

Let's Talk About Sex: A Study on the Recall of Gossip About Potential Mates and Sexual Rivals

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Abstract Although there is an abundance of gossip research, little is known about the impact of individuals' characteristics and their ability to recall gossip's content. We concentrated on gossip related to mating reputation, and investigated the effects of individuals' sex and relationship status when they are the subjects and receivers of such gossip. We presented 84 students with gossip-like stories, manipulated for content, and then provided a surprise recall test. We found that cues of attractiveness were recalled more for female characters, whereas cues of wealth status were recalled more for male characters. Gender differences in participants' recall occurred for gossip about same-sex people who may represent rivals, but not for gossip about other-sex people who may represent potential mates. The relationship status of the subjects and receivers did not affect the recall rates. We discuss these findings within the conceptual framework offered by evolutionary psychology.

Keywords Gossip · Human mate choice · Attractiveness · Wealth status

In this article, we present a study on the recall of reputation information in the context of human mating strategies. Research on reputation gossip [i.e., information about the traits and actions of third parties, such as the ability to retain or acquire mates, or the tendency to mate poach (i.e., the act of attracting someone who is already committed to someone else), and so on] has so far been scarce, and some investigators (Foster 2004; Wert and Salovey 2004) have argued that this lack might be due to the problem of defining gossip. Gossip is a multifaceted phenomenon, and definitions have thus far been complex and controversial. Here we try to resolve, at least in part, the problem of definition, and subsequently to address the need for reputation-based gossip research.

We focus on gender differences in people's interest in gossip, as well as the actual topics of gossip, because there has been prolific discussion both within and external to the academic literature in this area. However, much of this prior knowledge is not empirical in nature. Therefore, we sought to test whether men and women significantly differ in their interest in gossip and whether they are the subjects of different types of reputation-based information. To measure interest, we relied upon the work of Schiefele and Krapp (1996) who showed that interest is positively correlated with recall ability, independent of prior knowledge and intelligence. Hence, if an individual can recall correct, detailed information, then it is presumably information that is of high interest.

For the purposes of the current study, we further narrowed our view of gossip to the role it plays in the domain of human mating strategies. It has been shown that romantic relations are the most gossiped about topic (Levin and Kimmel 1977), and yet there has been no prior empirical investigation of the role or the form of gossip in the domain of romantic attraction.

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Gossip and Reputations

In a very broad sense, gossip can be defined as information about the new, deviant traits or behaviors of other people (e.g., Arno 1980). Within this general definition, a distinction can be made between strategy learning gossip, which is gossip without importance placed on a particular individual, and reputation gossip, which is gossip with importance placed on a particular individual. What we term strategy learning gossip follows the proposal of Baumeister et al. (2004) and De Backer and Gurven (2006), who argued that gossip can sometimes be relevant to a listener, independent of the exact identity of the person whom the gossip is about. Hence, strategy learning gossip encompasses many types of third-party talk, in which the person gossiped about can be replaced with another person without drastically changing the connotation of the message. For instance, “My 6 year old neighbor died from a heart attack” and “My 6 year old niece died of a heart attack,” both transmit the same message that even children are at risk of heart disease. The center of attention in strategy learning gossip is the communicated information that is relevant for fitness and that enables the recipient to form a strategy. We use the term “fitness” in an evolutionary sense, and thus it refers to information that impinges upon health, survivability, and the likelihood of conceiving children who later successfully bear their own children. Hence, the subjects of such gossip are mere carriers of fitness-relevant strategy information. This information can be used by receivers to increase their personal experience record. Receivers can vicariously learn from others’ successes and errors, which is a substantial benefit given that learning solely from personal experiences can often be life-threatening (see e.g., Bandura 1977; Carroll 1999, 2002; Pinker 1995; Scalise-Sugiyama 1996, 2001; Williams 1966).

What we term reputation gossip is a different form of third-party talk than strategy learning gossip, as the individuals who are talked about have a central role. Saying “My neighbor is the cutest boy in town” implies a different message than “My cousin is the cutest boy in town.” At a broad level, behavioral information may be relevant only when it is linked to a specific subject of gossip, or it may become increasingly of interest if it is linked to a specific gossip subject, or it may be interesting no matter whom it concerns. We call it reputation gossip when the gossip contains information relevant to the reputation of a particular individual (Bromley 1993). Senders of reputation gossip benefit from manipulating the reputation of gossip subjects, and, therefore, relatively manipulate, albeit indirectly, their own reputation. For receivers, reputation gossip functions to help them learn, at an accelerated rate, about the reputations of other specific individuals with whom they interact. Reputation gossip is relevant in the domain of

group living, in which people evolved and still reside, and especially in the domain of human mating. Here we focus on reputation gossip as a mechanism for fast learning, which is relevant to the diverse and numerous acts of human courtship.

Romantic Relations, Reputations and Gossip

Studies suggest that, in people’s search for potential mates, as well as in conflicts with potential rivals, individuals frequently focus on the past and present actions of specific others, which broadly represents reputation-based information (Hess and Hagen 2006a, b; Power 1998). The use of gossip for the dissemination of this information is important, as suggested by Power (1998), who proposed that the distribution of gossip is relevant to human mating as a manipulative strategy to alter one’s own and others’ reputations. According to Power, this function explains why gossip is shared with others. We take an evolutionary approach to human mating strategies and the role of gossip, and propose a theory to explain the adaptive function of receiving gossip: We posit that gossip is a learning mechanism for receivers within the context of courtship and for the maintenance of romantic relationships.

Based on the conceptual framework offered by evolutionary psychology, we contend that contemporary human mating strategies have been, and continue to be, shaped by the forces of sexual selection (Buss 1989, 1994). Sexual selection theory, as devised initially by Darwin (1859/1998) involves what he termed intersexual selection and intrasexual competition. Intersexual selection is the process whereby an individual of one sex chooses an individual of the other sex as a potential mate. The term intersexual refers to selecting mates of the other sex, but of course mate selection also may occur within the same sex. It should be noted that we situate the present research within a heterosexual framework in keeping with the extensive majority of evolutionary-based theories on sexual dimorphism. We readily acknowledge that this singular focus in sexual orientation is a limitation to the current research, but it allows us to utilize and expand upon the previous findings in a novel and substantive manner. The other side of sexual selection is intrasexual competition, which refers to the process whereby two or more individuals of the same-sex compete over the access of an other-sex (or potentially same-sex, see above note) individual as a potential mate.

Finding Romance: Reputation Gossip About Potential Mates

While searching for a mate of high quality, for either a short-term or a long-term relationship, people are at risk of

being deceived by potential mates (Buss 1994). This chance of deception presents people with the adaptive problem of investing time and energy in relationships that involve individuals with whom mating goals cannot be established. If people rely solely on their own, private life experiences in these situations, they risk being susceptible to costs through the misallocation of time, energy, and resources. Other researchers (Scalise-Sugiyama 1996, 2001; Williams 1966) have already suggested that the exchange of information about the strategies and reputations of people, what we call reputation gossip, can reduce these costs. We take this classification of gossip one step further, and define potential mates reputation gossip as information about individuals' reputation of being a good or bad romantic partner for short-term or long-term goals. The function of potential mates reputation gossip is to solve problems, or to avoid costs, that people encounter when trying to locate good mates. For example, this type of gossip could draw one's attention to an available long-term mate who has similar personality characteristics, values, and beliefs, and who does not have a reputation for committing infidelity. Through this form of gossip, receivers have an opportunity to learn at a low cost who is thought to be a good potential mate and who may be a bad potential mate; individuals no longer need to invest their own time, energy and resources to establish whether a potential mate is worth further consideration, and instead may rely on the experiences and knowledge of others.

Fighting Romance: Reputation Gossip About Sexual Rivals

Another hazard that people face when searching for potential mates is the threat posed by same-sex rivals (e.g., Schmitt and Buss 1996; Symons 1979). The ability to detect sexual rivals and lower their reputation can increase the likelihood that an individual may win conflicts with members of the same-sex over access to other-sex individuals. Again we suggest that a specific form of mating reputation gossip, sexual rivals reputation gossip, may serve to solve problems (e.g., identifying rivals, selecting a winning competitive strategy) in this area. Sexual rivals reputation gossip is information about the mating skills of same-sex rivals, and hence, it helps recipients to detect the identity of potential sexual rivals. In addition, receivers may use their acquired information not only to learn about specific rivals' reputations, but also to manipulate these reputations; for example, the recipient could further exaggerate or supply additional information. As well, it may aid senders because it functions to lower the reputation of same-sex competitors, and hence, due to a contrast, it may indirectly increase senders' reputations as good potential mates.

Gender Differences in Interest in Potential Mates and Sexual Rivals Reputation Gossip

Levin and Arluke (1985) demonstrated that men and women, when gossiping, devote equal time to the topics of gender and relationships. Likewise, Power (1998) suggested that there are no noteworthy gender differences in interest about mating reputation gossip, and that it benefits both men's and women's reproductive strategies. For example, according to Power, men tend to gossip with other men about women's sexual behavior and reproductive value (e.g., physical attractiveness, age), whereas women tend to gossip with other women about the status of men and to warn their female friends about known philanderers. It is important to note that Power's conceptualization of mating reputation gossip does not imply that it only occurs within conversations of same-sex individuals. For example, men may gossip with women about the marital status of other women, which could serve to help them to search for potential mates. Similarly, both men and women may use gossip to warn their cross-sex friends about mates of poor quality.

We agree with Power's (1998) idea that gender differences should be negligible with respect to potential mates reputation gossip. Men and women face the same problems associated with deceitful actions of potential mates, as well as the high costs of relying solely upon one's own experiences. Thus, we claim that both men and women would benefit by the use of potential mates reputation gossip as a solution to these problems.

Other researchers (Campbell 1999, 2004; Hess and Hagen 2006a, b) have contested these ideas and theorized that gender differences in interest and use of reputation gossip are to be expected because the sexes rely on different techniques to deal with interpersonal conflict. Campbell (1999, 2004) contended that in times of conflict, women cannot afford to use physical means to fight, as maternal care is crucial to the survival of young children. In contrast, men can rely on their physicality, as the harm or death of a father compromises a child's life less severely than the harm or death of a mother does. Therefore, Campbell asserted that women involved in interpersonal conflict are more likely to engage in less physical or direct techniques, such as the use of reputation-damaging gossip. Hess and Hagen (2006a, b) commented that this form of gossip, which they assert should be conceptualized as representative of informational aggression, is not merely a substitute for physical aggression, but rather that it is simply more effective for women to attack their rivals' reputations. They argued that the reputation of a woman as a potential mate is more vulnerable than a man's reputation as a potential mate. That is, women's reputations are an easy target for gossip because they are simple to lie about,

whereas it is more difficult to lie about men's abilities, status, and willingness to invest in a relationship. In other words, "because gossip is an excellent strategy for within-group competition, and because it is effective in attacking and defending difficult-to-assess aspects of reputation, gossip may have been a more effective weapon in female intrasexual competition than it was in male intrasexual competition, increasing selection for psychological adaptations for informational aggression in females" (Hess and Hagen 2002, p. 12).

The dispute that has arisen from these disparate views on the existence of gender differences in reputation gossip can be readily resolved when a distinction is made between potential mates reputation gossip and sexual rivals reputation gossip. Our theory, which is in line with the thinking of Campbell (1999, 2004) and Hess and Hagen (2002, 2006a, b), predicts that gender differences in receivers' interest in sexual rivals reputation gossip are to be expected. Our theory does not, however, lead to predictions of any gender differences in interest when it comes to potential mates reputation gossip, which fits the findings of Levin and Arluke (1985) and Power (1998). Furthermore, we suggest that, although men and women may be equally drawn to reputation information about potential mates, they are interested in different topics of gossip.

Gender Differences in the Topics of Reputation Gossip about Potential Mates and Sexual Rivals

Men and women have been shown to have different preferences for traits in potential mates (Buss 1989, 1994; Buss and Schmitt 1993; Symons 1979), and we expected that these differences would be reflected in potential mates reputation gossip and sexual rivals reputation gossip. To explain this theoretical advancement, it is useful first to review these gender differences in preference, accompanied by the evolutionary underpinnings that are proposed to have led to their development.

Evolutionary theories on gender differences in mate preferences focus on the distinct adaptive problems men and women have needed to solve. With respect to mating, one of the most central themes to women's behavior is that they must act in ways that do not undermine the fact that there is a high cost of investment in pregnancy and childcare. Due to biological differences, women have fewer reproductive opportunities than men do, and, on average, women make higher levels of parental investment than men do (Trivers 1972). As Trivers (1972) outlined in his sexual selection theory, the sex with the highest levels of parental investment is the choosiest sex in most living species. In humans, this difference is especially true in the context of short-term relationships, where women indeed seem to be far choosier than men (e.g., Li et al. 2002; Li and Kenrick

2006). In the context of long-term relationships both men and women are choosy, but many studies have shown that gender differences in mate preferences remain. For instance, the cross-cultural study of Buss (1994) has shown that, overall, women generally rank traits such as access to resources and willingness to commit to and invest in a relationship, higher than men do. Also, when the number of traits that one could deem as desirable in a potential partner are limited, women more than men tend to opt for traits that signal wealth and status (Li et al. 2002). This preference is to be expected, given that women's substantial investment in child care would come at the expense of their ability to secure their own resources.

Although men do not invest as heavily in children as women do, evolutionary psychology indicates they still face dilemmas with respect to their reproductive success. One critical issue is paternity certainty; if men unknowingly invest in a child who is not biologically related to them, then they have misallocated their time, energy, and resources. Thus, due to the possibility that they could be deceived into investing in a biologically unrelated child, it may be advantageous for men to invest only a minimal level in numerous relationships. In terms of biological costs and benefits, it is less costly, and highly beneficial, for men to date multiple women. Indeed, research has shown that men desire more sexual partners than women do over time (Buss and Schmitt 1993; Miller and Fishkin 1997; Schmitt et al. 2001). This finding does not necessarily imply that men are willing to date just any woman; instead, men are quite choosy about potential mates. When asked to list desired traits, men place a higher premium than women do on youth and physical attractiveness (Buss 1994). These preferences signal the reproductive capacity of women, as younger women have higher reproductive value (i.e., they have a higher probability of producing children) than older women do. Also, attractiveness correlates positively with health (Shackelford and Larsen 1999) and with overall reproductive potential because healthy individuals may be more capable of producing and caring for children.

These gender differences in preference lead to intriguing predictions for interest, and subsequent recall, of gossip content. Because women tend to desire wealthy men and men tend to desire attractive women, it can be predicted that men would have higher levels of recall for potential mates reputation gossip when it is about a woman and contains information about her physical appearance, as compared to information about her wealth status. We predicted that women would have higher levels of recall for potential mates reputation gossip when it is about a man and contains information about his wealth status, as compared to information about his physical appearance.

Similar expectations can be derived for men's and women's interest in reputation information about same-sex

competitors. Because men generally have high standards for women's attractiveness and consider physical appearance important, women should pay more attention to this characteristic in same-sex rivals and relatively less attention to rivals' wealth status. Similarly, due to women's tendency to have high standards pertaining to men's wealth status, men should pay more attention to this characteristic in same-sex rivals, as compared to their rivals' physical attractiveness. Buss and Dedden (1990) have indeed found that, in times of same-sex conflicts over the access to other-sex individuals, women are more likely than men to derogate competitors on their physical appearance whereas men are more likely than women to use information about the wealth status of a competitor in their derogation acts.

In sum, from both the perspectives of potential mates reputation gossip and sexual rivals reputation gossip, it follows that women's physical appearance is likely to be a prevalent subject of reputation gossip, as is men's wealth status. We predicted that men would show increased interest, as measured by recall, in reputation gossip about the physical attractiveness of women so that they could learn who would be a good potential mate (i.e., potential mates reputation gossip). However, we expected that women would value the same information, but not to learn who is a good potential mate; instead they would benefit from learning who is a threatening rival (i.e., sexual rivals reputation gossip). In addition, we predicted that women would pay more attention to information about cues that signal the wealth status of men so that they could learn who is a good potential mate (i.e., potential mates reputation gossip). Finally, we expected that men would value the same information, but not to learn who is a good potential mate. Instead they would learn about threatening same-sex rivals (i.e., sexual rivals reputation gossip).

The Effect of the Subjects' and Receivers' Relationship Status on the Appeal of Reputation Gossip about Potential Mates and Sexual Rivals

Are individuals who are currently uninvolved in a romantic relationship (i.e., single) interested in reputation information about potential mates and sexual rivals? If so, is this interest retained when an individual becomes engaged in a long-term relationship? Theories on infidelity and mate poaching suggest that both types of mating reputation gossip are of interest to individuals independent of their own relationship status.

First, as outlined above, single individuals may profit from both potential mates and sexual rivals reputation gossip. From a theoretical perspective, people should not stop their search for potential mates once they enter into a committed, long-term relationship. A relationship may

abruptly come to an end, due to death, infidelity, or abandonment, and it would be beneficial to have a sense of the availability of potential mates. Therefore, we propose that potential mates reputation gossip should be of interest to individuals regardless of their own relationships status. Also, given that a mate may form an extradyadic relationship, this type of gossip could be useful for ascertaining the possibility that one's mate has been unfaithful and is now being considered as a potential mate by someone else. Infidelity by men and women occurs for various reasons, including a desire for multiple mates, revenge, and to engage in potential mate switching (e.g., Buss and Schmitt 1993; Gangestad et al. 2002; Grammer et al. 1997; Schmitt et al. 2001). Many individuals become emotionally distressed or experience feelings of jealousy when they think that their partner has been, or might be, unfaithful (e.g., Buss 1994, 1999, 2000; Symons 1979). Hence, we argue that, because infidelity exists, potential mates reputation gossip remains relevant for individuals, even when they are in a committed, long-term relationship. We, therefore, assume that the relationship status of the receivers of potential mates reputation gossip does not affect their interest in that gossip.

Second, evidence indicates that, in their search for potential mates, humans do not restrict their options only to those individuals who are not in a committed relationship. Mate poaching is a possibility that places an established relationship at risk (Schmitt and Buss 2001; Schmitt et al. 2004). Individuals involved in committed relationships are aware that others might want to attract and steal their mate (Buss and Shackelford 1997). According to Schmitt et al. (2004), mate poaching is a behavior that occurs universally. In a cross-cultural study in 53 nations, spread over 10 world regions, anonymous surveys were used to collect data about people's experiences with romantic attraction. Schmitt and colleagues found the existence of mate poaching in each of these world regions for both men and women. If it is true that poaching is universally present in the mating strategies of both men and women, we can assume that the relationship status of those who are gossiped about, as well as the relationship status of the receivers of mating reputation gossip, does not affect the appeal of this type of information.

The Present Study

Based on the theories we outlined above, we have derived the following list of predictions that were tested in the present study. Note that the present study relies on the use of a recall task, so the predictions are thus accordingly framed with respect to the expected results on this task. Further note that we used stories about fictional characters, and, for clarity, we use the term 'character' here, although

these characters are meant to represent the subjects of gossip.

First of all, with respect to the possible gender difference in interest, we predicted that no gender differences would be found in the recall rates of male and female receivers of potential mates reputation gossip about other-sex characters, because this type of reputation information is equally relevant for men and women. Thus:

Hypothesis 1a : Recall rates of female receivers of potential mates reputation gossip about male characters = recall rates of male receivers of potential mates reputation gossip about female characters.

Next, regarding reputation information about same-sex competitors, we did expect to find gender differences in interest, with a higher interest among female receivers. As suggested by Campbell (1999, 2004) and Hess and Hagen (2002, 2006a, b), women more than men use verbal aggression during interpersonal conflict. Consequently, we assumed that women more than men would pay attention to reputation information about same-sex competitors because they can use this information in future verbal derogation of these persons. Therefore, we predicted that:

Hypothesis 1b : Recall rates of female receivers of sexual rivals reputation gossip about female characters > recall rates of male receivers of sexual rivals reputation gossip about male characters.

Second, although men and women might be equally interested in reputation information about potential mates, they might pay attention to different types of content. Research on gender differences in desires (Buss 1994) has shown that, on average, women place more importance than men do on the wealth status of potential mates. In contrast, men place more importance than women do on the physical attractiveness of a potential mate. Based on this prior research, we expected that women would be more interested in potential mates reputation gossip when it pertains to a man's wealth status, as compared to his physical attractiveness. Likewise, we expected that men would show higher interest in potential mates reputation gossip when it pertains to a woman's physical appearance, as compared to her wealth status. Also, with respect to interest in sexual rival reputation gossip, these findings led us to expect that women would be more interested in information about other women's physical appearance than in information about her wealth status. Similarly, we expected that men would be more interested in information about another man's wealth status than in information about his physical appearance. Thus, we predicted the following.

Hypothesis 2a : Independent of the receiver's sex, for mating reputation gossip with cues that signal physical attractiveness, recall rates would be higher for female than for male characters.

Hypothesis 2b : Independent of the receiver's sex, for mating reputation gossip with cues that signal wealth status, recall rates would be higher for male than for female characters.

Lastly, due to the frequent occurrence of infidelity and mate poaching, we assumed that individuals continue to search for potential mates and potential same-sex competition regardless of whether they are single or in committed relationships. More specifically, we predicted the following.

Hypothesis 3a : Single and committed receivers would be equally interested in potential mates reputation gossip about both single and committed other-sex characters.

Hypothesis 3b : Single and committed receivers would be equally interested in sexual rivals reputation gossip about both single and committed same-sex characters.

Method

Participants

The experiment involved 84 Belgian undergraduate students, who volunteered to participate. The participants were recruited on campus, and received a small gift (music single) to take part in this study. In total, 22 men and 62 women participated, all of whom self-reported a heterosexual orientation. Their mean age was 19.45 years ($SD=1.68$). Of the 84 participants, 44 reported that they were single and 40 reported themselves to be in a committed, long-term relationship at the time the experiment was conducted.

Materials

The gossip stories were presented on paper to the participants. Thus, every participant received a four-page booklet with 14 mating reputation gossip stories about 22 characters. All imaginary gossip stories were presented as though they were about 'soon to be colleagues'. That is, the instructions asked the participants to imagine that they would soon be employed at an office where they would have to cooperate with several new colleagues. They were further instructed to imagine that an office co-worker took them to an informal party where most of the new colleagues

were present. This co-worker then told them some reputation information about each new colleague, and the stories were presented as a conversation.

The booklets were given to participants to read, and they were allowed between 10 and 15 min, depending upon how quickly they read all the stories. Next, the participants were distracted with a survey that contained questions about their personal and social life. This distracter task took participants approximately 25 min to complete. At the end of the survey each respondent received a personal number to remember. We informed them that they had to remember this number because we would organize a lottery to win a prize as a reward for participation. It should be noted that no lottery was held, but instead, each respondent received a small gift.

To rule out biases in recall because of the order wherein the gossip stories were presented, we distributed four different versions of the gossip conversation. In each condition all 14 stories and 22 characters remained the same, but the order of presentation was shuffled. Each gossip story was given a number, and these numbers were shuffled four times to determine the order for each session.

Procedure

To measure interest in different types of reputation information, we made use of free recall measurements. It has been shown that interest and free recall rates positively correlate (Schiefele and Krapp 1996), such that higher recall indicates higher interest.

At the start of the session, oral instructions informed participants that the experiment consisted of two related sessions. They were told that they would first have to read some stories, and then fill out a questionnaire about their personality and social life. We then told them that we were investigating how the act of reading certain types of information impacts people's ability to complete questionnaires and that another group would get different information to read. They were not at all aware that the experiment involved a recall test about gossip stories, and only at the end of the session were they informed about the scope of the experiment.

After these oral instructions, the booklets were given to participants to read. The booklets were collected after 10 to 15 min, and at that time the distracter survey were distributed. Thirty minutes after the booklets were taken away, and all participants had completed the distracter tasks, the participants were informed about the recall test, and the fact that their personal number was needed for this task. We then distributed blank sheets on which participants had to record their personal number, and all the information they recalled from reading the booklets.

For each of the 22 characters in the gossip stories, we coded whether the participants recalled any reputation information or nothing at all. We also coded whether participants recalled detailed traits for any of the presented reputation information. We only coded correctly recalled information, such that if a participant incorrectly recalled information, it was not included. As a result, our analyses include two measures: Whether the participant recalled any information and whether they recalled particular traits.

Results

We first tested our predictions regarding the possible gender differences in recall for both potential mates and sexual rivals reputation gossip. We predicted gender differences to occur in the recall of sexual rivals reputation gossip about same-sex characters, but no gender differences to occur in the recall of potential mates reputation gossip about other-sex characters. To test this prediction, we looked at all 682 cases wherein a female respondent ($n=62$) could recall any reputation information about a male character ($n=11$). The descriptive statistics of this data showed 481 actual hits: The female participants' recall rate of reputation information about male characters was 70.5%. Next we looked at all 242 cases where a male respondent ($n=22$) could recall any reputation information about a female character ($n=11$). We counted 150 actual hits: The male participants' recall percentage is 62.0%. Thus, the men's recall rate of potential mates reputation gossip was slightly lower than the women's rate, but the difference is not significant ($p>.05$; all significance tests performed using the "Statistica Other Significance Tests for Difference Between Two Proportions",¹ see Table 1). Thus, Hypothesis 1a is supported.

When we examined the results for gender differences on the recall of sexual rivals reputation gossip (Hypothesis 1b), we noticed that of all 682 cases wherein a female respondent ($n=62$) could recall any reputation information about a female character ($n=11$), there were 499 actual hits (73.2%). Of all 242 cases where a male respondent ($n=22$) could recall any reputation information about a male character ($n=11$), we counted 146 actual hits, which is a recall rate of 60.3%. We used a proportion test and found that the female receiver's recall is significantly ($p<.05$) higher than the male receivers' recall (see Table 1).

To test whether men and women focus on different information when reputation gossip is about a woman or a man, we compared detailed reputation information about

¹To test the significance of the observed gender differences in the recall of mating reputation gossip, we used a proportion test offered by the Statistica program. This form of significance testing has been recognized as reliable and stable (Spiegel 1972).

Table 1 Gender differences in recall rates of potential mates reputation gossip and sexual rivals reputation gossip about a male/female subject.

Type of mating reputation gossip	Gender subject	Gender respondent	Positive recalls, count (%)	Total, count (%)	Sig. ^a
Potential Mates Reputation Gossip	Male	Female	481 (70.5)	682 (100.0)	.05
	Female	Male	150 (62.0)	242 (100.0)	
Sexual Rivals Reputation Gossip	Female	Female	499 (73.2)	682 (100.0)	.002
	Male	Male	146 (60.3)	242 (100.0)	

^a Computed with statistical other significance tests for difference between two proportions

two particular characters, one of each sex. The presented mating reputation gossip information about these characters was similar; both were described as young, attractive, and social. They were further described as prestigious graphical designers for the company, so that their job served as a cue for wealth status. We predicted that cues of physical attractiveness would be recalled more for the female than for the male character and that wealth status cues would be recalled more for the male than for the female character.

To test Hypotheses 2a and 2b, we selected all participants who had recalled any correct information about the male character (general hits, $N_1=42$ of a total $N=84$). Then, we recorded what percent of this sub-population correctly recalled that the male character was a graphic designer (as a cue for wealth status) and what percent correctly recalled that he was attractive (as a cue for physical attractiveness). Afterwards, we performed the same analysis for the female character (which yielded $N_2=76$ general hits of a total $N=84$). We again recorded what percentage of this sub-population correctly recalled that she was a graphic designer and what percentage recalled that she was physical attractive.

The wealth status cue was recalled by more participants for the male character (45.2% of $N_1=42$) than for the female character (28.9% of $N_2=76$), but not significantly so ($p=0.08$). However, the proportion of recall for the physical attractiveness cue did yield significant difference.

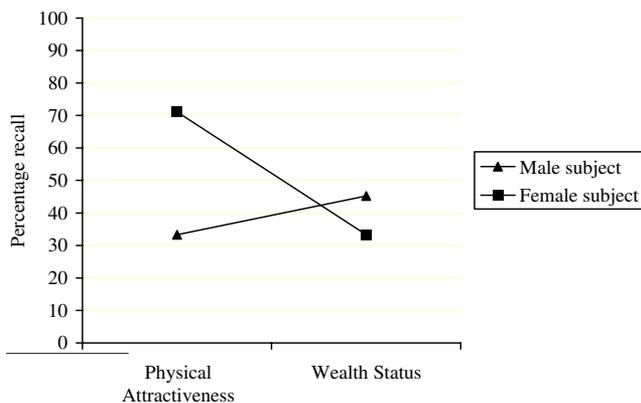


Fig. 1 Percentage recall of cues to physical attractiveness and wealth status for a male and female subject of mating reputation gossip.

Of all $N_2=76$ participants who recalled any correct reputation information about the female character, 71.1% remembered that she was physical attractive, whereas only 33.3% of all $N_1=42$ participants recalled that the male character was physically attractive ($p<.001$). An overview of this information is presented in Fig. 1.

Finally, we turn to the Hypotheses 3a and 3b, in which we predicted no influence due to the relationship status of either the receivers or the characters of the stories. We did not find any significant differences ($p>.05$; chi-square test) for single and committed, male or female, participants in their recall of potential mates reputation gossip about single or committed other-sex characters (see Table 2). An overview of the results for the differences between single vs committed participants' interest in either single or committed other-sex characters is presented in Table 2. From these results we conclude that the relationship status of the participant does not affect his or her recall of potential mates reputation gossip, as we predicted in Hypotheses 3a and 3b.

To test the influence of the characters' relationship status on the recall of potential mates reputation gossip, we examined: (1) the difference between single male participants' recall about single female characters, and single male participants' recall about committed female characters; (2) the difference between committed male participants' recall about single female characters, and committed male participants' recall about committed female characters; (3) the difference between single female participants' recall about single male characters, and single female participants' recall about committed male characters; and (4) the difference between committed female participants' recall about single male characters, and committed female participants' recall about committed male characters. All of these comparisons resulted in non-significant ($p>.1$, using a proportion test) differences, which indicates that the relationship status of the character does not affect people's recall of potential mates reputation gossip, as we predicted in Hypotheses 3a and 3b.

Similar results were found for the impact of relationship status on the recall of sexual rivals reputation gossip. We used chi-square tests to explore whether there were any differences between single and committed male partici-

Table 2 The effect of relationship status of receivers and subjects of potential mates reputation gossip on recall rates.

Gender respondent	Gender subject	Relation status subject	Relation status respondent	Positive recall, count (%)	Total, count (%)	Chi-square	Sig. ^a
Male	Female	Single	Single	32 (61.5)	52 (100.0)	.24	.66
			Committed	24 (66.7)	36 (100.0)		
Male	Female	Committed	Single	55 (60.4)	91 (100.0)	.03	.87
			Committed	39 (61.9)	63 (100.0)		
Female	Male	Single	Single	85 (68.5)	124 (100.0)	.98	.42
			Committed	78 (2.9)	124 (100.0)		
Female	Male	Committed	Single	163 (75.1)	217 (100.0)	.75	.45
			Committed	155 (71.4)	217 (100.0)		

^a Exact two-sided, computed with chi-square test

pants' recall about single and committed male characters, and in recall between single and committed female participants recall about single and committed female characters. None of these differences are significant (see Table 3 for an overview), which indicates that the relationship status of the receiver does not affect the recall rates of sexual rivals reputation gossip, as we predicted in Hypotheses 3a and 3b.

Last, we examined the impact of the character's relationship status on sexual rivals reputation gossip. We compared: (1) the difference between single male participants' recall about single male characters, and their recall about committed male characters; (2) the difference between committed male participants' recall about single male characters, and their recall about committed male characters; (3) the difference between single female participants' recall about single female characters, and their recall about committed female characters; and (4) the difference between committed female participants' recall about single female characters, and their recall about committed female characters. All these difference are again non-significant ($p > .1$, using proportion test), which indicates that the relationship status of the character does not affect the recall rates of sexual rivals reputation gossip, as predicted in Hypotheses 3a and 3b.

Conclusion

Although many people indulge in the act of gossip on a daily basis, and casual observation suggests that it is a regular feature of popular media, empirical scholarly research on gossip has been limited. Gossip is a complex, multifaceted and broad topic, which has been detrimental to its scientific exploration (Foster 2004; Wert and Salovey 2004). In this article, we focus on some aspects of this complex phenomenon in an attempt to bridge the gap between popular and scientific interest in the phenomenon of gossip. One way that we created this bridge was to provide a language with which researchers can use to isolate specific parts of gossip for further exploration. More specific, we opted to analyze gossip that is specific for romantic attraction.

Our results indicate that gender differences in the recall of potential mates reputation gossip do not occur, as we predicted, based on the earlier research by Power (1998). Men and women showed equal interest in information about the reputations of other-sex individuals who could be considered as potential mates, which we term potential mates reputation gossip. This finding is of no surprise, as both men and women may benefit by learning, through gossip, about who would be a good potential mate and who

Table 3 The effect of relationship status of receivers and subjects of sexual rivals reputation gossip on recall rates.

Gender respondent	Gender subject	Relation status subject	Relation status respondent	Positive recall, count (%)	Total, count (%)	Chi-square	Sig. ^a
Male	Male	Single	Single	29 (55.8)	52 (100)	.58	.51
			Committed	23 (63.9)	36 (100)		
Male	Male	Committed	Single	55 (60.4)	91 (100)	.03	.87
			Committed	39 (61.9)	63 (100)		
Female	Female	Single	Single	88 (71.0)	124 (100)	.08	.44
			Committed	90 (72.6)	124 (100)		
Female	Female	Committed	Single	164 (75.6)	217 (100)	.59	.26
			Committed	157 (72.4)	217 (100)		

^a Exact two-sided, computed with chi-square test

would not. Thus, we contend that potential mates reputation gossip is an efficient learning mechanism for both sexes, as it saves individuals the costs associated with gaining this information first hand.

Although there are no gender differences in potential mates interest, as measured by recall, there are gender differences in the recall of gossip when it concerns potential sexual rivals. We found that female participants recalled more information about the mating skills of female characters than male participants recalled about the mating skills of male characters. We predicted this gender differences in the recall of sexual rivals reputation gossip because gossip can be a useful tool in future derogation of same-sex rivals (Buss and Dedden 1990; Schmitt and Buss 1996), and, given gender differences in the bases of individuals reputations and mate preferences, the manipulative use of gossip in this manner is thought to be more valuable to women than to men (Hess and Hagen 2002, 2006a, b).

Our results also yielded significant gender differences in recalled content, which are in agreement with research on mate preferences. Cues about physical attractiveness were recalled more for a female than for a male character, whereas cues about wealth status were recalled more for a male than for a female character. These findings indicate that both men and women attend to the attractiveness of women, either to determine their potential mate value or to assess them as threats for intrasexual competition. Likewise, both men and women attend to the wealth of men for the same reasons.

Last, we investigated whether interest in potential mates and sexual rivals reputation gossip is influenced by the romantic relationship status of the individuals gossiped about, or the recipients of the gossip. Our results clearly suggest that relationship status has a negligible effect. In light of research on infidelity and mate poaching, which remain threats to individuals who are involved in long-term relationships, this lack of an effect is to be expected. Moreover, studies on jealousy have shown that both men and women are aware of the existence of infidelity and mate poaching, and thus they actively maintain their relationships (see e.g., Buss 1994, 1999, 2000). The current study provides additional evidence in support of the idea that people in relationships are aware, to some degree, of extradyadic individuals who may serve as potential mates and as threats. This awareness may direct one's attention to the forms of gossip that can function as critical sources of relevant, mating-related, information.

In the present study we focused mainly on the cues of wealth status and physical attractiveness, and we suggested that, based on evolutionary history, women would tend to desire wealthy mates and men would tend to desire physically attractive mates. Of course, desirability or general attractiveness as a mate can be defined by multiple

traits, and it would be interesting for future researchers to replicate our design by manipulating different aspects of individuals' reputations. In particular, it might be fruitful to investigate whether there is a gender difference with respect to recalled information for traits such as fertility, fidelity and childcare ability. These traits are highly relevant in the domain of courtship, and Hess and Hagen (2002) have argued that they are especially vulnerable to indirect aggressions, such as harmful gossip, because it is easy to invent lies about these traits and hard for the target to prove that they are incorrect.

Future researchers could also address the possibility of menstrual cycle effects on the recall of gossip. Fisher's (2004) study of women's judgment of other women's attractiveness has revealed that women tend to be more critical when they are in the high fertility (high oestrogen) stage of their menstrual cycle. In that study, women were asked to rate the attractiveness of other women's faces, and the ratings of women in the highly fertile phase were significantly lower than the ratings of women in the low fertility phase. Thus, it would be intriguing to ascertain if interest in reputation gossip about sexual rivals, as well as potential mates, fluctuates in similar patterns in relation to women's fertility.

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