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Some things are better left unsaid:
A vignette study on gossip triads and affective interdependence

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Abstract

The functions of gossiping are well known. Yet less attention has been given to how relationships in a gossip triad influence people's tendency to gossip. How does a relationship of affective interdependence, like friendship, affect people's goals and motivations to gossip? And especially: which relations make people refrain from gossiping? In this online vignette study, the participants (n=123) were presented with hypothetical situations for which they were asked if they would share negative information about the gossip object. Relationships between the object, sender and receiver of a gossip item were manipulated to investigate possible differences in behaviour. Furthermore, open questions were asked to reveal why people do and do not gossip and whom they prefer to gossip with and about. Data were analysed with Repeated Measures ANOVA (Analysis of Variance) and thematic analysis. Results showed that people prefer not to gossip about their friends because of the possible risk of hurting them or losing their friendship. People are more likely to gossip about an acquaintance because of the emotional distance of the relationship. Gossiping about the friend of the receiver is also less likely; yet only in the leisure context and not in the workplace. When people do gossip, they prefer to do this with their friends since they trust them and can get good advice about the situation. When these dyads get combined, differences appear between the leisure and workplace social contexts. This paper concludes that gossip behaviour has a great variety of motivations. Gossip motivations depend on how the people of interest are related to each other and in what context the interaction takes place.

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Chapter 1 – Introduction

"Have you heard it already?". It is safe to say that people gossip almost every day. To have fun, to vent their feelings, or to be critical of someone's behaviour. To set straight a common misconception: gossip can be negative in nature, but it can also be positive or neutral (Ellwardt et al., 2012a). Choosing how to share the information one holds about others can help people control their social surroundings. More and more gets discovered on how gossip as valuable knowledge is a powerful tool to help or hinder cooperation (Rosnow & Fine, 1976). Research often focuses on the workplace as a place where gossip has many effects. The consequences of negative gossip at work can have great implications for productivity in the organisation (Ribeiro & Blakeley, 1995; Wittek & Wielers, 1998). When people misuse gossip to their own advantage and bring others down, cooperation is far from being achieved (Einarsen, 2000). Luckily, having to work together can also contribute to sharing positive gossip about each other to benefit cooperation and friendship (Elward et al., 2012a; Kniffin & Wilson, 2005; Rosnow & Fine, 1976). Furthermore, individuals gossip with each other to evaluate the behaviour of the people around them and determine whom they think is worthy to have in their lives (Beersma & Van Kleef, 2012; Burt, 2008; Kniffin & Wilson, 2010). Thereby, gossip is a powerful way to punish people who behave out of line (Feinberg et al., 2012ab). Gossip thus proves to be very useful in everyday life.

Where much is known about the functions of gossip, less is known about the way the relationships between gossip actors influence the motivations to gossip. There are three parties involved in gossip: a sender, a receiver and an object. These three parties are also called a gossip triad. For this study, gossip is defined as "sharing evaluative information about an absent third party that the sender would not have shared if the third party were present, and which, according to the sender, is valuable because it adds to the current knowledge of the receiver" (Giardini & Wittek, 2019a). Gossiping is often portrayed as a one-sided act that requires little effort (Dunbar, 2004; Taylor, 1994). Yet, having a certain relationship with the receiver or the object can motivate the sender to think twice about whether it is wise to gossip or not (Giardini and Wittek, 2019a). There are instances when people hear gossip about a friend; this friend has not complied with some social norms. But they would not feel urged to share this with others because they consider their friend to be vulnerable as the object of gossip. Therefore, this friend's reputation is in danger (Michelson et al., 2010). The friendship brings them joy and support and they do not intend to hurt the other person, so they refrain from gossiping. This friendship is perceived as an affective interdependent relationship: a relationship where the actors are committed to each other and will therefore affect each other's goal achievement (Agnew et al., 1998; Molm, 1994). People in such a relationship care for each other's well-being; if, for instance, one feels bad, this might affect the other. Because of the consequences that affective interdependence brings about, people would make a cost-benefit consideration of whether it is wise to gossip or not. Which goal does the sender have concerning the object and the receiver?

Goal-framing theory (Lindenberg, 1997; Lindenberg & Steg, 2007) can be applied to analyse the decisions about whether to gossip or not. The goal-framing theory focuses on what motivates people to behave in a certain way. It is based on the idea that there are three types of goal-frames: hedonic, gain and normative (Lindenberg, 1997; Lindenberg & Steg, 2007). The hedonic goal-frame is about the present feeling of someone; the gain goal-frame is about future resources and the normative goal-frame focuses on whether to act appropriately in the eyes of others. Gossiping is known to be something linked to the hedonic goal-frame since it can deliver immediate satisfaction (Foster, 2004; Lindenberg & Steg, 2007). But with affective interdependent relationships in a gossip triad, the other goal-frames might come into play. In general, we see that the more people are dependent on each other, the more attractive it is to act socially appropriate (Tomasello & Vaish, 2013; Milinski, 2016). So, people might protect others from the negative consequences of gossip and therefore behave out of the normative goal-frame. Behaving out of the gain goal-frame could, on the other hand, allow people to use gossiping or refraining from it for their own benefit. Goal-frames often overlap when people make decisions and this would also be the case with gossiping. Knowing which goal is salient in which situation can tell more about how people would likely react when they have access to valuable information about someone. What if, as a potential sender, the person whom the information is about, is their close friend? What if the receiver is their close friend? And what would one do if the receiver and the object were friends? This study aims to answer these questions and fill the lack of knowledge about the conditions under which actors decide to refrain from gossiping. Following the reasoning above, the overarching research question is formulated as follows:

How will affective interdependence between the parties in a gossip triad affect the likelihood that the sender will gossip and what are the motivations for this behaviour?

The inspiration for this research is gained from the article "Silence is golden. Six reasons inhibiting the spread of third-party gossip" by Francesca Giardini and Rafael Wittek (2019a). In their research, they analytically reconstruct why senders would refrain from gossiping about someone in the workplace by composing six propositions. This research will review and test the affective interdependence propositions developed by Giardini and Wittek, with the aim of contributing to the literature on gossip and social interaction. The thesis is structured as follows: In Chapter 2, the theories around gossip, affective interdependence and goal-framing are reviewed to formulate specific hypotheses on the research question. Chapter 3 will present how a vignette study is a suitable method for this study. In Chapter 4 the results of the study will be presented by making use of the Repeated Measures ANOVA and thematic analysis. In Chapter 5, the research question will be answered, the study methods will be reviewed and advice for future research will be given. In the appendix, one can find a complete analysis of the measurements, data and all other relevant documents.

Chapter 2 - Theory

2.1 What is gossip and why do people gossip?

2.1.1 Defining gossip

Gossip can be defined in many ways. For example, "conversation or reports about other people's private lives that might be unkind, disapproving, or not true (Cambridge Dictionary, 2022)", or "informal conversation, often about other people's private affairs (Collins English Dictionary, 2022)". These definitions lack two important details: (1) the fact that gossip information is valuable and (2) the fact that the information will not be shared in the presence of the gossip object. Therefore, this study defines gossip as: "sharing evaluative information about an absent third party that the sender would not have shared if the third party were present, and which, according to the sender, is valuable because it adds to the current knowledge of the receiver" (Giardini & Wittek, 2019b). As stated in the introduction, there are three parties mentioned in this definition:

- A potential gossip sender is someone who is in possession of information about someone and has the choice to either share this information with someone or keep it for themselves.
- A gossip receiver is someone who hears information about an object from a sender.
- A gossip object is the person whom the gossip information is about.

If there are only one sender, receiver and object, this is seen as a gossip triad. In real-life situations, there are also cases in which there are more people involved. Nonetheless, gossip is often shared between only two people and is done in person (Dores Cruz et al., 2021b). How the people in a gossip triad are connected is of main interest to this study. But before further analysing this matter, a further understanding of how norm violations and reputations work in relation to gossip is needed.

2.1.2 Norm violation and reputation

If gossip entails negative content, this often results from the object not having complied with certain social norms (Dores Cruz et al., 2021b; Smith, 2010). For instance, when someone makes a misplaced hateful comment or is always late for meetings. When the object does not act appropriately, the violator shows that they are egoistic and are less focused on the people around them. Since others can see them as a threat, risk, or danger; gossip can alter the reputation of the norm violator in a negative way (Burt, 2008). People with a bad reputation are generally less trusted and liked. Pointing out norm violators by gossiping can be a way to punish them (Feinberg et al., 2012a; Tybur et al., 2020).

One's reputation is defined by what others think of them and not only by their actions. From a young age on, people are aware of how the concept of reputation works and are able to gossip in benefit of their own reputation (Ingram, 2019; Shinohara et al., 2021). Learning how norms work is of great importance for knowing which behaviour might come across as bad or good (Kisfalusi et al.,

2019). Gossiping is a very useful way to learn about norms; showing people how to behave in an appropriate way and knowing what the consequences are if they don't (Barkow, 1992; Baumeister et al., 2004). But one has to be careful since gossip itself can be seen as a norm violation. Yes, gossiping is something ubiquitous (Dunbar et al., 1997; Emler, 1994), but it is not always approved and is often seen as a negative trait of someone (Turner et al., 2003). Being a gossipmonger can lead to having a bad reputation and being a less trusted person (Elward et al., 2012a; Adams & Mullen, 2012). To take some examples from children's classrooms: when one's friends are targeted with negative gossip, people react in a disapproving way (Caivano et al., 2021; Caivano & Talwar, 2021). But when the gossip sender was sharing negative information to protect someone, this was approved (Caivano et al., 2021). Concluding; norms, reputation and gossip cannot be seen as separate entities as they continuously interact with each other. When personal relationships are added to the equation, this makes gossip an even more complex concept.

2.1.3 Cheating

For this study, a certain norm violation is of interest: cheating in a romantic relationship. The information is set to be negative and true: *The possible sender Robin saw the object Charlie making out with someone while Charlie is in a serious relationship with someone else*. Cheating is broadly seen as anti-social behaviour and thereby a norm violation (Boon et al., 2014; Lieberman, 1988). And although norms and values can differ between people, this is something most people agree on. This is because people in a relationship make certain agreements and if these are broken, people around them can see that they have acted out of the norms in the relationship (Grunt-Mejer & Campbell, 2015). Getting caught cheating can in the first place harm the romantic relationship of the object and in the second place harm their reputation. Therefore, this gossip content is valuable to the receiver: they can now influence the romantic relationship of the object and know more about their reputation.

2.2 Affective interdependence and goal-framing theory

2.2.1 Affective interdependence

Previous sections have made clear what role gossip plays in everyday life and which use it has, thereby uncovering why people would gossip in the first place. What has been given substantially less attention is the influence of the relationships in the gossip triad on the sender's motivation. Gossip does not exist in a social vacuum; the people in a gossip triad are connected in a certain way and this will influence the way they gossip and out of what motives they act (Estévez et al., 2022). Network studies on gossip have been carried out before, yet they often did not take the whole gossip triad into account and just focused on a part of it (Burt, 2001; Elward, 2012ab; Estévez et al., 2022; Grosser et al., 2010; Kisfalusi et al., 2019). This study takes a specific look at the differences in gossip behaviour in case the people in a gossip triad are either close to each other or not. The proper term for this

closeness is affective interdependence. Affective interdependence is defined as: situations where people have committed relations and will therefore affect each other's goal achievement (Agnew et al., 1998; Molm, 1994). People who are known to have strong affective-interdependent relationships are, for instance, friends, family and romantic partners. These kinds of people care for each other's well-being, feel each other's happiness or pain and know each other through and through. On the other side, there are relations that people do not affectively depend on, like friends of friends, distant family members and acquaintances. One could easily spend their days without this person in their life. Having a strong or weak affective interdependent relationship can also be compared to having either strong or weak ties (Granovetter, 1977). This study looks at the specific comparison between close friends and acquaintances.

When people are affectively dependent on each other, emotions play a big role in their relationship and therefore also in their gossip behaviour. Emotions help people to make indications about how to react in social situations and help to manage the experiences of life (Forgas, 1995; Lazarus, 1991; Wethington & Oatley, 1992). Martinescu (2019) states in her paper on gossip and emotions: "Emotions are likely to both shape and result from the transmission of gossip". For instance, seeing someone violating norms can lead to feelings of anger and distrust and this will turn into a feeling of protection over others who might get hurt by the actions of the violator (Feinberg et al., 2012ab; Beersma & van Kleef, 2012). Emotions help people to handle their problems with others and contribute to the management of relationships (Wethington & Oatley, 1992). To come to an understanding of how affective interdependence influences people's emotions and gossip motivations, goal-framing theory will be applied (Lindenberg, 1997; Lindenberg & Steg, 2007). Because being interdependent is characterised by influencing each other's goals, using a theory where goal achievement is central will give useful insights.

2.2.2 Goal-framing theory

The goal-framing theory is based on the idea that individual behaviour can be explained by the presence or prevalence of one or more of three different goal-frames: *hedonic*, *gain* and *normative* (Lindenberg, 1997; Lindenberg & Steg, 2007). The theory has been applied to different contexts, from unwavering why people do not behave environmentally friendly (Lindenberg & Steg, 2007), to why people do participate in criminal affairs (Keizer et al., 2008). Giardini and Wittek (2019a) used goal-framing theory to explain gossip motives in the context of interdependence. In the following paragraphs, the three frames are given individual attention in the context of gossip and affective interdependence.

Hedonic goal-frame

The hedonic goal-frame is about the present feeling of someone, is easy to fulfil and is often linked to gossiping (Foster, 2004; Lindenberg & Steg, 2007). A good example of behaviour coming from this goal-frame is someone taking another cookie with their tea, although they know they've had enough. Like taking a cookie, gossiping is also known to be something that can deliver immediate satisfaction and is not demanding (Foster, 2004; Lindenberg & Steg, 2007). People gossip with others because it is fun to do and helps people bond. It is a way for people to escape their daily grind and just have a good time (Beersma & Van Kleef, 2012; Dunbar, 1997; Noon & Delbridge, 1993; Rosnow & Fine, 1976). Achieving the sole goal to have fun can give a feeling of fulfillment and happiness (Frijda, 1986; Martinescu, 2019). Choosing to share information about someone can be done to relieve stress or pressure from the knowledge that the sender holds (Grosser et al., 2012; Waddington & Fletcher, 2005). This venting to balance emotions can be very necessary for the well-being of the sender.

Gossip can be for entertainment, but when the costs are greater than the benefits, one might think twice before speaking up. Acting out of the hedonic goal-frame can lead to harming others without initially realising this or doing it intentionally. Striving for the fulfillment of 'the need to belong' can also cause people to share more: one makes a good impression when they are open to sharing their gossip (Baumeister & Leary, 1995). Emotions, which are primarily hedonic, can easily override moral thinking (Cabanac, 2002). This study states that the motivations to gossip go beyond the hedonic goal-frame when affective interdependent relationships are in place. This is because the consequences of gossiping are generally higher and therefore require the other two goal-frames to act.

Gain goal-frame

The gain goal-frame is about getting resources for oneself in the future (Lindenberg, 1997; Lindenberg & Steg, 2007). For instance, getting an unpaid internship now may help to get a job in the future. An important gain goal concerning gossip is having a good reputation. A reputation is not something volatile: behaving well and pro-social is an investment in appearing trustful and likeable in the eyes of others in the future (Giardini & Wittek., 2019b). Gossiping can, depending on the situation, influence someone's reputation for better or for worse (Adams & Mullen, 2012; Caivano et al., 2021; Elward et al., 2012a; Gambetta, 2006). Therefore, people are likely to gossip so that this will not harm their reputations. Sometimes, even regardless of other people's well-being, as is the case with bullying (Pheko, 2018; Wert & Salovey, 2004).

Furthermore, a gain goal related to affective interdependence is to manage social contacts to make them as fruitful and trustworthy as possible. Keeping friends and relatives close helps to make sure that they can help in times of need. This relationship of reciprocity is of great importance in maintaining an affective interdependent relationship (Granovetter, 1977). To maintain a close relationship, one needs to support others by showing positive behaviour: helping someone out, being

there in times of need, et cetera. Gossiping or refraining from it can help people to protect their close relationships (Feinberg et al., 2012ab; Dores Cruz et al., 2021b) or create new ones which people may benefit from (Dunbar, 1994; Dunbar, 1997). Sometimes, one might need advice on how to handle relationship situations and might therefore gossip about the object (MacKinnon & Boon, 2012; Tovares & Kulbayeva, 2021). This advice can support the sender in approaching the object in a way that benefits them best. Furthermore, making goal progress in a relationship can contribute to a feeling of happiness and satisfaction (Frijda, 1986; Martinescu, 2019). Regarding the reasoning above, using the gain goal-frame could thus help people to gossip so that their affective interdependent relationships stay healthy (Dores Cruz et al., 2021b).

Normative goal-frame

Lastly, there is the normative goal-frame, according to which people have to act appropriately in the eyes of others (Lindenberg, 1997; Lindenberg & Steg, 2007). For instance, giving a seat to a pregnant woman on the train. This goal is the least egoistic of the three frames and in its purest form comes without direct benefit for the sender. Relevant to this frame is the presence of other people judging the behaviour of the person in question. A normative goal related to gossiping is to protect people from the consequences of norm violations. Preventing harm can be done by either informing or helping the receiver of gossip or by punishing the object, e.g., the norm violator. These motivations can be driven by anger stemming from situations of injustice and inequality (Beersma & van Kleef, 2012). Protecting people would qualify as *doing the right thing* and would likely lead to positive judgement from the surrounding people.

On the other hand, one might act out of the normative goal-frame to protect the object from harm that can be done to their reputation. The norm in this instance would be to care for the people around you, even if they may have behaved badly. When others might get hurt, people often feel guilty when they could have done something to prevent it (Weiner, 1985). Deciding not to gossip can help the object and is viewed upon as a good deed. Yet caring for one person in a gossip situation can contribute to negative consequences for others who are involved. These actions can therefore come with costs for the sender. Besides their time and effort, the sender could be at risk of a poor reputation or the loss of relationships.

In general, we see that the more people are dependent on each other, the more attractive it is to act in a socially appropriate manner (Tomasello & Vaish, 2013; Milinski, 2016). Therefore, the above-stated motivations are likely stronger when the people in danger or need are close to the sender. Helping out the people one cares for is something that does not have to be repaid immediately and goes without much hesitation (Amato, 1990). Important to note is the following: presented with the same situation, different people may make different decisions on gossiping. This is because norms

differ between persons and groups, so what one might see as something good to do, others might see differently (Nevo et al., 1993). Doing good might therefore not always lead to the desired results.

Goal-frame overlap

The goal-framing theory accounts for the complexity of real-life behaviour; when people decide how to behave, they often use more than one frame at a time. Besides this, people might not be aware of their decision processes and might therefore not know why they act in a certain way. For gossiping, overlap is often recognised between the norm and gain goal-frame. To explain this, the concept of pro-social behaviour needs attention.

Pro-social behaviour is defined as behaviour where people cooperate and help each other out of altruistic motives (Dovidio & Penner, 2001). A way to pro-socially gossip is, for instance, to target norm-violators by evaluating their behaviour and punishing them accordingly (Feinberg, 2012ab). This contributes to more cooperative living circumstances for everyone involved. Pro-social gossiping is good for others, but many theorists propose that no pro-social act can go without something of self-interest (Lichtenberg, 2010). To add to the example: targeting norm violators in favour of the group will also benefit the gossip sender self. Acting in favour of the group will often result in a better reputation for the sender and can give the sender a good feeling. A better reputation is good for maintaining close relationships and helps to gather new people around one. Following the reasoning of benefiting one's reputation, deciding to refrain from gossiping is an interesting case. When one refrains from gossiping, since they think that this is against social norms, they do not gain a good reputation out of this for acting kindly. Since people cannot appreciate behaviour that they are not able to see. In this instance, it could be a strategic move to avoid possible negative feedback from one's surroundings.

Which frame is salient for gossip behaviour depends on how pro-social the act is and what the cost or benefits for the possible sender are. In general: the larger this personal price is, the more likely it will be that the sender wants to protect themselves instead of helping someone else (Giardini and Wittek, 2019b). Discussing these examples has made clear that gossip motivation is very dependent on small changes in the context of the situation (Giardini & Wittek, 2019b). The upcoming paragraphs will focus on the three dyadic relationships of the gossip triad that are present between the sender, object and receiver. What will the strength of each relationship tell us about the motives for gossip in play and which goal-frames are expected to be salient in each situation?

2.3 Relationship sender-object

This study proposes that a possible sender would more easily gossip about an acquaintance than about someone close to them. The main motive for doing so can be found in the normative goal-frame. Close friends or relatives can nourish a feeling of protection for one and a potential gossip sender would not want to act in a way that can hurt their loved ones (Dubois et al., 2016; McAndrew et al.,

2007). Someone would, for instance, not spread any information that could ruin a close friend's reputation, even when their acts can have severe consequences (Weidman et al., 2019). Gossiping about people one cares for is generally 'not done' unless there is a valid reason for the sender to share such information (to help them, for instance). Trust guards close relationships and people treat each other the way they like themselves to be treated. The gain goal-frame could play a smaller role in this situation; the possible sender could decide to remain silent because the relationship is important and could benefit them in the future. This relationship of reciprocity is important to maintain to guarantee help and advice from this person in the future (Giardini & Wittek, 2019b). Getting caught can lead to consequences like the loss of the relationship or a decline in the reputation of the sender. So gossiping about close contacts comes with substantial risks for the sender. A social network study by Yucel and colleagues (2021) also found that friendships in a rowing team relate to less gossip about each other.

Gossiping about an acquaintance brings fewer risks than gossiping about a close friend or relative. Gossip tends to be about people the sender has a less valued or even negative relationship with (Ellwardt et al., 2012a; Hess & Hagen, 2021; Wittek & Wielers, 1998). Their well-being matters less to people since they do not depend on them for affection and help. The consequences of gossiping about acquaintances are therefore only small, since there is not much on the line. Getting caught will not do much harm to the relationship in place. Because of these reasons, the normative goal-frame is less important and the hedonic goal-frame could be more salient. The arguments made in this section lead to the following hypothesis:

Hypothesis 1: The stronger the affective interdependence between the potential gossip sender and object, the less likely it is that the possible sender will share negative information about the object

2.4 Relationship sender-receiver

In their article Giardini and Wittek (2019a) state that a cognitive-affective interdependent relationship between the sender and receiver would contribute to less gossip. The theoretical reason for this is set to be signalling; by refraining from gossip, the possible sender would let the receiver know that they do not gossip and thus act appropriately and are trustworthy (Farley, 2011). The focus hereby is on the normative goal-frame, with the increase of the salience of the remedial norm proscribing gossip. Furthermore, they also give attention to the presence of the norm that personal matters should be solved directly with the object and not by sharing the information with others (Ellickson, 1994; Wittek, 1999). Following these norms in the eyes of an acquaintance would be less important than in the eyes of a close contact, which would make it easier to gossip with an acquaintance. Their proposition is formulated as follows:

Proposition 4 (Signalling): Strong cognitive-affective interdependence between potential gossip sender and receivers is likely to increase the salience of remedial norms proscribing gossip. The threat of being sanctioned in case of its violation will temper the inclination to share negative third-party information.

Giardini and Wittek (2019a)

There are multiple possible objections to this proposition. Why would people entrust more information to an acquaintance in comparison to, for instance, a close friend? A close relationship of trust between a sender and receiver is in fact a good base for the opportunity to share gossip (Ellward et al., 2012ab; Yucel et al., 2021). It has been proven that gossip about norm violations often appears between a sender and receiver with a highly valued relationship (Grosser et al., 2010; Hess & Hagen, 2019; Wittek & Wielers, 1998). Firstly, this is because the sender can entrust important information to the receiver, which makes the chance of getting caught smaller. Getting caught gossiping can contribute to having a bad reputation or can lead to conflict between the sender and the object. Therefore, people gossip in ways with a minimal chance of being detected (Giardini & Conte, 2011; Giardini et al., 2019), which makes gossiping with a person one has a close relationship with more appealing. Furthermore, gossiping can help to maintain an affective interdependent relationship. One could share gossip with the receiver to make sure that they also share valuable information about others with them, guarding their reciprocity and the relationship itself (Giardini & Wittek, 2019b). An important condition in this regard would be that the behaviour of the object could hurt the receiver and not exclusively the sender (Caivano et al., 2021). In this way, gossiping helps to improve trust and a strong social bond between the gossipers (Bosson et al., 2006; Ellwardt et al., 2012b; Wittek & Wielers, 1998).

The reasoning above follows the gain goal-frame; yet there are also normative motives which make gossiping with a close contact more likely than with an acquaintance. When a friend or relative is hurt by the norm violation of the object, they could benefit from being informed about this. Also, if they could not get hurt immediately, a sender can inform the receiver about the reputation of the object and thereby protect them from possible harm in the future (Feinberg et.al., 2012b). And as has been made clear, protecting one's close contacts is more important than protecting an acquaintance. Furthermore, including someone in talking about others can also make people feel part of the group and this is something one would do for people who are close to them. Given the arguments stated above, the following hypothesis is proposed:

Hypothesis 2: The stronger the affective interdependence between the potential gossip sender and receiver, the more likely it is that the possible sender will share negative information about the object

2.5 Relationship receiver-object

The relationship between the receiver and the object of a gossip triad is something that has not been highlighted much in previous research. There are theories about how the receiver and sender often both have a negative relationship with the object they gossip about (Estévez, 2022; Wittek and Wielers, 1998). Other researchers talk about the requirement of a similar sentiment towards the object; this might be either negative or positive (Burt, 2001; Burt, 2008).

There are multiple reasons why the sender would refrain from gossiping in case the receiver and the object have an affective interdependent relationship. First, harm can be done to the relationship between the object and receiver by displaying the object in a bad light. Unless the sender deliberately wants to damage this relationship, the sender will likely act out of the normative goal-frame and keep quiet (Giardini & Wittek, 2019b). Furthermore, there are some risks to gossiping about a receiver's close contact and a sender might act out of the gain frame to minimise these risks. The presence of a close relationship between the receiver and the object can lead to the receiver more easily sharing who the sender of the gossip is. Getting caught gossiping will portray the sender's behaviour as anti-social. Aside from having a high chance of getting caught, gossiping about someone's friend or relative will not leave a trustful impression on the receiver (Caivano et al., 2021). In both these instances, harm might be done to the relationships between all people in the gossip triad and to the reputation of the sender (Tomasello & Vaish, 2013). When the object and receiver are only acquainted, there is less that the receiver has to worry about. These arguments conclude with the following hypothesis:

Hypothesis 3: The stronger the affective interdependence between the gossip <u>object and</u>

receiver, the less likely it is that the possible sender will share negative information about the object

2.6 Gossip triad as a whole

Having addressed the dyads separately, it is interesting to inspect how these dyads work together. A gossip situation is a combination of different relationships within the gossip triad: some configurations make it easier to decide whether to gossip or not and some make it more difficult. Gossiping is a dynamic process and the expectations that are set in this theory section can co-exist; one will likely not overrule the other. This study will take one example to describe this matter more thoroughly. Let us, for instance, assume that there is a close relationship between the sender and the receiver. There is to be expected that friends gossip more than acquaintances. But friends may not always decide to gossip independently from how the other parties are related. What if the friend someone wants to gossip to is also a friend of the object? Which motives arise that have not yet been discussed in relation to these dyads?

Exploring how a full gossip triad functions, there is a theory that needs attention: *triadic closure*. The theory of triadic closure focuses on the balance of social relations and proposes that relationships in a triad can either be balanced or imbalanced (Davis, 1976). Balanced triads are characterised by either all positive ties (+++) or one positive and two negative ties (+--). An imbalanced triad is a situation where there is only one negative tie. Arguing for this specific gossip situation, the balanced triad where all actors are positively related is of interest. Guarding the belief that 'the friend of my friend is also my friend' (Granovetter, 1977; Heider, 1958), the possible gossip sender would also care for the well-being of the object. This belief can contribute to the feeling of protection over them and therefore the protection of all relationships in place.

Above-stated arguments give support for not wanting to gossip about a friend's friend. But there are nonetheless motivations to do so, supporting that one existing dyad does not overrule the other and that they suppress each other's effect. One could, for instance, reason gossiping about someone's close contact could be done out of the personal motivation to keep their friend or relative for themselves. In such a situation there would be a certain degree of envy, social undermining and jealousy which finds its source in the gain goal-frame (Pheko, 2018). Knowing that the object has behaved against social norms can be used to bring the object down and thereby devaluate the relationship between the receiver and the object. The following hypothesis is constructed with the expectation that in a situation with more than two affective interdependent relationships, one relationship can moderate the effect of the other:

Hypothesis 4: The positive effect of the strong affective interdependence between the possible gossip sender and receiver on the tendency to share negative information about the object is less strong in the case of a strong affective interdependence between the object and the receiver

2.7 Control variables

2.7.1 Social contexts

The hypotheses will be set in two different social contexts: leisure time and the workplace, since these are the contexts where gossip most often happens (Beersma et al., 2019; Mc. Andrew & Milenkovic, 2002). What kind of difference can we expect between these situations? During their free time, people participate in activities with others, like playing sports and going out for drinks. Gossiping can be seen as something fun to do in an informal setting (Dores Cruz et al., 2021b). Meeting up with friends or acquaintances often leads to chit-chat about what others have been up to. Therefore, people might gossip more in leisure time situations: controlling for this is important to avoid an overestimation of gossip.

The workplace is a more formal context, but the informal network at work is ever so important (Wittek et al., 2000). Having either a good or bad reputation can have a big influence on a

person's performance and well-being inside and outside of work (Burt, 2007; Morrisson, 2004). Therefore, it is important to maintain a good reputation and healthy relationships with colleagues (Baumeister et al., 2004). People would likely act pro-social and share information about others if this could endanger the cooperation in the group (Tomasello & Vaish, 2013). Behaving this way is mainly important in work situations where colleagues are highly dependent on each other (Ellwardt et al., 2012a; Wageman, 1995). This study will focus on co-workers who are not dependent on each other to be able to compare work and leisure time on similar characteristics. Furthermore, when norm violations do happen at work, personal consequences for the object are likely to be higher than in a leisure time situation, since they are at risk of losing their job. So if this object is someone close to the sender, they might more easily refrain from gossiping to protect them.

The results will indicate if the differences in gossip between the leisure and workplace contexts are legitimate and will possibly reveal new insights about their characteristics. The interest also goes out to whether the social contexts might moderate the effects of the different triad configurations on gossip. The conceptual model for this study is given in *Figure 1*.

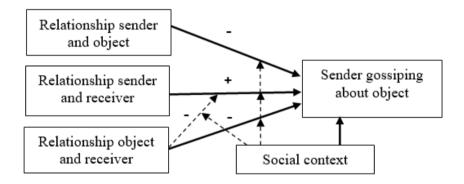


Figure 1: Conceptual model for testing the hypotheses

2.7.2 Demographics

There are only a few reasons to expect that there are differences in gossiping behaviour between people based on demographics and other characteristics (Dores Cruz et al., 2021b; Robbins & Karan, 2019; Levin & Arluke, 1985). Contrary to a lot of common beliefs, research has found that gossip is ubiquitous (Cox, 1970; Litman & Pezzo, 2005). Therefore, the population for this study is *adults in general*, so without certain characteristics. Dutch as well as international people were therefore welcome to participate in the study.

Data on the concepts in *Figure 1* were gathered by making use of a vignette study. The collection was done through an online survey which presented multiple hypothetical gossip situations to the participants. The survey still included questions on demographics (age, education and nationality), yet only to be able to check for heterogeneity. Chapter 3 will describe the data collection in more detail.

Chapter 3 – Methods

3.1 Research design

3.1.1 Studying gossip

Studying gossip is not an easy task. Gossiping is not socially accepted by everyone and can entail secrets which people are not eager to share. When people are asked about their own gossip experiences, participants might react in a socially appropriate way, which leads to biased answers. This issue is something which needs to be looked out for and solved in an appropriate way. This study approaches this problem by making use of a vignette study. This is a study design in which the researcher presents the participants fictional scenarios about the concepts of interest, with the goal to uncover the participant's behaviour and motivations (Hugher & Huby, 2004). The vignette of this study presented the participants with hypothetical social scenarios and they were asked to make decisions about how the people in these situations would behave. In this way, one can learn about people's behaviour and motives without them having to tell anything about their personal life with the risk of socially desirable biases (Constant et al., 1994). To provide proper internal validity (capturing the concepts meant to be measured), this study has thought through all scenarios by making use of relevant literature (Gould, 1996, pp.211-212). Furthermore, it is important that the scenarios appear real (Sim et al., 1998), since more hypothetical scenarios also let the participant respond in a more hypothetical than a real way (Neff, 1979). There are also limitations to using a vignette study. Such as the fact that people might not behave in the way they tell in the vignette survey in real life. This limitation makes capturing people's real behaviour difficult. Furthermore, there is the concern that the vignette is unable to capture the real elements of the social situation in question (Faia, 1980). Still, a vignette study is seen as the most suitable way to study gossip and affective interdependence and the discussion chapter will closely review the quality of the data.

3.1.2 Vignette design

The design of the vignettes is that of a gossip triad with a hypothetical sender, receiver and object. The interest goes out to five different configurations of the triad, which are presented in *Table 1*. The characters in the gossip triad are either very close friends or acquaintances. To the participants, acquaintances are defined as "someone people can also miss in their life" and very close friends are defined as "people one highly depends on for support and affection". Besides the relationships, the social context in which the triad is located is also manipulated; either leisure time or the workplace. In the descriptions of these contexts, there were details about how they know each other (i.e., colleagues or members of a running group) and on what kind of occasions they meet on a regular basis (i.e., after work or after practise drinks).

Table 1- Configurations of gossip triads (vignettes) for both leisure and workplace context

Vignette	nette Description		Description	
O R S 1.	Sender, receiver and object are all acquaintances, not friends.	0 R 8	The receiver is friends with both the object and sender.	
O R S	Only the object and the sender are friends.	0 R S	Only the sender and the receiver are friends.	
O R S	Only the object and the receiver are friends.		cquaintances: ———ery close friends:	

The participants were given all the necessary details to understand the gossip situation in the vignettes. The names that were chosen for the gossip triad in the vignette are *Robin, Charlie* and *Noah* and these are deliberately gender-neutral. Furthermore, there are no personal details about these hypothetical persons. This design is expected to reduce as much biases related to gender roles and stereotypes as possible. It has, for instance, been proven that people tend to gossip more with people of the same age and sex (McAndrew & Milenkovic, 2002; Mc Andrew et al., 2007; Leaperand & Holliday, 1995). Furthermore, the gossip information in the vignettes is about cheating in a romantic relationship. The possible sender *Robin* has seen the object *Charlie* in a cheating situation. It was made clear to the participants that the identity of both Charlie's partner and the person they kissed is not relevant. Robin now has to choose whether to share this with *Noah* or not.

For each of the vignettes, the following question was asked: "If you were Robin, would you tell Noah about Charlie cheating?". Answering possibilities were presented on a five-point Likert

scale from (1) *Definitely not* to (5) *Definitely yes* (later recoded 0-4). There were a total of ten questions: five vignettes in two social contexts. The questions were accompanied by a written description and a visualisation of the relationships in the triad and an icon of the context in which it was placed (e.g., a briefcase for the workplace). *Figure 2* gives an example of a picture that complemented the description.

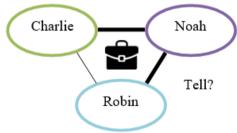


Figure 2: Example of a situation in the survey

3.1.3 Open questions

At the end of the survey, there were three open questions to provide greater access to the motives people hold for their gossip behaviour. The participants were asked: "Please think about the last time you shared negative information about a close friend: why did you do that?". The other two questions capture the reasons why the participants think it is easier to gossip with and about a friend or an acquaintance and why: "What is easier to do and why: to share negative information about/with a close friend or about/with an acquaintance?". These questions are not focused on the vignette characters since this might contribute to non-useful answers. Asking "what would Robin do?" could lead to answers like: "I don't know what Robin would do", or "that depends on what kind of person Robin is". Participants' own motivations, on the contrary, relate to real-life experiences and therefore provide insight into how human interaction comes about. These questions are more vulnerable to socially desirable answers but are still very valuable as an addition to the vignette questions. The answers to these open questions can also be compared to the vignette questions to see if these more personal questions fit the answers to the social situations. The whole survey can be found in Appendix 1. To avoid possible socially desirable answers, the word gossip was not mentioned in the survey. Instead, words like share and tell were used to explain the situations to the participants.

3.2 Description of the data

3.2.1 Data collection

The survey was distributed between the 19th of July and the 17th of August 2022 as an online questionnaire on WhatsApp, Instagram, Facebook and LinkedIn. It could be entered in either English or Dutch. The survey started with an explanation of the goal of the study and what kind of questions the respondents could expect. Furthermore, it was mentioned that participation is fully anonymous. To participate in the survey, the respondents had to give informed consent after reading the provided information. A full description of the information is given in Appendix 1. After giving consent to participation and the storage of their data, there was a question to confirm that they were 18 years or older. About 50% of the participants were able to hand in their questions within 12 minutes and 70% within 16 minutes. 20% of the participants took longer than approximately 19 minutes to finish the survey.

3.2.2 Sample

This study was a combination of convenience and snowball sampling. The invitation for participating in the research asked participants to share the link to the survey with other people who might be interested in participating. This message was repeated at the end of the survey. Reminders were sent two weeks and three and a half weeks after the first contact. A total of 193 people started the survey. Of those, 56 surveys were unfinished and these were deleted after a week of zero activity. Participants

were promised that unfinished surveys will be excluded from the analysis. Furthermore, 14 people started the survey but did not meet the consent or age qualifications. In the end, there were 123 qualified respondents. For the kind of sampling this study used, it is difficult to say a lot about the nonresponse numbers.

To check for the heterogeneity of the sample, participants were asked to indicate their *age*, *nationality* and *level of education*. The sample appears to be young, highly educated, and primarily Dutch; see *Table 2*. Furthermore, correlation tests indicated that the non-Dutch participants were primarily of younger age (r = -0.222; p = 0.015).

Table 2: Descriptive statistics age, nationality and educational level: minimum, maximum, respondents (missing), percentages and correlations.

Variable	Age	Education	Nationality	
Total (missing)	125(0)	123 (0)	123 (1)	
Percentages	<18 = 1.6% 18-30 years = 62.4% 31-45 years = 8.8% 46-60 years = 19.2% >60 = 8.0%	Primary education = 0.0% Secondary education = 13.8% Between secondary and higher education = 15.4% Higher education = 69.9% Postgraduate or higher = 0.8%	Dutch = 87.0% Other = 10.6% I rather not say = 1.6%	
Age	-	0.068	-0.222*	
Education	-	-	0.058	

^{*} significant at p<0,05; two-sided Pearson correlation test

3.3 Analysis plan

3.3.1 Repeated Measures ANOVA

The vignette questions are analysed with repeated measures (RM) analysis of variance (ANOVA). Participants answered the same question ten times: If you were Robin, would you tell Noah about Charlie cheating? RM ANOVA allows to compare differences in mean scores between these 10 questions. The dependent variable is, therefore: gossip. The independent variables are affective interdependence and social context; how do these characteristics relate to the tendency to gossip? Respondents who did not answer all ten questions were excluded from the analysis; this was only one respondent.

A two-way RM ANOVA will be conducted to analyse the data. First, there is interest in the interaction of the independent variables. For this test, the null hypothesis postulates that all means are equal. If the interaction is significant, this entails that the differences between the five vignettes are not the same for leisure and workplace, and vice versa. What follows is an analysis of the independent variables by viewing their main effects that are given with the two-way ANOVA. The main effect of

social context will reveal whether there is a difference in gossip between the leisure and workplace contexts. The main effect of affective interdependence is of particular interest: are there differences in gossip for the five vignettes? If statistically significant results are found the contrast tests within the two-way RM ANOVA are suitable to research where the differences are specifically situated.

Contrast tests allow to review the main effects of each of the vignette questions. For testing hypotheses 1 to 3, the main effects of vignettes 2, 3 and 5 are of interest. These vignettes will be compared to reference vignette 1, where all actors are acquainted, so that the effect of the relationship is revealed. For testing the interaction of hypothesis 4, the contrast of vignettes 4-5 vs. 3-1 is of interest. The differences between the social contexts for these effects are also reviewed. The analysis is done by making use of the statistical program IBM SPSS Statistics, Version 28 (IBM Corp, 2021).

3.3.2 Analysing open questions

Categorical variables

Analysing the open-ended questions will be done with a quantitative description in combination with a qualitative deductive analysis. The two questions were about the gossip preferences of the participants. Their initial response is captured by two dichotomous variables. *Gossip with* indicates whether people rather gossip with a friend or acquaintance and *Gossip about* indicates whether people rather gossip about a friend or acquaintance. Both variables have the values: (0) *Acquaintance* and (1) *Close friend*.

Thematic analysis

Besides the quantitative description of the open questions, participants also gave reasons for the behaviour they mentioned. To understand the 'why' part of their answers, thematic analysis was used. Thematic analysis is a way to gain insights into data by systematically identifying and organising themes that lie at the core of the data (Braun & Clarke, 2012). This analysis allows to detangle the answers given by the respondents in an orderly manner. The themes that are chosen should be able to jointly answer the matter that the researcher is interested in. For this study, the open questions focus on the motives that people have to gossip in relation to the presence of affective relationships. The themes of interest are mainly focused around the three goal-frames since these are central to explaining people's gossip behaviour. Before data analysis, six deductive themes were defined:

- 1. Hedonic gossip
- 2. Gain gossip
- 3. Normative gossip
- 4. Gain refrain
- 5. Normative refrain
- 6. Alternative

The first five themes relate to a certain goalframe in combination with the motivation to either gossip or refrain from gossiping. The last theme is suitable for participants mentioning alternative answers. For instance that they don't remember the last time they gossiped or that they are indecisive about their gossip preferences. These six themes should not overlap so they are able to each describe one part of the picture. With goal-frames being known to operate at the same time, some answers fitted more than one theme. In these cases, clear decisions were made as to what theme these should belong to. More details on this matter can be read in Appendix 4 and the results. During the analysis, deductive themes can change and new (indictive) themes can be created to fit responses that don't belong to any of the established themes.

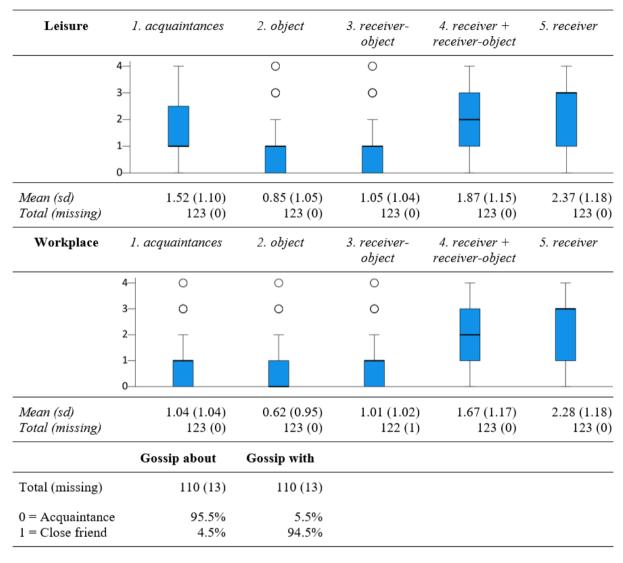
Analysing these themes is done by making use of a codebook: a list of codes which can be assigned to parts of the written text to mark what they are about. Each theme consists of multiple codes. A codebook is developed as follows. First, there are the deductive codes that are based on current insights from the literature and ideas from the researcher (Braun & Clarke, 2012). These codes are created before the data is analysed. For this research, a deductive code is called *protection object* within the theme *Normative – refrain*. This code would fit a respondent describing to refrain from sharing negative information about someone to protect this person. Using the program Atlas.ti (2022) one can assign different codes to parts of the answers given by the respondents. Furthermore, the codebook includes inductive codes. These codes are assigned to new and interesting results which do not fit the description of any of the deductive codes (Braun & Clarke, 2012). They can therefore define new scopes for the theories and ideas that are now available. A detailed description of the coding process and the final codebook are given in Appendix 4.

Chapter 4 - Results

4.1 Descriptive statistics

4.1.1 Univariate statistics

Table 3: Descriptive statistics from the variables in the analysis: boxplot, mean (standard deviation), respondents (missing) and percentages



The univariate descriptive statistics for all the variables are presented in *Table 3* and *Figure 3*. In *Figure 3*, the two lines present the mean gossip scores for each *social context* for the five *affective interdependence* vignettes. One can see that these lines follow the same pattern. This pattern shows where the differences between the vignettes are situated. In advance, vignettes 2 to 5 have been ordered from lowest to highest expected gossip mean. One can indeed see that the mean of gossip is larger for the vignettes to the right of the figure. Furthermore, the leisure line is for all vignettes situated above the workplace line. For some vignettes, the lines are situated close to each other: indicating only small differences in means for the social contexts. Most differences between the contexts can be found in the first two vignettes of *affective interdependence*.

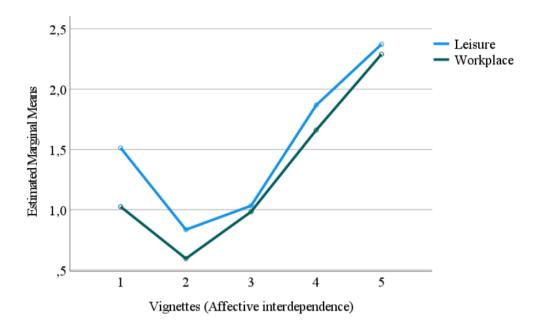


Figure 3: Estimated marginal means of gossip for two-way RM ANOVA

Vignette 2 (object) displays the lowest means out of the five vignettes for both leisure (mean = 0.85; sd = 1.10) and workplace (mean = 0.62; sd = -0.95). The least gossip, therefore, appears in the situation where the sender is friends with the object. Boxplots indicate peaked distributions. Furthermore, vignette 5 (receiver) displays the highest means for leisure (mean = 2.37; sd = 1.18) and workplace (mean = 2.28; sd = 1.18) indicating gossip is most likely to appear between a close sender and receiver. These means are, however, not high in an absolute way and this is supported by relatively high standard deviations, indicating somewhat flattened distributions.

Besides the vignette variables, there are two categorical variables relating to the open questions: *gossip about* and *gossip with*. Results clearly indicate that most of the participants would more easily gossip about an acquaintance (95.5%) than about a friend (4.5%). There are also 13 missings. Missings for both variables include anything from participants not filling in the questions, answers which were not clear and participants telling that they could not decide what is easier. For the variable *gossip with*, there are also quite straightforward results. 94.5% of the participants indicate that they would find it easier to gossip with a friend and 5.5% say it is easier with an acquaintance. This variable also has 13 missings. The descriptives of these variables show a similar pattern as the vignette questions.

4.1.2 Bivariate statistics

Table 4: Associations between all the variables in the analysis

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Leisure	1. Acquaintances	-									
	2. Object	0.521*	-								
	3. Receiver-object	0.449*	0.535*	-							
	4. Receiver + receiver-object	0.501*	0.333*	0.460*	-						
	5. Receiver	0.480*	0.251*	0.234*	0.541*	-					
Workplace	6. Acquaintances	0.526*	0.407*	0.356*	0.385*	0.372*	-				
	7. Object	0.416*	0.675*	0.449*	0.314*	0.272*	0.456*	-			
	8. Receiver-object	0.466*	0.471*	0.590*	0.561*	0.366*	0.490*	0.535*	-		
	9. Receiver + receiver-object	0.465*	0.415*	0.485*	0.725*	0.470*	0.430*	0.340*	0.463*		-
	10. Receiver	0.362*	0.113	0.155	0.511*	0.661*	0.378*	0.148	0.356*	0.495	* -

^{*} significant at p<0,01; two-sided Pearson correlation test

The bivariate descriptive statistics for all ordinal variables are presented in *Table 4*. One can immediately see that overall there are moderately high correlations, implying that there are associations present between most variables in the analysis. This is not surprising, since all the vignette questions initially measure the same outcome: would the participant gossip? Attention goes out to the red-marked correlations; these are the highest correlations for each of the variables. A pattern is discovered. The highest correlations are in all cases between the leisure and workplace vignettes that focus on the same triad configuration. Of these, the highest correlation is the one between the two *receiver* + *receiver-object variables* (r = 0.725; p < 0.001), indicating that these are the most similar variables out of all variables in the analysis. This pattern is justifiable since questions on the same vignette can be expected to be more alike than comparing different vignettes.

Within the vignette questions of the same social context, higher correlations are revealed between vignettes with a similar mean score and the other way around. For instance the relatively high correlation of 0.456 (p < 0.001) for the *acquaintances* and *object* vignettes for the workplace context. An example of a lower correlation is the 0.251 (p < 0.001) between the *object* and the *receiver* vignettes for the leisure context.

The association between *gossip with* and *gossip about* has been tested with a Fisher's Exact test. There was no statistically significant association between the two variables (two-sided, p = 1.00, see Appendix 2.6), which checks out since the answers have almost no variation.

4.2 Two-way RM ANOVA

4.2.1 Model assumptions

Further analysis of the relations between the vignette questions is needed to explain how the presence of affective interdependent relationships affects gossip behaviour. For conducting the two-way RM ANOVA, there are certain assumptions regarding the two-way ANOVA that need to be checked for. Firstly, there is the assumption of normality: a normal distribution of the dependent variable (gossip) for each of the vignettes in both contexts. The analysis of the univariate statistics did show that some of the variables were skewed, yet this is not surprising using a Likert scale measure with just five points. Generally, continuous variables are used for this type of ANOVA, but measurements also allow for ordinal data to be analysed. QQ plots and boxplots reveal that most abnormality is present in vignettes 2 and 3.

Secondly, there should be no outliers in any of the vignettes in both contexts. Testing for this was done by looking at the studentized residuals for each of the ten questions. There were just a handful of cases with results in line with being a possible outlier. Yet, only one of these showed the characteristics of a true outlier. This case was therefore excluded from the analysis.

Lastly, the data has to meet the condition of sphericity. This entails that the variances of the differences between scores of any two vignettes must be equal. A non-significant measure of Mauchly's Test of Sphericity indicates no violation of the assumption and one can interpret the test results accordingly. If there is a significant test, the assumption is violated and one has to account for this by using correcting measures. The value of epsilon Greenhouse-Geisser will determine which one should be used: if this >0.75, the Huynh-Feldt corrected results are consulted, if <0.75 the Greenhouse-Geisser. For the *interaction* (between *social context* and *affective interdependence*) the Mauchly's Test of Sphericity indicates that the assumption of sphericity has not been violated, $\chi 2(9) = 9,123$ p = 0.426 and therefore estimates can be analysed accordingly. For the main effect of *affective interdependence* the test is significant, which means that the assumption has been violated $\chi 2(9) = 50.186$ p < 0.001. The value of the Greenhouse-Geisser is 0.814, indicating that the Huynh-Feldt correction needs to be used.

4.2.2 Main effects

The two-way RM ANOVA first informs about the main effect of the independent variables and their interaction. The estimate of the interaction shows if the effect of affective interdependence on gossip is dependent on the social context and vice versa. The results display a significant effect for the interaction: F(4, 480) = 4.529 and P = 0.001. Therefore, one could say that the effect of affective interdependence is indeed dependent on social context. More concretely, what participants have told about their gossip behaviour in various vignettes is dependent on whether the vignette was situated in

a leisure or workplace context. Next, the main effect of the independent variables can be interpreted. H_0 and H_A for these effects are defined as follows:

- H_0 : $\mu_1 = \mu_2$ or H_0 : $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$
- H_A : at least two means are significantly different

The null hypothesis assumes that all means are equal. If one finds statistically significant measures, this implies that the means are not the same and that gossip, therefore, is partially explained by the independent variable. For $social\ context$, the output shows the test results of F(1,120)=23.798 and p<0.001, confirming that the overall mean for gossip differs between the social contexts. Looking at $Figure\ 3$, this leads to confirming a higher mean of gossip for the leisure context compared to the workplace context. Moving on to $affective\ interdependence$: with F(3,358;402,941)=100.077;p<0.001, the test is significant and confirms a main effect for affective interdependence on gossip. This entails that either one or more vignettes differ in mean score on gossip. Yet, where do these differences specifically occur? Contrast tests are of interest for testing differences between the vignettes and these are reviewed in the upcoming paragraphs.

4.2.3 Contrast tests

Hypothesis 1-3

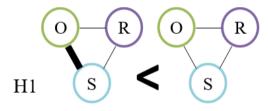


Figure 4 – Visualisation hypothesis 1

Hypothesis 1 states that an affective interdependent relationship between the sender and the object should contribute to less gossip. The difference between vignette 1 (acquaintances) and vignette 2 (object) is required to test this hypothesis. The test reveals a mean difference of -0.554 between these vignettes. This

indicates that the mean of gossip is 0.554 lower for vignette 2 compared to vignette 1 and this effect is also significant (F(1,120) = 49.246 and p < 0.001). An effect of -0.554 on a scale from 0 to 4 gives good reasons to believe the presence of the effect. More concretely, participants will likely gossip less in case the object is their friend compared to a situation where the object is an acquaintance. This holds for the assumption that all other dyads are equal (i.e. *ceteris paribus*). This is in line with hypothesis 1.

Next, it is of interest to see whether this contrast differs between the social contexts. As one can see in *Figure 3*, the slope from vignette 1 to 2 is steeper for the leisure context compared to the workplace context. The test for this difference reveals a value of -0.124 and implies that the contrast for the leisure context is 0.124 lower than the mean contrast of -0.554 (thus -0.678). Therefore finding stronger support for hypothesis 1 in the leisure contexts. Likewise, the contrast is 0.124 higher for the workplace, implying a less strong effect (-0.554 + 0.124 = -0.430). Although the interaction is

significant at α =0.05 (F (1,120) = 5.322; p = 0.024), a total difference of 0.248 between the social contexts would not be considered as big.

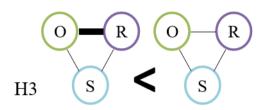


Figure 5 – Visualisation hypothesis 3

Hypothesis 3 assumes that the closer the relationship between the receiver and the object, the less likely it is for the sender to gossip about the object. To test this effect, the mean difference of interest is that between vignettes 3 (receiver-object) and 1. The test presents a mean difference in gossip of -0.260 (F (1,120) = 10.868;

p=0.001), which is a small effect considering the scale. The interaction reported with this test gives an interesting insight. With a value of -0.219, the effect is again stronger for the leisure context (F (1,120) = 13.407; p < 0.001). Yet, the effect for the workplace is therefore 0.219 higher than the mean of -0.260, making the difference almost non-existent (-0.041). This is also clearly visible in *Figure 3*: vignettes 1 and 3 of the workplace context almost have the same score. So, the negative effect on gossip proposed by hypothesis 3 only holds for the leisure context in this data. In the leisure context gossip would be less likely to appear if the receiver and object are in a close relationship compared to a triad where this relationship is not strong (*ceteris paribus*).

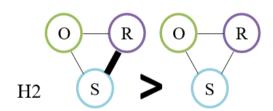


Figure 6 – Visualisation hypothesis 2

For hypothesis 2, the test of mean differences in gossip scores between vignette 5 (receiver) and 1 is of interest. This hypothesis states that when a gossip situation is characterised by a close relationship between the sender and the receiver, there will likely be more gossip. The difference between these vignettes is 1.062 and is

significant (F(1,120) = 127.651; p < 0.001). This indicates that participants rather gossip in a situation in which the receiver is a friend, compared to where the receiver is not (*ceteris paribus*). Compared to the 0-4 scale, an effect of 1.062 gives high support for the existence of the effect. This is also the largest relevant mean difference, indicating the biggest effect. This result finds support for hypothesis 2. Looking at the accompanying interaction, there is now a bit less strong effect for the leisure context. Because this is a positive main effect, the negative interaction value of -0.202 now indicates a smaller effect (F(1,120) = 10.301; p = 0.002). Looking at *Figure 3*, the relatively small difference between leisure and workplace primarily originates from the difference in vignette 1. Since the control vignette is lower for the workplace, the effect of gossiping with a friend is slightly bigger.

Interaction hypothesis 4

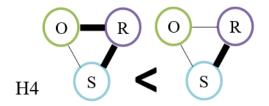


Figure 7 - Visualisation hypothesis 4

Hypothesis 4 expects a negative effect of the close *receiver-object* tie on the effect of the close *sender-receiver* tie on gossip. This is a negative interaction and can be checked by comparing the addition of the sender-receiver tie to the all-acquaintances situation versus the addition under the situation with a close receiver-object

tie present. Therefore, comparing vignette 1 vs. 5 (contrast of 1.062) with vignette 3 vs. 4 (contrast of 0.756). This test reveals a contrast of -0.306; indicating that the difference from 3 to 4 is smaller than the difference from 1 to 5. The interaction is significant for α =0.05 (F (1,120) = 8.777; p = 0.004), and it is not a big effect considering the scale. It, therefore, supports that the close *receiver-object* tie slightly limits the positive effect of the close *sender-receiver* tie on gossip. More concretely, making gossiping with a friend less easy if this friend is also close to the object; in line with hypothesis 4.

This same test also proves the interaction the other way around: the positive interaction of the close *sender-receiver* tie on the negative effect of the close *receiver-object* tie on gossip. For this effect, there was a comparison between vignette 1 vs. 3 (contrast of -0.260) with vignette 5 vs. 4 (contrast of -0.566). The result of this test is therefore the same contrast as before, but now it is positive: 0.306. The close *sender-receiver* tie enlarges the negative effect of the close *receiver-object* tie on gossip. Because of the smaller initial contrasts, this side of the interaction is relatively larger. Making it more difficult to talk about the receiver's friend if one is also friends with the receiver.

Comparing the two social contexts for this effect gives a contrast of 0.281 (F (1,120) = 10.670; p < 0.001). This entails that the contrast is 0.281 higher for leisure, which makes the negative contrast almost non-existent (-0.306+0.281 = -.025). Therefore, the receiver being close to the object does not hold the sender back to gossip with a friend in the leisure context. In the workplace context, the effect is considered stronger (-0.306 – 0.281 = -0.587), adding to the belief that hypothesis 4 is only supported in this context.

So, although vignettes 3, 4 & 5 are quite similar for the leisure and workplace context, the difference in vignette 1 is very important for how the contexts vary in gossiping behaviour. The effect of the sender-receiver relationship on its own is stronger for the workplace context, yet when a receiver-object relationship is added, the friendship between the sender and receiver contributes to relatively more gossip in the leisure context. The same is true for the effect of the close receiver-object relationship. Where there was almost no main effect for this relationship in the workplace, it does clearly matter when the sender is close to the receiver. So the results revealed that the need to gossip with a friend is relatively stronger in the leisure context and the need to protect a friend's friend is relatively more important in the workplace context.

The ANOVA analysis has found support for most of the expected behaviour in a gossip triad and some interesting differences between the contexts have been revealed. What the results mean for the overarching research question will be reviewed in the conclusion in Chapter 5.

4.3 Thematic analysis

4.3.1 Themes

Having analysed people's movements in gossip situations, it is now of interest to discover the reasons why they would behave in these ways. The participants were asked about their motivations and preferences to gossip and the answers showed a wide variety of explanations. The six deductive themes mentioned in the theory section were complemented with two inductive themes: (1) *Behaviour to gossip about* and (2) *Gain – good gossip circumstances. Table 5* shows the eight themes and how they relate to the three open questions. The green themes relate to gossiping and the *r*ed themes to refraining from it.

Table 5: Themes of thematic analysis by the three open questions

		Gossip experience	Gossip about	Gossip with	Total
1.	Behaviour to gossip about	18			18
2.	Hedonic – gossip	32	6	3	41
3.	Gain – gossip	34	1	9	44
4.	Gain – good circumstances	9	82	80	171
5.	Normative – gossip	24		4	28
6.	Gain – refrain	2	18	3	23
7.	Normative – refrain	4	12		16
8.	Alternative	32	14	13	59
	Total	155	133	112	400

The theme *Behaviour to gossip about* was created because the reasons respondents gossiped about their friends did not always fit a certain goal-frame. In these instances, there were no clear indications of in whose favour the participant would act. Furthermore, the inductive theme *Gain-good gossip circumstances* was designed to fit answers which described preferences in a gossip conversation. The theme *Gain-gossip* was not suitable for these answers since this is only centred around the benefits one can get out of gossiping.

The following paragraphs will review the themes by following the three questions. Themes 1, 2, 3 and 5 mainly focus on why people gossip about their friends and these will be reviewed first.

After this, there will be attention for respondents' gossip preferences which mainly includes theme 4, 6 and 7, as can also be seen by the marked cells in *Table 5*. Alternative answers that fitted theme 8 will be reviewed at the end of this chapter.

4.3.2 Behaviour to gossip about

When participants were asked why they gossiped about their friends, some centred their explanations around the behaviour the object demonstrated. In some instances, their close friend behaved badly in the eyes of the sender. Norm violations like having a wrong attitude and making wrong decisions are reasons for the participants to gossip. Besides disapproving the object's behaviour, the sender could also be surprised or impressed by the object's behaviour.

Participant 46: "Because I think they had a wrong attitude."

Participant 80: "I was surprised about a decision that this person had made."

A type of behaviour that related directly to the sender was getting hurt by the object. Getting hurt can give people the need to share this. They might let someone know to get support or help. Furthermore, sharing can also contribute to harming the reputation of the object and protecting the receiver from possible harm.

Participant 29: "I was also involved in this situation and my feelings were hurt."

4.3.3 Venting about a friend

When the participants noticed certain behaviour from the object, they sometimes felt the need to vent about this to someone. As one can see in *Table 5*, the hedonic goal-frame is primarily present when participants mention gossiping about their close friends. The sheer need to tell someone about the gossip was prominent in the answers. Venting emotions can help people to relieve the pressure of the knowledge they carry with them and is an easy way to find some distance and have some peace with it. In the Netherlands, a common expression for venting is "ik moet het kwijt" which means something as close to "I have to get this out". This was a commonly used expression of gossiping to vent.

Participant 91: "Out of frustration about actions that I did not agree with."

Participant 67: "Because I (...) needed to talk about it with another friend to calm down."

4.3.4 Self-centred reasons to gossip about a friend

Motivations to gossip about a friend often went further than venting. A part of the participants mentions that they gossip to get advice from the receiver. Participants found themselves in situations where they did not know what to do and needed some feedback from a third party. There were also a good number of cases where the participants were interested in the opinion of the receiver, but were not necessarily searching for advice. It rather had the function of gathering more opinions on the situation to gain more perspective or to confirm their ideas about the gossip content.

Participant 76: "To be able to put things into perspective or to ask advice about how to best handle the situation."

Because the gossip object is a friend, participants reflected on a possible conflict that could arise because they gossiped. Some participants shared the information with someone to avoid direct confrontation with the object. Others choose to gossip to escalate rather than de-escalate the situation because they were searching for revenge.

Participant 14: "Because I thought it necessary to let someone know about it since I couldn't obviously discuss it with the close friend without risking a bad experience".

4.3.5 Normative reasons to gossip about a friend

Gossiping about a friend was not only done out of egoistic motives. Sometimes the participants had the interests of the object itself in mind. They mentioned they were worried about their friend and felt the need to share this concern. Some participants also clearly stated that they wanted to help their friend. In some instances, others needed to be protected or informed. The receiver and people outside of the triad can gain something out of hearing the gossip. The bad behaviour of the object can harm them and sharing this might help them out.

Participant 107: "To help herself because it was self-destructive behaviour."

Participant 119: "But I only share this kind of information if it is beneficial that the person I share it with is also informed."

Participant 15: "Bad behaviour cannot go without consequences."

4.3.6 Why participants rather gossip about an acquaintance

Yes, people gossip about their friends, yet the majority of the participants mentioned that they rather gossip about an acquaintance. Part of the participants stated that the distance in a relationship with an acquaintance makes it easier to talk behind their back. Because an acquaintance means less to people, it is generally less difficult to see them being hurt. The relationship in place is disposable enough to risk gossiping about them. There are also a few participants who mention that it is less likely to get caught gossiping about an acquaintance since they generally have fewer opportunities to find out about it. Plus, in case one were caught, the consequences would be less severe.

Participant 43: "It is easier to share negative information about an acquaintance because I generally hope to see them less than close friends and am not very invested in our relationship."

Participant 82: "Definitely to share about an acquaintance because there is less likely chance of a negative impact. Also if the person then gets mad at you it will be less hurtful."

What makes it easier to gossip about an acquaintance is also that it is harder to gossip about a friend. In the context of the gain frame, it is important for a sender to keep the relationship with a friend healthy. Participants mention that gossiping about a friend can hurt their relationship and this is not something they would like to face. Getting caught gossiping about a friend can lead to fights, distrust and a bad reputation. In the context of the normative goal-frame it is relevant to protect a friend from possible harm being done to them because of the gossip. Some participants also note that they would rather talk directly to their friend if they behave in a bad way.

Participant 19: "You prefer not to jeopardise a friendship."

Participant 39: "Sharing information about a good friend feels like betrayal and could lead to arguments/fights."

Participant 22: "I don't talk bad about my friends, unless they do something of which I think they should not have done that, but I would rather tell that to themselves and not to someone else."

These results support hypothesis 1, which states that an affective interdependent relationship between the sender and the object should contribute to less gossip. Participants have a clear preference for gossiping about someone who is affectively distant from them. There is a small group of participants who believes the contrary is true: that it is easier to gossip about a close friend. Their motivations focus on that one needs to be close to someone to have access to gossip in the first place.

4.3.7 Why participants rather gossip with a friend

Now that the preferred characteristics of the object are analysed, what have the participants said about their preferred receiver of gossip? Almost all participants told that they rather gossip with a friend than an acquaintance. Participants mentioned that they would like to share gossip with someone that they have an established trust bond with and with whom they can talk about anything. Even when these things might not be kind to the object, an established bond with a friend creates an open and safe space for people to share their feelings. This bond can also provide the sender with a particular certainty of how the receiver will react. Some participants mention that they can expect a like-minded reaction from their friends and that friends often have prior knowledge about the situation, which makes a conversation more comfortable. Furthermore, the participants expect that the information will stay safe with friends, which lowers the risk of getting caught gossiping. The following quotations give a picture of some of these motives for the preference of a close receiver:

Participant 47: "Share with close friends, because they are likely of the same mind, or understand why I said it or think it."

Participant 53: "The sharing of negative information is easier with a friend because the confidentiality will more likely be assured. You know what you can expect when you share it with a friend."

These results support hypothesis 2, which states that an affective interdependent relationship between the sender and the receiver should contribute to more gossip. Participants have a clear preference for gossiping with someone close to them and with whom they have a trust bond e.g. an affective interdependent relationship. Again there is a small group who believes the opposite: they reason that the distance from an acquaintance makes it easier to share gossip.

4.3.8 Summing up and alternative answers

The thematic analysis has revealed a variety of motivations to gossip. Reflecting on the hedonic goal-frame, participants sometimes need to vent about experiences where the gossip object is their friend. But this is often not the only thing that drives them. Various gain — and normative goal-related motivations are displayed in the participants' answers. Reviewing the gain goal-frame, participants gave clear motivations regarding their optimal gossip situation. Furthermore, the sender will act out of the normative frame to care for the people close to them. Although the majority of the participants gave answers which were fitting to the goal-frames, not all of them did. Some did not remember the last time they gossiped about a friend and some stated that they never gossiped. Others were not sure who they would rather gossip with and about. The last alternative response was perhaps the most interesting for this study; some participants stated that their gossip preferences depend on the details of the situation. This supports the belief that people invest time and effort in their decision to gossip or not.

The thematic analysis has revealed interesting insights and has found support for some hypotheses that were derived from the theory. What the results mean for the overarching research question will be reviewed in the conclusion in Chapter 5.

Chapter 5 – Conclusion and Discussion

5.1 Conclusion

The main research question of this study was formulated as follows: How will affective interdependence between the parties in a gossip triad affect the likelihood that the sender will gossip and what are the motivations for this behaviour? First, both the vignette study and the thematic analysis found support for believing that a strong bond between the sender and the object motivates the sender to refrain from gossiping. This is in line with hypothesis 1. Thematic analysis showed that people behave out of the gain and normative goal-frame in this situation. The gain frame focuses on people's own benefits for the future and the normative frame on behaving well in the eyes of others. If the object is one's friend, there is a certain urge to protect the relationship in place (gain - and normative frame). Adding to this is that the emotional distance from an acquaintance makes it easier to talk behind their back and there are fewer consequences if one gets caught gossiping (gain frame). Therefore, this study confirms that the gossip object is often less close to the sender. Yet, it also reveals that they do not have to be an 'enemy', as some studies do propose, but they can also be someone one does not know very well (Ellwardt et al., 2012a; Hess & Hagen, 2021; Wittek & Wielers 1998).

Moving on to the sender-receiver relationship, results from the vignette study and thematic analysis have revealed that people prefer to gossip with someone close to them, in line with *hypothesis* 2. This result is contrary to the proposition of Giardini and Wittek (2019a); participants did not mention that they refrained from gossiping with their friends because they would otherwise appear untrustworthy. Instead, analysis of the motivations has shown that participants generally trust their friends more with gossip information and that a friend's reaction is more predictable and probably more helpful. This is in line with the literature on this topic, focusing on the trust bond and low chance of getting caught (Ellward et al., 2012ab; Giardini & Conte, 2011; Giardini et al., 2019; Yucel et al., 2021). The gain frame was most present in these motivations since people's own benefit was dominant. There were only a few mentions of gossiping just to inform their best friend about the object's norm violation (Feinberg et.al., 2012b). These results add to the knowledge by showing that the ubiquitousness of gossip is still limited to talking to a certain group of people.

The last main effect was that of the receiver-object relationship. It was expected that this relationship would contribute to less gossip (in line with *hypothesis 3*). Yet, this only holds for one of the two contexts that were studied: in the leisure context the effect was found, in the workplace context it was not. Apparently, it is less important in the workplace environment to care for the friend of an acquaintance or to behave trustworthy to the sender. People might care less for an acquaintance's feelings in a work situation, because of the more formal surroundings. This receiver-

object bond is a relation which has not yet been given much attention in current literature and this study gives an idea about the existing relationship. The thematic analysis did not tap into the motivations behind this behaviour but this could be embedded in future research; studying whether people indeed want to appear trustworthy by remaining quiet about someone's friend (Caivano et al., 2021).

These gossip situations don't take place in a vacuum and it was expected that combinations of certain relationships would make decisions less straightforward. On this matter, the results showed that within the workplace context, the positive effect of the sender-receiver relationship on gossip is limited by the presence of a strong relationship between the gossip receiver and the object. This is in line with *hypothesis 4*. A positive relationship holds the other way around, yet it is less strong: an established friendship between the sender and receiver makes gossip more likely despite the object-receiver friendship in place. In the leisure context, these interactions were not found (not in line with *hypothesis 4*); indicating that the need to gossip with a friend is relatively stronger in the leisure context and the need to protect a friend's friend is relatively more important in the workplace context. This difference can be explained by the nature of gossip in each of these contexts.

In the workplace, the consequences of gossiping about a friend's friend are possibly heavier than in the leisure context. Gossiping in this situation can disrupt the trust between the sender and the receiver and trusting one's closest colleagues is of interest. Protecting a friend's friend is pro-social and helps to ensure this trust. This follows the belief that 'the friend of my friend is also my friend' ((Granovetter 1977, Heider 1958). For the leisure context, the theory might lean more towards behaving out of jealousy when gossiping about a friend's friend (Pheko, 2018). The interaction of configurations revealed that it is important to take the whole gossip situation into account when researching gossip. Even when patterns first seemed to look alike and gossip in leisure is for all vignettes higher than for the workplace, there were still important differences to be revealed.

Thematic analysis of the participant's answers has shown that people are aware of the possible compositions of the gossip triad and that they take the consequences of their actions into account. People are aware that gossip can be bad for the people around them and that sometimes it is better to stay quiet. It became clear that the hedonic goal-frame, centred around immediate satisfaction, is rarely leading to the decision to gossip, as opposed to some theories (Foster, 2004; Lindenberg & Steg, 2007). The gain frame, in fact, played the main role in people's motivations. People often described their preferences from their own point of view, although their decisions might also benefit others. People who rather gossip about an acquaintance because of the emotional distance between them might indirectly mean that they want to protect their close friends from possible harm. This might make the normative goal-frame somewhat hidden behind the gain goal. This is a good example of how goal-frames overlap and motivations should not be interpreted straightforwardly. Just

like the need to gossip with someone to get advice: this benefits the sender because of the help they receive (gain goal), yet they might use the advice to help out the object or someone else (normative goal). Participants might not always think of mentioning or realising the underlying benefits of gossiping.

The goal of this research was to contribute to a better understanding of the influence of affective interdependent relationships on gossip and this goal was achieved. Results have helped to untangle how and why people gossip and support as well as complement the theories in place.

5.2 Design and measurements

For a right interpretation of the results, it is important to discuss the possible consequences of the research design. The measurements of both *affective interdependence* and *gossip* were part of the vignette descriptions. For affective interdependence, there has been made a distinction between weak interdependence (an acquaintance) and strong interdependence (a close friend). This was done to make the questions as clear as possible for the participants. Yet this has simplified the measurement of the concept and it was therefore not possible to discover any patterns of gossip beyond the extremes of affective interdependence.

For gossip itself, measurement was set to be an explanation of the norm violation of cheating and the question of whether the participant, as a possible gossip sender, would tell someone about this. Since not everyone holds the same norms, cheating as a norm violation could be viewed differently by different people. This is a downside of using a vignette design but does allow testing the participants under the same conditions. There were also no direct mentions of the word gossip, to avoid any socially desirable answers. These examples are what makes studying behaviour that is characterised by secrets and close personal bonds so hard to study. Gossip is closed off from the public for a good reason and unravelling how people gossip will therefore never be easy. And although a vignette study takes away some difficulties, it is not the richest kind of data (Dores Cruz et al., 2021a). It only indirectly captures the real social situation, so one can never tell with certainty that the behaviour the participants show in the study is the same as in the real world. The open questions tried to fill a part of this gap by asking more straightforward questions and were also able to provide more rich data on the motives behind the participants' behaviours. Furthermore, the quality of the participant's answers could have been influenced by the length of the survey. Filling in the survey generally took between 7 and 16 minutes. This is quite a long time and can indicate that it could be a difficult survey and that the question at the end of the survey could be answered with less attention. Furthermore, the relatively long time to fill in the survey could explain the 56 unfinished surveys.

5.3 Analysis

Moving on to how the questions were analysed, some points need attention. The multiple-choice vignette questions needed to fit certain assumptions related to the Repeated Measures ANOVA. The data used for the analysis were ordinal and not continuous, which is recommended. This had no direct consequences for running the tests, but using this data often contributes to violations of other matters. The biggest violation is made for the assumption of normality of the data. This could have caused tests of lower quality of especially hypotheses 1 and 3. Measuring gossip with a continuous scale could have contributed to a higher quality of the data. Yet, the ANOVA test is generally robust against the violation of normality (Schmider et al., 2010). Furthermore, the sample was of adequate size and therefore contributed to the power of the tests.

For the thematic analysis, a remark goes out to the defined themes in relation to the open questions. The two themes focussing on refraining to gossiping both fitted to few responses. This is no surprise since the three open questions were about reasons to gossip or about gossip preferences. More open questions could have been added to reveal more about the motivations why people remain silent when they possess valuable information. Furthermore, the answers were not always suitable to be related to a specific goal-frame. This could have been accessed by asking more specific questions, but it has also shown that people are not always aware in whose favour they are acting.

5.4 Future research

This study has contributed to the understanding of how the gossip triad works and could be seen as a foundation for future gossip network studies. Although the results provided answers, there is much more to explore regarding how people's surroundings affect their gossip behaviour. One of the questions this study raised is: where does the difference in behaviour and motivation between the leisure and workplace contexts come from? What is it about these contexts that makes some effects smaller and some larger? And do other contexts, like gossip in the household, provide other insights? Choosing other context variables could lead to other results and conclusions. A context that deserves more discovery is the current reputation of the gossip object. How people think of the object's behaviour in the past can influence how they react to their actions of today. This holds for gossip in the way that people's reputation makes gossiping about them more or less likely in the first place (Barclay, 2013). Will someone, for instance, be more likely to gossip if the one they gossip about is well-known for their norm violations? Adding this dimension of real-life interaction would help to get a better understanding of gossip as a whole. This is only one example of variables that can be used concerning affective interdependence in the gossip triad.

Secondly, there is still much to discover in the motivations behind the gossip regarding combinations of relationships. The results showed that researching full triads could lead to very different results than reviewing just the dyads. Which combinations lead to the most gossip and which to the least? And do the motivations clearly differ between the configurations? More gossip triad

configurations can be explored with either a vignette design or, for instance, by making use of real gossip networks. Even more interesting might be to discover how relationships develop after certain gossip incidents. If one would gossip about their friend and they find out, how big will the consequences actually be? With a longitudinal research design, one could measure people's initial bond and could measure it again after a time of them reporting their gossip behaviour. A study like this could therefore contribute to more insight into how gossip embedded in affective interdependent relationships guard or hinder cooperation.

Because of the big role gossip plays in everyday interactions, gossip remains a relevant subject to study. This research has contributed to the knowledge about when people decide to keep information to themselves. It has therefore revealed behaviour that usually stays in the dark. So where hearing gossip can be something fun, the sender might have made a thoughtful decision about sharing their knowledge.

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Appendix 1 - Survey English

Introduction and consent

My name is Vera Nomden and for my master thesis I am performing a study on talking about others in an informal setting. I would like to ask you to help me with my research by filling in this survey. In this survey you will be provided with 10 social scenarios and will be asked how you think you would behave in these situations. The survey will end with some open questions. Answering the questions will take somewhere between 5 and 10 minutes.

Participating in this study is fully voluntary, but you have got to be 18 years or older. If you decide to participate, your answers will be used for this study and will be deleted after I finish my thesis. In case you want to end the survey before finishing, your answers will not be used in the study. None of the answers you give can be traced back to your identity, which makes participating fully anonymous. Participation does not entail any physical or mental discomfort. In case you are experiencing any discomfort or have questions, you can always contact me at v.nomden@student.rug.nl.

Hereby you confirm:

- I have read the information about the research.
- I understand what the research is about, what is being asked of me, which consequences participation can have, how my data will be handled, and what my rights as a participant are.
- I understand that participation in the research is voluntary. I can stop participating at any moment without consequences.
- Below I indicate what I am consenting to.

Do you give consent to participate in the research?

- Yes, I do consent to participate
- No, I do not consent to participate

Do you give consent for your data to be stored for research purposes?

- Yes, I do consent to my data being stored
- No, I do not consent to my data being stored

DEMOGRAPHIC QUESTIONS

To what age group do you belong?

- 17 years or younger
 - Send to the end of the survey
- 18-30 years
- 31-45 years
- 46-60 years
- 61 years or older

What is the highest kind of education you have completed?

- Primary education
- Secondary education (High school)
- Anything between secondary and higher education
- Higher education (Bachelor, Master)
- Postgraduate or higher
- I rather not say

What is your nationality

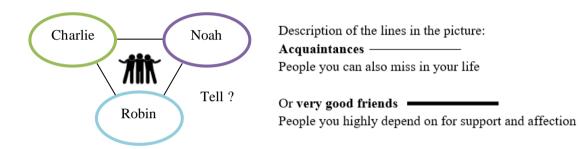
- Dutch
- Other: ...
- I rather not say

QUESTION 1 LEISURE

Charlie, Robin and Noah participate in an amateur running club that practices twice a week. They have been doing so for over the past two years. When Robin forgot something after practice last week and came back to pick it up, Robin saw Charlie kissing another group member* in the parking lot. Charlie is in a serious relationship with someone* outside of the group and does not know that Robin has seen them cheating. (*identity not important)

Although Charlie, Robin and Noah are all part of the running group, they rarely talk to each other.

The group is having a drink after each practice session and today, Robin and Noah happen to sit at the bar together. If you were Robin, would you tell Noah about Charlie cheating?



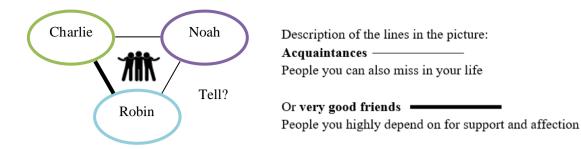
- 1. Definitely not
- 2. Probably not
- 3. I don't know
- 4. Probably yes
- 5. Definitely yes

QUESTION 2 LEISURE

Charlie and Robin have known each other way before they joined the running group. They are very close friends and spend a significant amount of time together outside of the group. They see Noah during practice, but they are not close.

Last week, Robin saw Charlie kissing another group member in the parking lot. Charlie is in a serious relationship with someone outside of the group and does not know that Robin has seen them cheating.

Today, Charlie did not join the group in the bar, and Robin decided to sit next to Noah. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

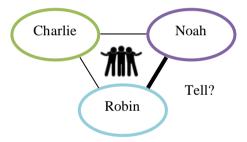


QUESTION 3 LEISURE

Robin and Noah became very close during the time they have spent together at practice and they highly value their friendship. Charlie is their fellow group member but they do not know each other well.

Last week, Robin saw Charlie kissing another group member in the parking lot. Charlie is in a serious relationship with someone outside of the group and does not know that Robin has seen them cheating.

The group is at the bar and Robin and Noah sit together while Charlie is sitting somewhere else. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

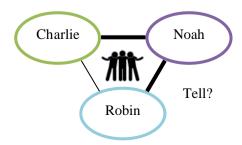


QUESTION 4 LEISURE

Noah is close friends with both Robin and Charlie. Noah has got to know them separately and Charlie and Robin rarely talk without the presence of Noah.

Last week, Robin saw Charlie kissing another group member in the parking lot. Charlie is in a serious relationship with someone outside of the group and does not know that Robin has seen them cheating.

Robin and Noah sit together at the bar after practice. Charlie did not yet arrive. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

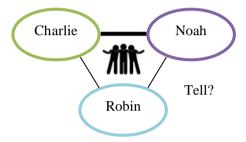


QUESTION 5 LEISURE

Charlie and Noah have known each other for a long time and are inseparable. They always arrive together at practice and tend to talk a lot. Robin only knows them because they are all part of the running group.

Last week, Robin saw Charlie kissing another group member in the parking lot. Charlie is in a serious relationship with someone outside of the group and does not know that Robin has seen them cheating.

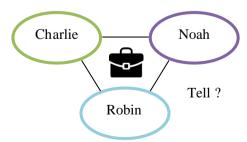
Robin and Noah happen to sit at the bar together during the after-practice drinks. Charlie has already left. If you were Robin, would you tell Noah about Charlie cheating? (Same options)



QUESTION 1 WORK

Charlie, Robin and Noah work for a newspaper company. They see each other at work, but are on different teams and have different responsibilities. Each Friday the employees of the company go out for drinks after work. Robin is walking around with a secret: last week Robin has spotted Charlie kissing a co-worker* in the copying room. Charlie is in a relationship with someone* outside of the company and does not know that Robin is aware of the affair. (*identity not important)

Charlie, Robin and Noah are all part of the team, but rarely talk to each other besides the occasional coffee corner chat. The group is having a drink after work and Robin and Noah happen to sit at the bar together. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

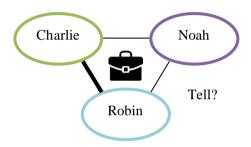


QUESITION 2 WORK

Charlie and Robin have known each other way before they joined the newspaper company. They did their communication studies together and have been very close ever since. Noah is their co-worker but is not close with them.

Last week Robin has spotted Charlie kissing a co-worker in the copying room. Charlie is in a relationship with someone outside of the company and does not know that Robin is aware of the affair.

Today, Charlie did not join the group in the bar, and Robin decided to sit next to Noah. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

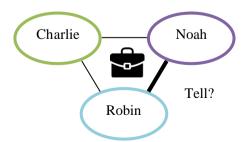


QUESTION 3 WORK

Robin and Noah became very close during their time at the newspaper company. They highly value their friendship. Charlie works with them, but they do not know each other well.

Last week Robin has spotted Charlie kissing a co-worker in the copying room. Charlie is in a relationship with someone outside of the company and does not know that Robin is aware of the affair.

The group is at the bar and Robin and Noah sit together while Charlie is sitting somewhere else. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

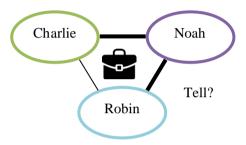


QUESTION 4 WORK

Noah is close friends with both Robin and Charlie. Noah has got to know them separately and Charlie and Robin rarely talk without the presence of Noah.

Last week Robin has spotted Charlie kissing a co-worker in the copying room. Charlie is in a relationship with someone outside of the company and does not know that Robin is aware of the affair.

Robin and Noah sit together at the bar after work. Charlie did not yet arrive. If you were Robin, would you tell Noah about Charlie cheating? (Same options)

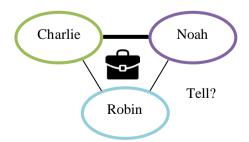


QUESTION 5 WORK

Charlie and Noah have known each other for a long time and are inseparable. They always arrive together at work and tend to talk a lot. Robin only knows them because they see each other at work.

Last week Robin has spotted Charlie kissing a co-worker in the copying room. Charlie is in a relationship with someone outside of the company and does not know that Robin is aware of the affair.

Robin and Noah happen to sit at the bar together during the after practice drinks. Charlie has already left. If you were Robin, would you tell Noah about Charlie cheating? (Same options)



There are still three short open questions I would like you to answer:

OPEN QUESTION 1

Please think about the last time you shared negative information about a close friend: why did you do that?

OPEN QUESTION 2

What is easier to do and why: to share negative information **about** a close friend or **about** an acquaintance?

OPEN QUESTION 3

What is easier to do and why: to share negative information about someone with a close friend or with an acquaintance?

END OF SURVEY MESSAGE

Thank you for participating in this survey! It would be highly appreciated if you could share the link of this survey with other people who you think might also be interested in filling in the survey. Thank you very much in advance.

Appendix 2 – Operationalizations and descriptive statistics

2.1 Consent

Before entering the survey questions, the participants were asked to indicate whether they consent to the terms and conditions of the study. The second consent question was about whether the participants agree to their answers to the survey questions being stored for data purposes. People who did not consent to these terms were deleted from the study. The following command was used to generate the descriptive statistics:

FREQUENCIES VARIABLES=Participation Storage /ORDER=ANALYSIS.

2.2 Sample

To gather information about the participants' ages, they were asked to indicate to what age group they belong. For the participants to be able to continue with the survey, they need to be 18 years or older. 123 out of the 125 participants fitted the age requirement. The following command was used to generate the descriptive statistics:

FREQUENCIES VARIABLES=Age /BARCHART PERCENT /ORDER=ANALYSIS.

The remaining 123 participants were presented with questions about their educational level: What is the highest type of education you have completed?, and their nationality: What is your nationality? The following command was used to generate the descriptive statistics:

FREQUENCIES VARIABLES=Education Nationality__ Nationality__ 2_TEXT /BARCHART PERCENT /ORDER=ANALYSIS.

The correlations between *age, education* and *nationality* were also analysed. For *nationality*, the category *I rather not say* is coded as a missing.

RECODE Nationality__(3=SYSMIS) (ELSE=Copy) INTO Nationality_rec. EXECUTE.

CORRELATIONS
/VARIABLES=Age Education Nationality_rec
/PRINT=TWOTAIL NOSIG FULL
/MISSING=PAIRWISE.

2.3 Language and duration

Details about how the participants filled in the survey are given by the descriptives of *Duration* and *User Language*:

FREQUENCIES VARIABLES= Duration UserLanguage
/NTILES=4
/NTILES=10
/STATISTICS=STDDEV RANGE MINIMUM MAXIMUM MEAN MEDIAN MODE
/ORDER=ANALYSIS.

The variable measuring duration takes the time between entering and finishing the survey (hh:mm:ss). Because participants did have a time limit of a week to finish the survey, the time between the starting and the handing in could increase up to days. As can be seen in *Table 1*, the maximum value is more than 95 hours, but this is likely not the time this participant actually spend on answering the survey questions. There are a handful of such cases and these heavily influence the mean duration. The percentiles present a more clear picture of the duration of the survey.

Table 1: Descriptive statistics for Duration with 10 percentiles

Duration (in seconds) Valid 123 Missing 0 1:35:29 Mean Median 0:11:13 Minimum 0:02:53 Maximum 95:40:42 Percentiles 10 0:05:35 20 0:07:17 30 0:08:28 40 0:09:36 50 0:11:13 60 0:12:57 70 0:15:23 80 0:18:49 90 0:25:44

Statistics

2.4 Vignette questions

For all ten vignette questions, the situation was described to the participant and they were asked: "If you were Robin, would you tell Noah about Charlie cheating?". Answering categories were: (1) Definitely not, (2) Probably not (3) I don't know (4) Probably yes and (5) Definitely yes. Variables were coded in such a way that 0 indicates no gossip and 4 indicates most gossip:

RECODE L1 L2 L3 L4 L5 W1 W2 W3 W4 W5 (1=0) (2=1) (3=2) (4=3) (5=4). EXECUTE.

Questions were not mandatory, but none of the leisure questions have any missing values. Only the third question in the workplace context has one missing. The full questions can be seen in part 1 of this appendix. The following command was used to generate the descriptive statistics:

FREQUENCIES VARIABLES=L1 L2 L3 L4 L5 W1 W2 W3 W4 W5 /STATISTICS=STDDEV MEAN MINIMUM MAXIMUM /ORDER=ANALYSIS.

2.5 Open questions

In the open question section of the survey, the participants were asked the following question on who they gossip about and with:

- What is easier to do and why: to share negative information **about** a close friend or **about** an acquaintance?
- What is easier to do and why: to share negative information about someone with a close friend or with an acquaintance?

The *why* part of these questions will be analysed with thematic analysis, but there will also be two variables to indicate the initial choices the participants made. Categories for *gossip about* as well as for *gossip with* are (0) *Acquaintances* and (1) *Close friends*. The following command was used to generate the descriptive statistics:

FREQUENCIES VARIABLES=GA GW /ORDER=ANALYSIS.

2.6 Bivariate statistics

To analyse the associations between the variables in the analysis, the bivariate statistics are used. Pearson Correlation tests were carried out for capturing the associations between the ordinal vignette variables. The following command was used to generate the descriptive statistics:

CORRELATIONS
/VARIABLES=L1 L2 L3 L4 L5 W1 W2 W3 W4 W5
/PRINT=TWOTAIL NOSIG FULL
/MISSING=PAIRWISE.

For the correlation between the two binary variables, another associations test is used: the Chi-Square test. Because two of the cell counts are less than five, the Chi-Square values however are not appropriate to use and therefore the reported Fishers Exact test was applied. *Table 2* presents the Chi-Square tests for *gossip about* and *gossip with*. The Chi-Square tests were generated with the following command:

CROSSTABS
/TABLES=GA BY GW
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ
/CELLS=COUNT
/COUNT ROUND CELL.

Table 2: Chi-Square tests gossip with by gossip about

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,208ª	1	,648		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,398	1	,528		
Fisher's Exact Test				1,000	,820
Linear-by-Linear Association	,206	1	,650		
N of Valid Cases	105				

a. 3 cells (75,0%) have expected count less than 5. The minimum expected count is ,19.

b. Computed only for a 2x2 table

Appendix 3 – Statistical analysis

3.1 Assumptions RM ANOVA

3.1.1 Normality

Checking for normality is done by looking at the distributions of the variables via boxplots and QQ plots. To make boxplot figures which present five items (of the same social context) at once, the data had to be restructured. Two separate datasets were made, one for the five leisure variables and one for the five context variables.

- Data > Restructure > Restructure selected variables into cases > One variable group
- Add variables to be Transposed (Name target variable 'score')
- Create one variable
- Select variable names, not sequential numbers
- Standard selection Options and then finish.

Using the restructured data, this syntax generated the five-in-one boxplots:

GGRAPH

```
/GRAPHDATASET NAME="graphdataset"
VARIABLES=Index1[LEVEL=nominal] scores[LEVEL=scale]
MISSING=LISTWISE REPORTMISSING=NO
/GRAPHSPEC SOURCE=VIZTEMPLATE(NAME="Boxplot"[LOCATION=LOCAL]
MAPPING( "x"="Index1"[DATASET="graphdataset"] "y"="scores"[DATASET="graphdataset"]))
VIZSTYLESHEET="Traditional"[LOCATION=LOCAL]
LABEL='BOXPLOT: Index1-scores'
DEFAULTTEMPLATE=NO.
```

Other statistics were generated with the following syntax (with the main dataset):

```
EXAMINE VARIABLES=L1 L2 L3 L4 L5 W1 W2 W3 W4 W5 /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
```

The boxplots are presented in Figure 1 and 2. The QQ-plots are presented in Figure 3 and 4; the further the dots are away from the diagonal line, the more they diverge from a normal distribution.

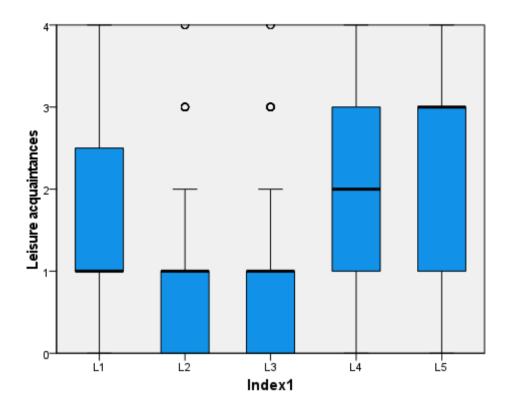


Figure 1: Boxplots for the five vignettes within the leisure context

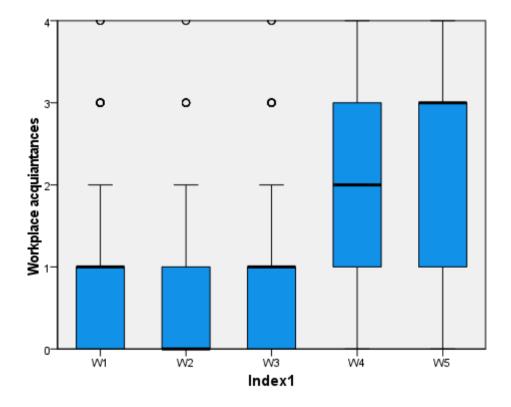


Figure 2: Boxplots for the five vignettes within the workplace context

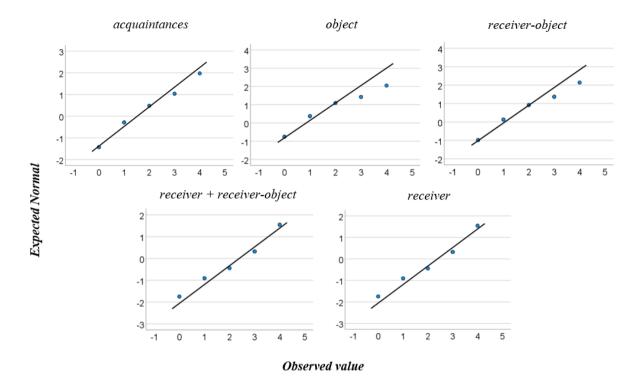


Figure 3: QQ-plots for the five vignettes within the leisure context

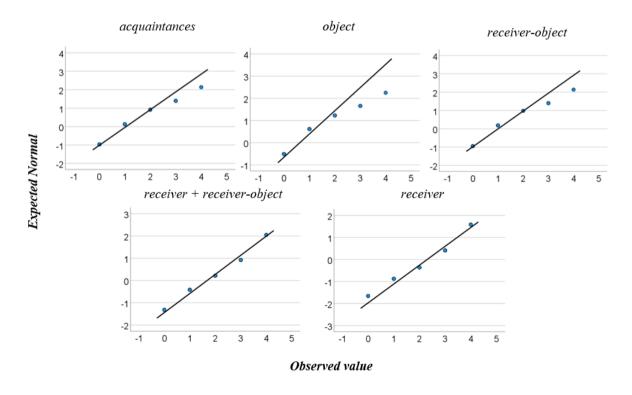


Figure 4: QQ-plots for the five vignettes within the workplace context

3.1.2 Outliers

Testing for outliers is done by looking at the studentized residuals for each of the ten vignette questions (these are generated by running the RM ANOVA without any set filters). Measures above 3 or below -3 are deemed to be outliers and these could have a strong effect on the outcomes of the tests. A variable was computed to access the relevant cases:

COMPUTE Outlier=(SRE_1 > 3) or (SRE_2 > 3) or (SRE_3 > 3) or (SRE_4 > 3) or (SRE_5 > 3) or (SRE_6 > 3) or (SRE_7 > 3) or (SRE_8 > 3) or (SRE_9 > 3) or (SRE_10 > 3).

Table 3 presents the cases which could be considered outliers. None of the cases had any residual score lower than 3, which was to be expected since the univariate statistics showed predominantly left-skewed distributions. The red marked boxes highlight the residuals higher than 3 and are all related to questions with the same gossip triad: the object-sender relationship. The 3.01 marked measures for L2 are not expected to be a big problem since the score is barely higher than 3. The 3.55 measures for W2 are more severe. Case 22 seems to be of particular interest here. Looking at its scores, this participant continuously mentions they would definitely gossip in the given situation (score of 4). The residuals are therefore also high for the other variables in Table 3. This particular outlier could by itself heavily influence the results. Furthermore, case 22 also indicates that they never find themselves in gossip situations and would not know what to do. Therefore, their responses that they would gossip in the vignette questions deem not to be reliable. The other four cases appear to have more variation in their answers and would therefore more likely contain valuable information. Furthermore, the analysis of boxplots reveals that some variables have a great number of possible outliers. However, it is not valuable to exclude all these participants from the analysis, since this would exclude too much valuable information. Regarding the arguments given, it has been decided to exclude case 22 from the analysis.

Table 3: *Variables with studentized residuals* > 3 *or* < -3

	Studentized residuals for all ten variables in the analysis									
ID	L1	L2	L3	L4	L5	W1	W2	W5	W4	W5
22	2,25	3,01	2,84	1,87	1,40	2,86	3,55	2,93	2,00	1,46
96	2,25	3,01	2,84	0,98	1,40	-1,02	2,50	2,93	2,00	1,46
59	2,25	3,01	0,91	0,98	1,40	2,86	1,45	2,93	1,14	1,46
65	2,25	3,01	2,84	0,98	1,40	-0,05	0,40	-0,01	1,14	-1,98
15	1,34	2,05	-0,06	0,98	1,40	1,89	3,55	1,95	-0,59	1,46

Filter cases:

USE ALL.
COMPUTE filter_\$=(ID ne 22).
VARIABLE LABELS filter_\$ 'ID ne 22 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE.

3.1.3 Sphericity

The RM ANOVA in SPSS checks for sphericity for the main effects and the interaction. The test is only relevant for variables with more than two categories. Therefore, the main effect of *social context* does not need to be checked regarding this assumption. A non-significant measure of Mauchly's Test of Sphericity indicates no violation of the assumption and one can interpret the *Tests of Within-Subjects Effects* accordingly. If there is a significant test, the assumption is violated and one has to account for this by using correcting measures. The value of epsilon Greenhouse-Geisser will determine which one should be used: if this is > 0.75, the Huynh-Feldt corrected results are consulted, if < 0.75 the Greenhouse-Geisser. Per analysis, the sphericity will be checked.

3.2 Two-way RM ANOVA

The following command was used for the Repeated Measures ANOVA, including contrast tests:

GLM L1 L2 L3 L4 L5 W1 W2 W3 W4 W5

/WSFACTOR=Social_context 2 Affective_interdependence 5

/MEASURE=Gossip

/METHOD=SSTYPE(3)

/SAVE=SRESID

/PLOT=PROFILE(Affective_interdependence*Social_context) TYPE=LINE ERRORBAR=NO MEANREFERENCE=NO

YAXIS=AUTO

/EMMEANS=TABLES(Social_context)

/EMMEANS=TABLES(Affective interdependence)

/EMMEANS=TABLES(Social context*Affective interdependence)

/PRINT= DESCRIPTIVE ETASQ PARAMETER

/CRITERIA=ALPHA(.05)

/WSDESIGN=Social_context Affective_interdependence

Social context*Affective interdependence

/MMATRIX L1 -0.5 L2 0.5 L3 0 L4 0 L5 0 W1 -0.5 W2 0.5 W3 0 W4 0 W5 0;

L1 -0.5 L2 0.5 L3 0 L4 0 L5 0 W1 0.5 W2 -0.5 W3 0 W4 0 W5 0; L1 -0.5 L2 0 L3 0.5 L4 0 L5 0 W1 -0.5 W2 0 W3 0.5 W4 0 W5 0; L1 -0.5 L2 0 L3 0.5 L4 0 L5 0 W1 0.5 W2 0 W3 -0.5 W4 0 W5 0; L1 -0.5 L2 0 L3 0 L4 0 L5 0.5 W1 -0.5 W2 0 W3 0 W4 0 W5 0.5;

L1 -0.5 L2 0 L3 0 L4 0 L5 0.5 W1 0.5 W2 0 W3 0 W4 0 W5 -0.5; L1 -.5 L2 0 L3 .5 L4 -.5 L5 .5 W1 -.5 W2 0 W3 .5 W4 -.5 W5 .5;

L1 -.5 L2 0 L3 .5 L4 -.5 L5 .5 W1 .5 W2 0 W3 -.5 W4 .5 W5 -.5.

The analysis of interest is a two-way RM ANOVA to test the interaction of *affective interdependence* and *social context* on *gossip*. The output provides the researcher with lots of interesting tables. Yet few are relevant for testing the relevant effect and therefore only these are reported in this Appendix. *Table 4* presents Mauchly's Test of Sphericity. For the *interaction* the test indicates that the assumption of sphericity has not been violated, $\chi 2(9) = 9{,}123$ p = 0.426 and therefore estimates can be analysed accordingly. For affective interdependence the test is significant, which means that the assumption has been violated $\chi 2(9) = 50.186$ p < 0.001. The value of the Greenhouse-Geisser is 0.814, indicating that the Huynh-Feldt correction needs to be used.

Table 4: Mauchly's Test of Sphericity for Two-way RM ANOVA

Mauchly's Test of Sphericity^a

Measure: Gossip

						Epsilon ^b	
Within Subjects Effect	Mauchly's W	Approx. Chi- Square	df	Sig.	Greenhouse- Geisser	Huynh-Feldt	Lower-bound
Social_context	1,000	,000	0		1,000	1,000	1,000
Affective_interdependence	,655	50,186	9	<,001	,814	,839	,250
Social_context * Affective_interdependence	,926	9,123	9	,426	,965	1,000	,250

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

Within Subjects Design: Social_context + Affective_interdependence + Social_context * Affective_interdependence

a. Design: Intercept

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Figure 5: Estimated marginal means of interacting variables

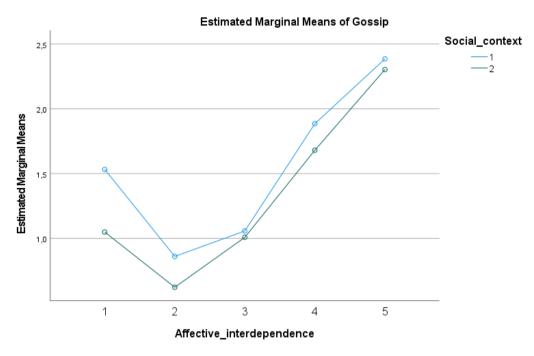


Table 5: Tests of Within-Subjects Effects for Two-way RM ANOVA

Tests of Within-Subjects Effects

Measure: Gossip		Type III Sum of					Partial Eta
Source		Squares	df	Mean Square	F	Sig.	Squared
Social_context	Sphericity Assumed	13,753	1	13,753	23,798	<,001	,16
	Greenhouse-Geisser	13,753	1,000	13,753	23,798	<,001	,16
	Huynh-Feldt	13,753	1,000	13,753	23,798	<,001	,16
	Lower-bound	13,753	1,000	13,753	23,798	<,001	,16
Error(Social_context)	Sphericity Assumed	69,347	120	,578			
	Greenhouse-Geisser	69,347	120,000	,578			
	Huynh-Feldt	69,347	120,000	,578			
	Lower-bound	69,347	120,000	,578			
Affective_interdependence	Sphericity Assumed	396,256	4	99,064	100,077	<,001	,45
	Greenhouse-Geisser	396,256	3,256	121,691	100,077	<,001	,45
	Huynh-Feldt	396,256	3,358	118,009	100,077	<,001	,45
	Lower-bound	396,256	1,000	396,256	100,077	<,001	,45
Error	Sphericity Assumed	475,144	480	,990			
(Affective_interdependence	Greenhouse-Geisser	475,144	390,751	1,216			
)	Huynh-Feldt	475,144	402,941	1,179			
	Lower-bound	475,144	120,000	3,960			
Social_context *	Sphericity Assumed	7,251	4	1,813	4,529	,001	.03
Affective_interdependence	Greenhouse-Geisser	7,251	3,860	1,879	4,529	,002	,03
	Huynh-Feldt	7,251	4,000	1,813	4,529	,001	,03
	Lower-bound	7,251	1,000	7,251	4,529	.035	.03
Error	Sphericity Assumed	192,149	480	.400			
(Social_context*Affective_in terdependence)	Greenhouse-Geisser	192,149	463,194	,415			
terdependence)	Huynh-Feldt	192,149	480,000	,400			
	Lower-bound	192,149	120,000	1,601			

Figure 5 presents the plot of the estimated marginal means which are needed for the first inspection of the difference for and between the vignettes and the contexts. What follows are the tests of the interaction and main effects of affective interdependence and social context, generated by the Within-Subjects Effects presented in Table 5. The estimate of the interaction shows if the effect of affective interdependence on gossip is dependent on the social context and vice versa. The results display a significant effect for interaction of F (4.000, 480.000) = 4.529 and p = 0.001. Therefore one could say that the effect of affective interdependence is indeed dependent on social context. Next, the main effects of the independent variabels can be interpreted. H_0 and H_A for these effects are defined as follows:

- H_0 : $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$
- H_A : at least two means are significantly different

The null hypothesis assumes that all means are equal. If one finds statistically significant measures, this implies that the means are not the same and that gossip is therefore partially explained by the variable. For $social\ context$ the output shows the test results of F(1,120)=23.798 and p<0.001, confirming that the overall mean for gossip differs between the $social\ context$. Moving on to $affective\ interdependence$: with F(3.358,402.941)=100.077; p<0.001, the test is significant and confirms a main effect for $affective\ interdependence\ on\ gossip$. This entails that either one or more vignettes (configurations of the gossip triads) differ in mean score on gossip. Contrast tests are of interest for testing differences between the vignettes.

3.3 Contrast tests

3.3.1 MMatrix

A contrast test tests if the difference between specified vignettes of *affective interdependence* significantly differ from each other. The MMatrix is used to specify contrasts within the ANOVA analysis. The matrix for this analysis consists of 10 numbers, representing all the measured vignettes (five times over two contexts). The sum of all the numbers in the matrix needs to be 0. For comparing none of the vignettes the MMatrix will look like this:

• 00000 00000

If one would like to compare leisure vignette 1 to leisure vignette 2 it would be:

• -10100 00000

For testing hypothesis 1-3 the main effects of vignette 2, 3 and 5 are of interest. One wishes to compare these to vignette 1 and test this for both the leisure and workplace situation at the same time. To get this mean effect, one will use 0.5 in the MMatrix instead of 1; taking half of the leisure and workplace context and therefore combining them.

•	Main effect vignette 2	5 .5 0 0 0	5 .5 0 0 0
•	Main effect vignette 3	5 0 .5 0 0	.50500
•	Main effect vignette 5	5000.5	5 0 0 0 .5

To test whether these contrasts differ between leisure and workplace an interaction value has to be measured and this is done by mirroring one of the contexts. The following interaction matrixes were developed:

•	Interaction vignette 2	5 .5 0 0 0	.55 0 0 0
•	Interaction vignette 3	5 0 .5 0 0	.50500
•	Interaction vignette 5	5000.5	.5 0 0 05

For testing hypothesis 4 it is needed to compare two contrasts with each other. The addition of the strong *sender-receiver* tie to an all-acquaintances situation has to be compared to the addition under the presence of a strong *receiver-object* tie; therefore comparing vignette 1 vs. 5 with vignette 3 vs. 4. The comparison leads to the flowing calculation of the contrast:

- (vignette 4 vignette 3) (vignette 5 vignette 1)
- $\bullet = v4 v3 v5 + v1$
- In order = v1 v3 + v4 v5
- MMatrix = $.5 \ 0 \ -.5 \ .5 \ -.5$ $.5 \ 0 \ -.5 \ .5 \ -.5$

And therefore its interaction will be:

• .50 -.5 -.5 .5 -.5 0 .5 .5 -.5

3.3.2 Contrast test results

Table 6: Contrast results for Two-way RM ANOVA

Transformed Variable T2 Т6 Т7 Т8 T1 Т3 Τ4 T5 Contrasta Contrast Estimate -,554 -,124 -,260 -,219 1,062 -.202 -,306 .281 Hypothesized Value 0 0 0 0 0 0 Difference (Estimate - Hypothesized) -.554 -,124 -,260 -,219 1,062 -,202 -.306 .281 Std. Error .079 .054 .079 .060 .063 .103 .086 .094 <,001 ,001 <,001 <,001 ,002 ,004 ,001 ,024 95% Confidence Interval for Lower Bound -,710 -,231 -,417 -,337 ,876 -,327 -,510 .111 Difference -,397 -,101 1,248 Upper Bound -,017 -,104 -,078 -,101 451

Contrast Results (K Matrix)

a. Estimable Function for Intercept

T5

Т6

T7

Т8

Table 7: Univariate contrast test results for Two-way RM ANOVA

Source	Transformed Variable	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	T1	37,099	1	37,099	49,246	<,001	,291
	T2	1,860	1	1,860	5,233	,024	,042
	T3	8,200	1	8,200	10,868	,001	,083
	T4	5,804	1	5,804	13,407	<,001	,100
	T5	136,465	1	136,465	127,651	<,001	,515
	T6	4,961	1	4,961	10,301	,002	,079
	T7	11,314	1	11,314	8,777	,004	,068
	T8	9,554	1	9,554	10,670	,001	,082
Error	T1	90,401	120	,753			
	T2	42,640	120	,355			
	T3	90,550	120	,755			
	T4	51,946	120	,433			

120

120

120

120

128,285

57,789

154,686

107,446

1.069

,482

1,289

,895

Univariate Test Results

The contrast test results are presented in *Table 6* and its parameters are in *Table 7*. T1 presents the main effect of vignette 2 and T2 its interaction. T1 reveals that the mean of gossip is 0.554 lower for vignette 2 compared to vignette 1 and this effect is also significant F(1,120) = 49.246 and p < 0.001. T2 shows a value of -0.124 and implies that the contrast for the leisure context is 0.124 lower than the mean contrast of -0.554 (thus -0.678). This interaction is significant at α =0.05 and supports a stronger effect of the close sender-object relationship in the leisure context (F(1,120) = 5.322; p = 0.024). Likewise, the contrast is 0.124 higher for the workplace, implying a less strong effect.

T3 presents the main effect of vignette 3 and T4 its interaction. Table 6 presents T3 with a mean difference in gossip of -0.260 and is significant with F(1,120) = 10.868 and p = 0.001. Therefore, vignette 3 has a lower mean of gossip than vignette 1. T4 has a value of -0.219; the effect is again stronger for the leisure context (F(1,120) = 13.407; p < 0.001).

T5 presents the main effect of vignette 5 and T6 its interaction. For T5 one finds a significant contrast of 1.062 (F (1.120) = 127.651; p < 0.001). This indicates that participants rather gossip in a situation in which the receiver is a friend (vignette 5), compared to where the receiver is not (vignette 1). Viewing *Table* 6, this is also the largest relevant mean difference, indicating the biggest effect. Looking at the accompanying interaction of T6, there is now a less strong effect for the leisure context. Because this is a positive main effect, the negative interaction value of -0.202 now indicates a smaller effect (F (1.120) = 10.301; p = 0.002).

T7 presents the comparison between vignette 1 vs. 5 and vignette 3 vs. 4 and T8 its interaction. This test reveals a contrast of -0.306, indicating that the difference from 3 to 4 is smaller than the difference from 1 to 5. The interaction is significant for α =0.05 with F(1,120) = 8.777 and p = 0.004 and therefore supports that the close *receiver-object* tie limits the positive effect of the close *sender-receiver* tie on gossip. This same test also proves the interaction the other way around: the positive effect of the close *sender-receiver* tie on the effect of the close *receiver-object* tie on gossip. For this effect, there was a comparison between vignette 1 vs. 3 (contrast of -0.260) with vignette 5 vs. 4 (contrast of -0.566). The result of this test is therefore the same contrast as before, but now it is positive: 0.306. This interaction is also accompanied by its own interaction with T8 and this contrast test has a value of 0.281 (F(1,120) = 10.670; p < 0.001). This entails that the contrast is 0.281 higher for leisure which makes the negative contrast almost non-existent (-0.306+0.281 = -.025). Therefore the close *receiver-object* tie does not limit the positive effect of the close *sender-receiver* tie on gossip in a leisure situation. And for the other side of the interaction, this implies that the close *sender-receiver* tie on gossip for leisure.

Appendix 4 – Thematic analysis

4.1 Coding

Coding took place as follows: three documents were made, each for one of the three open questions. The lines were numbered with the participants' case numbers. This was useful since sometimes participants referred to their previous answers and coding could be done by comparing these answers. The documents were coded one by one and memos were created for topics that were not yet in the deductive codebook. Since coding is not a straightforward process, some memo's changed their name and meaning over time, some were deleted and some were split up. After the first round of coding, the documents were reviewed until all pieces of text were coded properly. What will follow is a more detailed description of the construction of the themes and codes. Six out of the eight themes are named as follows: (1) Goal-frame – (2) Gossip or refrain from gossip. Unclear answers were coded with the memo 'unclear answer'. The final code-book is presented in *Table 8* in paragraph 4.2.

4.1.1 Behaviour to gossip about

The first theme is called **Behaviour to gossip about** and was established during the coding phase (inductive). It focuses on the reasons to gossip because the object behaved in a certain way. This theme is not linked to any goal-frame. This is done because there were no clear indications of in whose favour the participant would act. One code that belongs to this theme is <u>disapprove behaviour</u>, which relates to answers given by the participants that focus on how they disapprove of the behaviour of the object without giving a clear reason. The other code is <u>feeling hurt</u>, which was placed here from the **Gain – gossip** theme because the participants did not specify why they would tell someone that they got hurt.

4.1.2 Hedonic - gossip

The theme **Hedonic** – **gossip** focuses on the reasons to gossip out of the hedonic goal-frame (deductive theme). There are two codes within this theme: (1) <u>Venting</u>, refers to answers where people want to vent their emotions and irritations about the object to the receiver; (2) <u>Pleasure</u>, refers to answers where people mention that they gossip because they think it is pleasurable to do.

4.1.3 Gain - gossip

The theme Gain – gossip focuses on the reasons to gossip out of the gain goal-frame (deductive theme). The first code that is relevant to this theme is <u>advice</u>. This was used to mark the answers of the participants who mentioned they gossiped because they needed advice on the situation. Furthermore, this theme had the code <u>protect self</u>, which has been replaced by <u>feeling hurt</u>, where the participant mentions to gossip because they got hurt by the object. The focus is therefore still on the object harming the sender. This new code was placed in the theme **Behaviour to gossip about** (see

4.1.1). A code change related to this is that of the deductive code <u>harm</u>. When the participants mentioned that they would gossip with the intent to hurt the object, it was directed at getting revenge for something the object had done to them. To better capture its meaning, the code <u>harm</u> has been replaced by <u>revenge</u>. Furthermore, the code <u>bonding and reciprocity</u> has been changed to just <u>bonding</u>, since there were no mentions of reciprocity.

Next to these changes, there were also two new inductive codes added to this theme. First, there is *put in perspective*, which was assigned to phrases where participants said they gossiped because they wanted someone else their perspective on the situation. This code was added since *advice* was not specific enough. Participants did not always need a helping hand; sometimes they just wanted to know whether their thoughts made sense. Another new code is that of *avoid confrontation*, which was used when participants gossiped so that they could tell the story without having to talk about it with the object directly.

Lastly, for the object and receiver preference questions, a code that was used a lot was <u>small</u> <u>consequences</u>. It became clear that this code was too broad and that other codes were needed to cover some parts of the <u>small consequences</u>. The code also did not fit the **Gain – gossip** theme and therefore a new theme was created: **Gain – good gossip circumstances**, which can be read about in the paragraph below.

4.1.4 Gain – good gossip circumstances

This inductive theme is focused on what people think of as good gossip circumstances. The only deductive code as part of this theme is *small consequences* (as described above). The rest of the codes are all inductive. One of these inductive codes became *emotional distance object*, which was used when a participant gossips about someone because they did not have an emotional bond with this person or because their feelings did not feel important to the participant. Another inductive code that relates to small consequences is the code *low caught risk*. This is used whenever a participant mentioned that they gossiped because of the low risk of getting caught. *Small consequences* was still used when participants for instance mentioned that they gossiped because there was 'less on the line'. The inductive code *knowing the object* tells a different story and relates to answers that indicated that the participants rather gossip about someone they know because they can place their behaviour in context better.

Another new inductive code that was created and placed within this theme is called <u>trust bond</u> <u>receiver</u>. This was used whenever a participant mentions that they gossip with someone because they have a trust bond with them or that they are close with them. Following this topic, there is also the new code: <u>predictable</u> reaction, which focuses on the preference to gossip with someone who will likely react in a certain way. This provides gossip senders with particular certainty on their

conversation. On the contrary, a code called <u>distance receiver</u> focuses on how the participants rather gossip with someone who is less close to them.

4.1.5 Normative – gossip

The theme **Normative** – **gossip** primarily consists of deductive codes relating to gossiping in favour of others (to behave well in their eyes). Two codes focused on protecting others: (1) <u>protect receiver</u> and (2) <u>protect someone else</u>, referring to someone outside of the gossip triad. Next to protecting the receiver there were also mentions to provide the receiver with information: <u>inform receiver</u>. Gossiping to behave well in the eyes of others can also be done to punish the object. <u>Punish object</u> was used to mark mentions of wanting the object to suffer for their deeds.

Furthermore, two codes focussed on supporting the object. These were the deductive code <u>help object</u> and the inductive codes <u>worry about object</u>. The inductive code was needed since part of the participants worried about the object without mentioning they wanted to help them.

4.1.6 Gain – refrain

The theme **Gain** – **refrain** relates to participants mentioning they refrain from gossiping for their own benefit. The theme consists of two deductive codes. The first is *getting caught*: relating to remaining silent to avoid the chance to get caught. The second is *protect relationship*: focusing on wanting to protect the friendship with the receiver and therefore deciding not to gossip about them. Protecting the relationship is also beneficial for the other party and this code could therefore also fit the normative goal-frame. Yet it has been related to the gain goal-frame since the answers did not directly focus on the benefit of the friend in question.

A deleted code from this theme is <u>reputation</u>: where participants would mention that they refrain from gossiping to protect their own reputation. None of the analysed text fragments related to this code and therefore, the code was deleted from the code book.

4.1.7 Normative – refrain

The theme **Normative** – **refrain** consists of three codes focussing on why participants decided to refrain from gossiping to behave well in the eyes of others. The first is the deductive code <u>norms</u>. There were few mentions of refraining from gossiping because this is 'not done'. Other answers gave more direction to the reasons for refraining. <u>Protection object</u> relates to refraining from gossiping to protect the object. In these cases, the object was also the participant's friend. Furthermore, there was an inductive code was added to this theme: <u>directly object</u>. Some participants indicated that they refrained from gossiping because they would rather talk about the matter directly with the object.

A deductive code that was deleted from this theme was <u>distance</u>, which could be used to indicate that participants refrained from gossiping since people need to sort out their own business. Since nobody mentioned something relating to this, the code was taken out of the code book.

4.1.8 Alternative

These answers were coded and combined to form the theme **Alternative**. The theme consists of three deductive and one inductive code. When participants told that they do not gossip, they often did not mention why they behaved for this reason. The inductive code <u>refrain general</u> was used in these instances. In other instances, participants did not remember the last time they gossip and the code <u>memory</u> was used to mark their answers. Furthermore, some participants told that their decision to gossip or not, depended on the details of the situation. Others said that they could not decide on their gossip preferences. The codes *context* and *indecisive* were used accordingly.

4.2 Final code book

Table 8: Codebook for thematic analysis of open questions

Theme	Code	Туре	Description	Example from the data (Dutch translated)
Behaviour to gossip about	Disapprove behaviour	Inductive	because they disapproved the behaviour of the object	"Out of frustration about actions I could not find myself in."
	Hurt	Inductive	because they felt hurt by the object	"Because I was hurt by their actions/behaviour."
Hedonic - gossip	Pleasure	Deductive	Use when a participant would gossip because they think of it as a fun experience	"Just a nice gossip."
	Venting	Deductive	because they want immediate relief of the feelings the gossip information brings	"To clear my heart about the frustrations I had."
Gain – gossip	Advice	Deductive	because they need advice on how to handle the situation	"To ask others about what I could do in that situation."
	Put in perspective	Inductive	because they want to put the situation in a broader perspective	"To get more perspective/insight on a situation through asking a friend's opinion on the situation."
	Avoid confrontation	Inductive	because they want to avoid confrontation with the object	"I did not yet wanted to talk to that certain friend, out of frustration/anger"
	Revenge	Inductive	because they want revenge on the object	"To get back at them for something."
	Bonding	Deductive	because they want to strengthen the bond with the receiver	"To strengthen the bond with that other friend."
Gain – good gossip	Small consequences	Deductive	because there are few to no consequences	"Negative implications are less relevant."
circumstances	Emotional distance	Inductive	because the object has no big role in the	"Because they are not a big part of my life."

	object		life of the participant	
	Knowing the object	Inductive	because they know how the object behaves	"For me it is easier to share negative information about a friend, because I know them better."
	Low caught risk	Inductive	because there is a low risk of getting caught gossiping	"Because I trust them not to share the information such that the original person finds out."
	Trust bond receiver	Inductive	because they have a trust bond with the receiver	"Because I probably trust this person and less often talk about superficial matters."
	Predictable reaction	Inductive	because they have an idea about how the receiver will react	"You can better predict how someone would react to that."
	Distance receiver	Inductive	because the receiver is far away from the situation	"When you desire feedback, an acquaintance can be more objective."
Normative - gossip	Protect receiver	Deductive	because they want to protect the receiver	"To protect/warn other good friends."
	Protect someone else	Deductive	because they want to protect someone other than the receiver	"In the context of group interest."
	Inform receiver	Deductive	because they want to inform the receiver about the gossip content	"To notify someone else."
	Worry about object	Inductive	because they are worried about the object	"Because I was worried about the behaviour of this friend."
	Help object	Deductive	because they want to help the object	"Because I thought it was for their (the close friends) own good that the information was shared."
	Punish object	Deductive	because they want to punish the object	"Bad behaviour cannot go without consequences."

Gain – refrain	Getting caught	Deductive	Use when a participant would refrains from gossiping because of the high risk of getting caught	"You do not know whether this acquaintance can keep the information to themselves."
	Protect relationship	Deductive	because they want to protect the relationship with the object	"You do not want to put a good friendship at risk."
Normative – refrain	Norms	Deductive	because gossiping is something that is against social norms	"I don't think that is how you should act."
	Protection object	Deductive	because they want to protect the object	"You can expect that a good friend will support you."
	Directly object	Inductive	because they would rather talk to the object directly about the matter	"I don't talk bad about my friends, unless they do something of which I think they should not have done that, but I would rather tell that to themselves and not to someone else."
Alternative	Refrain	Inductive	because of no particular reason	"Honestly, I do not share negative information about friends with someone else."
	Indecisive	Deductive	Use when a participant say they do not know what they would decide in a gossip situation	"I'm not sure ()."
	Context	Deductive	Use when a participant say that gossip is dependent on the details of the social situation	"That is very dependent on the situation and the person you share it with."
	Memory	Deductive	Use when a participant says that they cannot remember the last time they gossiped about a friend	"I can actually not remember that."