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ABSTRACT

Personalized communication has become a very popular marketing strategy, but the research on its effectiveness is still limited. This study examined the persuasiveness of personalized digital newsletters in terms of increased attention, cognitive activity, evaluation, attitude, intention, and behavior. Participants ($N = 289$) were randomly exposed to one of five experimental conditions, namely generic, identification, raising expectation, contextualization, and combined condition. The personalized messages were not found to be more persuasive than the generic message. The effects were moderated by individuals' need for cognition and privacy concerns. Theoretical and practical implications are discussed.

INTRODUCTION

Personalization is a (marketing) communication strategy that aims to create communication in which information about the recipient is used to refer to some aspects of his or her *self* (Kalyanaraman et al., 2010). Personalization tactic that has gained prominence in current direct marketing is that of addressing the consumer by including personalization *cues* – recognizable aspects of a person, such as a name, date of birth, the place of residence – in a general message (Dijsktra 2008).

Whereas personalization is broadly utilized (JupiterResearch, 2007), there is paucity in research on effects of personalized communication. Some authors have proven personalized communication to enhance attention and elaboration (Tam & Ho, 2005), lead to a more positive attitude (Kalyanaraman & Sundar, 2006), and increase response rate (Ansari & Mela, 2003). Other studies, however, have failed to document positive effects of personalization (e.g., Bull, et al., 1999; Authors, 2010). Moreover, only a few studies have compared personalized materials with nonpersonalized materials (Dijkstra, 2008). Also, the question of whether different personalization strategies lead to different effects has yet to be addressed (Hawkins et al., 2008). Finally, the role of personal factors has been hardly studied (Ho et al., 2008). Therefore, this study intended to compare nonpersonalized communication with different personalization strategies while taking personal factors into account.

Personalized Communication
Personalization is often used within the context of web-based communication, for instance, in personalized web pages, digital newsletters, and e-commerce. The main aim of personalization is to make the message more meaningful and persuasive. The message is tailored to the receiver by incorporating personalization cues in a general text (Dijkstra, 2005). Personalization cues can be categorized in three personalization strategies distinguished be Hawkins et al. (2008). The first strategy is *identification*. Examples of identification cues are: a name, personal pictures, or the recognition of the recipient's birthday. The second way of personalizing a message is to *raise the expectation* that the message is customized by including overt claims of customization ("This offer is just for you!"). The last possibility to personalize a message is to frame it in a meaningful context. *Contextualization* is done by referring, for example, to the recipient's role as a student, or to the recipient's hometown.

Personalized communication may be effective because it includes personal information, such as name, address, which refers to the individual's *self*. People are cognitively sensitive to such information; therefore, personalized cues activate self-referencing. This means that both the cues and the content of the personalized message are processed in the context of self (Dijkstra, 2008). This make the message personally relevant (Dijkstra, 2008). According to elaboration likelihood model, people process personally relevant messages via the central route of processing (Petty & Cacioppo, 1979). Personalized communication leads to more cognitive activity; individuals pay more attention to and better memorize the message (Rogers et al., 1997). Moreover, the communication exerts more influence on behavior (Hunt & McDaniel, 1993). Therefore, personalized communication is able to influence attitude certainty and strengthen the attitude-behavior relationship, which makes influencing individuals more likely (Petty & Briñol, 2008). Based on this reasoning, we expected personalized communication to lead to stronger persuasion effects than generic communication.

Moderating Factors

Individual characteristics may be at the bottom of the mixed findings concerning personalization effectiveness. The reason why some researchers have not found personalization to be effective may be that consumers are becoming concerned about their *privacy* (Langheinrich et al. 1999). Consumers' feeling that they have lost control over their privacy (Nowak & Phelps, 1997) may result in resistance to sharing individual information (Rubini, 2001). Moreover, privacy concerns may evoke reactance to personalized communication. Therefore, we expected personalization to be less effective among individuals concerned with privacy.

Personalization acknowledges individuality of each recipient, and thus differentiates each of them from others, which makes people feel unique (Kalyanaraman & Sundar, 2006). Individuals pursue to maintain a sense of being special and derive satisfaction from the perception they are different (Simson & Nowilis, 2000). Therefore, personalization may be more effective among individuals with high *need for uniqueness*.

Need for cognition, a personal trait which reflects the extent to which individuals engage in and enjoy effortful cognitive activities (Cacioppo et al., 1983), may moderate personalization effectiveness by influencing the depth of information processing (Tom & Ho, 2005). Ho et al. (2008) found that individuals with a higher need for cognition prefer more personalized content. On the basis of need for cognition theory as well as on recent empirical findings (Ho et al., 2008), we hypothesized that higher need for cognition would enhance the persuasive effect of personalized messages.

METHOD

Participants
Our predictions were tested in an experiment. The sample consisted of Dutch undergraduate students ($N = 289$, 72.7 % female, $M_{age} = 19.64$, $SD = 2.12$) who were voluntary members of an existing student survey panel.

Materials
Digital messages that advertised the University Sport Center (USC) served as stimulus material. The messages were developed on the basis of the original USC newsletter during two focus groups with students ($N = 10$), and pre-tested among students ($N = 64$). The

messages were similar in length and layout, and encompassed information on sports, locations, and prices at USC. Five versions of the newsletter were created that differed in personalization strategy: generic (no personalization), identification, raising expectation, contextualization (female and male version), and a combined condition (all three strategies included).

Procedure
Participants were randomly exposed to one of the five following versions of a message: generic ($n = 61$), identification ($n = 65$), raising expectation of customization ($n = 59$), contextualization ($n = 41$), combination ($n = 63$). There were no differences between participants in these five conditions in terms of demographic variables (i.e., age, gender, year of joining the university). Participants received a link to the online survey. First, they were asked to respond to a few questions (e.g., about their gender or name). Later, they did a filler task. After that, they were exposed to one of the messages. Finally, participants were asked to fill in the survey.

Measures
In all conditions, the same questions were asked. The first part of the questionnaire included demographic questions. The second part measured dependent variables: attention, processing, recall, attitude, evaluation, and intention as well as manipulation check. The third part of the questionnaire measured moderating variables: need for cognition, consumers' need for uniqueness, and privacy concerns. Finally, in the last part of the questionnaire, additional demographic questions were asked. A behavioral measure was posed at the end of the survey.

Awareness of personalization was assessed via a 10-item scale answered on a five-point Likert scale: "Do you think that the newsletter was created especially for you?", "Did you have an impression of being personally addressed in the newsletter" ($\alpha = .85$). Attention was measured by the question "How thorough did you read the newsletter?" with four possible answers: *not at all*, *only scanned*, *read it partially*, and *read it all*. Cognitive activity was measured following the guidelines of Petty and Cacioppo (1981). Participants were asked to write down all they had been thinking about while reading the newsletter. The number and tone of all thoughts were coded by two coders (not including the author). To measure intercoder reliability, intraclass correlation coefficients in a two-way random model with an absolute agreement were calculated for positive (ICC = .40, $\alpha = .58$) and negative (ICC = .45, $\alpha = .64$) thoughts about the content of the message. Weighting was applied according to Petty and Cacioppo (1981). Evaluation of the newsletter was measured with a grade as used within the university (1 = *low*, 10 = *high*). Attitudes towards the message, as well as attitudes towards USC, were measured via five 10- and five-point semantic differentials (e.g., *bad quality-good quality*, *not nice-nice,* $\alpha = .90$, $\alpha = .92$, respectively). Intention was measured with two questions: "How probable is that you will contact USC?" and "How probable is that you will join USC?" answered on a scale anchored 1 (*very improbable*) to 5 (*very probable*). A behavioral measure was also introduced. At the end of the questionnaire, individuals were given the option to go to the USC website in order to get more information.

Personal characteristics were measured with multi-item Likert scales anchored by 1 (*totally disagree*) to 5 (*totally agree*). Individuals' need for cognition was measured by selecting the five items with the highest factor loadings and item-total correlations from the 34-item Need for Cognition Scale (Cacioppo & Petty, 1982). These five items scored high in a Dutch sample as well; however, an additional sixth item was added based on item-total correlations in this sample (Pieters et al., 1987). Example items are: "Thinking is not my idea of fun

(reversed)" and "I would prefer complex to simple problems". This scale had a Cronbach's alpha of .76. Respondents' need for uniqueness (CNFU) was measured by selecting nine items with the highest factor loadings from the 12-item Consumers' Need for Uniqueness scale (Ruvio, Shoam, & Makovec Brenčič, 2008) (α = .84). An example of an item is: "I often combine my possessions in such a way that I create a personal image that cannot be duplicated." To measure privacy concern (PC), the three-item Global Information Privacy Concern scale was used (Malhotra et al., 2004; α = .80). An example is: "I am concerned about threats to my personal privacy today."

RESULTS

The manipulation check showed that personalization manipulation was overall successful, $F(4, 284) = 6.17$, $p < .001$, $\eta^2 = .08$. However, based on Bonferroni analysis, only the combined condition differed significantly from the generic condition ($p < .001$). Therefore, only those two conditions were included in further analyses (Table 1).

To test main effects of personalization, one-way ANOVA with the condition as an independent variable and attention, evaluation, attitude, intention, thoughts, and behavior as dependent variables was employed. However, it did not reveal any significant main effect (Table 2). Therefore, we could not support our expectation that personalized communication leads to stronger persuasion effects than generic communication.

To test moderating role of need for cognition, consumers' need for uniqueness, and privacy concerns, regression analysis was performed with the condition as an independent variable (dummy coded), the personal characteristics (standardized), and the interaction between the condition and the personal characteristics as predictors, and respectively, standardized dependent variables. To assess the difference between conditions among individuals with low (-1 SD) and high (+1 SD) personal characteristic, analyses of covariance with estimated marginal means were run.

Regression analysis showed that NFC significantly moderated effect of the condition on attention ($\beta = -.31$, $t = -2.51$, $p = .013$). The simple slope analysis revealed significance of the slope for the combined condition ($b = -.34$, $p = .01$), but not for the generic condition ($b = .11$, $p = .38$). Individuals with low NFC paid significantly more attention to the combined condition than to the generic condition, $F(1, 120) = 5.99$, $p = .02$ (Figure 1). This contradicts our expectations that NFC will strengthen the persuasion effects of personalized communication.

Interaction analysis also showed the moderating role of PC on evaluation of the newsletter ($\beta = -.34$, $t = -2.42$, $p = .017$). The simple slope analysis revealed that the slope for the combined condition ($b = -.34$, $p = .01$) was significant, but the slope for the generic condition ($b = .00$, $p = .99$) was not. Analysis of covariance did not revealed significant differences between the conditions among individuals with either high or low PC (Figure 2).

PC was also found to moderate the effect of the condition on the positivity of thoughts elicited by the communication ($\beta = -.36$, $t = -2.47$, $p = .015$). However, neither the generic condition slope ($b = .20$, $p = .13$) nor the combined condition slope ($b = -.18$, $p = .11$) was significant. However, the difference between the generic and combined conditions was significant among participants with high PC, $F(1, 117) = 4.54$, $p = .04$, who had more positive thoughts when exposed to the generic condition than when exposed to the combined one (Figure 3). These

results seem to support our idea of negative influence of PC on the effectiveness of personalization.

DISCUSSION

The aim of this study was to examine the persuasiveness of different strategies of personalization. In addition, the moderating role of personal characteristics was taken into account. Again, we did not find personalized communication to be more persuasive than generic communication. Moreover, it was only slightly moderated by personal factors, namely by need for cognition and privacy concerns. Interestingly, individuals with low need for cognition paid more attention to the personalized condition, which combined all strategies, than to the generic condition. In accordance with our expectations, we found that privacy concerns inhibit persuasion effects of personalization.

An explanation for the overall lack of differences between conditions might be that personalization cues signal the attempt of persuasion, instead of relevance of the message (Petty & Cacioppo, 1986), which may cause reactance towards it. Moreover, when personalization is not justified (Bernett White et al., 2008) or perceived as honest (de Pechpeyrou & Desmet, 2007), it can decrease the attitude.

Concerning the personal characteristics, the moderating role of need for cognition seem to support an idea that personalization does not work via the central, but the peripheral route of processing. Personalization cues neither change the quality of the content itself, nor provide any persuasive information (Dijkstra, 2008), therefore, they may work as heuristics. It seems that they attracted attention from individuals with low need for cognition who are usually more interested in peripheral cues (Haugtvedt et al., 1992; Cacioppo, et al., 1986) as they are less motivated to elaborate (Bosnjak et al., 2007). The moderating role of privacy concerns proved that personalization may lead to negative response of individuals concerned about their privacy.

The current study was a replication of a previous study that proved that personalization was not as effective as it was believed (Authors, 2010). It showed that personalized communication does not seem to work. It showed that the ineffectiveness of personalization cannot be blamed on its dose, as it was suggested before (Dijkstra, 2008). The inclusion of personal factors proved that consumers who care about their privacy respond negatively to personalized communication. The results of the study suggest a need for a natural-settings research. Because information processing is the theoretical background that can explain the effectiveness of personalization, the role of arguments' strength, perceived relevance, and perceived involvement could be included. As the results of need for cognition suggested, more focus should be placed both on the mechanism of personalization and on moderators of personalization's efficacy. Our findings also have practical implications for the e-mail marketing. It appears that personalizing messages–by including personalization cues–does not make them more persuasive. Therefore, companies aiming to create more effective communication may want to consider other strategies than personalization.

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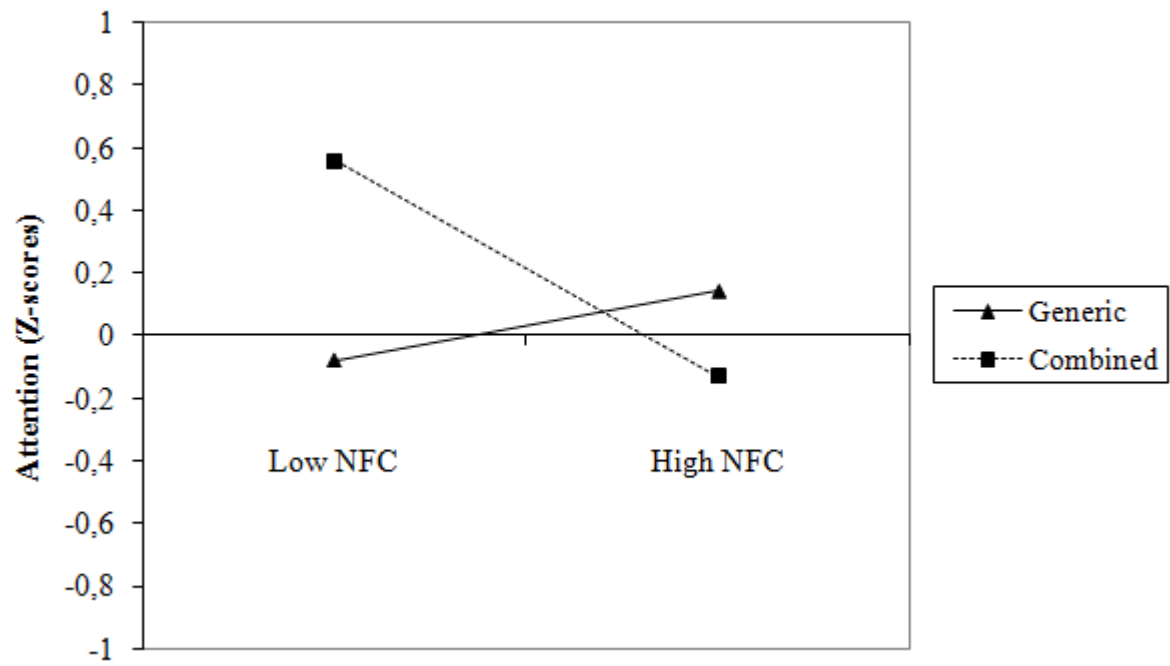*Figure 1.* Condition x need for cognition interaction on attention

Figure 2. Condition x privacy concerns interaction on evaluation (message)
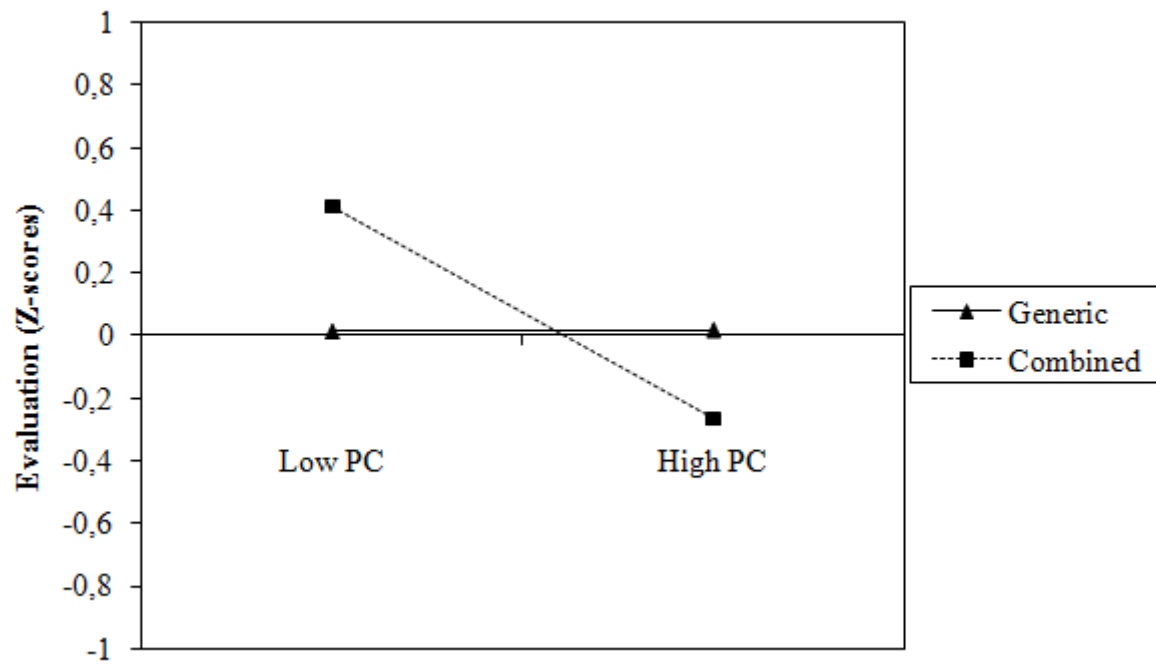
Figure 3. Condition x privacy concerns interaction on positivity (thoughts)
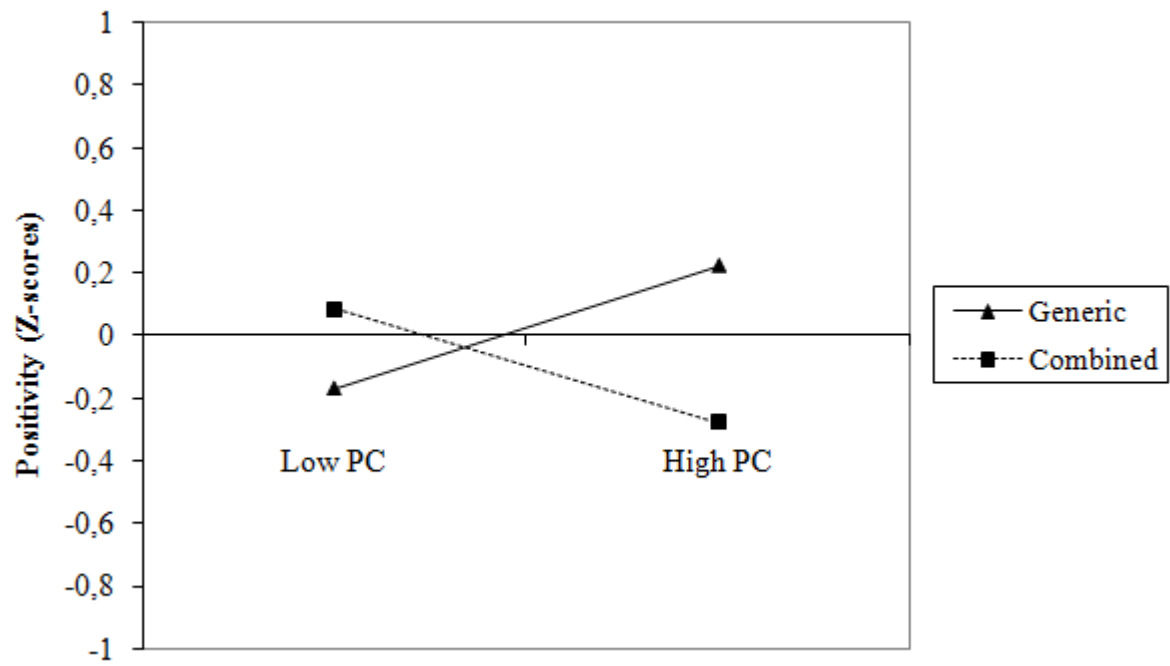
Table 1. *Manipulation Check*

Condition	Mean	Std. Deviation
Generic	2.90	.66
Raising expectation	2.89	.78
Identification	3.15	.64
Contextualization	3.04	.80
Combined	3.45	.77

Table 2. *Main Effects of the Condition on the Dependent Variables*

Variable	Condition	Mean	Std. Deviation	*t*	*p*
Attention	Generic	2.46	.65	-.67	.51
	Combined	2.56	.93		
Intention (contact)	Generic	2.62	1.40	.80	.42
	Combined	2.43	1.29		
Intention (join)	Generic	2.58	1.34	.44	.66
	Combined	2.48	1.33		
Evaluation (message)	Generic	6.31	1.18	-.37	.71
	Combined	6.41	1.80		
Attitude (message)	Generic	3.26	.69	.02	.98
	Combined	3.25	.88		
Attitude (USC)	Generic	3.63	.68	-.50	.62
	Combined	3.70	.79		
Negativity	Generic	.09	.18	-.14	.89
	Combined	.10	.20		
Positivity	Generic	.18	.25	.93	.35
	Combined	.14	.20		
Behavior	Generic	1.84	.37	.82	.42
	Combined	1.78	.42		