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# Word-of-Mouth Escalation Levels – Theory and Results of an Empirical Study Considering Different Situations and Target Groups

## Abstract

A huge amount of marketing literature focuses on communication among customers about products, services, or providers, which is referred to as Word-of-mouth (WoM). However, only a small part of the literature discusses in which situations and between which individuals WoM occurs. This article derives theoretically that the tie strength and the contextual reference between individuals can be regarded as important predictors for the occurrence of WoM: More precisely, we suggest that a higher tie strength and a contextual reference has an association with the likelihood that WoM occurs. We apply several scenarios with different levels of disconfirmation of expectations – which are regarded as escalations levels. Afterwards, a quantitative empirical study proves that individuals are more likely to tell others about certain events if these people have a higher tie strength. Also, we provide evidence that the contextual reference has an impact. The article underlines the importance of WoM for businesses and contributes to the existing literature.

## Keywords

word-of-mouth; C2C; interaction; business communication; tie strength; binding; contextual reference

## 1. Introduction

"Business communication" is discussed in various fields of science. It is applied in the field of communication science and linguistics (where it can be regarded as an independent discipline) as well as in business administration, such as marketing, business informatics, and human resource management (Jørgensen & Trosborg, 2003; Rossetti & Van Waes, 2022, p. 27; F. Siems et al., 2008, p. 9). Our understanding of the term "communication" is based on Bruhn (2014). Consequently, communication is regarded as the transmission of information and content in order to influence opinions, attitudes, expectations and behaviour of certain receivers. Communication has the aim to interact with the target groups (Bruhn, 2014, pp. 3–5).

In the field of marketing, the communication of companies is usually regarded as a tool of the marketing mix ("promotion"), which is commonly divided into the classical so-called 4 Ps of marketing (product, price, promotion, place) (Goi, 2009; Lahtinen et al., 2020; McCarthy, 1960). In "conventional" marketing, communication primarily involves whether and how companies communicate with their customers, particularly by using tools such as advertising, sponsorship and public relations (Blakeman, 2023, p. 4; Homburg et al., 2009, p. 237; Kotler & Keller, 2012, p. 49; Russ & Kirkpatrick, 1982, pp. 381–385).

In addition to communication by companies, it has become apparent within the past 30 years that in many industries, communication among customers about corresponding products, services, or providers is particularly important for the customer's purchase decisions: In the past 30 years, Relationship Marketing has gained special relevance for the majority of companies (Bruhn, 2022; Grönroos, 1994; Gummesson, 1987). The focus is on long-lasting relationships of a company to its stakeholders, esp. customers (Hennig-Thurau et al., 2002, p. 231). Also the field of business

\* Janek Mücksch Faculty of Business and Economics Technische Universität Dresden janek.muecksch@tu-dresden.de \*\*Markus Ziemann Faculty of Business and Economics Technische Universität Dresden Alumnus \*\*\* Florian U. Siems Faculty of Business and Economics Technische Universität Dresden <u>florian.siems@tu-dresden.de</u> communication gets a new additional dimension: This is referred to as Word-of-Mouth (WoM) and can be considered as important from a marketing point of view (e. g. F. A. Buttle, 1998, p. 242; Harrison-Walker, 2001, p. 61; Silverman, 2011). WoM is regarded as an important target value in Relationship Marketing (Bruhn, 2022, p. 296). Various reasons are given in the literature for the high relevance of WoM in many industries (Anderson, 1998; Bruhn, 2022, p. 99; F. A. Buttle, 1998; Silverman, 2001, 2011):

- WoM is regarded by (potential) customers as independent from the company and, therefore, as particularly honest and credible (Bruhn, 2022, p. 108; Silverman, 2005, p. 196).
- WoM is often target group-specific. In many cases, customers will communicate something to precisely those other potential customers who are actually eligible for the corresponding service (Silverman, 2005, pp. 195–196). The fact that this does not necessarily have to be the case is discussed in more detail later in this article.
- In connection with the first two points, the reactance to WoM is often likely to be much lower in comparison to "classic" corporate communications such as advertising (Leon & Choi, 2020, p. 874) (for instance, a potential customer will not "zap away" their best friend who reports about a certain experience).
- WoM has a high momentum of its own (snowball system principle) and thus can be regarded as very efficient advertising in case the message is in favour of the service provider, but on the other hand, it can also be a very dramatic danger for a company in case the content is negative or damaging to the company's reputation (Buttle, 1998, p. 242).

Particularly in the case of services, which in many cases are associated with higher quality uncertainties than consumer goods from the point of view of (potential) customers (Sun et al., 2012, p. 831), WoM is accordingly regarded as having a very high importance. This has been demonstrated empirically on many occasions (e.g., Mason, 2008; Maxham, 2001, p. 21; Ranaweera & Prabhu, 2003). At the same time, it can be assumed that the relevance of WoM has recently increased even further due to digitalisation and will continue to increase in the future, especially since customers have more and more options for a very wide-ranging WoM via online reviews and social media (Lis & Neßler, 2014, p. 63; Silverman, 2005, p. 199).

Previous research considers, among other things, the positive and negative consequences of WoM (e.g., Harrison-Walker, 2001, pp. 60–61), how often WoM occurs (Godes & Mayzlin, 2004, pp. 548–551), and who shares information and for which reasons (Alexandrov et al., 2013; Hennig-Thurau et al., 2003; Krishna & Kim, 2020). These considerations provide important indications for the functioning of WoM and thus implications for marketing. However, in the opinion of the authors of this paper, there has been too little differentiated consideration of the question of to whom WoM is actually expressed in individual cases. Several differences might exist, depending on the characteristics of an event with a service provider. Moreover, it might play a role whether it is only communicated to the immediate environment or possibly even to complete strangers such as customers (e.g., in the case of great anger to the "public"). Both could have important implications in practice, as WoM could then be viewed in a much more differentiated way than has been the case to date.

This is where this article comes in. After a short overview of existing research on WoM, the design and results of an empirical study are presented. The study illustrates how different the target groups of WoM can be, depending on the experience with a service. We provide evidence that the tie strength to another person and the contextual reference impact the likelihood that WoM occurs. Finally, the implications of this, as well as the limitations and a brief outlook, are presented.

#### 2. WoM as a tool in marketing communication: A review of existing findings

The following section provides a definition of WoM and an overview of the findings discussing the impact on WoM. More precisely, we especially discuss the role of tie strength and the contextual reference on the likelihood of an occurrence of WoM.

WoM is a commonly used term in science and practice (Lis & Neßler, 2014, p. 63). One of the first definitions for WoM was delivered by Arndt (1967a, p. 291). According to this definition, WoM is verbal communication from one person to another person about a brand, product, or service. It is between a sender and a receiver, where the receiver does not perceive the sender as commercial (Arndt, 1967b, p. 3). It is important to mention that the individuals exchanging information about a certain service, product or brand are independent from the provider (Silverman, 2011, p. 51). For instance, as discussed by Buttle (1998, pp. 242-243), WoM can be either positive or negative. Positive WoM is defined as the case where desirable messages and recommendations from the company's point of view are voiced. On the other hand, negative WoM is undesirable from the company's point of view and usually has negative consequences, for example, in the form of falling sales volumes or declining customer loyalty. However, the consumer's view is independent of this because the consumer can perceive both negative and positive WoM as positive or helpful (Buttle, 1998, p. 243). WoM can be regarded as extremely trustworthy since it offers a high level of credibility and reliability (Nieto et al., 2014, pp. 116–117). Moreover, WoM is personalized since it is often tailored to individual preferences and needs (Thomas et al., 2012, p. 195). In contrast to a typical advertisement, WoM is usually free of costs and can be therefore regarded as an extremely costefficient tool (Thorne, 2008, pp. 25-26). Ideally, positive WoM could lead the receiver using the service or buying the product. In addition to the classic sales context, this communication function also has an impact at the interpersonal level. This communication can take place during joint consumption or after a consumption experience in order to influence purchasing behaviour (Kirchler, 1993, p. 406).

Finally, it is also worth mentioning the importance of WoM for emotional regulation. Sharing information is thought to help the sender regulate their own emotions. While classical emotion regulation considers a single individual (Park & Folkman, 1997, p. 115), it is known through further research that collaborative sharing of information can support the coping and processing of emotions (Dunahoo et al., 1998, p. 162). Therefore, a WoM sender may share either a particularly pleasurable or annoying experience with a product or service with other people in order to process the experienced emotion.

For these reasons, WoM is of particular interest to businesses and service providers. Different characteristics of a relationship influence the probability that a WoM interaction occurs. These important characteristics are discussed in the following.

First, it is necessary to mention the tie strength between individuals when discussing WoM (Chung & Tsai, 2009; Voyer & Ranaweera, 2015; Wirtz & Chew, 2002). Depending on the situation or experience, people interact with many different audiences. They are usually communicating with family members, friends, acquaintances, larger groups, or complete strangers (Berger, 2014, p. 598). For this reason, this article considers the tie strength and the context of the individuals with whom customers are communicating. The tie strength of an interpersonal relationship can be characterised as a combination of the duration of a relationship, the emotional intensity, and the intimacy (mutual trust). Each of these elements are theoretically independent of the others, although they are likely to be highly correlated (Granovetter, 1973, p. 1361). Further research proves that these factors are interrelated (Kuwabara et al., 2010, p. 240; Marsden & Campbell, 1984, p. 484). Nevertheless, it is also possible that a relationship is also only defined by one of these characteristics or, respectively, by a subjective evaluation of the strength of a tie (Krackhardt, 2003, p. 217). For this reason, the definition of Granovetter (1973) is used, which assumes that most multiplex relationships are

equivalent to relationships possessing single strongly marked elements. For simplicity, the relationships considered in this publication are assumed to be positive and symmetric. For the purpose of this work, an intuitive basis is to be established which explains ties strength and allows a gradation between strong and weak relationships.

From the point of impression management, it is assumed that people strive to be socially accepted (Becker & Stamp, 2005, pp. 246–247). Moreover, people with a higher level of relationship strength already know each other very well. In conversations with weak ties, it is reasonable to assume that there is a greater need to achieve a good assessment by the other person through impression management (Berger, 2014, p. 598). Evidence for this is provided by considering the motivation of consumption decisions as done by Rattner & Kahn (2002, pp. 251–254). When decisions are made publicly, in the knowledge of others, behaviour shows significant differences from anonymous behaviour. This result is explained by the fact that people want to create a better image of themselves (Ratner & Kahn, 2002, pp. 251–254). In addition, research also shows that impression management occurs even in the presence of strong ties. For instance, literature provides evidence that individuals are more likely to portray themselves positively to personally relevant people than to strangers (Argo et al., 2006, pp. 101–106). Thus, it may be plausible that it depends on which relationships are more affected by impression management.

Moreover, another important aspect can be summarised under the term *emotion regulation*. The function of emotion regulation is strongly dependent on the strength of the relationship, but the direction and strength of the connection varies and also depends on the situation. In particular, the processing of negative emotions, but also general functions such as sense-making and the reduction of dissonance, can be better fulfilled in the context of strong relationships (Rimé, 2009, p. 62). However, when acting out emotions, such as acts of revenge, weaker relationships can also be involved. In addition, the use of online channels appeals to a group of people who usually have weak relationships. Sharing experiences on the Internet is commonly known in the literature under the term eWoM (Jalilvand et al., 2011; Serra Cantallops & Salvi, 2014).

Another important feature focuses on the social aspect of a relationship. The function of social bonding is pronounced with both weak and strong relationships. Interactions within strong relationships are often more profound than within weak relationships and strengthen social integration more. However, weaker relationships are also specifically used to reduce loneliness and social exclusion (Berger, 2014, p. 599). Persuading others often plays a role in stronger relationships, as the potential to actually persuade is seen as greater here. In addition, it is more important for people to convince close people of something than people with whom they have weaker relationships (Berger, 2014, p. 599)

The previous paragraphs discussed the tie strength between the WoM sender and WoM receiver as a relationship characteristic. The following paragraphs examine two characteristics, namely the expertise of the WoM recipient and the homophily between the communicating individuals. Although these characteristics are at first considered separately, they are related to each other.

The concept of homophily has already been considered in the literature as an impact factor on WoM behaviour. Homophily can be defined as the degree to which individuals resemble each other considering specific characteristics like gender, age, and educational or social status (Kwiek & Roszka, 2021, p. 1). Although tie strength and homophily cannot be regarded as synonyms, the concepts are closely related. A major difference is that homophily refers to the similarity of properties between individuals who are in a relationship (McPherson et al., 2001, p. 416), whereas attachment strength is a relational property that examines the relationship itself (Shi et al., 2009, pp. 1–2). The latter can be very different in different social relationships, independent of the similarity of the persons. However, it can be empirically shown that attachment strength and homophily are closely interrelated (Ladhari et al., 2020, pp. 4–7). This finding fits well with the so-called "like-me" principle, which says that individuals tend to communicate with other people who are similar to

themselves (Alves et al., 2016, pp. 107–108; Haun & Over, 2013, p. 75; Laumann, 1965, p. 26). This is plausible for several reasons. Firstly, it can be argued that individuals may be more willing to share information with people to whom they are similar. Secondly, it can be assumed that the probability of starting a conversation with another person is higher when this person is similar to oneself.

In order to understand the role of homophily, the model of the WoM network, according to Reingen (1987), is suitable. With the help of a network analysis, this model examines the social structure of a system consisting of WoM actors and their interrelationships. Such a WoM network consists of social groups. Thereby, communication can take place within such a group as well as between persons of different groups. On an individual level, a person's network of friends, relatives, and acquaintances can be condensed into a pattern. It can be examined along which personal paths WoM is shared within a network. It has been shown that WoM is shared more frequently within socially homogenous groups than between persons of different groups (Reingen, 1987, pp. 214–217). Socially homogenous groups are characterised by the fact that the people within the group have one or more things in common. For example, this can be a relationship, common interests, or the same place of residence. Thus, the WoM network theory also shows that homophily has a positive influence on WoM interactions.

Another characteristic which should be discussed is expertise. This is the degree of experience and familiarity with a product or service (Duhan et al., 1997, p. 286). It generally refers to information that can be retrieved from memory and is retrieved before an external search for information takes place (Duhan et al., 1997, p. 286). A distinction is made here between experience-based, subjective, and objective expertise. Experience-based expertise arises from experience with the product or service. Subjective expertise is solely the person's self-assessment of his or her knowledge, whereas objective expertise is considered to be actual knowledge (Duhan et al., 1997, p. 287). The influence of expertise can be viewed in two ways. One is by looking at the expertise of the WoM sender, and the other is by looking at the expertise of the receiver. The WoM sender's expertise is described in the WoM context as the extent to which a person is perceived as capable of contributing substantive information as credible without checking it. Thus, the perceived expertise of the sender has a positive impact on the effectiveness of WoM (Sweeney et al., 2014, pp. 339–340). For an investigation of the choice of target groups of WoM, which is focused on in this article, the expertise of the receiver is of interest as an influencing variable.

It has been established that a recipient's specialist knowledge influences buying behaviour. If a recipient already has knowledge of the subject of the WoM communication, he perceives the information as less risky (Bansal & Voyer, 2000, p. 175). However, what is significant for the influence on the choice of the WoM recipient is how the sender assesses the recipient's expertise. In context-driven WoM, it was found that the sender adapts specially shared content to the expertise of the interlocutor in each case. The likelihood that a piece of information will be shared with a specific person is higher if that person already has prior knowledge about the topic (Buttle & Groeger, 2017, p. 1044). For this reason, it can be assumed that there is also a positive influence of the recipient's expertise on the probability of information sharing.

Moreover, other important aspects, such as the status of the relationship or the used communication channel, are not discussed here since they are not of interest in the following empirical study.

#### **3. Hypotheses**

Based on the theoretical considerations made in Section 2, we developed the following hypotheses, which will be tested based on the data of a quantitative empirical study.

Firstly, we previously discussed the role of tie strength in a relationship. Based on the theoretical discussion, it can be assumed that a stronger relationship is associated with a higher likelihood that WoM occurs. Somehow intuitively, it is hypothesised that a higher closeness between individuals is associated with a higher probability that these people are exchanging information. For this reason, the hypothesis can be formulated as follows:

H1: A higher tie strength in a relationship is associated with a higher likelihood of WoM.

Secondly, it was discussed before that homophily and expertise may be regarded as impact factors on the likelihood of the occurrence of WoM. The theoretical considerations suggest that the probability of communicating WoM increases the higher the sender assesses the expertise of the recipient. According to WOM network theory, individuals are in certain social groups. Often these groups are characterised by similarities of the members (Reingen, 1987, pp. 215–216). The latter may also apply to homophily. We assume that homophily and expertise are related but different concepts that influence WoM. Contextual reference can be seen as a common umbrella term. Therefore, we formulate the following hypothesis:

H2: A higher level of contextual reference between individuals is associated with a higher likelihood of WoM.

## 4. Empirical Study

To investigate the hypotheses discussed above, an online survey was conducted in 2022 in Germany. Out of 166 responses, 106 participants completed the survey. It is worth mentioning that the individuals in the sample were relatively young (mean age 23.2 and 58.5% male) because a student sample was targeted.

Four fictional scenarios were described to all participants in the survey. Two of the scenarios were modelled in such a way that they aimed to be perceived as positive disconformity. On the other hand, two scenarios should be perceived as negative. In addition, the modelling took into account that a gradation in the event severity should be achieved. This means that the extent of the respective expectation disconformity was considered. The following scenarios were portrayed to the survey participants:

- 1. The cafeteria serves your favourite meal. (Scenario name: Favourite meal)
- 2. You receive a message from the university administration that you have been selected for a scholarship that will provide you with € 1000 per month in addition to your current budget. You do not have to pay back the money. (Scenario name: Scholarship)
- 3. The cafeteria at your university serves your favourite food. However, unlike what you are used to, it does not taste good at all today. (Scenario name: Bad meal)
- 4. Your current course of study at your university is abolished due to a lack of teaching staff. From now on, you will have to continue your studies at another university or discontinue your studies. (Scenario name: "Discontinued Studies")

Afterwards, the respondents were asked to evaluate these scenarios on an 11-point scale regarding their disconfirmation. The response options for evaluating the scenarios ranged from -5 ("much worse than expected") to 0 ("exactly as expected") and to 5 ("much better than expected"). As expected, the evaluation differed between the scenarios. For this reason, it is possible to distinguish between the scenarios based on their evaluation. This can also be seen in the following Table 1:

Scenario	Mean	Standard Deviation	Evaluation
Favourite Meal (1)	2.99	1.44	weak positive
Scholarship (2)	4.73	0.63	strong positive
Bad Meal (3)	-3.19	1.26	weak negative
Discontinued Studies (4)	-4.80	0.67	strong negative

Table 1: Mean and standard deviation of the disconfirmation with the four scenarios

A high level of disconfirmation with the expectation (values close to 5 or -5 respectively) can be regarded a higher level of escalation (Bohlmann et al., 2006). The mean values of the scenario evaluation show that scenarios (1) and (3) were evaluated with lower disconformity and thus are to be evaluated as less important events than scenarios (2) and (4).

Afterwards, the respondents were asked how likely it is that they would tell individuals from certain groups about the events mentioned before. The question was asked on a scale from 1 ("very unlikely") to 6 ("very likely"). The following three groups were considered:

- 1. Fellow students
- 2. Family, close friends
- 3. Acquaintances, public.

For the target group of fellow students, it was assumed that they have a medium level of commitment and a very high level of contextual reference. On the other hand, for members of the family and close friends, it can be assumed that they have a lower level of contextual reference but a very high level of commitment. The last derived target group, acquaintances and the general public, was assumed to have a low level of contextual relevance.

For each scenario and each group, the mean likelihood for WoM was calculated. The following Figure 1 provides an overview of the distribution of the means per scenario and group.



Figure 1: Average likelihood and corresponding confidence intervals of informing certain groups about specific events.

First of all, it can obviously be seen that the likelihood for WoM is higher in the majority of cases if the event can be regarded as having a high level of disconfirmation and therefore a high level of escalation For instance, the likelihood of WoM is always significantly higher in the case of Discontinued Studies than in the case of Bad Meal in the cafeteria (T for pairwise t-tests: 15.68, 18.8, 13.24, p<0.001 in all cases): In other words, as expected, the respondents were more likely to tell other people about an unexpected end of their studies than about a bad meal in the university's cafeteria. Surprisingly, this effect does not always hold in the case of positive events. On the one hand, the likelihood of WoM is significantly higher in the scenario of *Scholarship* than in the scenario of *Favourite Meal* for the group's acquaintances and public (T = 2.96, p = 0.002) and family and close friends (T = 16.68, p < 0.001). As expected, the respondents are more likely to tell the public, acquaintances, family, and close friends about a received scholarship than about their favourite meal in the cafeteria. On the other hand, this effect does not hold for the group of fellow students. As also visualised in Figure 1, the confidence intervals overlap, and there is, therefore, no significant difference (T = 0.785, p = 0.434). For this reason, it can be summed up that the respondents are not more likely to tell their fellow students about a received scholarship than about their favourite meal in the cafeteria. A possible explanation for this unexpected finding could be that the respondents would experience embarrassment when sharing this information with the comparable peer group, as it could lead to an unintended focus of attention (Tangney et al., 1996, p. 1261).

All in all, it can be shown that the hypothesis of the tie strength (H1) can be accepted. In all scenarios, pairwise t-tests prove that the respondents were more likely to tell fellow students or, respectively, family and friends about a certain event than acquaintances or the public, depending on the scenario (T between 7.99 and 28.14; p<0.001 in all cases). In addition, the respondents were also always significantly more likely to tell their family and close friends about certain events than their fellow students (T between 1.98 and 15.41, p between 0.025 and <0.001). According to these calculations, it can be stated that a higher tie strength is associated with a higher probability of an occurrence of WoM.

For hypothesis 2, the results are more ambiguous. It can be seen that the contextual reference plays a minor role. As mentioned before, acquaintances and the public are always significantly less likely to be informed about one of the four events (depending on the scenario, T between 7.99 and 28.14; p<0.001 in all cases). Nevertheless, the likelihood that the respondents tell their family or close friends about an event is always greater than the likelihood that fellow students are informed. Surprisingly, family or close friends are significantly more likely to be informed about the meal in the cafeteria than fellow students (T = 4.602 and p<0.001 or respectively T = 1.983 and p = 0.025 for one-sided t-tests). The latter also applies to the scenarios Scholarship and Discontinued Studies. For these reasons, Hypothesis 2 can only be partly accepted and must be partially rejected. A possible explanation would be that the tie strength has a bigger impact than the contextual reference on the occurrence of WoM.

These findings can also be found in the regression analyses, which were conducted as robustness checks. Linear regression analyses are used for estimating the impact of independent variables ("predictors") on a dependent variable (Wooldridge, 2013, pp. 71–72). A positive sign before the coefficients indicates that the relationship between the dependent and independent variable is positive, with a higher absolute value suggesting a stronger dependency (Wooldridge, 2013, pp. 29– 30). The asterisks indicate that the impact is statistically significant. The following Table 2 provides the regression estimates. In all cases, the likelihood of an occurrence of WoM was the dependent variable. Regression (1) includes all scenarios and groups. On the other hand, regressions (2) to (5) only cover one scenario but the likelihood of WoM to all groups.

Dependent variable: Likelihood of WoM							
	(1) All scenarios	(2) Scenario: Favourite Meal	(3) Scenario: Scholarship	(4) Scenario: Bad Meal	(5) Scenario: Discontinued Studies		
Constant	-0.933*** (0.183)	-0.088 (0.306)	0.505 (0.596)	-0.183 (0.286)	2.832*** (0.516)		
Tie Strength	0.417*** (0.027)	0.194*** (0.051)	0.824*** (0.044)	0.255*** (0.045)	0.417*** (0.040)		
Contextual reference	0.236*** (0.029)	0.386*** (0.055)	0.068 (0.047)	0.291*** (0.048)	0.209*** (0.043)		
Disconfirmation (absolute value)	0.543*** (0.033)	0.239*** (0.060)	0.007 (0.119)	0.265*** (0.060)	0.007 (0.101)		
Observations	1,272	318	318	318	318		
R <sup>2</sup>	0.341	0.228	0.547	0.256	0.336		
Adjusted R <sup>2</sup>	0.340	0.220	0.542	0.249	0.330		
Residual Std. Error	1.600 (df = 1268)	1.531 (df = 314)	1.321 (df = 314)	1.343 (df = 314)	1.197 (df = 314)		
F Statistic	218.818*** (df = 3; 1268)	30.857*** (df = 3; 314)	126.201*** (df = 3; 314)	35.949*** (df = 3; 314)	52.975*** (df = 3; 314)		
Note:	*p<0.1; **p<0.05; ***p<0.01						

Table 2: Estimation results with the likelihood of WoM as dependent variable

The survey asked the respondents about the perceived tie strength and contextual reference of the three groups. These variables were used as predictors in the estimation model. As already indicated by the comparison of means, it can be seen that a higher tie strength is always significantly associated with a higher likelihood of WoM (as indicated by the asterisks and the positive coefficients in the corresponding row of the table). Also, in the majority of the scenarios, the contextual reference has a significant impact on the likelihood of WoM (exception: scenario *Scholarship*). However, the size of the estimation coefficients is lower than for the tie strength. For this reason, it can be assumed that the tie strength has a bigger impact on the occurrence of WoM than the contextual reference of individuals. Furthermore, the regression estimates suggest that a higher level of disconfirmation (positive or negative) with an event is associated with a higher likelihood of WoM. This can be regarded as a proof that the escalation level has an impact on the likelihood of WoM which is somehow intuitive: the higher the surprise with an event (positive or negative), the higher the probability that other individuals are informed about the event.

All in all, the regression estimates confirm the findings of the mean comparison discussed previously.

## 5. Summary, implications, limitations, and prospects

This article delivers a contribution to the existing literature on communication in the field of Relationship Marketing. More precisely, insights on the reasons and likelihood of occurrence of WoM are provided. First, it was shown that the escalation levels play an important role. A higher perceived intensity of events is associated with a higher likelihood of WoM. This holds for both positive and negative events. Secondly, we show that the likelihood that WoM occurs is mainly driven by the tie strength of a relationship. Independent from the event, a closer relationship always leads to a higher likelihood that the respective person is informed about the event. Thirdly, we also provide some evidence that the contextual reference is an impact factor: A higher contextual

reference increases the likelihood of WoM, although this does not hold for all groups. For this reason, it follows that the likelihood of WoM is mainly driven by the tie strength and partly by the contextual reference.

The results suggest that it is not enough to simply promote positive WoM and avoid negative WoM. It is also important to think about which escalation levels can be found in each case. In the future, this can and should be taken into account in strategies to increase positive and reduce negative WoM. Considering this awareness, much more detailed possible effects (positive as well as negative) could be included in the planning. Moreover, companies and organisations should keep in mind that WoM is not only spread among groups with contextual reference but also, importantly, between other closely connected groups. This holds for positive and negative WoM and underlines the importance of trying to influence WoM. For instance, effective complaint management can be an effective tool to avoid negative WoM (Maurer & Schaich, 2011, pp. 502–503).

There are a few limitations worth mentioning. First of all, a student sample was recruited, and the scenarios shown were explicitly developed for the context of universities. It is important to keep in mind that the tie strength between fellow students may have been lower in 2022 due to digital teaching in universities because of the pandemic situation (Mizani et al., 2022, p. 2). In addition, it is possible that there is an overlap between fellow students and close friends since many students develop close friendships with some of their fellow students during their university years. Further research could consider other target groups and other scenarios. It would be interesting to compare the results shown before with other services. Moreover, it can be assumed that higher age is associated with less volatile interpersonal relationships (Carstensen, 2006, p. 1914). Therefore, it would be interesting to investigate whether the importance of the tie strength changes with higher age. In addition, we only focus on positive and symmetric relationships. Obviously, relationships between senders and receivers are not always necessarily positive and symmetric. Further research could focus on other kinds of relationships.

Moreover, it should be kept in mind that this research provides an overview of the effect. Further research applying more elaborate quantitative tools, such as SEM or PROCESS, could provide valuable insights to analyse the importance of other attributes, such as service satisfaction or the role of possible socio-demographic or psychographic characteristics like extroversion. In addition, we did not consider the role of emotions. In particular, negative moral emotions such as shame, guilt or embarrassment could reduce the likelihood of engaging in WoM as these emotions result from norm violations (Haidt, 2003; Tangney et al., 1996). On the other hand, engaging in negative WoM can be regarded as a coping strategy for dealing with negative emotions (Adjei et al., 2016; He & Harris, 2014). Moreover, qualitative interviews could deliver information on which specific situations and especially for which reasons information and experiences are shared or not. In addition, further qualitative research could investigate with in-depth interviews how WoM communication changes depending on the purpose and reasons of WoM. It would be plausible that the dynamics in WoM communication depend on the reason for which WoM occurs.

Finally, experiments and also the imagination of fictive scenarios have only a limited explanatory power as people may behave differently in reality (Cameron et al., 2011, p. 27; Chapanis, 1967, p. 558). Therefore, future research could focus on actual WoM and not only WoM intention in fictive scenarios.

#### Literature

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