

Is personalization always better?

A Quantitative study of personalization in e-mail advertising

The new interactive web provides opportunities for companies to use personalization on a much broader scale than previously. Consumers are also benefiting from a more individualized marketing where the offers can be tailored to their specific preferences and sent to them directly through e-mail. However, there are not only advantages with personalized marketing, as some consumers perceive it to intrude too much on privacy. The purpose of this study is to examine whether consumer attitudes to different levels of personalization follow an inverted U-shape relationship. As a second step, we examine whether the fit between the consumer and the ad, due to the consumer's involvement in the product or area, influences attitudes when increasing the degree of personalization. We conducted a quantitative experiment where we approached three groups of consumers via e-mail, including ads with different degrees of personalization for every group. We tested the influence of fit by dividing the respondents within the groups according to their involvement in the product or area promoted in the ad. In line with the purpose, the results demonstrated that there is a level where too personalized content generates negative attitudes towards an ad. Furthermore, we found that there is an influence of fit on attitudes towards the product due to involvement, with more positive attitudes for consumers with high involvement in the product or area. The results suggest that companies should select an appropriate level of personalization and aim at maximizing the fit between consumers and ad message to avoid reactance.

Keywords: Personalization, E-mail advertising, Reactance, Involvement, Attitudes

Authors:

Arash Alidoost, 20923

Amanda Lärkert, 20795

Date of defense:

30 May 2011

13.15-15.00

Supervisor:

Fredrik Törn

Opponent:

Jonatan Schwamberg, 20913

"...every say 18 months we are prepared to *share twice as much* stuff as we did before..."

- Mark Zuckerberg, founder of Facebook

"You can't just slap up an ad...you have to *approach them differently*. There's a lot to compete with".

- Eric Valk Peterson, VP and media director at Omnicom's Agency.com

"I think this will be the beginning of a *new form of advertising* that will be standard or mainstream a few years from now."

- Greg Tseng, CEO of Social network "Tagged"

*We would like to thank the following people for supporting
and helping us along the way*

Fredrik Törn for vital guidance and for keeping our spirits high

bitCycle for helping us in the experiment

Lena Sallin for brilliant advice

Antonio Zappulo for support and continuous feedback

Malin Sundin for priceless help and support

Victor Söderberg for invaluable opinions

Bijan Rahimkhani for great critical reviewing

Will Day for invaluable linguistic advice

Our parents for patience and good advice

Each other for good cooperation

And all the *respondents* of our survey, we couldn't have
done it without you!

Contents

1.0 INTRODUCTION	6
1.1 Background.....	6
1.2 Definitions	8
1.3 Problem area	9
1.4 Purpose.....	9
1.5 Delimitations	9
1.6 Theoretical contribution	10
1.7 Disposition	11
2.0 THEORETICAL FRAMEWORK	12
2.1 Positive effects of personalization.....	12
2.1.1 The value of using personalization in marketing.....	12
2.1.1.1 Personalizing by relating to the self.....	12
2.1.2 The opportunities of personalization online	13
2.1.2.1 Using personalization in e-mail communications	13
2.1.3 Degree of personalization matters.....	14
2.2 Negative effects of personalization	15
2.2.1 Increased transparency at the expense of privacy.....	15
2.2.2 The Inverted U-shaped effect of personalization.....	16
2.3 The influence of fit on personalization.....	17
2.3.1 Effects of personalization depend on fit.....	17
2.3.1.1 Two Dimensions of fit.....	17
2.3.2 Involvement improves fit	18
2.3.2.1 Product involvement enhances benefits	19
2.4 Summary of the theoretical framework.....	20
3.0 METHODOLOGY	21
3.1 Choosing the subject	21
3.2 Defining research design	21
3.3. Experiment Design.....	22
3.3.1 Manipulation of the independent variable	22
3.3.2 Selection of respondents.....	23
3.4 Main study	24
3.4.1 Choosing the product	24
3.4.2 Designing the ad	24
3.4.3 Designing the survey	25
3.4.3.1 Manipulations check	26
3.4.3.2 Dependent variables	26
3.4.3.3 Grouping variables.....	28

3.4.3.4 Pre-test	29
3.4.4 Conducting the experiment	29
3.5 Reliability and validity.....	30
3.5.1 Reliability	30
3.5.2. Validity.....	30
3.6 Analytical tool	31
4.0 RESULTS AND ANALYSIS.....	32
4.1 Results from examining the inverted U-shaped effect.....	32
4.1.1. Attitude towards an ad	32
4.1.2 Attitude towards a product.....	33
4.1.3 WOM-intentions	34
4.2 Analysis of the inverted U-shaped effect	35
4.2.1 Too much personalization leads to reactance.....	35
4.3 The influence of fit due to involvement.....	36
4.3.1 Involvement and personalization on the attitude towards an ad.....	36
4.3.1.1 Good fit indicates more positive attitudes towards the ad	37
4.3.1.2 Equal reactance when increasing the degree of personalization	38
4.3.2 Involvement and personalization on the attitude towards a product	39
4.3.2.1 Good fit establishes more positive attitudes towards the product	40
4.3.2.2 Less reactance as a result of good fit.....	41
4.3.3 Involvement and personalization on the WOM-intentions	42
4.3.3.1 Good fit indicates more positive WOM-intentions for the product.....	43
4.3.3.2 Equal reactance when increasing the degree of personalization.....	43
5.0 DISCUSSION AND IMPLICATIONS.....	45
5.1 Conclusions	45
5.2 General discussion	45
5.2.1 Increasing means from personalization up to a semi-personal level.....	45
5.2.2 Lower initial attitudes for the high involvement group.....	46
5.2.3 More reactance despite justification of the message	46
5.2.4 Increasing click-through rates.....	47
5.3 Critical review	47
5.4 Managerial implications	48
5.4.1 Avoiding personalization may be better	48
5.4.2 Importance of fit in personalized marketing.....	49
5.5 Future research	49
6.0 REFERENCES.....	51
7.0 APPENDIX.....	55

1.0 INTRODUCTION

“The user experience is changing, and the advertising opportunity needs to change with it. It's much better for the advertiser, because you have these much more relevant ads in a place consumers will want them and expect them.”

Karen Redetzki, MSN Microsoft product manager.

For most people, it no longer comes as a surprise to find one's name or age pop up in an online ad or in a personal e-mail sent from a company. The use of personalization as a marketing tool has increased drastically with the interactive platforms offered by the web. Both companies and customers can benefit from personalization as it enables offers to be more tailored and accessible for consumers, leading to increased loyalty and profitability for companies (Ansary & Mela 2003). However, today companies such as Google, Facebook and Twitter can follow every click you make, leading to consumers expressing a growing concern regarding the intrusion on their privacy (Tam & Ho 2006). As a consequence, events like “privacy awareness week¹” have emerged. At the same time, as new technology offers unlimited opportunities for the practice of personalization, companies must more carefully weigh the potential benefits from greater relevance and efficiency, against the risk of intruding on consumers' privacy². Furthermore, we believe that companies need to get a better understanding of when and where personalization is appropriate.

1.1 Background

Companies are continuously struggling to find new ways to break through the clutter and arouse their customers' interest. One way to achieve this is through personalizing their marketing by tailoring the ad message as much as possible to fit the consumers' preferences (Postma & Brokke 2002). Although all products do not appeal to all consumers, there is still an opportunity for companies to make their offer appear more attractive by making it more personal. The web as a marketing medium offers new opportunities to personalize the marketing at low cost, making it possible to reach consumers in any part of the world with individually adapted advertisement.

¹ <http://www.privacyawarenessweek.org/>

² Personalisation vs. privacy. Marketing, published by Haymarket Business Publications Ltd at <http://www.haymarket.com/home.aspx>

The web 2.0 positions the user at the center of the network and the focus is on the interaction between people, communities, computers and software (Nickull, Governor & Hinchcliffe 2008). The increase of user-generated content has put personalization in a more centered position on the web (Singh 2006). Following this, it is now possible for companies to inexpensively gain access to valuable information about consumers, which can be used for personalizing their offer according to consumers' preferences.

Using personalization in online marketing has proven to have many advantages, increasing the feeling of proximity of a company's products or services to the consumer. For example, the offers can be more locally adapted, user-relevant and easier to deliver (Passmore 2001). The use of personalized content has also proven to have a positive effect on consumers; for example by increasing the attention for the message and making the consumer elaborate more on the content (Tam & Ho 2006; Baumgartner, Sujan, & Bettman 1992; Mick 1992).

However, *the negative aspects* from using personalization are not as well covered in previous research (Jen-Hung and Shyu 2009; White, Zahay, Thorbjørnsen & Shavitt 2008) and marketers may not be sure what degree of personalization is appropriate. The increased transparency, as a result of the web 2.0, has developed a trend of consumers opposing personalization, as it intrudes too much on privacy (Godart & Gronau 2009; Chellapa & Sin 2005; Dwek 2001). In the beginning of the big boom for interactive platforms on the Internet, Passmore (2001) stated that "today, we might still have a chance to decide when to share personal information by for example subscribing to a newsletter on a site but in the future we might not have the same choice if companies continue to develop tracking systems without the concern for consumers' privacy". He described several areas where our privacy was about to be threatened; for example the tracking of user habits and locations on websites where consumers previously were anonymous (Passmore 2001). Today, the situation is very much as predicted, with large actors as Google and Microsoft being able to track every click the user makes, resulting in frustration amongst those who are concerned about their privacy (Godart & Gronau 2009).

1.2 Definitions

The following definitions have been used in the thesis:

App: Abbreviation for mobile applications, such as games, utilities and other programs for smartphones.

Fit: Description of a state when the marketing message matches the consumers' personal preferences. The fit can be influenced by previous experience in the product or area promoted in an advertisement.

High involvement: Definition used for respondents with a relation to the product or area offered in the ad. It implies that the consumer feels that the ad is more relevant and gets more involved when seeing it.

Interaction effect – An effect described in a two-way ANOVA explaining if there is an interaction between two independent variables, on the dependent variable.

Low involvement: Definition used for respondents with little or no relation to the product or area offered in the ad. It implies that the consumer feels that the ad is less relevant and gets less involved when seeing it.

Low involvement product: A type of product that is often bought without any substantial consideration. The consumer does not spend much time evaluating a low involvement product before purchasing it.

Personalization: When a company uses information about the consumer in the marketing material used towards the consumer. This can be done by for example using information about the consumer's name, age or occupation in an ad.

Reactance: Used to describe the psychological state that occurs when a consumer experiences negative attitudes towards a company or an offer.

Web 2.0: Explanation of the interactive web where the user is at the center of the network, including people, communities, computers and software.

WOM: Abbreviation for word of mouth.

1.3 Problem area

Following the previous discussion about the increasing usage of personalization in today's marketing practice, this is clearly an interesting area for further investigation. Although companies today have the tools for personalizing their offers, they are less aware of the reactions that follow and what negative impact personalizing may have on the attitudes towards an ad message. In our thesis, we would like to highlight the consequences from using too personalized content in e-mail advertising and examine how companies can use this tool in a way that is more beneficial both for them and their customers.

1.4 Purpose

The main purpose of the thesis is to study the effects of different degrees of personalization on consumer attitudes, in the area of *e-mail advertising*, in order to find out if there is a level where too personalized content generates negative reactions. This phenomenon is explained as the U-shaped relationship in existing theory.

Secondly, we aim at examining whether the fit due to the consumers' *involvement* in the product or area will have an impact on the attitudes, for different degrees of personalization.

1.5 Delimitations

We have chosen to limit our research to the study of personalization in *e-mail advertising*. Despite this, we often compare and refer to the theory about personalization used *in general* for advertising on the web, as it is frequently used to explain the same phenomena. The main difference is that in e-mail advertising, the consumer receives the personalized offer passively in an e-mail instead of e.g. discovering it on the sidebar of a webpage while actively navigating through a site.

We have limited our study to include three measures that we consider sufficient for studying consumer attitudes from personalization:

1. The attitude towards the ad
2. The attitude towards the product promoted in the ad
3. The positive WOM intentions for the product

To avoid a bias caused by consumers having preconceptions about a product, we chose a product that was not yet released on the market, but was about to be launched a few weeks after our experiment. In line with this, we also chose not to include the name of the company behind the product, as we wanted the respondents to focus as much as possible on the ad message and not to be influenced by previous knowledge of the company. The product used in our experiment is a *low-involvement* product, making our results applicable mainly for other low-involvement products. As the attitudes may differ depending on a number of factors, we considered this delimitation necessary.

Our study is conducted on the Swedish market, which makes it primarily relevant for this market. Furthermore, we chose to target *consumers*, which makes the study less relevant for B2B marketing.

1.6 Theoretical contribution

As personalization is becoming increasingly important in marketing today, we want to provide more insight into consumers' reactions to it, helping businesses to better use this tool in their marketing. Since relatively few previous studies have had this focus, we aim to provide a better framework regarding what level of personalization is the most appropriate. To accomplish this, we examine if there is an inverted U-shaped relationship between the attitudes and WOM-intentions for different degrees of personalization, when using e-mail advertising.

Although theory about a U-shape relationship of personalization already exists, we did not find any studies that focus directly on examining *consumer attitudes* and *WOM-intentions* within this context. We also discovered that existing theory within the area has become quite old and outdated as very few studies were conducted online and no study was focusing on e-mail advertising. With this thesis, we aim at extending the theory of personalized advertising, by examining consumer attitudes and WOM-intentions, when using e-mail as the medium.

As a second step, we want to study what strategies can be used to generate more positive consumer attitudes from personalization. We chose to focus on examining the impact of fit when increasing the degree of personalization, as this is a subject where previous research is very limited. As the use of the web as a marketing channel is

constantly increasing, we believe that businesses need to be more aware of the impact that personalization has, in order to make better use of personal information about consumers.

Long term, we believe our findings will contribute to more explicit guidelines for using personal consumer data, thereby reducing the insecurities amongst consumers regarding interactive sharing on the web and increasing the respect for consumers when using this marketing tool. After all, consumers can perceive many benefits from receiving personalized offers and therefore it would be less fortunate for both sides if companies would use it in the wrong way.

1.7 Disposition

This thesis is divided into five main chapters, starting with the introduction. The second chapter describes the theoretical framework where we explain relevant theories needed to generate our hypotheses and analyze the results. In the third chapter we cover the methodology of the study, where we describe the process of choosing the subject, the design of the experiment and how the main study was conducted. This chapter ends with a discussion of the reliability and validity of the study and a description of the analytic tool that was used. In the fourth chapter we report and analyze the results derived from our experiment and establish whether the hypotheses are supported or rejected. Finally, in the fifth chapter, we have a discussion about the results and connect them to the purpose of the study. We conclude by discussing the implications and limitations of the study, as well as suggestions for future research.

2.0 THEORETICAL FRAMEWORK

This section is structured into three parts that will cover the theoretical framework in the area of personalization. Firstly, we describe the positive effects of using personalization, including the general benefits that come from using personalization in marketing and the opportunities that the development of the web provides. Secondly, we cover the negative effects of personalization, describing what can happen if personalization is exaggerated. Finally, we describe how the attitudes from personalization can be influenced by the presence of fit between the consumer and the ad.

2.1 Positive effects of personalization

2.1.1 The value of using personalization in marketing

The purpose of using personalization in marketing is to attract customer attention, increase loyalty and build brands in a more efficient way (Riecken 2000, Ansary & Mela 2003, Simonson 2005, Alba et al. 1997). As a natural outcome of this, marketers have realized that personalizing an offer, content or service contributes to increased retention rate and profitability (Reed 2011; Winer 2001).

Consumers also benefit from customized product offers, individual services and enhanced experiences enabled by personalization (Fan & Poole 2006). Cognitive research has for example shown that users perceive personalized messages to be more useful and comprehensive, and that they are more willing to explore personalized content further. Personalized communications also tend to reduce information overload and make decision-making easier for the buyer (Tam & Ho 2006).

To summarize, personalization is an efficient tool for awakening consumers' interest and curiosity for a marketed offer; in addition it offers important benefits for companies.

2.1.1.1 Personalizing by relating to the self

The most common technique in marketing personalization is to create a self-referent message (Whyer and Srull 1989; Sujana et al 1993; Mark 1992). As the self is constantly involved in all cognitive processes and because of its constant existence in working memory, concepts related to the self are likely to have a strong influence on memory recall, judgment, and behavior (Hunt and McDaniel 1993; Klein and Loftus 1988; Kuiper

and Rogers 1979). Baumgartner, Sujan, and Bettman (1992) found that including information related to consumers' memories is a way of awakening feelings and emotional responses, while it also enhances product evaluations.

White, Zahay, Thorbjørnsen & Shavitt (2008) describe the personalization process as increasing the *degree of distinction* in a message, meaning that more and more detailed information about demographics, psychographics and purchase histories are used in the attempts at getting personal. In a self-referent message, it is common to include cues (e.g., the user's name in a greeting message) that connect to relevant personal attributes. A greeting message such as "Dear Anna, welcome back to cdon.com. I hope you enjoyed your latest movie with Scarlett Johansen" is an example of a self-referent message. According to Kircher et al. (2000), "Processing of self-relevant information and self-knowledge is regarded as distinct from processing objective information". Following this, we can assume that when activating the self by including personalized stimuli, the ad is likely to attract attention and be processed to a larger extent.

2.1.2 The opportunities of personalization online

In the beginning of the Internet age, Peppers and Rogers (1995) described a business paradigm shift from mass-produced goods and standardized services, to an emphasis on one-to-one direct contact with the consumer. Today's fast development of technological innovations on the Internet makes personalization possible on an even broader scale (Fan & Poole 2006; Simonson 2005; Dwek 2001). One of the prime advantages with using the web as a medium for personalizing the marketing is the fact that it facilitates the tailoring of information so that it can be used more quickly and at a price far below that of traditional media (Hoffman and Novak 1996; Passmore 2001). From a consumer perspective, receiving personalized offers increases convenience as it reduces the time and effort of browsing for relevant information (Chellapa & Sin 2005).

2.1.2.1 Using personalization in e-mail communications

E-mail enables companies to communicate with consumers in a more segmented way, reaching out to millions of consumers with unique messages at low cost. At the same time, it provides conveniences for consumers, not having to actively search for information and being able to decide when and where they want to be reached (Jen-Huang and Shyu 2009; Postma & Brokke 2002; Chellapa & Sin 2005).

Although e-mail advertising is relatively new subject for research, the results that exist have proven it to be very successful. In a study of customer relationship building via e-mail conducted by Jen-Hung and Shyu (2009), it was found that personalizing e-mails enhance relationship quality, perceived service quality and loyalty. Furthermore, previous research on the use of personalized *e-mail surveys* has shown that using the respondents name in the greeting is a proven technique for increasing click-through rates (Dillman 2000; Yammarino, Skinner, & Childers 1991; Yu & Cooper 1983). As a more specific example, one study of *e-mail advertising* showed that just by inserting someone's name in the e-mail, the click-through rates were increased by 10 % (Albrecht 2004). Moreover, personalization in e-mails advertisement is also proven to significantly reduce the unsubscribe intentions for consumers (Questex Media Group 2002). These empirical findings indicate that the use of personalization in e-mail communications is an effective tool for relationship building and is likely to result in higher click-through rates for the message.

2.1.3 Degree of personalization matters

From the follow up in one of the studies by Albrecht (2004) where the *click-through rates* initially increased, it was later found that *conversion rates* for the personalized e-mail offers were instead dropping. One possible explanation is that the consumers may have expected a *higher degree* of personalization of the offer in the ad, after initially having seen their name in the message. For example, they might have been expecting a customized offer or information about the closest local store where the product is available for purchase. In a study by YES-mail, an electronic company was using eight personalized cues, including information about the consumer's previous products owned, content preference and usage patterns. By implementing these, they managed to double the click-through rates in their e-mail communications (Questex Media Group 2002). These findings indicate that the *degree of personalization* may have different outcomes, depending on the company and its customers. When looking at the impact of personalization on click-through rates, including more than one personalized cue seems to have a larger effect.

2.2 Negative effects of personalization

2.2.1 Increased transparency at the expense of privacy

Personalization is possible partly thanks to the interactivity afforded by the Web 2.0. As mentioned earlier, communication platforms as Facebook, Twitter and G-mail have enabled companies to collect and update their information about consumer preferences and trace them as they navigate through a website (Ansary & Mela 2003; Morrissey 2006). Transparency on the web is also increasing in line with the popularity of social medias. One of the Facebook founders, Mark Zuckerberg, states that: “every say 18 months we are prepared to share twice as much stuff as we did before”. He bases this on the behavior of “Facebookers”, who are constantly adding more and more social objects to their shared profile on the web (Mossberg 2010). As mentioned earlier, sharing on the web implies many advantages for the consumer, making many users willing to accept a reduced privacy in exchange for the convenience of receiving tailored offers and information from online businesses (Chellapa & Sin 2005).

However, there are not only advantages with unlimited sharing on the web. While recent advances in Internet-based tracking and profiling technologies have provided marketers with the ability to create detailed consumer profiles, studies have shown that consumers may *not* be willing to share as much information about themselves, due to concerns for privacy online (Culnan 2000; Chellapa & Sin 2005; Godart & Gronau 2009; Dwek 2001). Although new media age research has repeatedly shown that consumers want a more personalized online experience, it also shows that consumers are fearful if delivery is taken out of their hands (Centaur Communications 2009). According to the “Personalization privacy paradox”, developed by Awad & Krishnan (2006), the people that value transparency are necessarily not the same people that accept to be profiled online. This presents a dilemma for companies that want to respect the privacy of the consumers who are unwilling to be approached with personalized content (Awad & Krishnan 2006). Although traffic on the web is constantly increasing, the advertising dollars have not followed, partly, because of the risk of using private information about consumers due to integrity issues (Morrissey 2006). If companies wish to use a high level of personalization, they have to make users trust them to a larger extent. One example of an attempt to increase the trust and reduce the risk of sharing, is that

companies keep their privacy guidelines highlighted to avoid making users afraid of sharing their private data on the site (Centaur Communications 2009).

2.2.2 The Inverted U-shaped effect of personalization

Due to the privacy and integrity-intruding aspects, personalization is a tool that should be treated with respect. Given the discussion above, it is reasonable to assume that too much personalization may have negative effects on consumers. Meyers-Levy and Peracchio (1996) found that the persuasive effectiveness of a self-referent message initially increased, but decreased when such cues were overused, resulting in an inverted U-shaped effect. Furthermore, Mick (1992) found that too much personalization diminished recall and comprehension for the ad. Similarly, White and Thorbjørnsen argue that consumers were experiencing *reactance* in terms of negative attitudes towards an offer or company, when receiving a too personalized message without evident benefits in terms of perceived utility. Brehm (1966) describes this negative reaction as a motivational state arising when a person perceives that his or her freedom is about to be threatened. In line with this, White, Zahay, Thorbjørnsen & Shavitt (2008) strongly recommend marketers to maximize perceived utility when sending out very personalized messages, as these negative responses might cause more harm to the brand than the simple lack of response to the e-mail. Similarly, Simonson (2005) advice companies to be sensitive towards the risk of irritating customers and damaging the relationship with them by making incorrect assumptions about their preferences, as this can induce negative attitudes towards the company and offer.

Meyers-Levy and Peracchio (1996) argue that a moderate degree of personalization is the most preferable. Up to this level, respondents have greater opportunity to recognize, appreciate and reflect on the message content and therefore consider the persuasiveness as favorable. At a moderate level, the favorable thoughts are overshadowing the possible negative thoughts that may arise from personalization and facilitate the processing of the content. When increasing the degree of personalization further, the persuasion effect tend to be less strong since consumers then focus more on the personalized information than on the promoted item or service. Thus, the influence of personalization causes negative reactions where the self-referent cues may distract the consumer from elaborating the advertised content (Meyers-Levy and Peracchio 1996).

Personalization to a certain degree seems to be considered positively from the recipient's perspective while too much personalization may cause psychological reactance towards the ad, resulting in an inverted U-shape relationship.

From this discussion we propose the following hypotheses:

H1 a): There is an inverted U-shape relationship between the *attitudes towards an ad* and the degree of personalization in the ad.

H1 b): There is an inverted U-shape relationship between the *attitudes towards a product* and the degree of personalization in the ad promoting the product.

H1 c): There is an inverted U-shape relationship between the *WOM-intentions for a product* and the degree of personalization in the ad.

2.3 The influence of fit on personalization

2.3.1 Effects of personalization depend on fit

Several studies have shown that the better an ad messages is tailored to the recipients' preferences, the better the results will be (Postma & Brokke 2002, Fan & Poole 2006). In fact, if *the fit* between the consumer and message is not sufficient, the personalized content can instead contribute to higher consumer *reactance* towards the company (White, Zahay, Thorbjørnsen & Shavitt 2008; Simonsson 2005). According to the same theory, achieving a good fit is a way of reducing the state of reactance. As discussed earlier, the web today offers increasing opportunities for companies to tailor the marketing content to the consumers' preferences, thereby achieving a good fit (Ansary & Mela 2003, Tam & Ho 2006).

2.3.1.1 Two Dimensions of fit

Tam and Ho (2006) describe two dimensions of achieving fit in a marketing message. The most common technique is, as mentioned earlier, to include elements related to *the self* (Whyer & Srull 1989; Sujana et al 1993; Mark 1992). Apart from including self-referent variables in the message, the fit in a message is also dependent on the *relevance of the content* (Tam & Ho 2006). Relevant content is more likely to reside in working memory because it is constantly being assessed in constructing the preference. This

way, relevant content will be elaborated to a larger extent, resulting in more and stronger memory traces (Tam & Ho 2006).

2.3.2 Involvement improves fit

Theory shows that increasing the consumers' involvement in the product or area explained in the ad, is one way of making the content relevant, leading to a better fit between the consumer and the ad (White, Zahay, Thorbjørnsen & Shavitt 2008; Simonson 2005).

When achieving a good fit between the consumer and the offer, the benefits from the offer must exceed the costs, in the sense that the consumer is sufficiently interested to be willing to be exposed to a personalized ad. White, Zahay, Thorbjørnsen & Shavitt (2008) defines this as the *perceived utility* a consumer experiences when receiving an ad message. Perceived utility is defined as the perceived net benefits of the advertised goods or services, which offset the psychological "costs" of receiving inappropriate personal messages.

In their research, they find the level of fit to depend on the interaction between the degree of perceived utility and the degree of *justification* of the personalized content in the message. By justification they mean that the ad must demonstrate how the use of consumer's personal information is relevant to the personalized offer. For example, if the consumer does not realize the value proposition of the offer (low perceived utility), the personalized content has to be explained to the consumer to a higher extent (justification), in order to avoid reactance towards the message. Respectively, when the consumer feels involved in the product or interested in the area advertised, (s)he senses a higher perceived utility from it and as a consequence, the personalized content does not have to be justified to the same extent.

For a more trustful relationship, the exchange between the customer and the company has to be mutual, meaning that perceived benefits should exceed the costs of sharing personal data on the web (Awad & Krishnan 2006; Chellapa & Sin 2005; Culnan 1999). When the benefit of the offer or service is more evident for consumers, privacy concerns are less significant, as the potential benefit outweighs the risk of intruding the privacy.

2.3.2.1 *Product involvement enhances benefits*

To reduce the risk and enhance the benefits from the offer, the ad content must be relevant in a way that awakes the interest of the consumer (Tam & Ho 2006). According to Meyers-Levy and Peracchio (1996), the effects from personalizing are influenced by the respondents' motivation to process the message. If motivation is low, the respondents are likely to be inattentive and unresponsive to the self-referent cues, and product evaluations are therefore unaffected by the level of personalization. This reasoning implies that the respondent has to feel involved in the message to appreciate the personalized content.

Alba and Hutchinson (1987) explain this involvement as the number of *product-related* experiences that the consumer has accumulated. For example, they include advertising exposures, information search, interactions with salespersons, decision-making, purchasing and product usage in various situations. Furthermore, Cesli and Olson (1988) showed that higher feelings of involvement and higher product knowledge lead to increased ad comprehension. According to the autobiographical memories discussed by Baumgartner, Sujan and Bettman (1992), the memories involving product and usage experiences are more likely to awake positive attitudes towards the ad. Moreover, Fan and Poole (2006) also point out the importance of including relevant and familiar products and services in the communication with a consumer to be able to receive more positive attitudes.

From the above theory we conclude that receiving an offer that appears familiar, in the way that it involves a product and an area of interest, contributes to a good fit between the consumer and the ad message. As the fit is likely to have a positive effect on the consumer, thanks to the benefits it presents, the attitudes towards the ad should be more positive.

Based on the theory of fit, higher involvement should lead to more positive attitudes towards an ad and thereby a higher ability to accept personalized content. Following this, we propose that consumers with high involvement will perceive personalization more positive compared to people with no connection to the product or area, when increasing the degree of personalization.

Thus, we propose the following hypotheses:

H2 a): For consumers with high involvement in a product or area, increased personalization leads to more positive attitudes *towards the ad* in relation to the attitudes of consumers with low involvement

H2 b): For consumers with high involvement in a product or area, increased personalization leads to more positive attitudes *towards the product* in relation to the attitudes of consumers with low involvement

H2 c): For consumers with high involvement in a product or area, increased personalization leads to more positive *WOM-intentions towards the product* in relation to the attitudes of consumers with low involvement

2.4 Summary of the theoretical framework

In conclusion, personalization is an efficient tool used when trying to break through the clutter, awake consumer interest and achieve more positive attitudes towards the ad and the product. Consumers are willing to explore personalized content further and they consider a distinct message to be more interesting and useful. The fast development of online marketing has facilitated the process of personalization, making it easier for companies to tailor their offers and reach out to more consumers at lower cost. However, if personalized content is exaggerated, consumers can instead perceive *reactance* as a consequence of personal integrity issues.

When comparing different levels of personalization, there seems to be an inverted U-effect where a too personal message has less positive effects than a semi-personalized one. This, in turn, may even result in *negative* attitudes towards the company and offer. To avoid this state, companies can try to maximize the fit between the marketing message and the consumer. This could be done by combining self-referent parameters with content relevant factors so that the consumer experiences a higher perceived utility from the particular offer. The impact of consumer involvement through interest in the product area is especially important as it is very likely to awake the consumer's interest and make him or her more positive towards the ad.

3.0 METHODOLOGY

This chapter begins with an explanation of the process of choosing the subject, followed by a discussion of the research and experiment design. We continue by describing the groundwork before the main study; the product used in the experiment, and the process of designing the ads. We continue by describing the designing of the survey and why we conducted a pre-test before the main study. Furthermore, we describe the main study and explain the execution of the experiment. Finally we discuss the reliability and validity of the experiment and explain what analytic tool we have used when analyzing the results.

3.1 Choosing the subject

As mentioned earlier, companies today have a hard time reaching out to the consumers. With this in mind, we started investigating different tools which marketers use in order to communicate more efficiently with their customers. After conducting extensive research, using databases and libraries, we realized that there is a need for further research within the area of personalization, especially concerning different levels of personalization. Since we are both fascinated by smartphones and the app-market, we initiated contact with the Swedish mobile-applications company bitCycle, which was interested in helping us to carry out the experiment. To avoid preconceptions about the product in the ad, we preferred to use a product that was not yet released on the market. Thus, it was suitable to choose one of their newly created photo-apps, "WordFoto", for our experiment.

3.2 Defining research design

Considering that the thesis has a deductive approach where we aim to generate and test hypotheses based on existing theory (Christensen et al. 2001), we chose to conduct quantitative research. The goal was to produce hard and reliable data in order to gain further understanding of the area of personalization and to provide guidelines for future decision making for online marketing (Bryman and Bell 2007).

We have chosen a conclusive research design, as the purpose of the thesis is to test specific hypotheses and examine relationships. Furthermore the study has a causal research approach, where we want to obtain evidence and examine cause-and-effect

relationships between different levels of personalization and consumer attitudes (Malhotra, 2010).

3.3. Experiment Design

The experiment consisted of a pre-test followed by a main study. Given the focus of the thesis on examining personalization effects for online marketing, we decided to conduct our experiment online.

The experiment design for both the pre-test and the main study was to send e-mails to three different groups of respondents. The emails consisted of a message, an ad and a link to our survey. The short message in the beginning of the e-mail encouraged the respondent to first study the ad in the e-mail and then to participate in our survey. In order to increase the number of respondents we announced that they would have the chance to win cinema-tickets when participating in our experiment.

All three groups received the same survey, but the ads they received had different degrees of personalization, depending on which group they belonged to. The respondents had one week from receiving the e-mail to complete the survey.

3.3.1 Manipulation of the independent variable

The manipulation consisted of sending the three groups of respondents' three different ads with different degrees of personalization. In order to isolate the effects from personalization, the ads were identical apart from the personalized cues. Thus the personalized cues in the ads were the only independent factors that were manipulated.

As mentioned in chapter 2, White, Zahay, Thorbjørnsen & Shavitt (2008) describe the personalization process as increasing the degree of distinction in a message, where information about demographics and psychographics are used in the attempts at getting personal. According to theory by Whyer and Srull 1989; Sujan et al 1993; Mark 1992, this information is also referred to as *self-referent cues*. In our study, we have therefore chosen a set of self-referent cues which we refer to as *personalized cues*.

The different levels of personalization in the ads were: *non-personalized, semi-personalized and very personalized*.

Group 1 - The non-personalized ad contained the following personalized cues:

No personalized cues (see appendix 1).

Group 2 - The semi-personalized ad contained the following personalized cues:

The respondents name and occupation (see appendix 1).

Group 3 - The very personalized ad contained the following personalized cues:

The respondents' name, occupation and his/her picture transformed with the WordFoto app (see appendix 1).

These groups will be referred to as groups 1, 2 and 3 in the rest of this paper.

For groups 1 and 2, where the ads did not include a picture of the respondent, we used a neutral picture created with the WordFoto app instead.

3.3.2 Selection of respondents

We chose a convenience sample since we had access to the information needed for creating the personalized ads, such as the respondents' name, e-mail address, picture and occupation. This information would have been hard to gather from a random sample, which is why we mainly included students at the Stockholm School of Economics. However, it should be stressed that we are aware that using a convenience sampling is often criticized, since such a sample tends to be less variable and the results are rarely representative for the whole population (Black 2010). This is discussed further in chapter 5 where we perform a critical review of the study.

Our sample consisted of 129 respondents distributed as follows: group 1 = 40, group 2 = 43 and group 3 = 46, where 42% were men, and 58% were women. The ages ranged from 18-31 where the means for the different groups were: group 1 = 23.75, group 2 = 23.81 and group 3 = 24.20. Besides the age similarities, the distribution of gender and occupation between the groups was also very similar. This means that the composition of each group showed a high degree of homogeneity, which is important as the experiment requires the groups to be as similar as possible (Lundahl & Skärvad, 1999).

3.4 Main study

3.4.1 Choosing the product

Through cooperating with bitCycle, we had an extraordinary opportunity to use a real product, not yet released on the market, for our experiment. The promoted product in our ads is an iPhone application named WordFoto. The app is unique in what it does and there is nothing similar to it offered in the App-store at the moment. “In seconds, it can take a picture and turn it into words”, as the slogan goes.

As the promoted product is a photography app, it was natural to include a photo made with the app in the ad. This picture was a suitable feature to manipulate when increasing the degree of personalization for group 3. Using the app for personalizing the content helped us increase the *justification* of the message. According to theory, this is a way of explaining to the consumer how the personalized information is relevant to the personalized offer (White, Zahay, Thorbjørnsen & Shavitt 2008.)

Furthermore it was very appropriate to have a photo as a personalized cue for group 3, being very coherent with the product, as we were only interested in examining the phenomena of personalization and did not want the result to be affected by incongruency.

3.4.2 Designing the ad

The purpose was for the ad to be as authentic as possible, including a short message to the receiver and a description of the features of the product. After meeting with bitCycle and learning more about their product, we decided how to design the ads and what information to include. The ads were then created using Microsoft PowerPoint. As mentioned earlier, the levels of personalization varied in the ads and the respondents received different ads depending on which group he/she belonged to (see appendix 1).

The ads created for group 1 were all identical. Since the ads used for group 2 were personalized, an ad had to be created for each respondent containing his/hers name and occupation. The same process was carried out for group 3 with the addition of every ad containing a transformed portrait picture of the respondent.

The pictures used for group 3 were first collected, mainly through Facebook, and then sent to bitCycle, which helped transforming them, with the WordFoto app. The respondents name and the name of the app, WordFoto, were used to create the personal picture (see below).



After the ads for group 1-3 had been created in Microsoft PowerPoint they were converted into the picture format jpeg. The pictures were then resized using Adobe Photoshop so that they would have the appropriate size for an e-mail. After testing different sizes, we decided that 700 * 525 pixels was an appropriate size for the ads.

We chose to put a substantial amount of time into gathering information about the respondents and creating authentic and personal ads to ensure high validity in the study.

3.4.3 Designing the survey

We created the survey using the online marketing research tool Qualtrics (see appendix 2). The majority of the questions were measured on a 7-point likert scale (Malhotra, 2010), with 1 representing “strongly disagree” and 7 representing “strongly agree”. We chose to limit the number of questions in our survey to 15; since studies have shown that respondents’ answers tend to skew towards the middle of the 1-7 scale if the survey is too long (Söderlund, 2005).

Certain questions were grouped together by creating an index in order to ensure high internal consistency, where only indexes with a Cronbachs alfa exceeding 0.7 were accepted (Söderlund 2005).

The manipulations check, concerning whether the respondent thought the ad was personal or not, was positioned as the last question in the survey, in order to prevent the respondents from understanding the main purpose of the experiment. In addition to the manipulation check, we conducted a pre-test to make sure that the main study would be as effective as possible.

3.4.3.1 Manipulations check

We did a manipulation check to ensure that the results we received were actually an effect of the different degrees of personalization. To examine this, we included the question “How personalized do you think the ad you received was?” in the survey. By conducting an ANOVA test with a significance level of 5 %, we analyzed the means between the groups. The results showed that respondents in groups 3 considered their ad the most personalized (mean 5.37), group 2 somewhat personalized (mean 4.40) and group 1 the least personalized (mean 2.35). As the result showed significant differences between the groups (sig.= 0.000) we can conclude that the manipulated content had the desired effect, indicating that the personalized content in the ads was sufficient to induce the pursued reactions.

3.4.3.2 Dependent variables

We have chosen to measure the effects of personalization by using three different measures. As the theory implies (Fan & Poole 2006; Tam & Ho 2006; Chellapa & Sin 2005; Kircher et al. 2000), *attitudes* are highly influenced by personalization. Thus, we chose to include two measures of this: the *attitude towards the ad* and the *attitude towards the product in the ad*.

Attitude towards the ad: To measure this variable we used five questions asking: *What do you think about the ad you received in your email? I like it, it's fun, it's creative, it's interesting, it's credible.*

As the theory implies, personalized content is perceived as more interesting and relevant as well as it increases the attention for the ad (Tam & Ho 2006; Baumgartner,

Sujan, & Bettman 1992; Mick 1992). Following this, we decided to include *interesting*, *creative* and *credible* as expressions of the liking of a personalized ad. When combining the five questions in an index, we found a Cronbachs alfa of 0.899, showing that interesting, creative and credible were appropriate expressions to represent the liking of the ad.

The respondents rated each statement on a 1-7 scale, where 1 represented “strongly disagree”, and 7 represented “strongly agree”.

Attitude towards the product: To measure this variable we used three questions asking: *What is your perception of the product, the app WordFoto? It seems fun, it seems useful, it seems interesting.*

According to the theory, personalized content tend to enhance product evaluations by making the content appear more *interesting* and *useful* (Tam & Ho 2006; Baumgartner, Sujan, & Bettman 1992). When combining the three questions in an index a Cronbachs alfa of 0.886 was found, showing that interesting and useful were appropriate expressions to represent the liking of the product.

The respondents rated each statement on a 1-7 scale, where 1 represented “strongly disagree”, and 7 represented “strongly agree”.

WOM-intentions for a product: This was measured by asking the question: *After seeing the ad, would you recommend the app to someone?*

With the developments of the web, *WOM-intentions* play an increasingly important role in marketing, making it possible for users to spread their word much faster and to a lower cost (Plummer 2007). Furthermore, since the attitudes towards an ad message or a product have a strong influence on *WOM-intentions* (Holmes & Lett 1977), we chose to test this as a third variable in our study. Dichter (1966) classifies this sort of *WOM* in the category of *message involvement*, meaning that this type of talk is mainly based on how the product is presented in advertisements and not on the consumers’ own experience of it. We consider this an appropriate description for the *WOM-intentions* that we intend to analyze in our study.

The respondents rated the statement on a 1-7 scale, where 1 represented “very unlikely” and 7 represented “very likely”.

3.4.3.3 Grouping variables

As mentioned in chapter 2, a fit between the consumer and the message can be achieved by including *relevant content* (Tam & Ho 2006). We therefore chose to divide our three groups into respondents with *high* and *low* involvement, where those with high involvement in the product or area would consider the content more relevant, according to the theory about fit (White, Zahay, Thorbjørnsen & Shavitt 2008).

The following questions were used to create a grouping variable for involvement:

- *Q10. Do you have a smart-phone?*
- *Q11. How often do you use applications on your smart-phone?* (This question was not shown to those who answered no on the previous question)
- *Q13.1 I am using Photoshop or other photo program to edit my photos.*
- *Q13.2 I am interested in photography.*
- *Q13.3 My camera is advanced.*
- *Q13.4 I care about the quality of the photos I take.*

For questions Q13.1-4 the respondents were asked to rate what they thought about the statements on a 1-7 scale where 1 represented not true at all, and 7 represented very true. An index including questions Q13.1- 4 was then created to measure the overall interest in photography.

In order to be classified as having high involvement, the following criteria had to be met:

- The respondent had a smart-phone.
- (S)he used applications 2-3 times/week or more often.
- (S)he had scored a mean of 3 or higher for the index measuring overall interest in photography.

If not all of these criteria were met, the respondent was classified as having low involvement. 38% of the respondents were grouped as having high involvement and 62% as having low involvement.

3.4.3.4 Pre-test

The pre-test consisted of sending e-mails to two respondents for each level of personalization (group 1-3), containing a short message with instructions, an ad and the link to the survey. After the respondents had completed the survey, the results were studied and short interviews were conducted. We asked the respondents questions about the ad, how they reacted to it and what they thought about the questions in the survey.

The results from the pre-test were used mainly for three reasons; firstly to determine if the different degrees of personalization in the ads were appropriate, secondly to investigate if the respondents understood the main purpose of the experiment and finally to examine if the survey design could be improved in any way.

We found that the respondents were not aware of what the main purpose of the experiment was, meaning that they did not expect it to be about personalization. This outcome was desirable, since the results of the experiment may be affected if the respondents understood the main purpose of the study.

Furthermore, the pre-test served as a small manipulation check, revealing that there were in fact distinct differences between the respondents' thoughts about the different degrees of personalization. The two respondents in group 1 considered their ad not to be personalized, group 2 considered their ad somewhat personalized, and group 3 considered their ad very personalized.

In addition, it was established that the length of the survey was appropriate and that there were only minor errors that had to be adjusted in the survey.

3.4.4 Conducting the experiment

After randomly dividing our sample into groups 1-3, gathering the information needed and creating the ads, the next step was to send the e-mails. In the first phase, we sent e-mails to 50 recipients in each group. Just as we had expected, the response rate was higher for group 3, which had received the very personalized ads. We therefore chose to send out 20 more e-mails to both groups 1 and 2. After one week we had collected 129 valid answers, distributed as follows: group 1 = 40, group 2 = 43 and group 3 = 46.

We used Mozilla Thunderbird to send the e-mails since the tool enabled us to attach the ad directly into the e-mail, enabling the recipient to see the ad instantly without having to open an attached file when opening the e-mail. This made the ad be perceived more authentic since commercial e-mails and newsletters are usually displayed this way and not through attachments. However some commercial content is sometimes automatically blocked by the mail-server, which is one of the reasons why we sent the e-mails from our private e-mail accounts. Furthermore this made it easier for the respondents to study the ad and then directly click the link below, leading them to the survey.

Since each one of the e-mails sent to groups 2 and 3 were personalized, they had to be sent one at the time. Even though the e-mails to everybody in group 1 could have been sent simultaneously as a mass e-mail, containing the same non-personalized ad, we chose to send an individual e-mail to every recipient as this is proven to increase the response rates (Howard & Kerin 2004).

3.5 Reliability and validity

3.5.1 Reliability

High reliability exists in a study when similar values would be attained if the same study would have been repeated, and it is essential to have high reliability in order to achieve *high validity*. Lack of high reliability can lead to false or misleading conclusions concerning how the examined variable covariates with other variables (Söderlund 2005). In order to ensure internal consistency and thereby high reliability, we have asked similar questions measuring the same phenomena in the survey. We have only accepted measures of Cronbachs alfa above 0.7 in accordance with the recommendations of Söderlund (2005).

3.5.2. Validity

According to Malhotra (2010), internal and external validity is needed in order to draw valid conclusions about the effects of independent variables and to make valid generalizations about larger populations.

Internal validity refers to whether the manipulated variable in the experiment actually caused the observed effects on the dependent variables. Without internal validity, the

results from the experiment are confounded (Malhotra 2010). Several actions were taken in order to minimize the effects from external factors and thereby achieve high internal validity. All of the e-mails containing the ads and the surveys were sent on the same day. Every e-mail was sent personally to each person in order to avoid respondents from knowing who else was in the experiment and thereby discussing their ad with other respondents before completing the survey. The surveys that were sent to the different groups were identical and the only elements that differed in the ads were the personalized cues. The pictures chosen for the very-personalized messages were all regular portrait pictures of the respondents, chosen mainly from Facebook. All data from the surveys were collected during the same period of one week, as we wanted all of the respondents to be affected by the same external factors.

However, we were unable to control when and where the respondents opened their e-mail, and whether it was on their computer or smartphone. Furthermore, we do not know if the ad was studied only in connection to the survey or if it was viewed many times before the respondent actually started the survey. Although these factors can affect the results, we believe that the measures we have taken in order to control the effects of the external factors are sufficient to achieve a high level of internal validity.

External Validity refers to whether the causal effects found in the experiment can be generalized, and to what extent. Even though both internal and external validity is desirable, there is often a trade-off between the two (Malhotra 2010). Considering that WordFoto is a real product that is not yet released, the ads that were created and used in the experiment are realistic, explaining real features of the product. To avoid a bias (as we knew some of the respondents), we randomly distributed the convenience sample into the three groups of different degrees of personalization (groups 1-3). Since only one product was tested on our sample, the conclusions drawn are foremost relevant to other low involvement products on the Swedish market. Further generalization can therefore be limited and should be done with caution.

3.6 Analytical tool

The data collected from the survey was analyzed using the analytical software SPSS. We used one way ANOVA tests for H1a-c and two-way ANOVA tests for H2a-c. The hypotheses have been accepted at a 5% significance level.

4.0 RESULTS AND ANALYSIS

In this section we will analyze the results by applying the theoretical framework described in chapter 2. To avoid repetition, as the findings for hypotheses 1 a-c show similar results, we have decided to divide the part covering the inverted U-shaped effect, into two parts where the first part presents the results and the second part covers the analysis. Since the results for hypotheses 2a-c are different from each other, we have chosen to analyze each one of them independently, after presenting the results of each hypothesis.

As mentioned earlier, we will refer to the groups of different levels of personalization as group number 1, 2, 3 where group 1 represents the non-personalized message, group 2 the semi-personalized message and group 3 the very personalized message.

4.1 Results from examining the inverted U-shaped effect

For hypothesis H1a-c, we examined the results of the expected inverted U-shape effect on the dependent variables; the attitudes towards an ad, attitudes towards a product and WOM-intentions. The results were analyzed using a one-way ANOVA test where we compared the means between the different groups (1-3) for the three dependent variables. After examining if the test was significant, we conducted Post Hoc tests, investigating the differences between each one of the groups. All the hypotheses will be rejected on a 5 % level.

4.1.1. Attitude towards an ad

ANOVA

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	Attitude towards ad	3.132	0.047*

n = Total 129

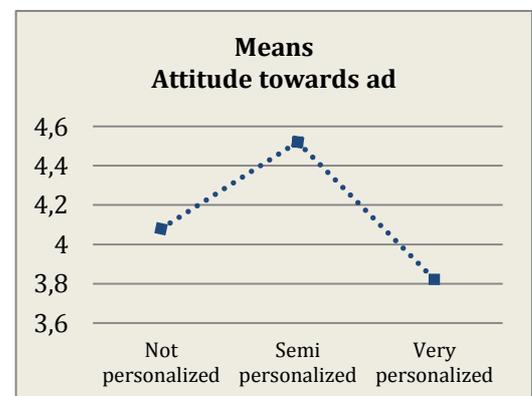
Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001

Post Hoc test

Dependent variable	Not personalized	Semi personalized	Mean Difference	Sig.
Attitude towards ad	4.08	4.53	0.44	0.144

Dependent variable	Semi personalized	Very personalized	Mean Difference	Sig.
Attitude towards ad	4.52	3.82	-0.70	0.019*

Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001



The one-way ANOVA test is significant, which shows that there is a significant difference between the means for the dependent variable, attitude towards the ad, for at least two of the groups. While there are mean differences between all groups, we can see that only the ones between groups 2 and 3 (sig. = 0.019) are significant on the 5 % level. Thus, we can only observe an indication of differing means between groups 1 and 2 (sig. 0.144). However, as the graph illustrates, we can see the tendency of the inverted U-shape effect described by Meyers-Levy and Peracchio (1996) and Mick (1992).

Since there is a significant difference between the attitudes for group 2 and 3 but not between 1 and 2, the inverted U-shape effect can be considered partially correct. We are therefore able to partially accept Hypothesis 1a that there is an inverted U-shape relationship between the attitude towards an ad message and the degree of personalization in an ad.

H1 a): There is an inverted U-shape relationship between the *attitudes towards an ad message* and the degree of personalization in the ad. **PARTIALLY ACCEPTED**

4.1.2 Attitude towards a product

ANOVA

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	Attitude towards product	2.888	0.049*

n = Total 129

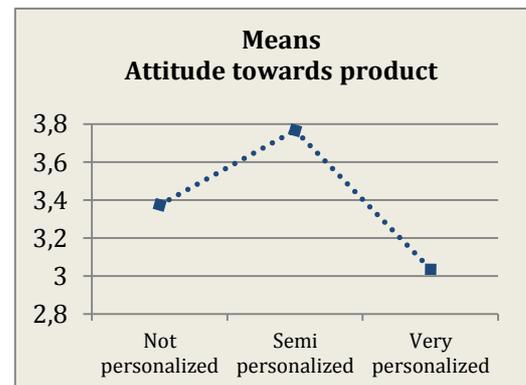
Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001

Post Hoc test

Dependent variable	Not personalized	Semi personalized	Mean Difference	Sig.
Attitude towards product	3.37	3.77	0.39	0.2145

Dependent variable	Semi personalized	Very personalized	Mean Difference	Sig.
Attitude towards product	3.77	3.04	-0.73	0.023*

Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001



Also when testing attitudes towards the product, the ANOVA test shows a significant difference between groups 2 and 3 (sig. = 0.023), while we can only see an indication of differing means between groups 1 and 2 (sig. = 0.2145). The graph illustrates the inverted U-shape relationship described by Meyers-Levy and Peracchio (1996) and Mick (1992).

Since there is a significant difference between the attitudes for group 2 and 3 but not between 1 and 2, the inverted U-shape effect can be considered partially correct. We are therefore able to partially accept Hypothesis 1b that there is an inverted U-shape relationship between the attitude towards a product and the degree of personalization in an ad promoting the product.

H1 b): There is an inverted U-shape relationship between the *attitudes towards a product* and the degree of personalization in the ad promoting the product. **PARTIALLY ACCEPTED**

4.1.3 WOM-intentions

ANOVA

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	WOM-intentions	3.148	0.046*

n = Total 128

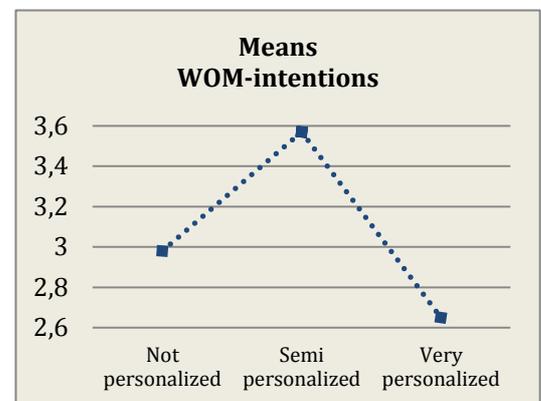
Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001

Post Hoc test

Dependent variable	Not personalized	Semi personalized	Mean Difference	Sig.
WOM-intentions	2.98	3.57	0.59	0.134

Dependent variable	Semi personalized	Very personalized	Mean Difference	Sig.
WOM-intentions	3.57	2.65	-0.92	0.019*

Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001



Similar results as for the attitudes towards the ad and the product are shown for the WOM-intentions. The ANOVA test is significant between groups 2 and 3 (sig. = 0.019) but not between groups 1 and 2 (sig. = 0.134). The inverted U-shape effect described by Meyers-Levy and Peracchio (1996) and Mick (1992) is thereby observed also when measuring the WOM-intentions.

Since there is a significant difference between the attitudes for groups 2 and 3 but not between 1 and 2, the inverted U-shape effect can be considered partially correct. We are therefore able to partially accept Hypothesis 1c that there is an inverted U-shape relationship between the WOM-intentions and the degree of personalization in an ad.

H1 c): There is an inverted U-shape relationship between the *WOM-intentions* and the degree of personalization in the ad. **PARTIALLY ACCEPTED**

4.2 Analysis of the inverted U-shaped effect

As the differences between groups 1 and 2 are not significant, they will not be included in the analysis. Instead, they will be discussed in chapter 5.

4.2.1 Too much personalization leads to reactance

From the significant differences between groups 2 and 3, we can establish that our results for all three hypotheses are in line with existing theory (Godart & Gronau 2009; Simonson 2005; Brehm 1966) stating that too much personalization leads to negative attitudes and reactance as it intrudes too much on the privacy. As Meyers-Levy and Peracchio (1996) describe, when personalization exceeds the semi-personal level, the self-referent cues distract the consumer from appreciating the promoted item or service, as shown in the second part of the U-shape relationship. Similarly, in our study, we can see that this relationship is evident even in e-mail advertising, shown by the change in attitudes and WOM-intensions between groups 2 and 3.

As the picture is the only personalized cue that differs between the ads sent to groups 2 and 3, the results indicate that this was a cue perceived as too intruding on the privacy. Even though the respondents' had already shared the same picture on Facebook, they reacted negatively when seeing it in an ad. This reaction can be related to the theory by Centaur Communications (2009), implying that the attitudes to personalization are sometimes double-sided; at the same time as consumers want a more personal online experience, they are fearful if delivery is taken out of their hands, as confirmed by the results from the testing of H1a-c.

Similarly, as explained by the personalization privacy paradox elaborated by Awad & Krishnan (2006), the people who like sharing on the web are not necessarily the same ones who are willing to be profiled online. In our study, this indicates that even though the picture was already shared on Facebook, which does not mean that the consumer is willing to be approached with it in an ad by a company. Instead, this might lead to reactance as consumers clearly separate the sharing of information and the use of it in web advertising, as explained by Awad & Krishnan (2006).

For all three hypotheses, the most personalized ad (group 3) is in fact showing lower attitude scores than the non-personalized group (1). As White, Zahay, Thorbjørnsen &

Shavitt (2008) argue, negative responses due to reactance might harm the brand more than the simple lack of response to the e-mail. This means that in some cases, it might in fact be more favorable for marketers not to use personalization at all since it implies a risk of losing potential customers. Similarly, Simonson (2005) implies that companies should be careful with damaging the relationship with their customers by making incorrect assumptions about their preferences.

To conclude, we found significant results showing declining attitudes between groups 2 and 3, in accordance with the theory of reactance.

4.3 The influence of fit due to involvement

For hypotheses H2a-c, we examined the interaction effect between the two levels of involvement (high/low) and the different degrees of personalization (groups 1-3), on the attitude towards an ad, attitude towards a product and the WOM-intentions. Here we used a two-way ANOVA test to compare the interaction effects for each of the three dependent variables. The interaction effect is most significant when the gradients of the curves in the charts, representing the different groups of involvement, are as different from each other as possible for the different degrees of personalization (groups 1-3). Respectively, the effect is the least significant when the curves are parallel to each other for the different degrees of personalization (Rumsey 2007). All the hypotheses will be rejected on a 5 % level, but we will also discuss selected non-significant results. The grouping of respondents into high and low involvement is conducted as explained in chapter 3.

Since we are not interested in the actual means for the two different groups of involvement but rather the changes in the means as the degree of personalization increases, we have chosen to standardize the means and examine them further using an additional chart for each dependent variable.

4.3.1 Involvement and personalization on the attitude towards an ad

Means for Attitude towards ad

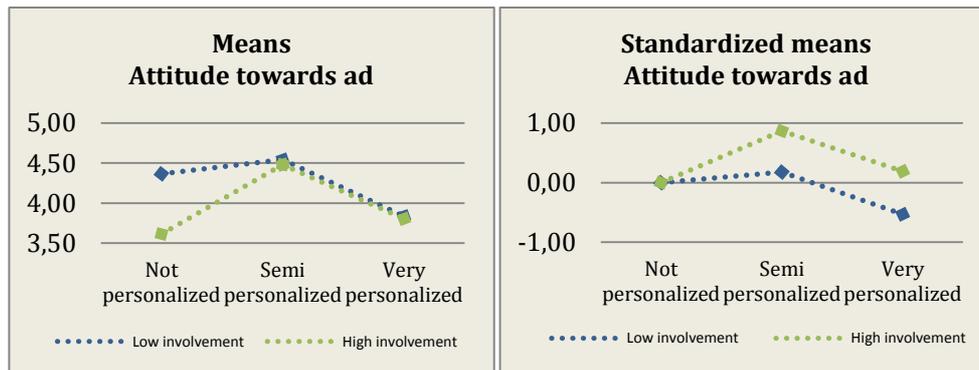
Degree of involvement	Not personalized	Semi personalized	Very personalized
Low involvement	4.37	4.54	3.83
High involvement	3.61	4.48	3.80

Test of between subjects effects

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	Attitude towards ad	2.969	0.027*
Involvement	Attitude towards ad	1.349	0.124
Interaction effect	Attitude towards ad	0.915	0.2015

n = Total 128

Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001



The interaction effect between involvement and degree of personalization is not significant (sig. = 0.2015) as seen in the table above. As the charts illustrate, the gradients of the curves are very similar for the two groups of involvement, and the curves are close to parallel. This demonstrates why the interaction between involvement and degree of personalization is not resulting in a significant difference on attitudes towards the ad.

Since there is no interaction effect, higher involvement within the product or area does not lead to more positive attitudes towards the ad as the level of personalization increases. Thus, we need to reject hypothesis H2 a).

H2 a): For consumers with high involvement in a product or area, increased personalization leads to more positive *attitudes towards the ad* in relation to the attitudes of consumers with low involvement. **REJECTED**

4.3.1.1 Good fit indicates more positive attitudes towards the ad

If we look at the standardized means chart, we can see that there is a positive relationship between high involvement and increased personalization between groups 1 and 2, but not between groups 2 and 3. This indicates that personalized content has a

more positive influence on people with high involvement, as explained in the theory about fit (White, Zahay, Thorbjørnsen & Shavitt 2008). Meyers-Levy and Peracchio (1996) argue that a person has to be motivated to be positively affected by the personalized content. To arouse this motivation, the consumer must feel *involved* in the message. As the theory implies, (Alba and Hutchinson 1987; Baumgartner, Sujan and Bettman 1992; Fan and Poole 2006), involvement in a message is highly influenced by the consumer's previous product-related experiences and his or her interest in the particular area of the offer. The trend of increasing means for attitude towards the ad in groups 1 and 2, for the high involvement level, indicates that product involvement and interest has influenced the responses through achieving a better fit between the consumer and the message.

4.3.1.2 Equal reactance when increasing the degree of personalization

When increasing the degree of personalization from group 2-3, the changes in attitudes are similar for both levels of involvement. As also seen in the standard means chart, the two involvement curves are almost parallel for group 2-3. This does not support the theory of fit (White, Zahay, Thorbjørnsen & Shavitt 2008), which implies that higher involvement would lead to more positive attitudes when increasing personalization, compared to low involvement.

According to White, Zahay, Thorbjørnsen & Shavitt (2008), an offer should present clear benefits to the consumer so that (s)he experiences a high perceived utility from the product or service offer, to offset the psychological costs of receiving inappropriately personal messages. From the results, it seems that the high involvement group did not consider any extra benefits even though they were more familiar with the product (smartphone) and the area (photography). Applying the theory, the higher involvement did not seem to compensate for the psychological costs when evaluating the attitudes towards the ad, as shown by the similar changes in the means for both levels of involvement.

4.3.2 Involvement and personalization on the attitude towards a product

Means for Attitude towards product

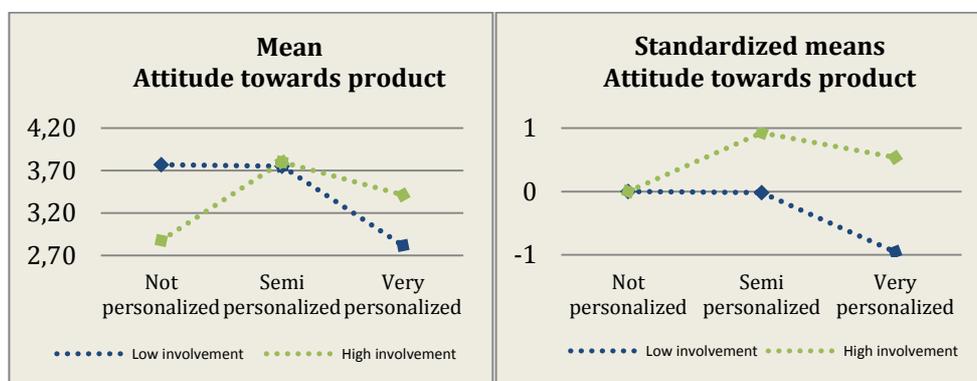
Degree of involvement	Not personalized	Semi personalized	Very personalized
Low involvement	3.77	3.75	2.82
High involvement	2.88	3.80	3.41

Test of between subjects effects

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	Attitude towards product	2.281	0.053
Involvement	Attitude towards product	0.100	0.376
Interaction effect	Attitude towards product	2.786	0.0325*

n = Total 128

Significance level: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$



The two-way ANOVA test shows a significant interaction effect between involvement and degree of personalization, meaning that there is a significant difference in the attitudes towards the product between the two groups of involvement as the level of personalization increases.

We will describe the differences deriving from the interaction effect in two steps:

1. Between groups 1 and 2 for high and low involvement, where the attitudes *increase more* for the high involvement group.
2. Between groups 2 and 3 for high and low involvement where the attitudes *decrease less* for the high involvement group.

These two steps help to explain the significant interaction effect demonstrated by the two-way ANOVA test.

Since there is a significant interaction effect, where higher involvement within the product or area leads to more positive attitudes towards the product, as the level of personalization increases, we have support for hypothesis H2 b).

*H2 b): For consumers with high involvement in a product or area, increased personalization leads to more positive attitudes towards the product, in relation to the attitudes of consumers with low involvement. **ACCEPTED***

4.3.2.1 Good fit establishes more positive attitudes towards the product

When looking at the standardized means chart we can clearly see that the increase in attitudes between groups 1 and 2 are higher for the high involvement group (0.93) compared to the low involvement group (-0.02). Like the indicated trend in hypothesis H2a, these significant results *establish* that personalization has had a more positive influence on the high involvement group, resulting in more positive attitudes for the product. In line with the theory (Alba and Hutchinson 1987; Baumgartner, Sujan and Bettman 1992; Fan and Poole 2006), *product-related experiences* seem to have a significant influence on the attitudes towards a product as explained by the increase between groups 1 and 2. Especially since this hypothesis is directly connected to the product on which the theory bases its framework, it is reasonable to assume that this has made it easier for consumers to relate to the product in the ad to their previous experiences within the product category. Thus, this can be one explanation to why the differences are more significant when studying the attitudes towards the product, compared to studying the attitudes towards the ad as examined in H1a.

The substantial increase in attitudes within the high involvement group can also be interpreted as consumers perceiving the offer as more beneficial, experiencing a higher *perceived utility* from the ad, as the level of personalization increases from group 1 to group 2. As White, Zahay, Thorbjørnsen & Shavitt (2008) argue, a higher perceived utility implies a *higher fit* between the consumer and the message, leading to more positive attitudes when the level of personalization increases. Our study suggests that higher involvement leads to higher perceived utility and a better fit. This would explain why personalized content has more positive impact on the high involvement level, as personalization increases between groups 1 and 2.

4.3.2.2 *Less reactance as a result of good fit*

Studying the second step, representing the differences from group 2-3, we notice that the decrease in attitudes is much less for the high involvement group (-0,39) than for the low involvement group (-0,93).

According to White, Zahay, Thorbjørnsen & Shavitt 2008, an offer should present clear benefits to the consumer so that (s)he experiences a high perceived utility from the product offer to offset the psychological costs of receiving inappropriately personal messages. Similarly, Simonson (2005) argues that companies can decrease a consumer's negative reactions to an inappropriately personal message, by increasing the perceived fit between the offer and the consumer's personal characteristics. In line with the theory, the close relation to the product and its benefits seem to have contributed to a higher perceived utility for the high involvement group between groups 2-3, offsetting the negative reactions that were evident for both of the levels of involvement in H2a..

In accordance with the theory about *reactance* described by White, Zahay, Thorbjørnsen & Shavitt 2008; Brehm 1966 Simonson 2005), the large decrease of the low involvement curve from group 2-3 indicates that this has had an influence since the fit is not sufficient.

White, Zahay, Thorbjørnsen & Shavitt 2008 also argue that a very personalized message needs a higher degree of *justification* when the perceived utility is low and there is an insufficient fit between the consumer and the message. Justification implies that the personalized content in the message has to be explained to the consumer to a larger extent, if the offer is not noticeably matching the consumer's needs. If not explained, the personalized content caused by the insufficient fit is likely to result in negative attitudes and reactance towards the ad or product advertised. The influence of lacking fit is clearly evident in the results for the low involvement group as it causes higher reactance than for the high involvement group.

For the low involvement level, the difference in reactance between groups 2 and 3 is slightly more evident when examining the attitudes towards the product, compared to the results from the attitudes towards the ad in H2a (-0.94 versus -0.71). This implies that respondents experience more reactance towards the *product* tested in H2b, than

towards the *ad* in H2a, when the fit is insufficient in both cases. In line with the theory about product-related experiences (Alba and Hutchinson 1987; Baumgartner, Sujan and Bettman 1992; Fan and Poole 2006), the results can once again be caused by the fact that the testing of this hypothesis is focused on the *product* in the ad, for which the theory bases its framework. This leads us to believe that evaluating the product in the ad would lead to more reactance than when evaluating only the ad in H2a.

4.3.3 Involvement and personalization on the WOM-intentions

Means for WOM-intentions

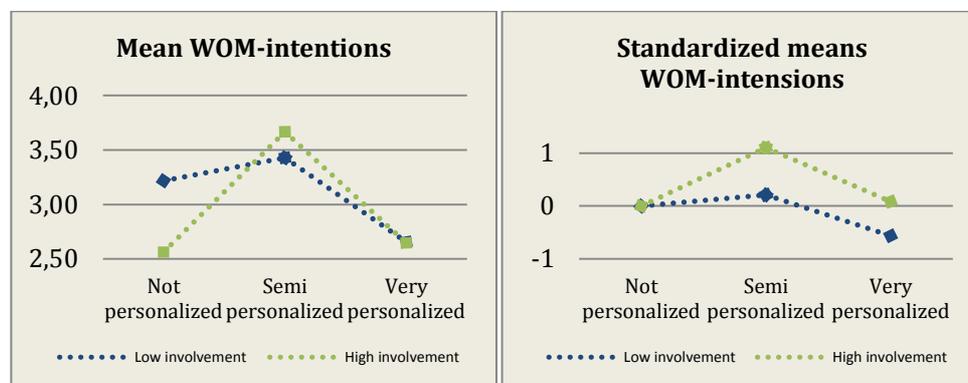
Degree of involvement	Not personalized	Semi personalized	Very personalized
Low involvement	3.217	3.43	2.65
High involvement	2.56	3.67	2.65

Test of between subjects effects

Independent variable	Dependent variable	F-value	Sig.
Degree personalization	WOM-intentions	2.811	0.032*
Involvement	WOM-intentions	0.194	0.330
Interaction effect	WOM-intentions	0.661	0.259

n = Total 128

Significance level: * p < 0.05; ** p < 0.01; *** p < 0.001



The results for the WOM-intentions are similar to the ones for the attitudes towards the ad (H2a). In accordance with the results for hypothesis H2a, we see that the interaction effect between involvement and degree of personalization is not showing any significant difference. As illustrated in the standardized means chart, the curves for the two groups of involvement are almost parallel.

Since there is no interaction effect, higher involvement within the product or area does not lead to more positive WOM-intentions for the ad as the level of personalization increases. Thus, we have to reject hypothesis H2c.

H2 c): For consumers with high involvement in a product or area, increased personalization leads to more positive *WOM-intentions for an ad* in relation to the WOM-intentions of consumers with low involvement. **REJECTED**

4.3.3.1 Good fit indicates more positive WOM-intentions for the product

The significant interaction effect in hypothesis 2b, demonstrates that higher involvement leads to more positive attitudes towards the product, in relation to the low involvement group, as the level of personalization increases.

Like hypotheses H2a-b, we can see from the standardized means chart that there is a positive relationship between high involvement and increased personalization between groups 1 and 2, indicating that personalization has had a more positive influence on the high involvement group also for the WOM-intentions. Although not significant for this hypothesis, we achieve the same result as in H2a, with increasing means between groups 1 and 2. In line with the theory of fit (White, Zahay, Thorbjørnsen & Shavitt 2008), this trend shows a more positive relationship between personalization and involvement for the WOM-intentions. As discussed in H2a, this trend is very likely to have been influenced by product-related experience, which is a prerequisite for high involvement according to the theory (Alba and Hutchinson 1987; Baumgartner, Sujan and Bettman 1992; Fan and Poole 2006).

4.3.3.2 Equal reactance when increasing the degree of personalization

Studying the standardized means chart, we can see that the curves for involvement are almost parallel, indicating that there is no significant interaction effect between group 2-3 and the levels of involvement. Just like H2a, this does not support the theory of fit (White, Zahay, Thorbjørnsen & Shavitt 2008; Simonson 2005), implying that higher involvement should lead to more positive attitudes when increasing personalization, compared to low involvement. In line with White, Zahay, Thorbjørnsen & Shavitt 2008, it seems as the high involvement group did not perceive the benefits from the ad positively enough to want to recommend the ad to someone else. Furthermore, since this

hypothesis is examining the positive WOM-intentions that are a result of positive attitudes (Holmes & Lett 1977), we realize that this, as being a secondary effect, might have made the differences less significant than for the attitudes towards a product measured in H2b.

5.0 DISCUSSION AND IMPLICATIONS

In this chapter, we start by presenting the conclusions based on the results from the hypotheses. We continue by carrying out a general discussion covering the significant findings as well as interesting trends we wish to highlight. In the following section we evaluate our methods and suggest possible improvements by performing a critical review of the study. Finally, we discuss managerial implications and suggestions for future research.

5.1 Conclusions

We found significant differences between the attitudes for the semi- and very personalized levels, but not between the non- and semi-personal levels. This means that the inverted U-shape effect may be considered *partially true*. In line with the purpose of the thesis, we are able to confirm that there is a level where too personalized content generates negative reactions to an *e-mail advertisement*. This is true for all three measures; attitudes towards an ad, attitudes towards a product and WOM-intentions.

Secondly, the significant interaction effect that was found demonstrates that higher involvement leads to more positive *attitudes towards the product*, in relation to the attitudes for the low involvement level, as the degree of personalization increases. Thus, we can conclude that fit due to consumer involvement *does* have an impact on the *attitude towards the product*, for different degrees of personalization. The same relationship could not be established for the *attitudes towards the ad* and *WOM-intentions*.

5.2 General discussion

5.2.1 Increasing means from personalization up to a semi-personal level

Although not significant between groups 1 and 2, we see a clear tendency of the inverted U-shape effect in the results for H1a-c. When testing all three hypotheses, the results show how the attitudes increase from group 1 to 2, just as described by Meyers-Levy and Peracchio (1996) and Mick (1992). We believe that this first part of the inverted U-shape relationship deserves to be highlighted as it clearly indicates the advantages of a personalized ad. The theory provides many examples of why consumers may prefer a personalized ad. It is, for example, convenient to receive customized offers as it reduces

time and effort to browse for relevant information (Chellapa & Sin 2005). As Meyers-Levy and Peracchio (1996) explain, personalization up to a certain level is positive, implying that respondents have a greater opportunity to recognize, appreciate and reflect upon the message content, which leads to a positive persuasion effect for the product in the ad. In line with this, we found that our respondents seem to consider the semi-personal ad the most appealing due to its appropriate level of personalized content. The increasing means between groups 1 and 2 might have been even more significant if we had had a larger sample size. To conclude, there is a clear trend towards more positive attitudes when using personalization up to a semi-personal level.

5.2.2 Lower initial attitudes for the high involvement group

When examining the difference between the high- and low- involvement groups, we encountered a peculiarity concerning the attitudes and WOM-intensions in the non-personalized group (1). The attitudes in group 1 were lower in the high involvement group than in the low involvement group, even though both groups received non-personalized ads. Consequently, this affected the increase of the attitudes for the high involvement level between groups 1 and 2. One explanation for this is that the respondents with high involvement were not as impressed by the product promoted in the ad, as they were familiar with similar types of products. People in the low involvement group, on the other hand, were neither familiar nor interested in the product area and therefore based their judgment only on the ad, leading to higher scores.

5.2.3 More reactance despite justification of the message

As described in the methodology chapter, we increased the personalization in group 3 by using a photo of the respondent, transformed with the WordFoto-app promoted in the ad. This way, the product was very coherent with the personalized information used, meaning a high level of justification as explained by White, Zahay, Thorbjørnsen & Shavitt 2008. Despite this, the respondents in group 3 proved to have more negative attitudes towards the ad than respondents in groups 1 and 2 as shown when examining the inverted U-shaped relationship (H1a-c). According to the theory of justification as an influence on fit, the attitudes would probably have been even lower for group 3 if the personalized cue had not been coherent with the promoted product in the ad.

5.2.4 Increasing click-through rates

As this study is based on e-mail advertising, we have measured the advantages of using personalization in this medium. Although not included in the experiment, one interesting finding from this is that the respondents receiving the most personalized message (group 3) had a much higher response rate initially, compared to respondents in two other groups. This is the reason why we sent 20 additional e-mails to groups 1 and 2. However, the attitudes still turned out to follow the inverted U-shaped relationship with declining attitudes for group 3. These results can be compared to the findings from the study by Albrecht (2004) where personalization in e-mail advertising initially increased click-through rates but later proved to reduce the conversion rates.

5.3 Critical review

One of the limitations with the study is the relatively small sample size of 129 respondents. Except for leading to more significant results, a larger sample would have increased the external validity resulting in more generalizable results. Worth mentioning is that we did attain significant results in spite of the small sample, demonstrating the strength of the caused effects. Although attaining great homogeneity between the groups 1-3, a random sample would have provided more generalizable conclusions, compared to our convenience sample (Malhotra 2010).

When measuring the effects of different degrees of personalization, the study could have benefited from testing attitudes towards more than one product in the experiment. However, since this would have required a substantially larger sample size and it would have made it harder to isolate external factors, we chose to use only one product in our experiment.

We believe that the measured effects from the experiment would have been even greater if the respondents would not have been aware that the ad was part of an experiment, when they saw it for the first time. One way of avoiding this could have been to first send an e-mail including only the ad, and then follow up with another e-mail containing the survey. This would probably have affected both the attitudes and the response rates of the survey. It is reasonable to assume that the negative attitudes arising from receiving a too personalized ad would have been *stronger*, and that the response rates would have been *lower* if the recipient had received the ad without

knowing it was a part of an experiment. The reason why we sent only one e-mail containing both the ad and the survey and told the recipients about the experiment was that we believe the response rates would have dropped drastically if we had done otherwise. This would have given us a smaller sample leading to less significant results. Applying the theory by Meyers-Levy and Peracchio (1996), a more motivated sample increases the possibility of getting more honest reactions to the personalized content in a message. If motivation is low, the respondents are likely to be inattentive and unresponsive to the self-referent cues, and product evaluations are therefore unaffected by the level of personalization. By telling the respondents about the experiment, they were more motivated to study the ad and answer the survey, since they wanted to help us by participating. Moreover, as we established several significant differences between the groups, this indicates that the respondents considered the ad as authentic.

The effects from the different degrees of personalization might have been affected by the fact that all e-mails were sent separately, to all respondents. In the study, we chose to send separate e-mails to respondents in all groups, even for group 1 where all the ads were identical and we could have sent a mass e-mail instead. As we did not want to measure the differences in the reactions to the way the mail was sent, we followed the same procedure for sending e-mails to all of the three groups. The reason for this was that we wanted to keep all factors constant between the groups except for the difference in the ads. As all groups received separate e-mails, we believe our results were not affected negatively. Rather the respondents in group 1 may have perceived the ads more personalized than if they had received a mass-mail. This would probably have led to larger differences in the means for the attitudes between groups 1 and 2. However, we considered a higher response rate to be more critical for the outcome of the experiment.

5.4 Managerial implications

5.4.1 Avoiding personalization may be better

As illustrated by our results for the U-shaped relationship, attitudes for the most personalized ad (group 3) is lower than the ones for the non-personalized (group 1), for all three hypotheses 1a-c. These results clearly indicate that it may sometimes be better for companies not to use personalization at all, rather than taking the risk of causing more reactance than for a non-personalized message. By obtaining these reactions when

personalization is exaggerated, we advise marketers to be more careful when using personalized content and try to match the benefits of the offer to the particular consumer's preferences. Personalization is not always better, even if companies try to justify the personalized content to the consumer, as we did in our study.

5.4.2 Importance of fit in personalized marketing

When looking at the attitudes for the two levels of involvement, we can only establish that fit has had an influence when studying the attitudes towards a *product*, as our results for the interaction effect was clearly significant. As discussed in the analysis, these results seem reasonable, as the product is the center of the ad for which the consumer bases most of his/her evaluations. These results provide important guidance for companies, demonstrating that fit is especially important when wanting to enhance product evaluations for an ad. For the attitudes towards an ad and the WOM-intentions, we are not able to determine whether the fit has had a positive influence.

However, results from examining H2a-c show that group 3 has had *higher* attitudes and WOM-intentions than group 1, for the high involvement group. Contrary to this, the attitudes and WOM-intentions for the low involvement group proved to have *lower* attitudes for group 3, than group 1. This indicates that fit has had an influence on the attitudes and WOM-intentions, leading to different relationships for the high and low involvement levels. Due to the increased tendency for reactance when fit is not sufficient, marketers should try to maximize the perceived utility for the consumer when sending very personalized messages, as argued in the theory. If not, the content may overwhelm the positive effects of personalization and cause reactance that can harm the company or brand.

5.5 Future research

Since little research has been done, examining the negative effects from using too much personalization in e-mail advertising, we believe our study can be seen as a valuable base for future research and that there are many possibilities for further investigation in the area.

Based on what was mentioned in the previous section, one suggestion for future research is to expand the experiment to include a larger sample. With a larger sample,

more dimensions than high/low involvement in product or area can also be examined. For example, it would have been interesting to examine if differences between much or little experience from online advertising would have had an influence on attitudes. In line with the theory of fit, more experience from online advertising would be likely to have a positive influence on the attitude towards an online ad. Furthermore, since we realized that involvement has an influence on fit, more dimensions leading to a better fit are interesting for future research.

Although our study uses a low involvement product, we chose to base the hypotheses on the existing theory for both high and low involvement products. However, since there are limited previous studies about the differences when implementing personalization for low versus high involvement products, this would be an interesting area for further investigation.

As the most appropriate degree of personalization is hard to pinpoint and may vary between different types of advertising, it would be interesting to find out more about which personalized cues are accepted and which ones are perceived inappropriate by consumers. With today's fast development in this technological area, we can assume that consumer attitudes towards personalization are changing and are likely to evolve along with the advances of the web. For example, the GPS-functions in smartphones, enabling location-aware marketing, would most likely have been seen as too personal, only 10 years ago. Mark Zuckerberg's statement that "every 18 months we are prepared to share twice as much stuff as we did before" is further indication of the growing trend towards a higher acceptance for personalization and transparency. As this trend implies, we will soon be facing rapid changes in the area of personalization.

Our ambition is that our study will contribute to the existing framework in this modern era of personalization where consumer perceptions rapidly change as a result of the constant technological development.

6.0 REFERENCES

Literature

- Albrecht H. (2004) Online customers value the personal touch. *B&T Weekly*, 54(2484):13
- Ansari, A., & Mela, C. (2003). E-customization. *Journal of Marketing Research*, 40(2), 131–140.
- Alba, J. et al. (1997) Interactive homeshopping: Consumer, retailer, and manufacturer incentives to participate in electronic marketplaces, *Journal of Marketing* 61 38–53.
- Alba, J, & Hutchinson, J 1987, Dimensions of Consumer Expertise, *Journal of Consumer Research*, 13, 4, pp. 411-454,
- Awad N, Krishnan M. (2006) The personalization privacy paradox: an empirical evaluation of information transparency and the willingness to be profiled online for personalization *MIS Quarterly* 30(1):13-28.
- Brehm, J. W. (1966). A theory of psychological reactance. *New York: Academic Press*.
- Bryman, A. & Bell, E. (2007). *Business research methods*. Oxford [u.a.], Oxford Univ. Press
- Centaur Communications (2009) Win users' trust by letting them choose what they see. *New Media Age* 02.
- Celsi, R, & Olson, J 1988, The Role of Involvement in Attention and Comprehension Processes, *Journal of Consumer Research*, 15, 2, pp. 210-224
- Christensen, L. & Engdahl, N. & Gräås, C. & Haglund, L. (2001), *Marknadsundersökning – En Handbok*. Lund: Studentlitteratur
- Chellappa, R.K., Sin, R.:(2005) Personalization versus Privacy: An Empirical Examination of the Online Consumers' Dilemma. *Information technology and management*, 6(2-3)
- Culnan, M.J. (2000) Protecting privacy online: Is self-regulation working? *Journal of Public Policy & Marketing* 19(1) (20–26).
- Dillman, Don A. 2000. *Mail and Internet Surveys: The Tailored Design Method*. New York: Wiley.
- Dichter, E. (1966), How Word-of-Mouth Advertising Works, *Harvard Business Review*, Vol 44, Issue 6, p. 147–166
- Dwek R. (2001) E-personalisation returns. *Marketing Week* (01419285) 24(31):14.

Fan H, Poole M. (2006) What Is Personalization? Perspectives on the Design and Implementation of Personalization in Information Systems. *Journal of Organizational Computing & Electronic Commerce* 16(3/4):179-202

Godart, C & Gronau, N (2009) Software Services for e-business and e-society: 9th IFIP WG 6.1 Conference on e-Business, e-Services and e-Society, Nancy, France, Proceedings. Berlin, Springer-Verlag.

Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer mediated environments: Conceptual foundations. *Journal of Marketing*, 60, 50–68 (July).

Holmes J, Lett Jr. J (1977) Product Sampling and Word of Mouth. *Journal of Advertising Research* 17(5):35-40.

Howard D.J., Kerin R.A. (2004) The effects of personalized product recommendations on advertisement response rates: The "Try this. It works!" technique. *Journal of Consumer Psychology*, 14 (3), pp. 271-279.

Hunt, R. R., and McDaniel, M. A. (1993) "The Enigma of Organization and Distinctiveness," *Journal of Memory and Language* (32), 1993, pp. 421-445.

Jen-Hung H, Shyu S. (2009) "Building personalised relationships with customers via emails". *Total Quality Management & Business Excellence* 20(6):585-601.

Klein, S. B., and Loftus, J. "The Nature of Self-Referent Encoding: The Contributions of Elaborative and Organizational Processes," *Journal of Personality and Social Psychology* (55:1), 1988, pp. 5-11.

Kircher, T. T. J., Senior, C., Phillips, M. L., Benson, P. J., Bullmore, E. T., Brammer, M., Simmons A., Williams S. C., Bartels, M., and David, A. S. "Towards a Functional Neuroanatomy of Self Processing: Effects of Faces and Words," *Cognitive Brain Research* (10:1/2), 2000, pp. 133-144.

Kuiper, N. A., and Rogers, T. B. "Encoding of Personal Information: Self-Other Differences," *Journal of Personality and Psychology* (37), 1979, pp. 499-514.

Lundahl & Skärvad, (1999), "Utredningsmetodik för samhällsvetare och ekonomer", 3. Uppl, Studentlitteratur

Malhotra, N. K. (2010). *Marketing research: an applied orientation*. Upper Saddle River, NJ, Prentice Hall.

Meyers-Levy, J., and Peracchio, L. A. (1996) "Moderators of the Impact of Self-Reference or Persuasion," *Journal of Consumer Research* (22:4) pp. 408-423.

Mick, D. G. (1992) "Level of Subjective Comprehension in Advertising Processing and Their Relations to Ad Perceptions, Attitudes, and Memory," *Journal of Consumer Research* (18:4) , pp. 411-424.

- Morrissey B. (2006) What's Next? Choose Your Own Ad-venture. *Adweek* 47(15):11
- Mossberg W. (2010) Getting Personal. But Too Personal? *Wall Street Journal - Eastern Edition* R6.
- Nickull, D., Governor, J & Hinchcliffe, D. (2008). *Web 2.0 Design Patterns*. Sebastopol, CA, O'Reilly & Associates.
- Passmore D. (2001) Personalization vs. Privacy--The Stakes Grow Higher. *Business Communications Review* 31(3):16.
- Peppers, D & Rogers, M (1995), "Do You Want to Keep Your Customers Forever?" *Harvard Business Review*, 73 (March–April), 103–114.
- Plummer, J. (2007) "Word Of Mouth: A New Advertising Discipline?" *Journal of Advertising Research* 47, 4 385–386.
- Postma, O. J., & Brokke, M. (2002). Personalization in practice: The proven effects of personalisation. *Journal of Database Management*, 9(2), 137–142.
- Questex Media Group (2002) Message Personalization, Targeting Delivers Higher Response, Retention. *Customer Interface* 15(9):17.
- Reed D. (2011) Using data for an individual experience. *Marketing Week* (01419285) 13, 34(1):48-50.
- Riecken, D. (2000) "Personalized views of personalization," *Comm. of ACM*, vol. 43, no. 8, pp. 26–28
- Rumsey, D. J. (2007). *Intermediate statistics for dummies*. Hoboken, NJ, Wiley.
- Simonson, I. (2005). Determinants of customers' responses to customized offers: Conceptual framework and research propositions. *Journal of Marketing*, 69, 32–45.
- Singh S. Web 2.0: (2006) Online Communities, Personalization and the Web OS. *Silicon india* 10(5):26-27.
- Sujan, M., Bettman, J. R., and Baumgartner, H. (1993) Influencing Consumer Judgments Using Autobiographical Memories: A Self- Referencing Perspective, *Journal of Marketing Research* (30:4) pp. 422-436.
- Tam, K,Y & Ho, S.Y,. (2006). "Understanding the Impact of Web Personalization on User Information Processing and Decision Outcomes," *MIS Quarterly*, (30: 4). 865-890
- White T, Zahay D, Thorbjørnsen H, Shavitt S. (2008) Getting too personal: Reactance to highly personalized email solicitations. *Marketing Letters*.19(1):39-50
- Winer, R.S A (2001) Framework for customer relationship management, *California Management Review* 43(4) (2001) 89–105.

Wyer, R. S., and Srull, T. K. (1989) *Memory and Cognition in its Social Context*, Lawrence Erlbaum Association, Mahwah, NJ

Yammarino, Francis J., Steven J. Skinner, and Terry L. Childers. (1991) "Understanding Mail Survey Response Behavior: A Meta-analysis." *Public Opinion Quarterly* 55(4):613–39.

Yu, Julie, and Harris Cooper. 1983. "A Quantitative Review of Research Design Effects on Response Rates to Questionnaires." *Journal of Marketing Research* 20:36–44.

Websites

Personalisation vs. privacy. Marketing (00253650) February 17, 2010;:31.
Haymarket Business Publications Ltd, <http://www.haymarket.com/home.aspx>,
Stockholm 2011-05-16

<http://www.privacyawarenessweek.org/>, Stockholm 2011-05-16

7.0 APPENDIX

Appendix 1: The ads used in the experiment

Group 1: Non-personalized ad

WordFoto
Turns your pictures into words

You've probably heard the worn out cliché about a picture being worth a thousand words. We've taken this phrase quite literally and created WordFoto, an app that lets you create amazing typographic works of art from your photos.

- Import photos from library or use camera
- Select your own words and choose between eight different style presets
- Adjust brightness, contrast and saturate post processing
- Get your results in a full resolution photo
- Save, email or share on Facebook.

We understand that life can sometimes be hectic, which is why we've created this amazing app that does practically all the work for you.

Why choose between a picture and a thousand words when you can have both?

[Click here to get the app now from Appstore](#)

App Store

Group 2: Semi-personalized ad

WordFoto
Turns your pictures into words

Dear Max,

You've probably heard the worn out cliché about a picture being worth a thousand words. We've taken this phrase quite literally and created WordFoto, an app that lets you create amazing typographic works of art from your photos.

- Import photos from library or use camera
- Select your own words and choose between eight different style presets
- Adjust brightness, contrast and saturate post processing
- Get your results in a full resolution photo
- Save, email or share on Facebook.

We understand that life as a student at SSE can sometimes be hectic, which is why we've created this amazing app that does practically all the work for you.

Why choose between a picture and a thousand words when you can have both?

[Click here to get the app now from Appstore](#)

App Store

Respondant's name

Respondant's occupation

Group 3: Very personalized ad

The advertisement for WordFoto features a large image of a man's face composed of the word 'Marcus' and 'WordFoto'. To the right, a smaller image shows a woman's face composed of various words. The text of the ad includes a headline, a personalized greeting, a paragraph about the app, a rhetorical question, and a call to action. Annotations with arrows point to specific elements: 'Respondant's picture' points to the woman's face; 'Respondant's name' points to 'Dear Marcus,'; and 'Respondant's occupation' points to 'student at SSE'.

WordFoto
Turns your pictures into words

Dear Marcus,

You've probably heard the worn out cliché about a picture being worth a thousand words. We've taken this phrase quite literally and created WordFoto, an app that lets you create amazing typographic works of art from your photos.

We understand that life as a student at SSE can sometimes be hectic, which is why we've created this amazing app that does practically all the work for you.

Why choose between a picture and a thousand words when you can have both?

[Click here to get the app now from Appstore](#)

- Import photos from library or use camera
- Select your own words and choose between eight different style presets
- Adjust brightness, contrast and saturate post processing
- Get your results in a full resolution photo
- Save, email or share on Facebook.

Respondant's picture

Respondant's name

Respondant's occupation

Appendix 2: Survey

Hi, thank you for taking the time to help us! The survey contains 15 short questions and will only take a few minutes to complete. If you have any questions regarding the survey you are very welcome to contact us via email: Arash Alidoost - 20923@student.hhs.se
Amanda Lärkert - 20795@student.hhs.se

Q1 Sex

- Female (1)
 Male (2)

Q2 How old are you?

Q3 What do you think about the ad that you received in your email?

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I like it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's credible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 After seeing the ad, would you...

	Very unlikely 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very likely 7 (7)
Forward it to someone?	<input type="radio"/>						
Tell someone about it?	<input type="radio"/>						

Q5 Generally, what do you think is important in an ad message? That it is...

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertaining	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coherent with the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relevant to the consumer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 After seeing the ad, would you...

	Very unlikely 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very likely 7 (7)
Consider downloading the app	<input type="radio"/>						
Recommend the app to someone	<input type="radio"/>						
Like to know more about the app	<input type="radio"/>						

Q7 What is your perception of the product, the app WordFoto?

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It seems fun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems innovative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 How much would you be willing to pay for app, if it wouldn't be offered for free download?

- Nothing (1)
- \$1 (2)
- \$2 (3)
- \$3 (4)
- \$4 (5)
- \$5 or more (6)

Q9 Do you have a smart-phone?

- Yes - iPhone (1)
- Yes - HTC or other Android phone (2)
- Yes - other (3)
- No (4)

Answer If "Do you have a smart-phone?" No Is Not Selected, Q10 it not displayed

Q10 How often do you use applications on your smart-phone?

- Never (1)
- Once a Month (2)
- Once a Week (3)
- 2-3 Times a Week (4)
- Daily (5)

Answer If "Do you have a smart-phone?" No Is Not Selected, Q10 is not displayed

Q11 How often are you using the following applications?

	Never (1)	Sometimes (2)	Often (3)
Entertainment apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Games apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utilities apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Photography apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Networking apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
News apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Interest in photography

	Not true at all (1)	2 (2)	3(3)	4 (4)	5 (5)	6 (6)	Very true (7)
I am using Photoshop or other photo program to edit my photos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in photography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My camera is advanced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I care about the quality of the photos I take	<input type="radio"/>						
---	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Q13 In an ad, do you think it is appropriate if a company knows and uses information about...

	Not appropriate at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very appropriate 7 (7)
Your name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your preferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 Online advertising

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I enjoy receiving offers from advertisers online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often subscribe to online newsletters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer receiving information about products through advertising rather than finding it myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 Degree of personalization in the ad

	Not personalized at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very personalized 7 (7)
How personalized do you think the ad you received was?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>