

The Effect of Subject Lines on Open Rates of Email Marketing Messages

Snežana Stupar-Rutenfrans

University College Roosevelt (Utrecht University),
The Netherlands

Devin de Koff

Breda University of Applied Sciences,
The Netherlands
Bol.com, the Netherlands

John van den Elst

Breda University of Applied Sciences,
The Netherlands

ABSTRACT

This article investigates the effects of email subject lines on the open rate of email marketing messages. Based on previous literature, three different subject lines with distinctive elements of copywriting were developed: a (1) personal, (2) emotion eliciting and (3) short subject line. The open rates of emails with these subject lines were compared to the open rates of emails with a fourth subject line without these copywriting elements, the control group. An A/B test was conducted where an email marketing message sent to a total of 1,409,963 customers of bol.com. Recipients received an email with one out of four possible subject lines. Results show that all emails with subject lines including a distinctive element of copywriting had higher open rates compared to those with a subject line that belonged to the control group. The control group had an open rate of 24.3%, the personal subject line 25.0%, the short subject line 26.9% and the emotion inducing subject line 26.1%. The differences are statistically significant and substantive for bol.com. In conclusion, adjusting a subject line by influencing its content in terms of length, emotional triggers and personalization can all independently lead to a higher open rate of email marketing messages.

Keywords: subject lines, personalization, emotion elicitation, copywriting

INTRODUCTION

Goods and services are promoted via email by online web shops. It's a tool which uses electronic mail as a means of communicating commercial or fund-raising messages to an audience (Fariborzi and Zahedifard, 2012). E-mail marketing is continuously optimized to create a positive attitude towards the marketing message (Andersson and Fredriksson, 2014) and the respective companies (Solomon et al., 2010). The first two things the recipient sees are the name of the company and the subject line of the message. The subject line may influence the attitude of a consumer towards a company (Andersson and Fredriksson, 2014).

Recipients of email marketing may be sensitive to variations of content in subject lines (Sapleton and Lourenço, 2014). Consequently, optimizing subject lines of email marketing messages can make them more attractive for the reader. Improving the subject line is therefore expected to increase the open rate of email marketing messages. This can be done by

improving elements of copywriting (writing convincing texts for advertising or acquisition purposes which lead to results, no matter what the product is or where it is sold) (Meeske, 2005).

Existing research on email marketing messages addresses copywriting elements such as personalization (Fox School of Business, 2012; MarketingSherpa, 2015; Postma and Brokke, 2002), emotional elements of copywriting that influence the affective attitude of the target audience (Dib, 2015), using shorter sentences and reduced amount of characters (letters, numbers, symbols) (Blinker, 2014; DDMA, 2015; Emailmonday, 2015), choosing the right words and phrases that appeals to the target group (Janke, 2014), pleading for the help of the respondent (Porter and Whitcomb, 2005; Trouteaud, 2004), or emphasizing rewards (Kent and Brandal, 2003). Over-all findings suggests that if such elements of copywriting are incorporated in email subject lines, the emails can become more appealing to the reader and consequently attract more attention compared to copywriting that omits such elements (Emailmonday, 2015; Janke, 2014; Successwise, 2015). Therefore, the recipient is more prone to open the corresponding email. In 2013, the average open rate of 159,839 different Dutch email campaigns was 34.0%, with an average of 22.5% in e-commerce, which is the sector that includes bol.com (Frankwatching, 2014). In terms of tone of voice, bol.com tries to distinguish itself from competitors using informal and personal copywriting (Bol.com, 2015).

The current study is innovative, as the findings contribute to narrowing the knowledge gap concerning the influence of subject lines in email marketing. It aims to discover if copywriting in subject lines could increase the open rate of email marketing messages sent by bol.com. Three hypotheses were formulated:

H1: When personalization in subject lines is used, the opening rate of an email marketing message sent by bol.com will be higher compared to using subject lines without personalization.

H2: When emotional triggers in subject lines are used, the opening rate of an email marketing message sent by bol.com will be higher compared to using subject lines without emotional triggers.

H3: When a shorter subject line is used, the opening rate of an email marketing message sent by bol.com will be higher compared to using a longer subject line.

METHODS

Research Design and Procedures

This study has been conducted between November 2015 and February 2016. For the purpose of this research, A/B-testing was applied (Kent and Brandal, 2003) where multiple variables are independently tested to understand which one of them proves more effective. The effectiveness is defined as the percentage of the open rate. The current sample has received a regular email marketing message from bol.com, with one of four different possible subject lines. The copywriting elements of these subject lines are based on previous studies (Blinker; 2014; Fox School of Business, 2012; Maslen, 2015; Postma and Brokke, 2002; Successwise, 2015).

The email marketing message *Profitably Cared For (Voordelig & Verzorgd)* was sent to 1,409,963 of bol.com customers on Monday January 11, 2016 around 8:20 (CET/GMT+1). Four different subject lines with distinctive elements of copywriting were used. A (1) personalized subject line, an (2) emotion eliciting subject line, a (3) short subject line, and a fourth subject line, the control group, which (4) did not include any of these copywriting elements. The A/B-test was used to determine which of the copywriting elements leads to the highest open rate

compared to the control group. This method has been chosen because it provides clear data about the actual open rate of the respective emails.

Research Participants

The current study contains existing consumers of bol.com in the Netherlands and Belgium who are on the bol.com mailing list. Bol.com has a large variety of different products for different consumer groups. The study focuses on consumers of bol.com, but due to the large and varied target group, the results may indicate the response of the general Dutch and Flemish population.

No distinction has been made with regard to additional demographics or the use of technology of this sample group. Therefore, the email was sent to 1,409,963 bol.com customers of all ages, locations and interests. Bol.com has more detailed customer information, since the customers provide this when creating an account. However, due to anonymity and privacy reasons, the sample could not be described in more detail. Consequently, specific customer variables that could influence the open rate of email marketing messages have not been explored.

The recipients for each particular email subject line were obtained by random selection. Emails with the personal subject line were sent to 376,966 recipients. The emotional subject line was sent to 313,854 recipients. The short subject line was sent to 336,132 recipients. Finally, the control group consisted of 383,011 recipients.

Materials: Email Marketing Message and Subject Lines

An email marketing message was sent to bol.com consumers concerning the *Beauty and Health (Mooi & Gezond)* items of bol.com. This category contains items such as cosmetics, cleaning and bathroom products. Based on literature and respective hypotheses, four different Dutch subject lines are written: one using personalization, another triggering the emotions 'greed' and 'fear', one that is short, and finally one that does not include these elements. There were two different possible responses to these subject lines. They were either 1) opened, or 2) not opened. For the four different subject lines, see Table 1.

The main theme of the email marketing message that was used for this research is *Profitably & Cared For (Voordelig & Verzorgd)*. All drafted subject lines as seen in Table 1 are variations on this theme, consistently using the words *Profitably (Voordelig)* and *Cared For (Verzorgd)*. This theme and these words are consistently used in all subject lines in order to ensure that the subject lines only differ in accordance with the intended variables (personalization, emotional and short) and no other variables (like other different themes or words). So, readers are not expected to open the email because of any other variable than the ones envisioned for this research.

The personalized subject line contains the first name of the customer (in line with the informal tone of voice which is typical for bol.com) followed by the phrase *start the new year profitably and cared for? ([first name], voordelig verzorgd het nieuwe jaar in?)*. The emotional subject line is formulated as *A profitably cared for 2016? Limited stock. (Een voordelig verzorgd 2016? Op = op)*. This subject line is triggering 'greed' and 'fear' that she or he misses the opportunity to purchase an interesting product or item. The short subject line is only consisting of two words *Profitably cared for (Voordelig verzorgd)*. Finally, the control group receives an email with the subject line *Start the new year profitably and cared for (Voordelig verzorgd het nieuwe jaar in)*, which is not personal, does not contain an emotional trigger, and is not short.

Analyses

Each of the hypotheses was tested in IBM SPSS Statistics (Version 23.0). One categorical binomial (yes/no) variable per subject line was created with only two values per variable, *opened* and *not opened*. The correct statistical test for one categorical dependent variable is either a binomial test (IDRE, 2016) or a chi-square goodness-of-fit test (Pallant, 2013). Both of these tests were conducted for the following reasons.

A binomial test is accurate for it focuses on only two values of one dependent variable, which the results of the A/B test has, in this case *yes* and *no*. The binomial test indicates if a tested proportion is significantly different from a previously determined or given 'test proportion'. The three hypotheses of this study share one element, which is the comparison with a control group, i.e. a subject line that does not include the used attractive elements of copywriting. This means that it is tested whether the open rates of the three subject lines are significantly different from the 'control group' subject line. The open rate of the 'control group' subject line is used as 'test proportion' with which the open rate of the three subject lines can be compared. Table 2 shows that the open rate of the 'control group' subject line is 24.3%. A percentage of 24.3% is a proportion of 0.2430 (see Table 3). Therefore, the comparison is made to a test proportion of 0.2430.

The binomial test is claimed to lack accuracy when it comes to larger samples (Pallant, 2013), like this study. Therefore, an additional chi-square goodness-of-fit test was conducted in order to verify the results of the binomial tests. A chi-square goodness-of-fit test also determines whether the observed proportions for a categorical variable differ from hypothesized proportions or 'test' proportions (IDRE, 2016). A test proportion is assigned to each of the possible values. In this case the values are *yes* (opened) and *no* (not opened). Once again, the open rates or 'proportions' of the 'personal' subject line, the 'emotional' subject line and the 'short' subject line are compared with the open rate of the 'control group' subject line to determine a significant difference. Table 2 illustrates that the open rate of the 'control group' subject line is 24.3%. This means that the test proportion assigned to value *yes* is 0.2430 and the test proportion assigned to value *no* is 0.7570 (see Table 3). These test proportions for *yes* and *no* are applicable for each of the three subject lines since they are all compared to the open rate of the 'control group' subject line.

RESULTS

In general, the results show that the control group subject line has the lowest opening rate of all four subject lines (see Table 2), which is in line with the hypotheses, whereas the 'short' subject line has the highest opening rate. The binomial and chi-square tests provide more details.

Binomial Test Results

Three binomial tests were conducted for the subject lines that were *not* the control group subject line, being the 'personal' subject line, the 'emotional' subject line and the 'short' subject line. Since all subject lines are compared to the control group, the test proportion of 0.2340 is applied in these three binomial tests (see 'Methods').

For the first conducted binomial test, with the 'personal' subject line, a 'test proportion' of 0.2430 was used (see Table 3). The email with a 'personal' subject line was distributed to a total of 376,966 recipients, resulting in 94,107 opened emails. This is an open rate of 25.0%. The binomial test reveals that the proportion of opened emails with a 'personal' subject line of .2496, was significantly larger than the expected .2430, $p = .000$. Consequently, there is a strong significant difference between the 'control group' subject line and the 'personal' subject

line, which confirms hypothesis 1. According to this binomial test, an email with a subject line that uses personalization is more likely to be opened than an email with a subject line that does not use personalization.

The second binomial test involves the 'emotional' subject line, and is also using a 'test proportion' of 0.2430. The email with an 'emotional' subject line was distributed to 313,854 recipients, resulting in 81,772 opened emails. This is an open rate of 26.1%. The binomial test reveals that the proportion of opened emails with an 'emotional' subject line of .2605, was significantly larger than the expected .2430, $p = .000$. Consequently, there is a strong significant difference between the 'control group' subject line and the 'emotional' subject line, which confirms hypothesis 2. Thus, an email with a subject line using emotional triggers is more likely to be opened than an email with a subject line that does not include emotional triggers.

Third, the email with a 'short' subject line was distributed to 336,132 recipients, resulting in 90,560 opened emails. This is an open rate of 26.9%. The binomial test reveals that the proportion of opened emails with a 'short' subject line of .2694, was significantly larger than the expected .2430, $p = .000$. Consequently, there is a strong significant difference between the 'control group' subject line and the 'short' subject line, which confirms hypothesis 3. According to this binomial test, an email with a short subject line is more likely to be opened than an email with a subject line that is not short.

Chi-Square Goodness-of-Fit Test Results

The results of the chi-square goodness-of-fit test confirm the results of the binomial tests as all of the subject lines differ significantly from the 'control group' subject line with an asymptotic significance of .000, *Personal* $\chi^2 (1, N = 376,966) = 90.439, p = .000$. *Emotional* $\chi^2 (1, N = 313,854) = 525.001, p = .000$. *Short* $\chi^2 (1, N = 336,132) = 1,275.283, p = .000$. Specifically, these results indicate that there is a significant difference in the proportion of opened emails for each subject line (25.0% for 'personal', 26.1% for 'emotional' and 26.9% for 'short') as compared with the value of 24.3% of the subject line that belongs to the control group.

DISCUSSION

The current study investigated whether significant differences exist between the open rates of three subject lines with attractive elements of copywriting of one email marketing message sent by bol.com compared to the open rate of a control group which omitted such elements. As expected and in line with previous research, all three subject lines (personal, emotional and short) had a higher open rate than the control group subject line, implying that all three hypotheses were confirmed (Blinker; 2014; Fox School of Business, 2012; Maslen, 2015; Postma and Brokke, 2002; Successwise, 2015). The inclusion of personalization in email marketing indeed leads to higher open rates compared to email marketing that does not use personalization (hypothesis 1 is confirmed). Contradictory Fox School of Business (2012), which argues that the inclusion of one's first name would prove less effective than leaving one's first name out (in the sample of American recipients), the current study found that it is more likely that the Dutch and Belgian bol.com recipients will open an email marketing message if his or her first name is included in the subject line. It is possible, however, that since the recipients are existing customers of bol.com and are therefore familiar with the company, the negative association is moderated, which leaves room for positive association with the company and willingness to open the sent email marketing message (Fox School of Business, 2012).

The current findings also demonstrate that the inclusion of the emotions 'greed' and 'fear' lead to a higher open rate than subject lines that do not include these emotions (hypothesis 2 is

confirmed). It is not surprising that the inclusion of such an emotional trigger leads to a higher open rate since previous studies (Maslen, 2015; Successwise, 2015) suggested that emotional triggers in subject lines would lead to a more positive response from recipients and to a higher click-through-rate and open rate. By reading and understanding the message that the products are sold for a lower price, in a limited time frame, having limited stock, the recipient might fear that he or she will miss the opportunity to purchase an interesting product or item and thus the emotion 'fear' is triggered. At the same time, the emotion 'greed' is triggered, since people wish to purchase products for a reduced price. If only a limited stock is available, some people might not be able to purchase a product for a reduced price and will have to spend more money on the product when it becomes available for the regular price again.

As expected, this study has shown that people are more likely to open an email with a subject line that uses fewer characters (hypothesis 3 is confirmed). An explanation for this could be that many people use different devices to read their emails and there is a limited amount of characters in subject lines that can be used to read them in full (Blinker, 2014). Moreover, people are suffering from information overload and find it difficult to process a lot of information (Aikat and Remund, 2012), which is something that can further explain the preferences for the shorter subject lines in the current sample of participants.

In summary, the control group subject line had an open rate of 24.3%, the 'personal' subject line had an open rate of 25.0%, the 'emotional' subject line had an open rate of 26.1% and the 'short' subject line had the highest open rate with 26.7%. It can be speculated that it is logical that each of these subject lines have higher open rates compared to the control group for they included elements of attractive copywriting whereas the control group did not. Looking at information overload and the limited ability to process information, it makes sense that the shorter subject line had the highest open rate.

The current study has several limitations. One needs to be careful with the interpretation of the current results due to the focus on one particular type of email marketing messages (*Beauty and Health* items of bol.com), so the generalizability to other types of marketing messages might be low. Additionally, no comparison has been made with a subject line that contains all three elements (being personal, emotional and short). Therefore, further research is needed to investigate whether the presented findings also apply to other types of content in the email subject lines.

It can be concluded that adding attractive elements of copywriting to subject lines in email marketing messages significantly raises the opening rate of these messages. Note that when it comes to percentages of the open rates, the difference between the percentages of open rates does not look large. However, since the sample contains so many recipients, over 1.4 million in total, these differences are substantive. One percent of 1,409,963 recipients is over 14,000 people. This means that even the smallest variation in percentages makes a difference of many thousand people who opened the email marketing message sent by bol.com.

AUTHOR DISCLOSURE STATEMENT

No competing financial interests exist.

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Table 1

Dutch subject lines used in A/B test and respective English translations of these subject lines

Copywriting element	Subject line (Dutch)	Subject line (English translation)
Personalization	[name], voordelig verzorgd het nieuwe jaar in?	[name], start the new year profitably cared for?
Emotional trigger	Een voordelig verzorgd 2016? Op = op.	A profitably cared for 2016? Limited stock.
Short	Voordelig verzorgd.	Profitably cared for.
Control group	Voordelig verzorgd het nieuwe jaar in.	Start the new year profitably cared for.

Table 2

Subject lines, characters, total recipients and open rates

Test	Characters	Total recipients #	Total open rate %
Control group	37	383,011	24.3
Personal	45	376,966	25.0
Emotional	37	313,854	26.1
Short	18	336,132	26.9

Table 3

Binomial tests of the 'personal' subject line, the 'emotional' subject line and the 'short' subject line compared to the 'control group' subject line

	Category	N	Observed proportion	Test proportion	Exact significance (1-tailed)
Open_Pers	Group 1	Yes	94,107	.249643	.243000 .000
	Group 2	No	282,859	.750357	
	Total		376,966	1.000000	
Open_Emo	Group 1	Yes	81,772	.260542	.243000 .000
	Group 2	No	232,082	.739458	
	Total		313,854	1.000000	
Open_Short	Group 1	Yes	90,560	.269418	.243000 .000
	Group 2	No	245,572	.730582	
	Total		336,132	1.000000	