DON'T BE SO EMOTIONAL! HOW TONE OF VOICE AND SERVICE TYPE AFFECT

THE RELATIONSHIP BETWEEN MESSAGE VALENCE AND CONSUMER

RESPONSES TO WOM IN SOCIAL MEDIA

**ABSTRACT** 

**Purpose** 

The purpose of this article is to shed light on the boundary conditions of the effect of the valence

of word-of-mouth on social networking sites (sWOM) on consumer responses (attitude toward the

service provider, purchase intention and positive word-of-mouth intention). Specifically, we

examine two moderators: the tone of voice (factual versus emotional) of the sWOM and service

type (utilitarian versus hedonic) of the service that the sWOM is about.

Methodology

A 2 (message valence: positive versus negative) x 2 (tone of voice: factual versus emotional) x 2

(service type: utilitarian versus hedonic) full-factorial between-subjects online experiment with

400 respondents was conducted and the data were analyzed using Hayes' PROCESS macro.

**Findings** 

The results show that message valence exerts a greater impact on consumer responses with factual

sWOM messages compared to emotional ones. Furthermore, the impact of message valence is

stronger for hedonic services compared to utilitarian services. In contrast to our expectations, there

is no significant impact of matching the tone of voice to the service type.

**Practical implications** 

First, for sWOM senders, factual messages are found to be more influential: backing an sWOM up

with arguments and specific details increases the chance of it affecting consumers' responses. As

a result, marketers, especially of predominantly hedonic services, should encourage their followers

and customers to spread positive factual sWOM about their service.

Originality/value

The study tests two previously unstudied moderating variables that affect the relationship between

message valence and consumer responses to sWOM messages. Moreover, this study provides

interesting insights for marketers and bloggers or reviewers.

**Keywords**: sWOM, tone of voice, service type, social media, Facebook

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#### INTRODUCTION

Consumers' increased use of online communications is reflected in their word-of-mouth (WOM) behavior (Karjaluoto et al., 2016). Sharing daily consumption online is an important part of modern life (Kim et al., 2015). Hennig-Thurau et al. (2004) define electronic word-of-mouth (eWOM) as: "any positive or negative statement made by potential, actual, or former customers about a product or a company, which is made available to a multitude of people and institutions via the Internet." (p. 39)(p. 39). eWOM can occur through review sites (e.g., TripAdvisor), (micro)blogging platforms (e.g., Twitter), video sharing sites (e.g., YouTube) and social networking sites (SNS, e.g., Facebook). In the present study, we are interested in the latter, for which the term sWOM has been coined (Balaji et al., 2016). sWOM is eWOM on SNSs, which are, "applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other." (Kaplan and Haenlein, 2010, p. 63).

In general, eWOM is acknowledged to greatly impact consumer attitudes, behavioral intentions (e.g., Cheung and Thadani, 2012) and sales (Rui et al., 2013). Sociable Labs (2012) report that 62% of online shoppers have read product-related messages from Facebook connections. The limited research on sWOM seems to suggest that sWOM, like other forms of eWOM, is perceived by consumers as trustworthy and credible (Chu and Kim, 2011) and exerts a positive effect on consumers' online brand engagement, brand awareness, brand attitude and purchase intention (Karakaya and Barners, 2010; Schivinski and Dabrowski, 2015; Wang et al., 2012).

It may, however, be important to distinguish sWOM from the broader concept of eWOM. First, research on eWOM already suggests that not all digital WOM is created equal. In an explicit comparison between consumer reviews and microblogs, Marchand et al. (in press) document differential effects of the valence and volume of the two types of eWOM on video game sales. Second, some research documents differences between eWOM and sWOM (e.g., Lin et al., in press). From a sender's perspective, one of the major implications of sWOM is that the sender is identifiable and can be held accountable, which results in a higher social risk (Balaji et al., 2016; Eisingerich et al., 2015), while other forms of eWOM (e.g., online reviews) may be anonymous. From a reader's perspective, sWOM has a unique advantage of referability: the contributor's SNS profile provides for a higher level of source credibility, benefiting sWOM adoption (Hajli, in press).

Identification with the sender is also a relatively unique aspects of SNSs, that drives readers' purchase intention (Wang et al., 2012). Bachleda and Berrada-Fathi (2016) suggest that negative sWOM from a Facebook friend is less influential than negative eWOM from a consumer review site, because readers place less trust in sWOM.

Users' motivation to visit SNSs and review sites also differ, which could result in different responses to WOM on these platforms (Gvili and Levy, 2016). SNSs are mainly used to pass time and for amusement and social exchange (Ku et al., 2013), whereas review sites are consulted to read information on a product or service in which the user is already interested (Reichelt et al., 2014). Exposure to brand information in sWOM is more voluntary (Chu and Kim, 2011). The meta-analysis of Babié Rosario et al. (2016) indicates that the effect of sWOM on sales is weaker than the effect of eWOM through e-commerce platforms. sWOM does, on the other hand, entail an increased risk that customer complaints go viral (i.e. shared on a massive scale on SNSs), causing a potential public relations crisis for a firm. It is therefore essential that the determinants and consequences of sWOM are examined (Balaji et al., 2016).

The beneficial effect of positive message valence on attitudes (Purnawirawan et al., 2015), brand loyalty and perceived brand quality (Schivinski and Dabrowski, 2015), purchase intentions (Bae and Lee, 2011) and even sales (Floyd et al., 2014) of the message recipients, is consistently found in the eWOM literature (e.g. Floyd et al., 2014; Lee and Koo, 2012; Purnawirawan et al., 2015), and has been replicated in one sWOM study (Rui et al., 2013). However, this effect can be reinforced or weakened by moderating factors.

The current study offers a number of contributions. According to Barger et al. (2016) conceptual framework on consumer engagement in social media, an antecedent that needs more extensive research is the 'content factor'. Our study responds to this call by inspecting how the tone of voice of a message (whether the sWOM message takes on a more factual or emotional tone) moderates the effect of message valence on consumer responses. Moreover, we also inspect the moderating effect of service type (whether the service mainly fulfills utilitarian or hedonic buying motivations) on the effect of sWOM valence, which in the framework proposed by Barger et al. (2016), can be categorized as a "product factor". By studying the combination of these variables, we are able to explore the boundary conditions of the effects of sWOM message valence.

This study sets out to corroborate in an sWOM context findings on the role of message valence and tone of voice previously found in an eWOM context, and further tests the moderating effect of service type. We test our propositions for services, since sWOM has been found to be more influential when services are discussed (compared to products) (Babić Rosario et al. (2016). We focus on both traditional brand responses (attitude and purchase intention) (e.g. Park and Lee, 2008; Purnawirawan et al., 2015), and consumer engagement, more specifically, positive word-of-mouth intention. Consumer engagement is "a consumer's positively valenced brand-related cognitive, emotional and behavioral activity during or related to focal consumer/brand interactions" (Hollebeek et al., 2014, p. 154). Positive WOM intention is a particularly relevant outcome variable in the context of social media, and social networking sites in particular (Geuens and De Pelsmacker, 2017).

#### LITERATURE REVIEW AND HYPOTHESES

The influence of message valence on consumer responses to sWOM

Most studies find that positive eWOM benefits recipients' attitudes (Doh and Hwang, 2009; Purnawirawan et al., 2015), purchase intentions (Bae and Lee, 2011; Doh and Hwang, 2009) and sales (Floyd et al., 2014), while negative eWOM entails negative effects. In an sWOM context, Rui et al. (2013) report a positive effect of positive tweets about a movie on movie sales and a negative effect of negative tweets. While the effect of message valence is quite consistent, it is influenced by a number of moderators. For example, the effect of review valence is greater when consumers have less product expertise or are not familiar with the brand (Purnawirawan et al., 2015; Zou et al., 2011). López-López and Parra (2016) show that the presence of a review voted as "the most helpful" influences recipients' attitude toward the product in the direction of the review valence. Moreover, they find that this effect is further reinforced by goal congruency between the focal review and the recipients' goals.

Inspired by Barger et al. (2016), we examine how message content and product related antecedents, such as a factual versus emotional tone of voice and the service type moderate the effects of sWOM message valence. The conceptual model on which the hypotheses in the following sections are based, is presented in Figure I.

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# Insert Figure I about here

The moderating effect of a factual versus an emotional tone of voice

We consider the factual versus emotional tone of voice of sWOM as an element of message content, an important antecedent of consumer engagement on social media (Barger et al., 2016). Some messages are (predominantly) factual, based on attribute-value information, such as "My internet connection speed is twice as fast as before". The arguments used are rational, objective, specific and clear. Other messages are predominantly emotional, focusing on the feelings caused by the experience of using the product by the writer, with no or little support from verifiable arguments (e.g., 'This hotel was awesome! I'm really glad we stayed here.') (Park and Lee, 2008). Emotional messages are often more subjective, and abstract, containing interjection and non-relative information.

Previous research uses a different terminology to examine relatively similar phenomena. Huang et al. (2007) find that negative online reviews lead to a higher opinion acceptance, WOM intentions and boycott intentions when the reviews are instrumental (cf. factual) compared to affective (cf. emotional). Park and Lee (2008) show that positive attribute-value reviews (cf. factual) that focus on the attributes of a portable multimedia player increase purchase intention more than recommendations that focus on the experience of using the product (cf. emotional). Wu and Wang (2011) conclude that positive rational eWOM messages outperformed positive emotional ones with respect to their effect on brand attitude, trust and affection and purchase intention, especially for highly involved consumers. Lee and Koo (2012) findings suggest that objective (cf. factual) information has a stronger effect on consumer attitudes and behavior (intentions) than subjective (cf. emotional) information. They suggest that this results from the fact that objective information will less likely result in misunderstanding or bias in the evaluation process. Chun and Lee (2016) confirm these findings in an sWOM context in that users perceive messages with more utilitarianvalue (cf. factual) content as more useful than hedonic-value (cf. emotional) messages. This, in turn, increases users' behavioral intention to subscribe to a company's Facebook page, learn about the company, recommend the use of the company and promote the company. However, they considered only positive messages, and did therefore not study the moderating effect of the tone of voice on the effect of valence.

These results can be explained by the accessibility-diagnosticity theory (Ahluwalia and Gürhan-Canli, 2000). Information needs to be both accessible in consumers' memory and diagnostic before it influences evaluations. Consumers evaluate the diagnosticity of information by its ability to help them in evaluating the quality and performance of the target object. Diagnostic information that is less ambiguous will more likely be used. Factual messages, based on concrete product characteristics, independent of the reviewer, are perceived as more informative or diagnostic. This might be especially important for services as they cannot be seen or touched (Sweeney et al., 2012).

The findings are also explained by attribution theory (Moran and Muzellec, 2014; Sen and Lerman, 2007). A message can be attributed to product performance (stimulus attribution) and/or to dispositional characteristics of the communicator (non-stimulus attribution) (Lee and Youn, 2009; Moran and Muzellec, 2014). Factual messages are more likely to induce stimulus attribution since the use of arguments provides a better insight into product performance. In contrast, emotional messages are more likely to induce non-stimulus attribution due to the lack of arguments and the use of emotional statements. Subsequently, the information will be discounted in the evaluation of the product's actual performance (Lee and Youn, 2009; Moran and Muzellec, 2014).

In line with these theories and results, we expect that factual messages will reinforce the effect of message valence. Positive sWOM should obviously result in more positive consumer responses than negative ones, but the difference in effects between positive and negative sWOM should be greater with factual than with emotional messages.

H1: The effect of sWOM message valence on readers' (a) attitude toward the service provider, (b) purchase intention and (c) WOM intention is stronger for sWOM messages that are perceived as more factual.

## The moderating effect of service type

People use goods and services based on hedonic or utilitarian motivations (Batra and Ahtola, 1991; Dhar and Wertenbroch, 2000). While the consumption of most goods and services can involve both hedonic and utilitarian dimensions, researchers often distinguish between predominantly utilitarian and hedonic products (Batra and Ahtola, 1991; Dhar and Wertenbroch, 2000; Hellén and Sääksjärvi, 2011). When buying a service for predominantly hedonic motivations (e.g. restaurant, bar), people seek value from an affective and sensory experience of aesthetics,

sensual pleasure, fantasy and fun (Hirschman and Holbrook, 1982). The experience and derived sensations from consuming the service drive quality perception and satisfaction. Consequently, hedonic services are highly person-specific and are mostly experienced subjectively (Voss et al., 2003). A service bought for utilitarian motivations (e.g. cell phone provider, bank), on the other hand, is used to accomplish a functional or practical task. As these tasks are less person-specific, an evaluation of the service quality and customer satisfaction can be made more objectively (Voss et al., 2003). Hedonic and utilitarian buying motivations lead to differences in information processing (e.g. King and Balasubramanian, 1994; Senecal and Nantel, 2004). Due to the fact that hedonic services cannot be known or evaluated until experienced or used (Klein, 1998; Zhu and Zhang, 2010), pre-purchase uncertainty is high (Park and Lee, 2009; Park and Park, 2013). Risk aversion causes consumers to perceive eWOM about a hedonic service as more diagnostic (Willemsen et al. (2011). Utilitarian services, on the other hand, can be evaluated based on tangible attributes prior to purchase (Klein, 1998; Purnawirawan et al., 2015). As a result, consumers may complement sWOM with other (factual) information that they can readily observe. Therefore, sWOM will be relatively less diagnostic for utilitarian products and services than for hedonic ones (Willemsen et al., 2011). Based on accessibility-diagnosticity theory, message valence should therefore exert a greater effect on readers' responses for hedonic than for utilitarian products. Previous research in this field has focused exclusively on online reviews. However, we assume that these findings also apply in an sWOM context. Therefore, we expect:

H2: The effect of sWOM message valence on readers' (a) attitude toward the service provider, (b) purchase inetention, (c) WOM intention is stronger for a hedonic service than for a utilitarian service.

#### Tone of voice, service type and consumer responses

In the previous sections, we developed hypotheses on how the message tone of voice and the service type moderate the effect of valence separately. In this section, we will hypothesize that, additionally, all three factors interact to influence consumer responses. Based on the matching principle (e.g. Klein and Melnyk, 2016), we expect that a match between the message tone of voice and the service type exerts a greater impact on consumers' responses. The matching principle states that advertising messages that are compatible with a consumer's motivations (utilitarian or hedonic) are more persuasive than incompatible messages (Shavitt, 1990). López-López and Parra

(2016) indeed found that the effect of a review voted as the most helpful is stronger when the review is congruent with the reader's goals.

The consumption of utilitarian goods is more cognitively driven and goal-oriented towards a functional or practical task. Therefore, consumers tend to evaluate utilitarian services more cognitively. When processing information for this type of products, the immediate consequences of using the products will be of interest (Batra and Ahtola, 1991). As hypothesized in H1, the use of tangible and objective information in WOM (i.e., a factual tone of voice) will increase the likelihood that readers rely on the WOM (Grabner-Kräuter and Waiguny, 2015). The matching principle prescribes that a more factual tone of voice is especially influential when the sWOM concerns a utilitarian service, as a factual tone of voice matches with readers' utilitarian buying motivations. Therefore, we expect:

H3: For sWOM messages about a utilitarian service, the effect of message valence on readers' (a) attitude toward the brand, (b) purchase intention, (c) WOM intention is stronger when the message is perceived as more factual.

Hedonic services satisfy emotional needs. As a result, consumers perceive affect and experiences as important when evaluating a hedonic service (Hellén and Sääksjärvi, 2011). Emotional messages will therefore be more diagnostic (Jiang and Wang, 2006). Research shows that consumers use more signs of affect when evaluating hedonic services compared to utilitarian services (Jiang and Wang, 2006) and eWOM about these goods and services are more affectively processed (Klein and Melnyk, 2016). Thus, sWOM messages using an emotional tone of voice might match better with hedonic services (Grabner-Kräuter and Waiguny, 2015). We expect:

H4: For sWOM messages about a hedonic service, the effect of message valence on readers' (a) attitude toward the brand, (b)purchase intention, (c) WOM intention is stronger when the message is perceived as more emotional.

#### STUDY DESIGN AND PROCEDURE

We created a 2 (valence: positive vs negative) x 2 (tone of voice: emotional vs factual) x 2 (service type: utilitarian vs hedonic) full-factorial between-subjects experiment. Although the main

study is conducted with U.S. participants, for convenience reasons two pretests were conducted with Belgian participants. The scales used in the pretests are the same as in the main study (Table I). In a first pretest (N=36,  $M_{age}$ =46.81, 38.9% male), respondents rated how utilitarian and hedonic a number of services are. We also measured involvement as that is a potential confound in responses to emotional and factual messages. Respondents were recruited via Facebook to complete an online questionnaire. We selected a bar as a hedonic service, and a cell phone provider as a utilitarian service, as these differed significantly in perceived hedonism ( $M_{bar}$ =5.96,;  $M_{provider}$ =4.48, p<.001)) and perceived utilitarianism ( $M_{provider}$ =6.23,  $M_{bar}$ =4.86, p<.001), but not in involvement (p= .369).

Next, we created eight potential sWOM messages to cover our 2x2x2 design (see Appendix A). All messages consisted of two short sentences followed by two hashtags. The emotional messages reflect the emotions the sender experienced in using the service (e.g. "It is pure enjoyment!"). The factual messages provide service-relevant information and factual characteristics (e.g. "It was also clean as a whistle."), which is in line with the manipulations of Huang et al. (2007) and Park and Lee (2008). In a second pretest, 166 respondents (age range: 19 to 61,  $\overline{X}_{age}$ = 38.40 (SD= 12.66); 31.9% male) were recruited by email from an online panel set up by the researchers' department to complete an online questionnaire. Each respondent was randomly assigned to a single valence by tone of voice condition (e.g. positive valence – factual tone). That is why the number of respondents is higher than in the first pretest. Respondents rated the perceived valence (negative positive) and perceived tone of voice (e.g. not factual/factual) for the created sWOM message in their condition for both the bar and the cell phone provider (within-subjects), in a randomized order. An independent samples t-test indicated that the factual messages were indeed perceived as more factual than the emotional ones and the positive messages were indeed perceived as significantly more positive than the negative messages (all p< .001).

The main study was set on Facebook because Facebook is considered the most popular social network site today (cf. Fang, 2014; Wang and Chang, 2013). We drafted a (non-interactive) mock Facebook page to mimic an actual Facebook news feed, in line with previous research (Chun and Lee, 2016). We instructed respondents to imagine that this was their own news feed. In the feed (among other things, which were held constant across conditions), a (fictitious) Facebook friend

had posted a message about a bar (hedonic service) or a cell phone provider (utilitarian service). Both services were fictitious brands to avoid potential confounds of prior brand knowledge and attitudes. The post was either positive or negative, and written either in an emotional or factual tone of voice. American respondents (N=400, M<sub>age</sub>=28.15, 54.5% male) were recruited for an online survey via a professional recruitment service and randomly assigned to conditions. All respondents were at least undergraduates. Only participants with a Facebook account were selected, 50.5% of the respondents spent time on Facebook every day, with a majority (56.3%) spending between 10 and 30 minutes per day on Facebook. Only 4.3% of respondents had less than 11 Facebook friends and 18.5% had more than 401 Facebook friends. The average score on a Facebook intensity scale was 4.34 (SD= 1.67).

#### Measures

Table I shows all construct items. Respondents first answered the questions on their Facebook use, Facebook intensity (e.g. "Facebook is part of my everyday activity), number of days spent on Facebook in the past week, average minutes per day spent on Facebook and number of Facebook friends. Respondents then saw the mock Facebook page containing the target sWOM post, with the instruction to imagine that they were looking at their own Facebook news feed. Next, participants rated the perceived valence and tone of voice of the target post, their attitude towards the service provider (Att), purchase intention (PI) and (positive) word-of-mouth intention (WOM). Finally, respondents were asked to rate the hedonic and utilitarian buying motivation for either the cell phone or the bar. All constructs were measured by means of 7-point Likert scales or semantic differentials. Construct scores were computed by calculating the average of the items per construct.

# Insert Table I about here

#### Manipulation checks

Although the pretests were conducted in a different country than the main study, in line with the results of our pretests, all manipulations were successful. Participants rated the positive sWOM ( $\overline{X}$ = 5.94, SD= 1.13) as significantly more positive than the negative sWOM ( $\overline{X}$ = 1.84, SD= .91, t(398)= -40.12, p< .001). The factual sWOM ( $\overline{X}$ = 4.57, SD= 1.11) was rated more factual than the emotional sWOM ( $\overline{X}$ = 3.85, SD= 1.10, t(398)= 6.51, p< .001). Next, a cell phone provider ( $\overline{X}$ =

6.35, SD= .86) was rated as more utilitarian than a bar ( $\overline{X}$ = 4.95, SD= 1.20, t(398)= 6.51, p< .001), while a bar ( $\overline{X}$ = 5.75, SD= .1.21) was rated as more hedonic than a cell phone provider ( $\overline{X}$ = 4.77, SD= 1.10, t(398)= 8.88, p< .001).

#### **RESULTS**

To test our hypotheses, we analyzed the data using Hayes' PROCESS macro (2013) (Model 3) with 1000 bootstrap samples. We conducted three separate analyses for the three dependents. We used perceived tone of voice and perceived valence (both mean centered) as independent variables. This is consistent with previous research on personalization (Li, 2016) and interactivity (Cauberghe et al., 2011). Service type was dummy coded (cell phone provider (utilitarian) = 0, bar (hedonic) = 1). We also included all interactions.

# Insert Table II about here

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There is a positive main effect of perceived message valence on Att (b=.443, p<.001), PI (b=.365, p<.001) and WOM (b=.201, p<.001). The results also show a significant interaction between message valence and tone of voice on Att (b=.125, p<.001), PI (b=.124, p<.001) and WOM (b=.072, p<.001) (Table II). Simple slope analyses indicate that the slopes for Att (m<sub>-1SD</sub>= .298, m<sub>+1SD</sub>= .588), PI (m<sub>-1SD</sub>= .221, m<sub>+1SD</sub>= .509) and WOM (m<sub>-1SD</sub>= .117, m<sub>+1SD</sub>= .285) for sWOM messages with a more factual tone of voice (observed at the mean +1SD) are steeper than those for the ones with a more emotional tone of voice (observed at the mean -1SD), indicating a stronger effect of message valence for more factual than for more emotional messages (see Figure II). H1a, b and c are supported.

# Insert Figure II about here

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Next, we find a significant interaction between message valence and service type on Att (b= .158, p< .001), PI (b= .232, p< .001) and WOM (b= .150, p= .001). The slope gradients indicate that for Att ( $m_{-1SD}$ = .600,  $m_{+1SD}$ = .442), PI ( $m_{-1SD}$ = .596,  $m_{+1SD}$ = .364) and WOM ( $m_{-1SD}$ = .350,  $m_{+1SD}$ = .200), the slopes for the hedonic service are steeper than for the utilitarian service, demonstrating a stronger effect of message valence for a hedonic service than for a utilitarian

service. H2a, b and c are supported. Finally, we find a significant three-way interaction effect between message valence, tone of voice and service type on WOM (b= .092, p= .012), but not on Att (b= .001-, p= .971) and PI (b= .014, p= .761). H3a and H3b are rejected. We further probed the results for WOM. For a utilitarian service, the slope of message valence is significantly steeper for a more factual (observed at the mean +1 SD) compared to a more emotional message (observed at the mean -1 SD) (m- $_{1SD}$ = .117, m+ $_{1SD}$ = .283, p< .001), as expected in H3c. For a hedonic service, the slope of message valence is also significantly steeper for a more factual message than for a more emotional message (m- $_{1SD}$ = .161, m+ $_{1SD}$ = .541, p< .001). Unexpectedly, the slope is even steeper for the hedonic than for the utilitarian service. This finding indicates than for hedonic services, it is even more important to use a more factual tone of voice than for a utilitarian service. H4a, b and c are thus rejected. Overall, H1, H2 and H3c are supported, while H3a, H3b and H4 are rejected.

#### DISCUSSION AND CONCLUSION

Previous research has demonstrated a positive effect of positive (compared to a negative) eWOM on consumer responses (e.g. Bae and Lee, 2011; Purnawirawan et al., 2015). The current research corroborates this on social networking sites. In response to the call of Barger et al. (2016) to examine the effects of content and product factors on consumer engagement in social media, the current study focuses on the moderating impact of a factual versus emotional tone of voice and a utilitarian versus hedonic service type on this relationship in a social networking setting. The findings suggests that consumers evaluate sWOM differently depending on the tone of voice and the type of service evaluated. This implies that the effects of sWOM cannot simply be generalized across all messages and product types, which is in line with previous findings for online reviews (e.g. Willemsen et al., 2011). The findings of the current study add to the growing body of literature on the boundary conditions of message valence effects on responses by showing that sWOM message valence has more impact on attitude and purchase intention towards a service, and positive WOM intention when a more factual tone of voice (rather than an emotional one) is used. Message valence also has a stronger effect on consumer responses when evaluating an sWOM message about a hedonic service compared to one about a utilitarian service. We conclude that these

findings, previously documented in other fields (Park and Lee, 2009; Park and Lee, 2008; Wu and Wang, 2011), also hold in the context of social networking sites.

Our findings also imply that matching tone of voice to the nature of a service does not lead to a greater impact of message valence on consumer responses than mismatching. In our study, for both utilitarian and hedonic services, the informative effect of a factual message seems to dominate the potential effect of a match in terms of the tone of voice. In other words, a more factual positive message leads to more positive attitude toward the service provider, purchase intention and positive WOM intention, regardless of the product type. While this result was unexpected, it can be understood in the light of other research. Klein and Melnyk (2016) argue that matching (or mismatching) a message for hedonic services might matter less due to the fact that arguments for this type of service might not be scrutinized in detail. They suggest that the presence of arguments offers a heuristic cue upon which decisions can be based. This seems especially true for WOM intention, as we found a significant three-way interaction here in the opposite direction of what we expected: more factual arguments seemed even more influential (compared to emotional ones) on WOM intention for a hedonic service than for a utilitarian service. Eisingerich et al. (2015) already posited that positive WOM intentions are more sensitive to social disapproval from others. A poor recommendation could harm the recommender's credibility and reputation (Cheung et al., 2009) and consumers may be less willing to take a chance in offering positive (s)WOM about a service as a poor decision in this respect does not only have repercussions for their own service experience, but may also reflect poorly upon them as a source of information (Dens et al., 2015). This may be the reason why we find this effect on WOM intention, but not on attitudes or purchase intention. The quality of hedonic services is harder to judge than that of utilitarian services. Review readers may only feel confident to recommend a (hedonic) service to others when there are clear positive factual arguments to do so.

### MANAGERIAL IMPLICATIONS

Our results provide guidelines for practitioners and influencers. First, message valence has a consistent effect on consumer responses: positive reviews lead to more positive responses. Service providers should thus encourage their customers to post as many positive reviews on SNSs as possible, and avoid negative reviews to be posted. Second, messages that are formulated in a factual tone of voice, reinforce the effect of review valence on the attitude toward the service provider,

purchase intention and positive WOM intention. Research suggests that consumers do not only spread eWOM out of personal interest (e.g. venting negative feelings or economic incentives), but also because they are concerned about others. Consequently, we advise people posting sWOM and marketers soliciting positive sWOM to back up their sWOM with facts and avoid emotional argumentation. Third, our results imply that recipients of sWOM messages are generally more influenced by sWOM about hedonic services than utilitarian ones. It is therefore more beneficial for marketers of predominantly hedonic services to persuade potential customers via sWOM, and they should invest relatively more effort in trying to elicit positive sWOM, or countering negative sWOM. Finally, there is no need for consumers or service providers to try to match their tone of voice of sWOM to the type of service. Regardless of the service type, factual messages have a greater impact than emotional ones. In terms of triggering WOM, the effect of factual review messages on consumers is even stronger for hedonic than for utilitarian services in term of reinforcing the message valence effect. Consequently, in terms of customer engagement, this again underlines the importance of soliciting positive factual reviews for marketers of hedonic services, even more so than for providers of utilitarian services. Especially providers of hedonic services should therefore try to motivate satisfied customers to post more factual details about their positive experiences or they could ask for factual details when interacting with them. On their own site, they could provide a standard fill-out form or template to stimulate more factual consumer reviews, or they could more prominently highlight client testimonials that spontaneously describe factual aspects of their experience.

#### LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The limitations of this study provide opportunities for future research. First, respondents were only exposed to a single sWOM message. Future research could examine the impact of a set of different sWOM messages about the same service. Kim and Gupta (2012) found that a single review with negative emotions decreases the negative impact of the review on product evaluations (compared to a non-emotional negative review), whereas multiple negative emotional reviews increase the negative impact (compared to multiple non-emotional negative reviews). Furthermore, for a positive emotional review, they found that one review did not impact product evaluations and

multiple emotional reviews did. We also did not consider different types of emotions, nor did we use different types of attributes. Felbermayr and Nanopoulos (2016) used data mining to examine the role of different emotions in online reviews for different product categories. Their findings already hint that there is an interaction between different emotions and product type. For example, for the category 'tools and home improvement' joy is not a very important dimension to predict reviews helpfulness. For games, on the other hand, this is an important dimension. This might be a foundation upon which further experimental analyses might build. Furthermore, Teng et al. (2014) examine different aspects, such as strength, comprehensiveness and relevance, in determining argument quality of online reviews, which future research could employ to distinguish between different types of arguments. Although we surveyed 400 respondents, which is in line with previous experiments in the field (e.g. Dens et al., 2015: 54 respondents per condition; Wang et al., 2015: 41 respondents per condition), future research could examine a larger sample.

Second, we did not examine the impact of the context. Our sWOM message was presented on a Facebook wall with only one other message, which was intentionally kept neutral (profile picture update). However, the mood induced by e.g. the valence of other sWOM messages might also have an impact on the processing of sWOM messages. In line with the context appreciation theory, the context can be used as a source of information in the processing mechanism. It has been shown to positively impact likeability, informativeness and even brand recognition in the context of television advertising. A positive mood, as a result of the context, can be transferred to consumers' responses (De Pelsmacker et al., 2002).

Third, Petty and Cacioppo (1984) indicate that attitudes formed via the central route are more time-resistant than those formed via the peripheral route and that people are more likely to act upon attitudes based on issue-relevant thinking. Future research could shed light on whether the use of a factual tone of voice and a hedonic buying motivation increase the likelihood of central processing in a longitudinal experiment.

Finally, our study only used self-reported attitudes and intentions and did not measure actual behavior. The rise of social media has led to the development of data analytics, enabling researchers to analyze real social network data and examine the impact on, for example, sales (Rui et al., 2013). Measuring self-reports is common in the context of experiments, where people are often confronted with fictitious brands for reasons of internal validity (Geuens and De Pelsmacker, 2017). Adding behavioral data would strengthen the empirical validation of our results.

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## **FIGURES**

Figure I. Conceptual framework

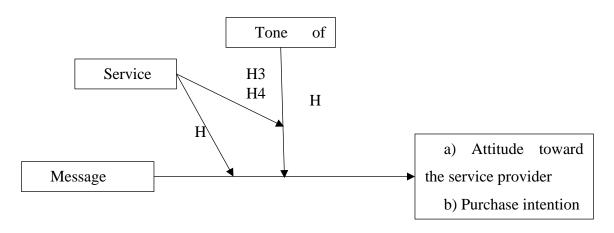
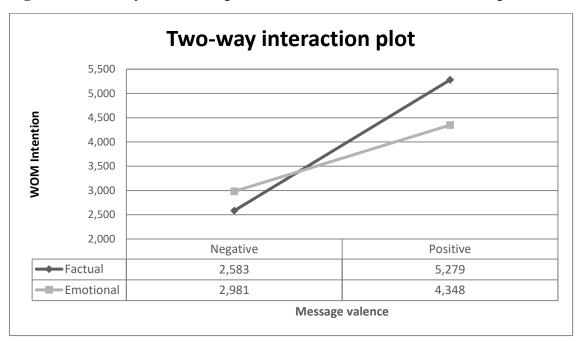


Figure II. Two-way interaction plot with word-of-mouth intention as dependent variable



## **TABLES**

**Table I. Construct items** 

Construct	Items	Cronbach's Alpha in the Main Study	Scale Origin
Perceived message	To what extent do you think the post was negative	-	
valence	or positive?		
Perceived tone of	- Emotional – rational	.735	Liu and Stout
voice	- Intangible - tangible		(1987)
	- Subjective - objective		
	- Nonfactual - factual		
	- Nonlogical - logical		
Hedonic buying	- Not fun — fun	.978	Voss et al.
motivation	- Dull - exciting		(2003)
	- Unenjoyable - enjoyable		
Utilitarian buying	- Ineffective – effective	.927	Voss et al.
motivation	- Not functional - functional		(2003)
	- Impractical – Practical		
Attitude toward	- Unappealing — appealing	.918	Spears and Singh
service provider	- Bad - good		(2004)
	- Unpleasant — pleasant		
	- Unfavorable - favorable		
Purchase intention	If I were to choose a bar/cell phone provider, I	-	Dodds et al.
	would consider Chromebar/Smartline.		(1991)
Word-of-mouth	- I am likely to say negative/positive things about	.842	Brüggen et al.
intention	Chromebar/Smartline.		(2011)
	- I am (not) likely to recommend		
	Chromebar/Smartline to a friend or a colleague		
	- I am likely to discourage/encourage friends and		
	relatives to visit Chromebar/use Smartline.		
FB Intensity	<ul> <li>Facebook is part of my everyday activity.</li> </ul>	.838	Ellison et al.
	- I feel out of touch when I haven't logged onto		(2007)
	Facebook for a while.		
	- I would feel sorry if Facebook shut down.		
Days spent on FB	- In the past week, on average, approximately how	-	Ellison et al.
	many days have you used Facebook?		(2007)
Minutes per day	- In the past week, on average, how many minutes	-	Ellison et al.
spent on FB	per day have you spent on Facebook?		(2007)
Number of FB	- About how many Facebook friends do you have	-	Ellison et al.
friends	in total?		(2007)
Product category	A cell phone provider / bar is to me.	.947	De Meulenaer et
involvement	- Unimportant – Important		al. (2015)
	- Meaningless – Meaningful		
	- Does not matter to me – Does matter to me		

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**Table II. Unstandardized Regression Weights** 

	Att	PI	WOM
Perceived valence	.443***	.365***	.201***
Perceived tone of voice	.115**	008	.136**
Service type (1: bar)	.390***	.701***	.403***
Perceived valence x tone of voice	.125***	.124***	.072***
Perceived valence x service type	.158***	.232***	.150**
Perceived tone of voice x service type	196*	289**	.110
Perceived tone of voice x perceived valence x service type	.001	.014	.092*
$\mathbb{R}^2$	.590	.426	.314

*Note:* \*\*\*p≤.001; \*\*p≤.010; \*≤.050

TABLES

Appendix A. Stimuli: sWOM message per condition

		Emotional	Factual
bar	positive	Just went for a drink at ChromeBar.	Just went for a drink at Chromebar. The
		AMAZING! It really is pure enjoyment!	service was really fast. It was also clean
		I'm totally looking forward to the next	as a whistle. #uniqueservice
		time! #awesome	#veryprofessional
		#happinessinthelittlethings	
	negative	Just went for a drink at Chromebar.	Just went for a drink at ChromeBar. The
		TERRIBLE! We were annoyed the whole	service was superslow. It wasn't very
		time! I'm never going back there! #sad	clean either. #badservice #unprofessional
		#reallydisappointed	
cell phone	positive	Just switched to cell phone provider	Just switched to cell phone provider
provider		SmartLine. AMAZING! It really is pure	SmartLine. The mobile data is unlimited
		enjoyment! I'm totally looking forward to	and is also really fast. They also have the
		using it every day! #awesome	highest coverage! #uniqueservice
		#happinessinthelittlethings	#veryprofessional
	negative	Just switched to cell phone provider	Just switched to cell phone provider
		SmartLine. TERRIBLE! It irritates me	SmartLine. The mobile data is not in the
		constantly! I want to change again! #sad	package and is also superslow. I also
		#reallydisappointed	don't have a good connection.
			#badservice #unprofessional