

# **Flaming and Word of Mouth**

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## **Abstract**

**Consumers sometimes express their opinions about brands online. Usually in a normal way, but now and then flames are used. Flaming is defined as “displaying hostility by insulting, swearing or using otherwise offensive language”. This study explores the impact of those flames on other consumers’ opinions and attitudes and if flames can be seen as a type of electronic Word of Mouth. An experiment was conducted in which subjects had to evaluate a brand while being exposed to flames, in the form of Twitter messages, towards that brand. Flaming, compared to non-flaming, influenced brand attitude and the appeal of the brand negatively, but brand personality, perceived quality and perceived reliability were not significantly affected. It did not matter if the flames contained information about the reason for the flame or not, both types of flames affected consumers in the same way.**

## **Samenvatting**

**Consumenten geven soms hun mening over merken online. Meestal gebeurt dit op een normale manier, maar soms doen zij dit door middel van flames. Flaming wordt gedefinieerd als "het uitten van vijandigheid door beledigingen, vloeken of door het gebruik van andersoortige aanstootgevende taal". Deze studie onderzoekt de impact die flames op andere consumenten kunnen hebben en of dit kan worden gezien als een soort elektronische Mond tot Mond reclame. Een experiment werd uitgevoerd waarin respondenten een merk beoordelen terwijl zij werden blootgesteld aan flames richting dat merk in de vorm van Twitterberichten. Flaming, in vergelijking met niet-flaming, had negatieve invloed op merkattitude en op de aantrekkingskracht van het merk, maar merkpersoonlijkheid, gepercipieerde kwaliteit en gepercipieerde betrouwbaarheid werden niet significant beïnvloed. Het maakte niet uit of de flames wel of geen informatie bevatte over de reden van de flame, beide type flames hadden evenveel invloed op consumenten.**

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## **Introduction**

### **Electronic Word of Mouth**

The Internet and the increasing popularity of social media have enabled people to share their opinions on all kinds of subjects online. Consumers can use the Internet to look for opinions on certain kinds of products, and if they want, share their own opinions. These opinions can sometimes be expressed in a very rude manner. Many studies have researched the impact that shared opinions about products or brands can have on others. Those studies always looked at normal formulated opinions but not on opinions that contained rude words or cursing. This study focuses on these harsh expressions and if those harsh expressions of opinions can have a similar effect on consumers as normally formulated opinions about products, brands or companies.

Sharing information on products is referred to as Word of mouth (WOM). Richins & Root-Shaffer (1988) define Word of mouth as: ‘the process of conveying information about a product, a service or a company from person to person’. According to Richins & Root-Shaffer (1988) it plays a major role in customer buying decision. When WOM takes place on the Internet it is called electronic WOM (eWOM). Regular WOM is face-to-face communication and therefore usually takes place between people who know each other. However, eWOM takes place on the Internet and is not face-to-face communication but is called computer-mediated communication (CMC). It still can take place between people who know each other, but more often it is directed towards people unknown to the sender. Hennig-Thurau, Gwinner, Walsh, & Gremler (2004) define eWOM as: “a statement 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”.

The degree of satisfaction or dissatisfaction with a product, service or brand is in general regarded as one of the most important antecedents for people to engage in WOM (Arndt, 1967). Other reasons to engage in WOM are expertise (Feik and Price, 1987), involvement and commitment (Dichter, 1966), the perceived benefits of social exchange (Brown & Reingen, 1987), or the degree of moral hazard (Frenzen & Nakamoto, 1993). In general dissatisfied consumers will share their experiences with more people than satisfied consumers. According to Kotler (1991) satisfied costumers share their experiences with three people, but dissatisfied costumers share their experiences with up to eleven people. Hart, Heskett, & Sasser (1990) suggest that the ratio is eleven to six and the Technical Assistance Research Programmes (1986) finds that the ratio is about two to one. Research done by Anderson (1998) showed that extreme satisfaction can also lead to an increase in WOM, but this increase is not as large as seen with extremely dissatisfied customers.

WOM usually comes from a non-commercial personal source and therefore WOM is regarded as reliable and credible by consumers, which leads to WOM being “highly persuasive and extremely effective” (Bristor, 1990). WOM has been found to be more influential than reviews in printed media (Herr, Kardes & Kim, 1991). Especially when consumers make a high risk purchase decision they are susceptible to WOM (Still, Barnes & Kooyman, 1984). To cope with the uncertainty they seek out information from a credible source (Bansal & Voyer, 2000). This reduction of uncertainty is identified by Roselius (1971) as a risk reliever.

Although eWOM is less personal it is still influential and consumers tend to trust it (Duan, Gu, & Winston, 2008). According to Hennig-Thurau et al. (2004) eWOM is

even more powerful than WOM because it is immediate, has a large reach, is available in large quantities, is accessible by large groups of people and it is credible because it is in print. Another factor is that the eWOM, especially micro blogging, can occur during or just before the purchase process.

That WOM can be extremely influential has been widely recognized. Most research has focused on positive WOM, but there is research that suggests that negative WOM can be even more influential (Lutz, 1975). Herr et al. (1991) found that negative WOM is more diagnostic than positive information and thus has a greater impact on the consumer. Sweeney, Soutar & Mazzarol (2005) showed that negative WOM concerning a firm was twice as likely to cause a change in opinion than positive WOM. Besides the more diagnostic power of negative WOM, Sweeney et al. (2005) also looked at the difference in composition between negative and positive WOM. Positive WOM tended to be more cognitive and rational, while negative WOM tended to be largely emotional.

### **Flaming**

A phenomenon that sometimes occurs in an online environment is flaming. Moor, Heuvelman & Verleur (2010) defined flaming as “displaying hostility by insulting, swearing or using otherwise offensive language”. Flaming is rare in face-to-face situations, it occurs more often in in CMC. Flaming is usually directed towards a person but it can also be directed towards products, services and companies.

There are several explanations why people engage in flaming. According to Kiesler, Siegel & McGuire (1984) in CMC attention may be drawn away from the self and others because of the lack of personal cues and perceived anonymity, which can lead to deindividuation. In several studies it was shown that flaming indeed occurs

more often in CMC than in face-to-face communication (Kiesler, Zubrow, Moses & Geller, 1985). Lea & Spears (1991) showed that CMC does not always automatically lead to flaming, but that the perceived norm influenced flaming.

Flaming can also be miscommunication. Because of the lack of nonverbal information CMC can be ambiguous or misinterpreted (Kock & Nosek, 2005). Postmes & Lea (2000) showed that messages can be perceived as very offensive by outsiders, but that this did not have to be the case for the sender and receiver.

Most studies that focused on flaming looked at communication between people. But it is not uncommon that offensive language is directed towards products or brands. Flaming on products or services can be seen as a type of eWOM. But it is not known whether or what kind of effect the foul language used has on consumers.

Flaming towards products can occur on all kinds of websites. This study will look at flaming on Twitter, a micro blogging website where users can share small messages. An analysis of the content of Twitter messages done by Jansen, Zhang, Sobel & Chowdury (2009) showed that in 19% of all tweets a brand is mentioned. The goal was to use Twitter to measure brand sentiment. They found that one out of five messages mentioning a brand contained an expression about brand sentiment. This means that four percent of all tweets can be classified as eWOM. One out of three of those messages contained a negative statement about the brand. It is unknown how much of those negative mentions of brands on Twitter can be classified as flames. Research has been done on normal non-flaming eWOM but not yet on eWOM that contains flames. This research focuses on the impact of flaming on Twitter on product attitudes and perceived brand personality.

Charlett, Garland & Marr (1995) showed that product attitude is influenced by eWOM. If flaming on products can be classified as a special type of negative eWOM



it can be expected that it has the same negative impact on consumers' attitude towards that product.

- H1: Flaming in tweets will result in a less favorable attitude toward the brand compared with positive tweets

Berens, Van Riel & Van Bruggen (2005) in their research measured product attitude with three subscales in which they asked about the quality, appeal and reliability of the product. If the first hypothesis is correct and flaming indeed influences attitudes it will be interesting to find out if those three subscales (quality, appeal and responsibility) that Berens (2005) used to measure attitude are also influenced. This leads to the next three hypotheses on quality, appeal and responsibility.

- H2: Flaming in tweets will result in less perceived reliability of the brand compared with positive tweets
- H3: Flaming in tweets will result in less perceived quality of the brand compared with positive tweets
- H4: Flaming in tweets will result in a less appealing brand compared with positive tweets

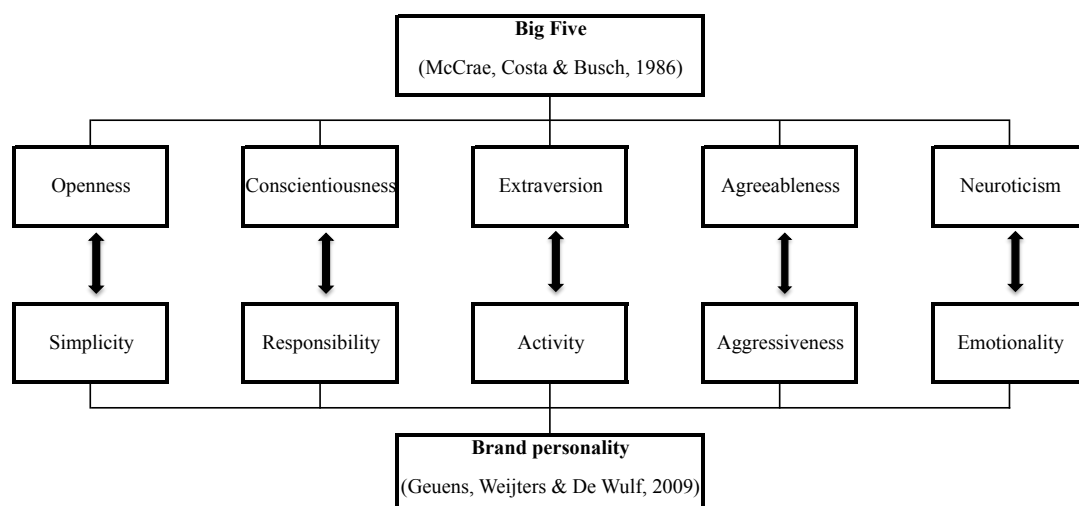
### **Brand Personality**

Tischer (2012) showed that brand personality is also influenced by negative information. This might also be the case with flaming in eWOM on Twitter. Brand personality is a set of human characteristics associated with a brand (Aaker, 1997). Brand personality is important for companies because they can use it to build a strong relationship of consumers with a product (Fournier, 1998). Azoulay & Kapferer

(2003) defined brand personality as the unique set of human personality traits both applicable and relevant to brands.

The scale Aaker (1997) developed measured five personality traits of brands (sincerity, excitement, competence, sophistication and ruggedness) similar to the human, Big Five, personality traits (McCrae, Costa & Busch, 1986). A problem with Aaker's scale was that it was not cross culturally replicable (Bosnjak et al., 2007) and non-generalizable on the respondent level (Austin, Siguaw & Mattila, 2003). The scale also contained non-personality items (Azoulay & Kapferer, 2003; Geuens, Weijters & De Wulf, 2009).

Geuens et al. (2009) used Azoulay & Kapferer's (2003) definition and developed a new brand personality scale where the above-mentioned problems were tackled. The five personality traits (simplicity, responsibility, activity, aggressiveness and emotionality) that Geuens et al. identified were derived from the Big Five (McCrae et al., 1986) human personality traits, as can be seen in Figure 1.



*Figure 1.* Brand personality derived from the five factor model (Big Five)

A study done by Tischer (2012), in which he used the scale Geuens et al. (2009) developed, showed that negative information about a company influenced how consumers looked at the product and company. If flaming is indeed a type of eWOM, the personality traits that are most likely to be affected are aggressiveness and responsibility, because a flame uses extreme language and is an indicator for a disappointing product or of low quality. This leads to the next two hypotheses.

- H5: Flaming in tweets will result in a higher score of the brand on the aggressiveness trait compared to positive tweets
- H6: Flaming in tweets will result in a higher score of the brand on the responsibility trait compared to positive tweets

### **Quality of eWOM**

Lee, Park & Han (2008) showed that the quality of eWOM affects how much a person is influenced by it. Their research compared low quality online reviews with high quality online reviews. The low quality reviews contained no information about the product, only that the reviewer was dissatisfied with it. The high quality reviews contained several arguments why the costumer was dissatisfied with it. Lee et al. (2008) found that high quality reviews affected product attitude more than the low quality reviews did.

A flame containing no reason could be viewed as “low quality” and a flame containing a reason as “high quality”. Given the findings of Lee et al. (2008) it is possible that flames containing a reason will have a greater impact on the consumer. If the previously formulated hypotheses are correct and flaming indeed has an impact on attitude, quality, appeal, reliability, aggressiveness and responsibility it would be

interesting to see what happens if flames are presented with a reason for the flame. In the case of attitude and the three subscales Berens et al. (2005) used, it can be expected to have a greater impact because it is still a flame and it contains eWOM of a higher quality. This leads to the next four hypotheses of this research.

- H7: When a reason is given for the flame the attitude towards the brand will be more negative than when a flame without reason is presented
- H8: When a reason is given for the flame the perceived reliability of the brand will be lower than when a flame without reason is presented
- H9: When a reason is given for the flame the perceived quality of the brand will be lower than when a flame without reason is presented
- H10: When a reason is given for the flame the appeal of the brand will be lower than when a flame without reason is presented

On the aggressiveness trait of brand personality something else is expected. The higher quality of the flame is more likely to nuance the flame. Because a reason for the flame is given, it is more likely that the brand will be judged as less aggressive. When it comes to responsibility, the reason for the flame is likely to have more effect on the responsibility flame, just as is the case with attitude, quality, appeal and reliability. The higher quality flame will present more evidence to the reader that the brand is not responsible. This leads to the last two hypotheses on brand personality and quality of the flame.

- H11: When a reason is given for the flame the brand will score lower on the aggressiveness trait than when a flame without reason is presented
- H12: When a reason is given for the flame the brand will score lower on the responsibility trait than when a flame without reason is presented

## Method

### Design

A between subjects design with three conditions was used to test the hypotheses. The first condition was the flaming condition in which Twitter messages were depicted with only flaming in them. The second condition showed tweets consisting of a flame plus a reason for the flaming. The third condition showed positive tweets.

### Participants

A total of 78 students participated in the study. Seventeen students were motivated by the credit they received if they took part in the experiment, the other sixty-one took part voluntarily. The makeup of the three groups did not differ significantly when it came to the motivation, credit or voluntary,  $\chi^2 = 1.530$ ,  $df = 2$ ,  $p = .465$ . Six participants were excluded from analysis because of missing data, filling in the same answer or constant talking during the experiment. All participants were students at the University of Twente or students at Windesheim School for Higher Professional Education.

The participants were randomly assigned to one of the three conditions. Although more women participated (65.3 percent) in the experiment there were no differences found between the three conditions when looking at the makeup of the groups,  $\chi^2 = 1.727$ ,  $df = 2$ ,  $p = .422$ . The exact distribution of men and women amongst the three conditions can be found in Table 1.

Table 1  
*Gender Distribution*

Condition	Male	Female	Total
Flame	8	16	24
Flame + Reason	6	17	23
Positive	11	14	25
Total	25	47	72

All participants were between 18 and 29 years old with a mean age of 22.25 years old. There were no significant differences among the conditions regarding age,  $\chi^2 = 22.20$ ,  $df = 22$ ,  $p = .447$ .

### **Procedure**

Participants were randomly assigned to one of three conditions, a flaming condition, a flaming and reason condition and a positive condition. Participants were told the purpose of the study was to find out what makes a website trustworthy and how a trustworthy website can influence evaluations of products when little information was presented. Participants were told they had to evaluate a website and a product that was shown on a website.

Participants had to watch a PowerPoint presentation and during the viewing of the presentation they were asked to fill in the questionnaires. The presentation started with the instructions to ensure that every participant got the same instructions. After this the first website was shown. Firstly the homepage of the website was shown for 15 seconds so that the participant could get a good impression of the website as a whole. After this the presentation automatically moved on to next page of the website

on which a printer was shown. The participant could now start with filling in the questionnaire. First they had to answer questions about their first impressions of the website as a whole. Then they had to evaluate the product or brand that was shown. After this the participant moved on to next website and had to perform the same task again, but this time with a different website and a different product or brand.

The first website shown was the same for every participant so that participants could familiarize themselves with the task and it also clouded the real purpose of the study. The second website differed among the three conditions. The homepage was the same for all conditions, but the product/brand page was not. The Twitter feed box was manipulated to show different types of tweets depending on which condition the participant was in. After evaluating the second website and brand the participant was asked to fill in some control questions.

## **Measurement**

The dependent variables of this study (attitude, quality, appeal, reliability, aggressiveness and responsibility) were measured by using existing scales. Some of the scales were modified and all were translated to Dutch. All questions used in this experiment can be found in Appendix A.

For measuring the participant's attitude toward the brand a 3-item scale was used. The participant could fill in how positive versus negative, favorable versus unfavorable and good versus bad he rated the brand. The scale scored high on reliability with a Cronbach's  $\alpha = .927$

To measure quality, appeal and reliability a scale developed by Berens et al. (2005) was used. The original scale consisted of questions with answering possibilities in form of a Likert scale with endpoints named "*very low*" or "*very high*".



For this study the questions were modified into statements so they were more in line with the rest of the questionnaire. For example, the question “*Do you find this (product or brandname) attractive?*” became the statement “*I find this (product or brandname) attractive*”. A five-point Likert scale with endpoints ranging from “*completely agree*” to “*completely disagree*” was used to determine the participants feeling about that statement. The reliability construct, consisting out of two items, had a Cronbach’s  $\alpha = .842$ . The three items that measured quality had a Cronbach’s  $\alpha = .882$ . Appeal also scored high on reliability with three questions and a Cronbach’s  $\alpha = .867$ . The three constructs (reliability, quality and appeal) can also be combined into one overlapping construct: brand attitude. When combined, the eight items together scored a high correlation coefficient with a Cronbach’s  $\alpha = .945$ .

To test if the Twitter messages affected brand personality a questionnaire was made by using the dimensions that Geuens et al. (2009) identified. The five brand personality traits that they identified were activity, aggressiveness, emotionality, simplicity and responsibility. For this study only aggressiveness and responsibility were of value, but simplicity, emotionality and activity were also included in the questionnaire as filler items. Again, participants had to fill in how strongly they agreed with a statement on a five-point Likert scale with endpoints ranging from “*completely agree*” to “*completely disagree*”. The composite of the three items measuring responsibility had a Cronbach’s  $\alpha = .778$ . Aggressiveness, measured with two items, scored a Cronbach’s  $\alpha = .808$ .

## **Stimulus**

The websites used for this study were existing websites. To avoid familiarity of the participants with the website as much as possible the two websites used were both

American. Both websites were slightly modified a to ensure they fitted the screen as good as possible. The first website used as a stimulus was [www.howstuffworks.com](http://www.howstuffworks.com). The product shown on the website was a printer made by HP. The second website used was [www.consumersearch.com](http://www.consumersearch.com). The service that was shown on the website was Sprint, an American telecom service. The page where Sprint was displayed also had a Twitter feed box embedded in it. The Twitter messages differed for each condition. All Twitter messages were real messages found on Twitter.

A pretest was conducted to select the Twitter messages to ensure that the messages used in the experiment were fit for the experiment. First, a selection of ten to fifteen messages per condition was made. The first selection was based on face validity. The selected messages were presented to a group of 20 people. They rated the messages on four aspects (positive - negative, comprehensible - not comprehensible, rude – not rude and apparent reason – no apparent reason).

Because the first language of the test subjects is not English and the Twitter format the most incomprehensible tweets were excluded. The messages that were rated as most positive were used for the positive condition. The messages that were rated as rudest were used for the flaming condition or the flaming plus reason condition depending on how they scored on the apparent reason for the flame. The messages that were used can be seen in figure 2. All stimulus' used in the experiment can be found in Appendix B.



Figure 2. Twitter feed boxes used in the experiment

## Results

### Flaming versus positive tweets

First the mean score of the dependent variables was calculated. An overview of the mean scores of the three conditions on the dependent variables can be seen in figure

3.

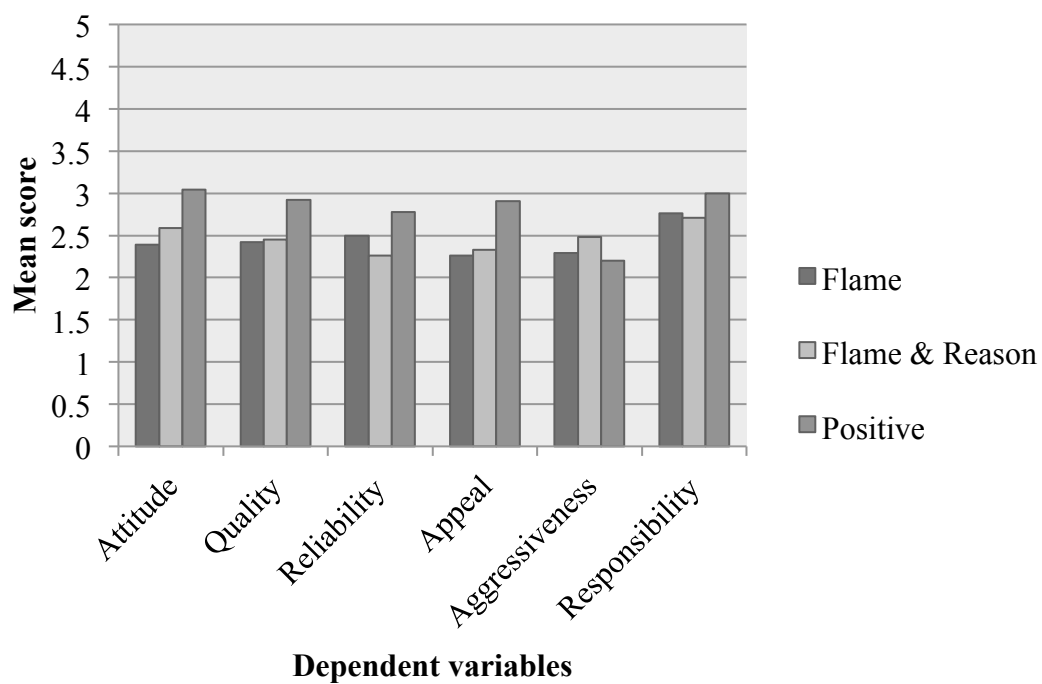


Figure 3. Overview of mean scores

To test the first six hypotheses, the tweets containing flames were compared with the positive tweets. To test if the difference in tweets resulted in a different score on the dependent variables an independent-samples t-test was used. The results are shown in Table 2. Only attitude and appeal differed significantly between the two conditions. Perceived quality showed a tendency towards significance.

Table 2

*Mean scores on dependent variables: the difference between flames and positive tweets*

	Condition		<i>t</i>	<i>df</i>	<i>p</i>
	Flame	Positive			
Attitude	2.39 (.95)	3.04 (.79)	-2.62*	47	.012
Quality	2.42 (.95)	2.92 (.85)	-1.956**	47	.056
Reliability	2.5 (1.04)	2.78 (0.78)	-1.068	47	.291
Appeal	2.26 (.91)	2.91 (.83)	-2.582*	47	.013
Aggressiveness	2.29 (1.03)	2.2 (.71)	.364	47	.717
Responsibility	2.76 (.81)	3.00 (.72)	-1.077	47	.287

*Note.* \* =  $p \leq .05$ , \*\* =  $p \leq .10$ . Standard Deviations appear in parentheses below means.

A significant effect was found on the attitude and appeal variable. Flaming in tweets resulted in a lower score on those variables compared with positive tweets. This confirms H1 and H4. The quality variable showed a tendency towards significance. The mean score of reliability, aggressiveness and responsibility did not

differ significantly between the two groups, resulting in the rejection of H3, H5 and H6.

### **Flaming versus flaming with reason**

Hypotheses seven to twelve were tested by comparing the effect that tweets containing only flames with the tweets containing a flame and a reason for the flame with each other. No significant effects between the flaming and flaming with reason conditions were found on the tested variables, attitude, quality, reliability, appeal, aggressiveness and responsibility. This results in the rejection of hypothesis 7 to 12. The mean scores and significance levels of the flaming and flaming with reason conditions are shown in Table 3.

Table 3

*Mean scores on dependent variables: the difference between flaming and flaming & reason tweets*

	Condition		<i>t</i>	<i>df</i>	<i>p</i>
	Flame	Flame & Reason			
Attitude	2.39 (.81)	2.59 (.80)	-.800	45	.428
Quality	2.42 (.95)	2.45 (.79)	-.128	45	.899
Reliability	2.50 (1.04)	2.26 (.94)	.825	45	.414
Appeal	2.26 (.91)	2.33 (.70)	-.291	45	.772
Aggressiveness	2.29 (1.03)	2.48 (.95)	-.645	45	.522
Responsibility	2.76 (.81)	2.71 (.81)	.227	45	.822

*Note.* Standard Deviations appear in parentheses below means.

## Discussion

### General conclusions

The objective of this research was to see if flaming towards a product or brand could have a negative impact on people's perception of a brand. And when this is the case, if there is a difference between flaming with or with no reason given. Several hypotheses were tested in an experiment. The results of the experiment show that flaming towards brands influences how consumers perceive a brand but that it did not matter whether or not a reason for the flame was presented. The results of this research indicate that flaming should be taken seriously and should not be ignored. Flaming towards brands, just as eWOM, influences people's perception. Flaming can be seen as a special type of eWOM.

Looking more closely at the influence of flaming versus non-flaming we see that two of the tested variables proved to be influenced significantly by flaming. The flames negatively influenced both attitude and the subcategory of attitude, appeal. Another subcategory of attitude, perceived quality, showed a tendency toward significance. These results are in line with the proposed hypotheses. However, the third subcategory of attitude, reliability, seemed not to be influenced by the tweets. It is hard to explain why this was not the case. It is possible that the tweet did not contain enough information on the reliability of the brand. The flaming in the tweets was an indication that people were not happy with the brand, but the flaming in tweets did not give specific information about the reliability of the brand. The flaming alone was just an indication that the brand was "bad". It could be that more evidence was needed for reliability to be influenced.



The two groups, flaming and non-flaming did not significantly differ on the two brand personality traits. The flames did not result in a different view of the brand on the aggressiveness and the responsibility trait. Although Tischer (2012) found that negative information could influence brand personality this was not the case in this study. A difference between these two studies was that the negative information (a product failure) in Tischer's (2012) was in the form of a newspaper article and this study used tweets containing flames. The difference in medium and tone of the message, although both negative, might differ too much.

The hypotheses that focused on the difference between flames and flames presented with a reason were all rejected. It did not seem to matter whether or not a flame was presented with or without a reason for the flame. This is hard to explain, because it goes against earlier findings, such as those of Lee et al. (2008). Where Lee et al. (2008) found that the quality of the eWOM influenced how much it affected attitudes; in this study a flaming tweet with a reason did not have a greater effect on all dependent variables. It is possible that a tweet with a reason is not viewed as a higher quality tweet than a tweet containing only a flame. The participant might only have eyes for the flame but not for the reason presented with it, or that he or she does not give much value to the reason. The used medium might also be a possible explanation. In the study Lee et al. (2008) conducted they used little product reviews on a website whereas in this study tweets were used. It is possible that tweets are given less value due to the nature of the medium. Lee et al. (2008) also used a product instead of a brand such as in this study.

## **Limitations**

There are some limitations to this research. First of all, about half of the subjects indicated that they did not see, or give very little attention to the Twitter feed box containing the tweets. It is not clear why they did not give attention to the tweets. It is possible that the task was not clear enough, but it may very well be possible that the Twitter feed box blended too much with the stimulus website and did therefore did not attract much attention. In a comparable study Lee et al. (2008) found that the amount of attention given to the task predicted the amount of effect it had. The more attention was given to the task, the more influence it had on product attitudes. In this experiment excluding subjects that did not see the tweets did not change the mean scores on the tested variables in such a way that the results would be different.

Another factor is that the flames were presented as tweets. It is possible that different media on the Internet have different impacts on consumers. For instance, tweets are short messages from people which in this case were embedded on the website used in this experiment. For instance, it is possible that comments on a specific article have more impact because they are in direct response of the article or product, which is not the case with embedded tweets. Other forms of online WOM, such as Facebook comments or messages on an online forum for instance, might have a different impact on the reader.

## **Implications**

This study has shown that flaming influences people's perceptions of a brand. Therefore it should be taken seriously, just as is the case with eWOM. Companies should not ignore flames towards their brands just because of questionable content. Although flames do not always contain information about why people are unhappy

with a product or a brand, it is still an indication that they are unhappy. Consumers who are exposed to flaming towards brands still get an indication that someone was very unhappy. Consumers do not discard flames just because they contain foul language. This means that companies should be wary for flames, just as they already do for negative eWOM, because flames can be seen as a type of negative eWOM. After all, eWOM is a powerful influencer of decisions that consumers make.

### **Future research**

More research on the impact of flaming towards brands can shed light on the subject. It might also be possible that if flames are surrounded by regular eWOM their impact might be reduced, because regular eWOM might be considered as more serious and of a higher quality. The opposite might be possible too, flames are an easy indication for dissatisfied consumers and flames possibly stand more out than normal eWOM. This might overshadow the regular eWOM. Research about differences in how flames are perceived in different media can also be interesting. Flaming on forums, Facebook, Twitter or comment sections might be perceived differently. Differences in consumers can also be an interesting topic. Some consumers might be more influenced by flaming than others. Another interesting topic is that not all brands are subjected to flames. Technology brands seem to be more flamed upon than other types of brands. It might be interesting to look at why this does not seem to be the case for every type of brand.

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## Appendix

Appendix A: Measures		
Scale	Item	Alpha
Attitude	• Goed - Slecht	.927
	• Gunstig - Ongunstig	
	• Positief - Negatief	
Quality	• Ik sta positief tegenover deze provider	.882
	• Ik denk dat deze provider een hoge kwaliteit biedt	
	• Ik denk dat deze provider een betere kwaliteit biedt dan vergelijkbare providers	
Appeal	• Ik vind deze provider sympathiek	.867
	• Ik vind deze provider aantrekkelijk	
	• Deze provider geeft mij een aangenaam gevoel	
Reliability	• Ik vind deze provider betrouwbaar	.842
	• Deze provider geeft mij een veilig gevoel	
Aggressiveness	• Ik vind deze provider agressief	.808
	• Ik vind deze provider brutaal	
Responsibility	• Ik vind deze provider verantwoordelijk	.778
	• Ik vind deze provider realistisch	
	• Ik vind deze provider stabiel	

## Appendix B: Stimuli

### Website 1, homepage

The screenshot shows the homepage of the Consumer Guide Products website. The browser is Opera, and the address bar shows 'products.howstuffworks.com'. The page layout includes a top navigation bar, a search bar, a left sidebar with a 'Research:' menu, a main content area with a featured product (air compressor) and category lists, and a right sidebar with 'Looking for More?' and 'Prices' sections.

**Search Bar:** Search Consumer Guide Products and the Web:  [search](#) enhanced by Google™

**Research:**

- Cameras & Photography
- Computers
- Electronics
- Fitness & Recreation
- Home & Garden
- Kids & Family
- Clothing & Accessories
- Flowers & Gifts
- Health & Beauty
- Media & Entertainment
- Buying Guides
- Articles
- See More

**Learn More:**

- Consumer Guide Automotive
- HowStuffWorks.com
- Mobil Travel Guide

**Community:**

- Newsletter

**The LATEST from Consumer Guide**

**Compress your workload**

An air compressor can help you speed through tough, tedious jobs like roofing, siding, insulation and interior trim. Consult our Stuff Guide to read expert reviews and choose the right model for the job.

**WASHER/DRYER** **ELLIPTICAL MACHINE** **AIR COMPRESSOR** **HDTV**

< previous pause next >

**Reviews and Prices from Consumer Guide**

**Computers**

- Desktop Computers
- Laptops
- Computer Monitors
- PDAs
- Laser & Ink Jet Printers

[See More](#)

**Electronics**

- Televisions
- MP3 Players
- Home Theater Systems
- Satellite Radio Receivers
- Car Accessories

[See More](#)

**Cameras & Photography**

- Digital Cameras
- DV Camcorders
- Film Cameras
- Camera Bags
- Camera Lenses

[See More](#)

**Fitness & Recreation**

- Bicycles
- Home Gyms
- Elliptical Trainers
- Family Tents
- Sleeping Bags

[See More](#)

**Home & Garden**

- Lawn Mowers
- Refrigerators & Freezers
- Gas Grills
- Hedge Trimmers
- Vacuums & Steam Cleaners

[See More](#)

**Kids & Family**

- Baby Backpack Carriers
- Car Seats
- Strollers
- Travel Systems
- Portable Cribs & Play Yards

[See More](#)

**Feed Your Family!**

sign up today for KITCHEN DOLLAR recipes

**Curiosity.com** from eDiscovery

Do you remember these memorable TV moments? Prove it. Take the quiz. >>

**Looking for More?**

**Explanations**

- Digital Cameras Buying Guide
- MP3 Players Buying Guide
- Treadmills Buying Guide
- Cell Phones Buying Guide
- Printers Buying Guide

**Expert Reviews**

- Panasonic Lumix DMC-FZ50 Digital Camera
- Soleus Air MAC-8000 air conditioner
- Apple iPhone
- Digital Lifestyle Outfitters HomeDock for iPod
- Panasonic DVD-LS90 Portable DVD Player

**Prices**

- Canon PowerShot SD1000 Digital Camera
- Bose CineMate Home Theater System
- Motorola RAZR V3i Cellular Phone
- Samsung LN-T4665F TV
- Britax Companion - Onyx Infant Car Seat

**Home** | **Company Info** | **Advertise with Us** | **Newsletter** | **Careers** | **Privacy** | **Visitor Agreement** | **Search** | **Contact Us** | **Help** | **RSS**

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## Appendix B: Stimuli (continued)

### Website 1, product page

The screenshot shows a web browser window displaying the HP Deskjet 460wbt review page on howstuffworks.com. The page layout includes a navigation sidebar on the left, a main review area, and several sidebars on the right.

**Navigation Sidebar:**

- Research:
  - Cameras & Photography
  - Computers
    - Reviews
    - Buying Guides
    - Articles
    - Desktop
    - Laptop
    - Monitors
    - PDA's
    - Printers
    - Software
    - See More
  - Electronics
  - Fitness & Recreation
  - Home & Garden
  - Kids & Family
  - Clothing & Accessories
  - Flowers & Gifts
  - Health & Beauty
  - Media & Entertainment
  - Buying Guides
  - Articles
  - See More
- Learn More:
  - Consumer Guide Automotive
  - HowStuffWorks.com
  - Mobil Travel Guide
- Community:
  - Newsletter

**Main Review Area:**

Home > Computers > Printers > Photo Printers

☒ Expert Review  
HP Deskjet 460wbt



Read Full Expert Review

**Expert Rating: 4 (what's this?)**

0 1 2 3 4 5  
Below Average Average Excellent

**Expert Rating Scale:**

Category	Rating (0-5)	Labels
<b>Value</b> Is it appropriately priced?	4	High-Priced Average Great Deal
<b>Performance</b> How well does it work?	4	Below Average Average Excellent
<b>Ease of Use</b> How easy is it to operate?	4	Complicated Average Easy
<b>Features</b> What's included?	4	Minimum Average Fully Featured
<b>Overall</b> What does Consumer Guide® think?	4	Below Average Average Excellent

**Related Ad Categories:**

- Wedding Photo
- Photo Album
- Photo Printer Canon
- Consumer Reviews
- Consumer Reports

**Sidebars:**

- Curiosity.com:** Do you remember these memorable TV moments? Prove it. Take the quiz. >>
- Looking for More?:**
  - Explanations:**
    - Printer Buying Guide
    - How Inkjet Printers Work
    - How Laser Printers Work
    - What are the best settings when e-mailing digital pictures to friends, and what settings do I use if
    - Getting the Most From Your Digital Camera
  - Expert Reviews:**
    - Hewlett-Packard Photosmart 475 photo printer with integrated hard drive
    - Lexmark P350
    - Brother HL-4040CN
    - HP Photosmart A716
    - HP Photosmart D7360
- Personal Shopper:** No more search options are available.

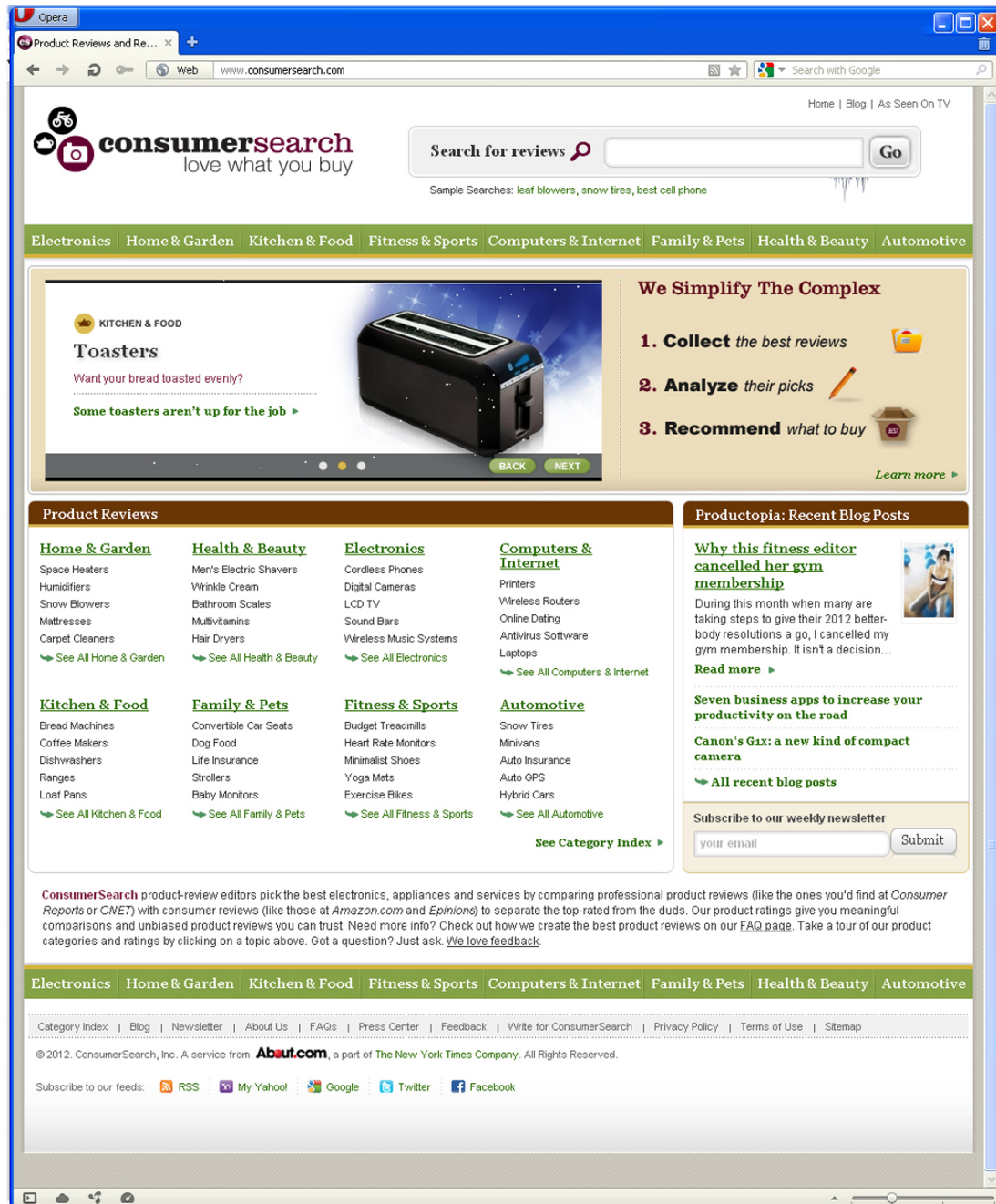
**Footer:**

Home | Company Info | Advertise with Us | Newsletter | Careers | Privacy | Visitor Agreement | Search | Contact Us | Help | RSS

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## Appendix B: Stimuli (continued)

### Website 2, homepage



## Appendix B: Stimuli (continued)

### Website 2, product page

The screenshot shows the ConsumerSearch website in the Opera browser. The URL is <http://www.consumersearch.com/cell-phone-plans/sprint>. The page features a navigation bar with categories like Electronics, Home & Garden, Kitchen & Food, Fitness & Sports, Computers & Internet, Family & Pets, Health & Beauty, and Automotive. A search bar is located on the right. The main content area displays a featured product, the Samsung Galaxy Tab and Samsung Galaxy S II, with a button to "See All Cell Phone Plans". Below this, there's a section for "Top cell phone carrier" featuring Sprint, with a description: "Sprint is a United States based wireless telecommunications network and a global Internet carrier. Sprint has 53.4 million customers." and a button to "See Our Full Review". To the right of the Sprint section is a sidebar titled "We Simplify The Complex" with three steps: 1. Collect the best reviews, 2. Analyze their picks, and 3. Recommend what to buy. Below this is a "sprint" section with a list of tweets and a "Join the conversation" button. At the bottom, there's a "Product Reviews" section with links to various categories like Home & Garden, Health & Beauty, Electronics, and Computers & Internet. The footer contains a "Category Index" link, a "Blog" link, a "Newsletter" link, and a "Subscribe to our weekly newsletter" form.

Opera

Web | <http://www.consumersearch.com/cell-phone-plans/sprint> Search with Google

Home | Blog | As Seen On TV

**consumersearch** love what you buy

1 We collect the best reviews 2 analyze their picks 3 recommend what to buy

Learn more

Electronics Home & Garden Kitchen & Food Fitness & Sports Computers & Internet Family & Pets Health & Beauty Automotive

Home » Electronics » Cell Phone Plans

**Samsung**  
Samsung Galaxy Tab  
Samsung Galaxy S II

See All Cell Phone Plans

\*Est. \$30 per month and up

Reviewed April 2011

Like 6 Tweet 0 +1 0 Email What do your friends think? Ask

Overview | Specs | Where To Buy

**Sprint**

Top cell phone carrier

Sprint is a United States based wireless telecommunications network and a global Internet carrier. Sprint has 53.4 million customers.

See Our Full Review

**We Simplify The Complex**

1. Collect the best reviews  
2. Analyze their picks  
3. Recommend what to buy

Learn more

sprint

TheJoshDeig Sometimes Sprint be pissin me the fuck off!!!  
about 5 minutes ago 'reply' 'retweet' 'favourite'

MerKenyon Sprint sucks asshole "..."  
about 10 minutes ago 'reply' 'retweet' 'favourite'

julzsantana dear Sprint... Fuck you all!!!!  
about 10 minutes ago 'reply' 'retweet' 'favourite'

camuelylean 'I'll fuck you in your dirty cunt mouth... fucking SPRINT'  
about 20 minutes ago 'reply' 'retweet' 'favourite'

seancawelti fuck I hate Sprint so goddamn much  
about 35 minutes ago 'reply' 'retweet' 'favourite'

RougeCobain Fuck SPRINT!!!! #pissedoff  
about 40 minutes ago 'reply' 'retweet' 'favourite'

twitter Join the conversation

Subscribe to our weekly newsletter  
your email Submit

Electronics Home & Garden Kitchen & Food Fitness & Sports Computers & Internet Family & Pets Health & Beauty Automotive

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