interpersonal Desirability	4.16	1.02	3.95	1.10	4.13	1.17
Targets' Romantic Desirability	4.00	1.59	3.66	1.69	3.56	1.68

Table 7Study 3's comparisons across gossip framing conditions.

	Concern vs. No info		Malicious vs. No Info		Concern Vs. Malicious	
	B (SE)	t(df) r	B (SE)	t(df) r	B(SE)	t(df) r
G Concern	1.61 (0.10)	t(388) = 16.55 p < .001 r = 0.64	-1.56 (0.09)	t(388) = -16.64 p < .001 r = 0.65	3.16 (0.10)	$t(388) = 30.70 \ p < .001 \ r = 0.84$
G Interp	0.63 (0.08)	t(388) = 7.96 p < .001 r = 0.37	-1.54(0.07)	t(388) = -21.31 p < .001 r = 0.73	2.17 (0.08)	t(388) = 25.61 p < .001 r = 0.79
G Trust	0.75 (0.08)	t(388) = 8.92 p < .001 r = 0.41	-1.02(0.08)	t(388) = -13.34 p < .001 r = 0.56	1.78 (0.09)	t(388) = 20.53 p < .001 r = 0.72
G Rom	0.39 (0.14)	t(146) = 2.83 p = .005 r = 0.23	-0.87(0.12)	t(146) = -7.41 p < .001 r = 0.52	1.25 (0.14)	t(146) = 8.82 p < .001 r = 0.59
T Interp	-0.03(0.06)	t(388) = -0.53 p = .595 r = 0.03	-0.21(0.06)	t(388) = -3.77 p < .001 r = 0.19	0.18 (0.06)	t(388) = 3.03 p = .003 r = 0.15
T Rom	-0.44 (0.13)	t(146) = -3.47 p < .001 r = 0.28	-0.34 (0.13)	t(146) = -2.60 p = .010 r = 0.21	-0.10 (0.13)	t(146) = -0.73 p = .470 r = 0.06

Note. G refers to gossipers. T refers to targets. Interp refers to interpersonal desirability. Rom refers to romantic desirability. Bolded effect sizes are statistically significant.

5. Study 3

Although Study 2 suggested social benefits to delivering gossip with concern, it remains unclear whether these disclosures harm female targets' reputations. Study 3 sought to address Study 2's primary limitation by including a condition in which female gossipers did not deliver reputation-harming information about targets.

5.1. Method

Participants. Four hundred and forty-four individuals responded to a survey posted on Amazon's Mechanical Turk. After those who did not complete the survey (n = 34) or failed the attention check (n = 21) were removed, the final sample consisted of 389 participants³ (147 men; $M_{age} = 36.71$; range: 18–80 years).

Procedure. Study 3's design, concern conditions, and malicious conditions were identical to Study 2's, such that participants evaluated three gossip scenarios. However, in the no information condition, the speaker and target were depicted without the gossip statement (see Fig. 2).

As before, participants rated gossipers' concern, trustworthiness ($\alpha=0.83$), interpersonal desirability ($\alpha=0.957$), and targets' interpersonal desirability ($\alpha=0.917$). Male participants assessed gossipers' and targets' romantic desirability ($\alpha_{gossipers}=0.850$; $\alpha_{targets}=0.841$). Last, participants completed basic demographic information.

5.2. Results

Similar two-level models to those in Study 2 examined whether

perceptions of the gossipers and targets differed across gossip framing conditions (see Tables 6 and 7). Supporting the efficacy of the manipulation, participants perceived gossipers as more concerned for targets in the concern versus malicious and no information conditions. Congruent with predictions, participants perceived gossipers as both more trustworthy and interpersonally desirable when framing statements with concern compared to maliciously or when no information was transmitted. Furthermore, male participants evaluated gossipers as more romantically desirable when delivering statements with concern, compared to with malice or no gossip. Thus, gossipers enhanced their social and romantic appeal by delivering concern-based gossip.

Turning to perceptions of targets, participants perceived female targets as less interpersonally desirable when gossiped about maliciously compared to compassionately or when not gossiped about at all. However, contrary to predictions, gossip phrased with concern did not significantly harm targets' interpersonal desirability relative to no gossip. Male participants perceived female targets as less romantically desirable when they learned malicious or concern gossip, compared to no gossip. This finding supports that gossip delivered with concern can effectively harm women's romantic opportunities.

Additional analyses examined whether female or male participants were more sensitive to the gossip framing manipulations (see supplementary materials). These revealed that compared to male participants, female participants evaluated malicious gossipers as lacking concern, less trustworthy, and less desirable social partners.

5.3. Discussion

Study 3's findings largely replicated those found in Study 2. Relative to malicious gossipers, gossipers who delivered negative information with concern were perceived as more trustworthy, interpersonally desirable, and romantically desirable. Moreover, concerned gossipers were also perceived more favorably than a control condition, wherein no gossip was shared. The design of Study 3 allowed for a more pointed test of the influence of gossip on perceptions of female targets. Concerned gossip harmed female targets' romantic desirability relative to no gossip. However, gossip phrased with concern did not harm targets' interpersonal desirability. This pattern might suggest delivering gossip with concern might be more protective of gossipers than particularly injurious to targets (at least, outside of romantic contexts).

Investigations of participant sex largely replicated Study 2, whereby

 $^{^3}$ Post-hoc sensitivity analyses indicated greater than 99 % power to detect condition effects within on gossipers' social desirability. Indeed, we achieved 80 % power to detect a coefficient as low as B=-0.28 for these comparisons. However, when it came to examinations of targets' social desirability, we achieved only 75 % power to detect the comparison between the concern and malicious condition, and only 7 % power to detect the comparison between the concern and the no information condition. This is because we had 80 % power to detect coefficients as low as B=0.2, which is larger than the coefficients of B=-0.18 (concern versus malicious) and B=0.02 (concern versus no information) we detected. Thus, larger samples might uncover significant differences between gossip phrasing and no gossip on targets' desirability.

female participants more strongly disliked, distrusted, and doubted the concern of malicious gossipers. These findings suggest women conveying overt contempt while gossiping risk rejection from female peers. Thus, delivering negative gossip with concern may protect women against intrasexual social penalties.

6. Study 4

Thus far, the current investigation was limited by its reliance on hypothetical scenarios in online surveys. Study 4 therefore examined whether gossip framing shifted interpersonal perceptions in face-to-face interactions.

6.1. Method

Participants. Participant recruitment occurred over two semesters, wherein two female confederates were available. Two hundred and eighty-five undergraduates reported to the lab in exchange for course credit. Participants were dropped from analyses if they either knew a confederate or observed confederates leaving the lab from a previous session (n=9) or were underage (n=1). The final sample comprised 275 undergraduates⁴ (204 female; $M_{\rm age}=19.3$, SD=1.48, Range: 18-32 years).

Procedure. Participants were randomly assigned to one of three gossip phrasing conditions: concern, malice, or no gossip (see phrasing below). The gossip target (i.e., a second female confederate) was kept blind to condition to ensure her behavior was unaffected by the manipulation.

Participants arrived at the building and were joined by two ostensible female participants (research confederates). The experimenter called the participant and two confederates into the lab, informing them they would solve jigsaw puzzles in pairs. The experimenter provided a cover story that the study was investigating how individuals work together in groups. After participants provided consent, the experimenter verbally assigned each person a letter (A, B, or C) to determine pairings. The participant (always assigned A) was instructed to pull a paper out of a cup to determine with whom they would work first. The participant always drew a letter C, indicating they would work with the first confederate (the gossiper). The second confederate (gossip target) was taken to another lab room.

The experimenter instructed the participant and first confederate (gossiper) to solve the puzzle together while considering which strategies were most successful. After about thirty seconds, the first confederate inquired about the second by asking, "hey do you know that other girl in the study?". After the participant responded, the confederate replied, "I think I have seen her out a lot". The confederate's subsequent disclosure served as the experimental manipulation:

Neutral: "But I don't really know her".

<u>Malicious</u>: "Every time I've seen her, she's always been really drunk and all over guys. She's such a slut."

<u>Concern</u>: "She always seems to have had too much to drink and all over the guys there. It makes me worried for her and I don't know if I should help or not. I just hope she's being careful."

After a few minutes, the experimenter returned, holding a stopwatch and instructed the participant they would then work with the other 'participant' (second confederate). The experimenter brought the participant to the second lab room, where the second confederate (gossip target) was waiting. The second confederate was blind to condition, so she was unaware of which statement had been disclosed. She

was instructed to make small talk with the participant about neutral topics. After a few minutes of working on the puzzle, the experimenter returned, ostensibly to take the second confederate (gossip target) to work with the first. After leading the second confederate out of the room, the experimenter asked the participant to complete a computer-based questionnaire about their impressions of task, their partners, and basic demographic information. Last, participants were probed for suspicion and debriefed about the nature of the study.

6.2. Measures

Interpersonal Perceptions. Using 7-point scales (1 = not at all, 7 = not at all, 8 = not at alextremely), participants provided impressions of both the gossiper and her target for 13 traits (moral, kind, trustworthy, sociable, extraverted, annoying, sympathetic, mean, gossipy, promiscuous, virtuous, genuine, smart). We conducted exploratory principal components factory analyses, and three-factor solutions emerged based on eigenvalues greater than 1 and scree plot examination. The seven interpersonally desirable traits (moral, kind, trustworthy, virtuous, sympathetic, genuine, and smart) loaded most highly onto the first factor (Eigenvalues >4.94, pattern matrix loadings >0.49). These seven items were therefore averaged to form an interpersonally desirable composite for the gossiper and her target ($\alpha = 0.845$, 877, respectively). Despite reverse-scoring items, the four interpersonally undesirable traits (annoying, mean, gossipy, and promiscuous) loaded significantly onto the second factor (Eigenvalues >1.87; pattern matrix loadings >0.65). These four items were averaged to form an interpersonally undesirable composite for the gossiper and her target ($\alpha = 0.692, 0.759$), respectively. The two social skill traits (sociable and extroverted) loaded most strongly onto the third factor (Eigenvalues >1.04; pattern matrix loadings >0.72). These two items were averaged to form sociality composites for the gossiper and her target ($\alpha = 0.573$, 0.837, respectively).

Affiliative Desire. Participants reported their desires to affiliate with each partner by indicating how much they: liked her, wanted to be friends with her, wanted to be associated with her, wanted to be close to her, and would be willing to disclose personal information to her (1 = not at all, 7 = extremely). Exploratory principal components factory analyses revealed a single factor solution for these five items (Eigenvalues >3.58). Responses cohered well together and were averaged to form affiliative desire composites for both the gossiper and her target (α = 0.883, 0.923, respectively).

Romantic Desire. To assess romantic interest, male participants also reported the degree to which they were: attracted to, interested in having a short-term relationship (casual/sexual) and long-term relationship (dating) with each person, assuming they were both single. Exploratory principal components factory analyses revealed a single factor solution for these four items (Eigenvalues >3.06). Responses cohered well and were averaged to form romantic interest composites for both the gossiper and her target ($\alpha = 0.896, 0.935,$ respectively).

6.3. Results

A series of one-way between-subjects ANOVAs compared perceptions of the gossiper across framing conditions (see Tables 8 and 9). Follow-up models examined whether participant sex moderated the effects of condition. None of these interactions were significant, so only the effects of condition are reported.

Participants perceived the gossiper as having more undesirable traits when she gossiped with malice or concern, compared to when she did not gossip, supporting that gossip is socially risky. Consistent with hypotheses, phrasing gossip maliciously significantly increased perceptions of the gossiper's undesirable traits compared to phrasing with concern. Perceptions of the gossiper's desirable traits also differed across framing conditions, such that she was perceived as more desirable when she gossiped with concern relative to with malice and not significantly different from when she did not gossip. Together, these patterns suggest

⁴ Post-hoc sensitivity analyses revealed we achieved >90 % power to detect condition effects using ANOVAs to assess the gossiper's and target's overall desirability. Indeed, we achieved 80 % power to detect a critical F value as low as 3.03, which is smaller than the F values of 7.02 and 22.97 we obtained for the target's and gossiper's desirability, respectively.

Table 8Study 4's descriptive statistics across conditions.

		Neutral M (SD)	Malicious M (SD)	Concern M (SD)
Perceptions of	Undesirable	1.62	2.84 (1.13)	2.25 (0.82)
Gossiper	Traits	$(0.80)_{b}$	a	a b
	Desirable	5.07	4.82 (1.01)	5.17 (0.85)
	Traits	(0.80)		b
	Sociality	5.47	5.65 (1.02)	5.53 (1.02)
		(1.04)		
	Affiliative	4.66	4.31 (1.06)	4.51 (1.01)
	Desire	(0.95) _b	a	
	Romantic	3.50	3.73 (1.64)	3.88 (1.52)
	Interest	(1.29)		
Perceptions of	Undesirable	1.45	1.81 (0.86)	1.78 (0.98)
Gossip Target	Traits	$(0.69)_{b}$	a	a
	Desirable	4.95	4.61 (0.97)	4.72 (0.93)
	Traits	(0.94)	a	
	Sociality	3.72	3.55 (1.27)	3.72 (1.44)
		(1.55)		
	Affiliative	4.03	3.83 (1.12)	3.86 (1.17)
	Desire	(1.21)		
	Romantic	2.75	2.93 (1.49)	2.85 (1.73)
	Interest	(1.31)		

Note. $_{\rm a}$ represents statistically significant difference from the neutral condition. $_{\rm b}$ represents statistically significant difference from the malicious condition.

gossiping harms social perceptions, but framing with concern is less costly than malicious phrasing.

Perceptions of the gossiper's sociality did not differ across conditions. There was a marginally significant shift in participants' desire to affiliate with the gossiper across conditions (p=.052). Follow-up contrasts revealed she was less desired as a social partner in the malicious relative to neutral condition, but no other significant differences emerged. Because there was no difference in participants' desire to affiliate with her when comparing the concern to neutral condition, this suggests reduced social penalties when delivering with concern. The gossiper's romantic desirability did not differ significantly across conditions.

Similar ANOVAs compared perceptions of the gossip target across conditions. Compared to when no gossip was disclosed about her, she was evaluated as possessing more undesirable traits in both the malicious and concern gossip conditions. Perceptions of her undesirable traits did not differ between the concern or malicious conditions, suggesting both phrasings equally injured assessments of her. Participants perceived the target to possess fewer desirable traits when she was gossiped about maliciously compared to when no gossip was said about

her. Although participants perceived the target to have reduced desirable traits when she was gossiped about with concern, compared to when no gossip was said about her, this difference was not statistically significant (d=0.24, p=.107). Thus, both malicious and concern gossip were injurious to interpersonal perceptions of a female gossip target. Perceptions of the target's sociality, romantic appeal, and affiliative desirability did not differ significantly across gossip framing conditions, however.

6.4. Discussion

Study 4 sought to establish whether the findings observed among hypothetical online vignettes would extend to face-to-face interactions. As predicted, when a female gossiper framed her gossip with concern, she was perceived as possessing more desirable and fewer undesirable qualities compared to when she delivered similar information with malice. To be sure, however, gossiping with concern still harmed perceptions of a gossiper, compared to when she withheld gossip. Thus, any disclosure of negative gossip might carry social costs, but phrasing with concern is less costly than malicious disclosures.

Participants evaluated her gossip target as possessing more undesirable attributes when she was discussed with concern, compared to when they did not hear any gossip about her. Thus, contrary to Study 3, but supportive of hypotheses, gossip delivered with concern effectively impaired a target's social appeal. Indeed, both concern and maliciously phrased gossip effectively harmed the gossip target's reputation. These patterns provide further support that negative gossip delivered with concern can offer competitive social advantages to female gossipers.

7. General discussion

The current investigation tested the hypothesis that belief and expression of concern for one's gossip target grant women social advantages in female intrasexual reputation competition. Study 1 supported the greater prevalence of these beliefs among women than men. Relative to men, women endorsed stronger concern relative to harm motivations during their recent and general social conversations about absent others. Women were particularly likely to espouse these benevolent intentions when discussing other women, indicating these beliefs characterize women's gossip about same-sex peers.

Studies 2–4 examined the efficacy of concern phrasing in female reputational competition. In Study 2, female gossipers who phrased their statements with concern were evaluated as more trustworthy, interpersonally desirable, and romantically desirable than when

Table 9Study 4's comparisons across conditions.

		Difference Across Cond	litions	Concern vs. Malicious	Neutral vs. Concern	Neutral vs. Malicious
Gossiper	Undesirable Traits	F(2, 272) = 41.86	$\eta^2 = 0.235$	d = 0.59	d = 0.78	d = 1.27
	Desirable Traits	F(2, 272) = 3.51	p < .001 $\eta^2 = 0.025$	p < .001 $d = 0.37$	$p < .001 \ d = 0.12$	p < .001 d = 0.28
	Sociality	F(2, 272) = 0.696	p = .031 $\eta^2 = 0.005$	p = .011	p = .446	p = .052
	Affiliative Desire	F(2, 272) = 2.98	p = .499 $\eta^2 = 0.021$	d = 0.20	d = 0.15	d = 0.35
		.,	p = .052	p = .180	p = .320	p = .015
	Romantic Interest	F(2, 272) = 0.38	$\eta^2 = 0.011$ $p = .688$			
Target	Undesirable Traits	F(2, 272) = 5.77	$\eta^2 = 0.041$ $p = .004$	d = 0.04 p = .774	d = 0.40 p = .007	d = 0.48 p = .003
	Desirable Traits	F(2, 272) = 3.24	$\eta^2=0.023$	d = 0.12	d = 0.24	d = 0.36
	Sociality	F(2, 271) = 0.41	p = .041 $\eta^2 = 0.003$ p = .664	p = .434	p = .107	p = .014
	Affiliative Desire	F(2, 271) = 0.83	$\eta^2 = 0.006$			
	Romantic Interest	F(2, 68) = 0.09	p = .439 $\eta^2 = 0.003$ p = .912			

delivering the same information either maliciously or straightforwardly. Study 3 examined whether similar patterns would emerge when the control condition presented no gossip information about female targets. Indeed, Study 3's findings suggested female gossipers were perceived as more trustworthy, interpersonally desirable, and romantically desirable when they phrased their gossip as concern, compared to when phrased maliciously or when they did not gossip at all. Moreover, when men learned concerned gossip, they less strongly desired female targets as romantic partners, compared to when they did not hear any gossip. This pattern suggests gossip couched with concern could be especially injurious to targets' romantic prospects.

Study 4 revealed these patterns manifest in face-to-face social interactions. Although a woman who phrased her gossip with concern was perceived as possessing fewer desirable attributes than when she did not gossip, she was perceived as more interpersonally desirable compared to when she phrased her gossip maliciously. Moreover, she effectively harmed her target's reputation when she delivered her gossip with concern compared to when she did not transmit any gossip. Weighing costs and benefits then, Study 4's findings suggest relative to malicious gossip, gossip guised as concern is both effective at harming female targets' reputations, while also inflicting lower costs onto the gossiper than malicious gossip. Altogether, the findings of Studies 2–4 suggest women's gossip delivery has tangible social consequences: proclamations of concern grant competitive reputational advantages to gossipers.

However, the reputational harm targets incurred from concerned gossip differed across studies. In Study 2, concerned gossip was less deleterious to targets than malicious gossip, suggesting the possibility that gossip delivered with concern is less injurious because it conveys affection for the target. In Study 3, concern-based gossip did not harm targets' interpersonal desirability, but harmed their romantic appeal relative to no gossip, providing mixed support for its defamatory power. However, in the context of an in-person interaction, Study 4 revealed both men and women evaluated a female target as possessing more undesirable traits when they learned concerned gossip relative to no gossip. This disparity between studies might suggest hypothetical vignettes do not fully capture the social import of learning reputational information in person. Future research might better adjudicate how gossip delivered with concern alters the specific inferences about targets and whether those depend on the gossip content or gossiper's tone.

Results also suggested women may be more sensitive to female gossipers' expressions of concern than men (see supplementary materials). In Study 2, women more favorably evaluated concerned gossipers and more strongly punished malicious gossipers than did men. In Study 3, women more strongly punished malicious gossipers than men. These patterns are consistent with the contention that women compete with one another using reputational competition. That is, women should be sensitized to the motivations of their same-sex peers if these motivations signal speakers' relative trustworthiness with one's own reputationrelevant information. These findings replicate those uncovered in Reynolds and Palmer-Hague (2022), whereby women more strongly penalized female gossipers engaging in more versus less overt forms of gossip about same-sex peers. Interpretations of this pattern should be drawn with caution, however, as Study 2 and 3's scenarios depicted only female gossipers. It might be that both men and women are especially sensitive to the gossip motivations of same-sex peers, as these individuals are one's primary romantic rivals (Wilson & Daly, 1996). Future research might therefore examine whether individuals more strongly punish and reward same-sex (versus opposite-sex) gossipers contingent on the gossipers' tone.

Another limitation of the examination's methods is that participants might have interpreted expressions of concern as more personal disclosures than the malicious or neutral phrasings. To disentangle whether concern or self-disclosure more strongly contributes to positive evaluations of gossipers, future research could manipulate these features independently. Furthermore, because the current investigation only examined negative gossip, it is unclear whether expressions of concern

might be socially advantageous in other contexts requiring tact. For example, concern might be less off-putting when discussing oppositional political views (e.g., "I am worried X policy could lead to worse outcomes" versus "X policy is a terrible idea and will never work"). Researchers interested in topics such as political communication, persuasion, therapy, or human relations might profit from considering whether and how professions of concern might offer benefits in other fraught social situations.

The discrepancy in social outcomes for malicious compared to seemingly benevolent gossipers may indicate a selective pressure to either guise one's competition with prosociality (i.e., social desirability) or earnestly believe one is discussing others' flaws out of concern (i.e., self-deception). Surely there are cases when individuals divulge information because they are earnestly concerned for someone. However, the current article contends that earnest concern would function as an ideal mechanism for spreading reputation-relevant information precisely because the speaker is not harboring (or at minimum, not eliciting cues of harboring) nefarious intentions. To some degree, the true intentions of the speaker are irrelevant. If divulging the information grants speakers relative social or romantic advantages, then natural and social selection should have favored divulgence, using whichever proximate psychological mechanisms most compel the behavior. Earnest concern may function as one such mechanism if it generates a desire to discuss conspecifics' reputational information. As evolutionary theorists have noted, natural selection can favor ignorance if fools prosper (Ghiselin, 1974; Trivers, 2011).

However, participants reports of concern in Study 1 relied on self-report, making investigations of sincerity challenging. Future investigations might avoid these limitations by employing behavioral or implicit measures. For example, subsequent research could offer participants the opportunity to share information that could benefit a target as well as information that offers no chance at benefitting a target. If the concern is genuine, gossipers should be more likely to transmit information that would help a target than information that merely besmirches a target's reputation. Alternatively, studies that employ both implicit and explicit measures of feelings towards gossip targets might disentangle whether implicit negative feelings underly gossipers' proclamations of concern.

Regardless of whether professions of concern are earnest, transmission of personal information can have quite deleterious consequences for targets. Indeed, the female targets in Studies 3 and 4 suffered reputational harm when discussed with concern. These patterns suggest a disconnect between the prosocial motivations for and outcomes of gossip. Women might be unaware that their benevolent intentions are, in fact, harming one another. If so, this information may be useful in understanding and preserving female friendships. Previous research has found that girls' and women's same-sex friendships more often dissolve than men's (Benenson et al., 2009; Benenson & Alavi, 2004; Benenson & Christakos, 2003). The current findings suggest one possible explanation: women's prosocial motivation to discuss their female social partners can transmit reputation-denigrating information, which is recognized as gossip by the female targets under discussion. That is, targets might experience the reputational harm of gossip, irrespective of gossipers' intentions.

Individuals interested in promoting female cooperation and female friendships would be well-advised to consider the current findings. If women are unaware of the negative outcomes of these benevolently-motivated disclosures, then an important step in designing interventions might be to draw attention to the discrepancy between gossipers' intentions and targets' outcomes. These findings might also offer important implications for workplaces. If women discuss female co-workers or superiors out of concern, they could be unintentionally undermining them. Researchers and the broader public have lamented the absence of women in higher level management positions (Heilman, 2012). If workplace gossip influences hiring or promotion decisions, then understanding the pattern of these conversations may help to

promote women's organizational hierarchy ascension.

8. Conclusion

When Laura Tracy (1991) interviewed women about female competition, she found a perplexing pattern: women denied their own competitive motivations, but attributed nefarious ones to other women. The current investigation proffered and tested an explanation for this discrepancy: women's denial of their own malicious motivations is a feature—not a bug—of female psychology. Women who believe they are sincerely concerned about female gossip targets can effectively transmit reputation-tarnishing information about same-sex competitors, without harming their own social opportunities. The results of the current investigation support this assertion. Not only do women espouse greater concern than malice when discussing same-sex peers, benevolence grants social and romantic advantages to female gossipers. The theory and data presented here suggest the age-old adage, "the road to hell is paved with good intentions" holds true among women's intrasexual gossip.

CRediT authorship contribution statement

Tania A. Reynolds: Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Jon K. Maner:** Supervision, Conceptualization. **Roy F. Baumeister:** Writing – review & editing, Supervision, Resources, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jesp.2024.104670.

References

- Archer, J. (2004). Sex differences in aggression in real-world settings: A meta-analytic review. Review of General Psychology, 8, 291–322.
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. Personality and Social Psychology Review, 9, 212–230.
- Balliet, D., Li, N. P., Macfarlan, S. J., & Van Vugt, M. (2011). Sex differences in cooperation: A meta-analytic review of social dilemmas. *Psychological Bulletin*, 137, 881–909.
- Beersma, B., & Van Kleef, G. A. (2012). Why people gossip: An empirical analysis of social motives, antecedents, and consequences. *Journal of Applied Social Psychology*, 42, 2640–2670.
- Bem, S. L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155–162.
- Benenson, J. F. (2014). Warriors and worriers: The survival of the sexes. New York, NY: Oxford University Press.
- Benenson, J. F., & Alavi, K. (2004). Sex differences in children's investment in same-sex peers. Evolution and Human Behavior, 25, 258–266.
- Benenson, J. F., & Christakos, A. (2003). The greater fragility of females' versus males' closest same-sex friendships. *Child Development*, 74, 1123–1129.
- Benenson, J. F., Markovits, H., Fitzgerald, C., Geoffroy, D., Flemming, J., Kahlenberg, S. M., & Wrangham, R. W. (2009). Males' greater tolerance of same-sex peers. *Psychological Science*, 20, 184–190.
- Bjorkqvist, K., Lagerspetz, K., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. Aggressive Behavior. 18, 117–127.
- Burbank, V. K. (1987). Female aggression in cross-cultural perspective. Behavior Science Research, 21, 70–100.
- Campbell, A. (1999). Staying alive: Evolution, culture, and women's intrasexual aggression. Behavioral and Brain Sciences, 22, 203–214.

- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, 79, 1185–1229.
- Coyne, S. M., Archer, J., & Eslea, M. (2006). "We're not friends anymore! Unless...": The frequency and harmfulness of indirect, relational, and social aggression. Aggressive Behavior: Official Journal of the International Society for Research on Aggression, 32, 294–307.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. Child Development, 66, 710–722.
- Crick, N. R., & Nelson, D. A. (2002). Relational and physical victimization within friendships: Nobody told me there'd be friends like these. *Journal of Abnormal Child Psychology*, 30, 599–607.
- Cullerton-Sen, C., & Crick, N. R. (2005). Understanding the effects of physical and relational victimization: The utility of multiple perspectives in predicting socialemotional adjustment. School Psychology Review, 34, 147–160.
- Dalton, D., & Ortegren, M. (2011). Gender differences in ethics research: The importance of controlling for the social desirability response bias. *Journal of Business Ethics*, 103, 73–93
- DeBacker, C. J., Nelissen, M., & Fisher, M. L. (2007). Let's talk about sex: A study on the recall of gossip about potential mates and sexual rivals. Sex Roles, 56, 781–791.
- Dunbar, R. I. M. (2016). Sexual segregation in human conversations. *Behaviour*, 153, 1–14.
- Farley, S. D. (2011). Is gossip power? The inverse relationships between gossip, power, and likability. European Journal of Social Psychology, 41, 574–579.
- Felmlee, D., Sweet, E., & Sinclair, H. C. (2012). Gender rules: Same- and cross-gender friendships norms. Sex Roles, 66, 518–529.
- Fisher, M., & Cox, A. (2009). The influence of female attractiveness on competitor derogation. *Journal of Evolutionary Psychology*, 7, 141–155.
- Fisher, M., Shaw, S., Worth, K., Smith, L., & Reeve, C. (2010). How we view those who derogate: Perceptions of female competitor derogators. *Journal of Social*, *Evolutionary, and Cultural Psychology*, 4, 265–276.
- Gawronski, B., & Walther, E. (2008). The TAR effect: When the ones who dislike become
 the ones who are disliked. Personality and Social Psychology Bulletin, 34, 1276–1289.
 Ghiselin, M. T. (1974). The economy of nature and the evolution of sex. Berkeley: University
- of California. Heilman, M. E. (2012). Gender stereotypes and workplace bias. *Research in Organizational*
- Behavior, 32, 113–135.
 Hess, N. H., & Hagen, E. H. (2006a). Psychological adaptations for assessing gossip veracity. Human Nature, 17, 337–354.
- Hess, N. H., & Hagen, E. H. (2006b). Sex differences in indirect aggression: Psychological evidence from young adults. Evolution and Human Behavior, 27, 231–245.
- Hill, K., & Hurtado, A. M. (1996). Ache life history: The ecology and demography of a foraging people. New York: Aldine de Gruyter.
- Hrdy, S. B. (1999). Mother nature: Natural selection and the female of the species. London: Chatto and Windus.
- Jaeger, M. E., Skleder, A. A., Rind, B., & Rosnow, R. L. (1994). Gossip, gossipers, gossipees. In R. F. Goodman, & A. Ben-Zeev (Eds.), Good gossip (pp. 154–168). Lawrence, KS: University Press of Kansas.
- Kowalski, C. M., Rogoza, R., Vernon, P. A., & Schermer, J. A. (2018). The dark triad and the self-presentation variables of socially desirable responding and self-monitoring. *Personality and Individual Differences*, 120, 234–237.
- Krebs, D. L., & Denton, K. (1997). Social illusions and self-deception: The evolution of biases in person perception. In J. A. Simpson, & D. T. Kenrick (Eds.), Evolutionary social psychology (pp. 21–48). Hove, UK: Psychology Press.
- Kuttler, A. F., Parker, J. G., & La Greca, A. M. (2002). Developmental and gender differences in preadolescents' judgments of the veracity of gossip. *Merrill-Palmer Quarterly*, 48, 105–132.
- Lyons, M. T., & Hughes, S. (2015). Malicious mouths? The dark triad and motivations for gossip. *Personality and Individual Differences*, 78, 1–4.
- 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.
- McAndrew, F. T., & Milenkovic, M. A. (2002). Of tabloids and family secrets: The evolutionary psychology of Gossip1. *Journal of Applied Social Psychology*, 32, 1064–1082.
- Merten, D. E. (1999). Enculturation into secrecy among junior high school girls. *Journal of Contemporary Ethnography*, 28, 107–137.
- Moucheraud, C., Worku, A., Molla, M., Finlay, J. E., Leaning, J., & Yamin, A. E. (2015). Consequences of maternal mortality on infant and child survival: A 25-year longitudinal analysis in Butajira Ethiopia (1987-2011). Reproductive Health, 12, S4.
- Nevo, O., Nevo, B., Zehavi, A. D., & Milton, M. J. (1993). Gossip and counselling: The tendency to gossip and its relation to vocational interests. *Counselling Psychology Quarterly*, 6, 229–238.
- Raudenbush, S. W., Bryk, A. S., & Congdon, R. (2013). HLM 7.01 for windows [computer software]. Skokie, IL: Scientific Software International, Inc.
- Reynolds, T., Baumeister, R. F., & Maner, J. K. (2018). Competitive reputation manipulation: Women strategically transmit social information about romantic rivals. *Journal of Experimental Social Psychology*, 78, 195–209.
- Reynolds, T. A. (2022). Our grandmothers' legacy: Challenges faced by female ancestors leave traces in modern women's same-sex relationships. *Archives of Sexual Behavior*, 51, 3225–3256.
- Reynolds, T. A., & Palmer-Hague, J. (2022). Did you hear what she did to me? Female friendship victimization disclosures offer reputational advantages. *Journal of Experimental Social Psychology*, 101, Article 104311.

- Rucas, S. L., Gurven, M., Kaplan, H., Winking, J., Gangestad, S., & Crespo, M. (2006).
 Female intrasexual competition and reputational effects on attractiveness among the Tsimane of Bolivia. Evolution and Human Behavior, 27, 40–52.
- Sear, R., Mace, R., & McGregor, I. A. (2000). Maternal grandmothers improve nutritional status and survival of children in rural Gambia. *Proceedings of the Royal Society of London B*, 267, 1641–1647.
- Sommerfeld, R. D., Krambeck, H. J., Semmann, D., & Milinski, M. (2007). Gossip as an alternative for direct observation in games of indirect reciprocity. *Proceedings of the National Academy of Sciences*, 104, 17435–17440.
- Surbey, M. K., & McNally, J. J. (1997). Self-deception as a mediator of cooperation and defection in varying social contexts described in the iterated prisoner's dilemma. *Evolution and Human Behavior*, 18, 417–435.
- Tracy, L. (1991). The secret between us: Competition among women. Boston, MA: Little, Brown and Co.
- Trivers, R. (2011). The folly of fools: The logic of deceit and self-deception in human life. New York: Basic Books.

- Turner, M. M., Mazur, M. A., Wendel, N., & Winslow, R. (2003). Relational ruin or social glue? The joint effect of relationship type and gossip valence on liking, trust, and expertise. *Communication Monographs*, 70, 129–141.
- Vigil, J. M. (2007). Asymmetries in the friendship preferences and social styles of men and women. *Human Nature*, 18, 143–161.
- Von Hippel, W., & Trivers, R. (2011). The evolution and psychology of self-deception. *Behavioral and Brain Sciences*, 34, 1–16.
- Watson, D. C. (2012). Gender differences in gossip and friendship. Sex Roles, 67, 494–502.
- Wilson, D. S., Wilczynski, C., Wells, A., & Weiser, L. (2000). Gossip and other aspects of language as group-level adaptations. In C. Heyes, & L. Huber (Eds.), *The evolution of cognition* (pp. 347–365). Cambridge, MA: MIT Press.
- Wilson, M. I., & Daly, M. (1996). Male sexual proprietariness and violence against wives. Current Directions in Psychological Science, 5, 2–7.
- Yang, J., Ming, X., Wang, Z., & Adams, S. M. (2017). Are sex effects on ethical decision-making fake or real? A meta-analysis on the contaminating role of social desirability response bias. *Psychological Reports*, 120, 25–48.