Ad Me?

The Effect of Facebook's Targeted Advertisements

Abstract

Being categorized by others has strong effects on wellbeing. We care about how we are perceived by others, if others do not see you in the way you perceive yourself this have implications for your wellbeing and self-perception. One way marketers use this is by segmenting. Correctly identifying and categorizing a customer in a service encounter leads to significantly higher customer satisfaction. This is true for advertising as well, if we – as consumers – identify ourselves with the advertisement we will be more likely to want to buy what is advertised. In this thesis a new advertising medium will be further explored, social media. The purpose this thesis serves is to further research in the area and providing knowledge about the effects of categorizing consumers on social media. Testing for effects of a gender-categorizing ad, this is a quantitative study of the effects on the ad itself, the brand advertised, the product, spillover effects onto nearby advertisement and most importantly, self-esteem effects on the individual. The experiment was conducted through manipulation of two Facebook feeds, one containing an ad featuring a product targeted towards men and one featuring an ad targeted toward women. The results were that no significant changes in attitudes toward the ad, brand, product or surroundings could be detected. However, even when no attitude change was seen, negative effects on self-esteem of the participants could be detected. Incorrectly categorized participants displayed lower self-esteem after viewing categorizing advertisement in social media.

Keywords

Advertising ◆ Categorization ◆ Consumer Attitude ◆ Self-Esteem ◆ Social Media

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Thank You!

Vocabulary

B2C (Business-To-Consumer) Marketing: Marketing directly from a company to consumers who are the ultimate users of its products and services. (Investopedia)

Beauty and Personal Care Products: Products commonly found in bathroom cabinets. Examples of products groups belonging in this category: skin care, fragrances, oral care, men's grooming, depilatories, deodorants etc. (Euromonitor)

Categorization vs. Segmentation: In this thesis, we separate the two terms by defining segmentation as the marketing praxis of dividing people into categories. Categorization is basically the same term, only from a psychological viewpoint. Segment is what marketers do, categorize is what individuals do.

Facebook: The largest social network in the world, counted in number of users. (www.statista.com 2015)

Facebook Feed: The definition according to Facebook being: "The most interesting, recent activity taking place on your site…" (Facebook). Simply put, the activity shown in the center of your Facebook page.

Demographics: Demographics are used to learn more about a population's characteristics. Factors often used in demographic studies are age, race, sex, economic status, level of education, income level and employment level. (Investopedia)

Social Media: Internet based applications allowing individuals and organizations to publish material publicly on websites or social networking sites. (Colliander 2012).

Traditional Advertising: In this thesis, traditional advertisement is considered to be print advertisement. Print advertisement being a still picture with the brand or product printed and formatted by a company targeted toward consumers.

Traditional Media: In this thesis, traditional media refers to media offline, in most cases journals and magazines.

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1. Introduction

We all have those dreaded moments of nothingness. When waiting for that friend of yours who never seems to be on time. When sitting on the bus. At a boring lecture, in a dull meeting, when eating dinner alone… The examples of small time slots that could be filled with something else during a day are many. What do we do? We check Facebook, Instagram, Twitter or other social media, letting them act as a time killers. But have you ever noticed how cluttered with advertisements your feeds are? Have you ever googled a product only to have it show up on Facebook the next time you log in? Have you ever received advertisement so misdirected that you suspect your computer has been hacked? (Like getting discounts for Botox… when being in your twenties…) Even more importantly, how do you react to this misdirected advertising? Do you let the advertisement pass, since it obviously was not for you? Do you pay a little extra attention because it is obvious that it does not belong in your feed? Or do you get annoyed, confused or even amused? Is it not a little bit funny that even though they seem to know everything about you they still cannot seem to get you? What are the effects of social media ad(d)ing you?

1.1 Background

Social media is becoming one of the most important media channels of our time and the social networking site Facebook is close to reaching 1.5 billion users (www.statista.com 2015). The average person spends up to 1.72 hours per day on social networking sites (Mender 2014). In our use of social media we are also increasingly being targeted by commercial messages. Messages that often are shaped to target categories of consumers, categories that we are assumed to identify with. This is nothing new. Categorizing consumers has long been standard practice among marketers. Different market segments are sent different types of marketing messages. Differing consumer segments receive differing service offers when entering a store. Studies have been conducted showing that making the correct customer categorization in the service offering or advertising is important for customer satisfaction (Söderlund 2012)(Mehta

1999). Although targeting consumers in social media advertising is becoming increasingly more common, to our knowledge no research has yet been conducted regarding the effect of such categorization. Particularly as to whether the incorrect categorization that sometimes occurs can have negative effects on consumer attitudes that extend beyond the advertisement.

Social Media

With the rapid increase social media usage in the last ten years it is no wonder that social media is also gaining importance among companies and brands. Did you for example know that 71% of American adults use Facebook? (Duggan et al. 2015). And as we know, where consumers go, marketers follow. Facebook increased its ad revenue with 46% in the first quarter of 2015 compared to the same period the previous year (Svenska Dagbladet 2015). With increasing use and increasing money poured into advertising on social media, should we not study the effects of it too?

The term social media is widely used. For some social media is where you share pictures with your family, and for others it is an efficient mean of communicating with millions of fans. In the dynamic landscape of social media we want to clarify what we mean when using the term social media in this thesis. We have chosen to use the definition used by Jonas Colliander in "Socially Acceptable?" as it fits well with the social media and advertising context we intend to study. Hence we define social media as "…*widely available internet-based applications with low barriers of entry that allow individuals or organizations to publish material on public websites or social networking sites available to a select group of people."* (Colliander 2012).

Advertising in Social Media

Social media advertising is rapidly increasing (Svenska Dagbladet 2015). Many companies are now advertising through social media. Some companies place ads, just as they would have done in a news journal or leisure magazine, but many have also started brand accounts where loyal and interested consumers can receive news updates from the brand(s) they are interested in and also interact with the company. Dollars spent on worldwide social network

advertisements reached $16.10 billion in 2014, a 45.3% increase from 2013 (CMO Council 2015).

How is Social Media Different from Traditional Media?

According to researchers social media usage differs from traditional media usage, thus advertisers need to take this difference into consideration when designing their advertisement (Colliander 2012). Social media is used by many as a mean to communicate with friends and family, making the social media a personal space for many users. When advertisers enter this personal sphere and deliver marketing messages they are entering a personal space of social media users (Colliander 2012). This evokes the notion that consumers' reception of advertising is different in social media than in traditional media. Despite this notion very little research has yet been done on advertising in social media.

Research that has been done focuses on differences between social media and traditional media, drawing conclusions on how social media and traditional media differs. When viewing traditional media we do not have any personal relation to the sender of the message, whereas in social media we are used to communicating with friends and other people we care about. Even when the social media is a blog with millions of followers the readers often develop a very personal relationship to the blogger. Therefore we have a different relation and attitude to messages delivered through social media, where we are used to receive communication on a more personal level. Consequently in social media the sender of the message has added importance compared to traditional media. Who is behind the message, why do they deliver the message, and how they deliver the message are important factors for how the message will be received in social media settings (Colliander 2012).

Why We Categorize and Associated Problems

Human beings are social creatures and a large part of how we define ourselves is defined by which groups we belong to. The research in this field is called Social Identity Theory (see theory in chapter 2.1.2). By signaling to others which group(s) we belong to we are stating who we are. Signaling group belonging can be done by our way of dressing, speaking or even the locations

we chose to spend our time in. According to social identity theory it is important for individuals to be seen by others as belonging to the group that we ourselves identify us with (Barreto, Ellemers 2003).

When a marketer categorizes and targets a consumer, the marketer is inferring to the consumer which group of people the marketer believes that the consumer belongs to, or wants to belong to. By categorizing consumers the marketer is indicating the perceived group the consumer should belong to, and ultimately what type of person the consumer is. Failing to correctly categorize a consumer, and ending up categorizing the consumer to a group to which the consumer does not feel connected is what we in this thesis from here on will call incorrect categorization. According to Social Identity Theory incorrect categorization of this kind can create stress and discomfort for the individual being categorized (Burke 1991).

Incorrect categorization can lead the consumer to completely disregard the communication message due to the discrepancy with the consumers' individual self-perception (Barreto, Ellemers 2003). Another effect is the need to re-evaluate group belonging to reaffirm, or alter, the experienced group belonging. The reevaluation is a process that creates stress for individuals' sense of self (Barreto, Ellemers 2003). This process, which brings the individuals to question themselves in their group belonging have been shown to lead to negative self-evaluations (Ellemers, Spears & Doosje 2002). We believe that incorrect categorization leads to lowered self-evaluated self-esteem among incorrectly categorized individuals. Effects of categorization have been studied in different types of settings: in social encounters as well as in customer service and advertising. To date we are not aware of any research studying categorizing advertising in Social Media, wherefore we now in the next section will focus specifically on categorizing consumers in social media marketing.

Categorization on Social Media

With the rise of social media and the increasing amount of consumer data available to marketers the methods of categorizing are becoming increasingly more sophisticated. Segmentation variables in social media can now depend on browsing behavior, current location or even your social connections. (Facebook 2015) Although segmentation is getting more advanced and refined there are still instances when marketers try to group consumers into groups where consumers do not feel that they belong. Computer algorithms fail and human errors occur resulting in advertising that reaches a recipient who does not at all feel that the advertisement is meant for them.

Social media is perceived as an extension of the personal sphere for many users. The way consumers perceive social media increases the importance of message sender behavior (Colliander 2012). As the sender behavior has added importance in the social media setting, consumers are potentially extra sensitive to the advertiser practice of segmenting in advertisements on social media. The widespread usage of categorization in social media advertising, combined with the lack of specific research of its effects, leads us to believe that the use of categorizing advertisements in social media should be further studied.

Spillover Effects

Consumer attitudes cannot be studied in isolation; there is high likelihood that consumer attitudes toward one item will affect how the consumer perceives other items in its proximity. Rosengren et al. has shown that consumers' attitude toward advertising in a magazine affects attitudes toward the magazine brand as well (Rosengren, Dahlén 2013). We will therefore look at potential spillover effects of categorizing advertising. Social media advertising is on the rise and it is not uncommon to see multiple ads from different companies at the same time when browsing social media. We are curious about spillover effects of attitudes to other advertisements in the same category. Will the media itself be affected? What are the effects of incorrect categorization when placed in a social media setting?

1.2 Problem Formulation

Several studies exist about advertising and its effects, and business schools all over the world teaches students how to optimally target and categorize consumers (Jobber, Ellis-Chadwick 2013). Studies about social media exist, as well as studies of the power of context (Rosengren, Dahlén 2013)(Colliander, Dahlén 2011). Categorization is also emphasized as an important factor for customer satisfaction in traditional marketing settings (Söderlund 2012). However, categorizing consumers in the personal sphere of social media has, to our knowledge, yet to receive attention from researchers.

Combine this with the fact that more advanced algorithms today are available to marketers to segment consumers by, offering opportunities for marketing messages that can be more and more specifically targeted to certain groups and individuals. It is thus relevant for marketers to know how their marketing messages will be received. Should the marketing messages be broadly scripted, reducing the risk of incorrectly categorizing some consumers, but also reducing the specific appeals to certain groups? Or should marketing messages be narrowly tailored to fit small consumer groups, accepting that some consumers thus feel incorrectly categorized? This consideration will be relevant both for marketers who are designing their communications to bond with consumers, as well as the owners of social media channels who want to please both advertisers and media users, as well as other advertisers in the social medium who might be affected if spillover effects occur. The purpose of this thesis will be to address the above-mentioned issues.

1.3 Purpose

Marketers all over the world use categorization liberally to target consumers. Great benefits can be achieved through correct categorization, although previous research also indicates that risks of incorrect categorization exist. The purpose of this thesis is thus to examine the effects of, correctly or incorrectly, categorizing consumers in a social media setting.

1.4 Delimitations

Our research is limited to B-2-C marketing, Business-to-Consumer marketing communicated through social media. The focus of the study is marketing conducted in the form of advertisements. In this case the study will be conducted using Facebook as the social media vehicle. We have chosen Facebook, as it is by far the largest social media vehicle of today (Duggan et al. 2015). The results of the study will therefore primarily be applicable to social media advertising on Facebook. Social media is a relatively new medium for advertising and consumers' and advertisers' behavior is ever changing to adapt to these new medias. Results from this study will then, due to the nature of social media, primarily be relevant for social media usage today. However we do not expect the effects of categorization on the individual to change in the near future, neither for advertisements to disappear from social media anytime soon. Therefore we hope that this thesis will contribute with insights about the media landscape today and raise new questions for future researchers. We have limited this study to Swedish speaking participants, which might affect applicability of the study in an international context, since cultural differences could affect social media usage and advertisement in other nationalities. For the advertisements we chose to use existing brands and existing advertisements to make the advertising look as realistic as possible. The advertisements are for products making the results primarily applicable to traditional advertisements of products. In order to be able to study the effects of categorization we had to choose a categorization variable. Variables that Facebook has recorded for all their users are gender and age. We thus chose to categorize on gender in this thesis, a common categorization variable used for beauty and personal care products. We suspect that the results could differ if more specific or sensitive categories for categorization had been used, such as "overweight" vs. "skinny" or "soccer fan" vs. "hockey fan". Finally, the effects of categorization might be endless. We have therefore chosen to answer the following three questions specifically:

1. Do categorizing advertisements affect consumers' attitudes toward products and brands advertised on social media?
2. Are there spillover effects on the attitudes toward the medium and surrounding advertising?
3. Does categorization affect the self-esteem of consumers?

1.5 Expected Contribution

Research exists that confirms that categorization of consumers in traditional media and in service encounters affects customer satisfaction (Söderlund 2012). Further there is also research saying that incorrect categorization causes psychological stress and discomfort to the categorized individual (Burke 1991). Research supports that mistakes by one company can lead to negative spillover effects to other companies in the same industry (Roehm, Tybout 2006), and support is available that advertising in a media affects the consumers' perception of the media (Colliander 2012).

There is, to our knowledge, no research on the effects of categorizing advertisement in a social media setting, and not as to whether this can create spillover effects to the media vehicle and other advertising in the medium. By building on previous research, which has primarily been conducted in traditional media settings, and using the theories in a social media setting we aim to further develop the application of these theories.

We are thus applying existing theories to a new context and testing their validity for the new setting. Through this research we aim to develop a better understanding for the premises of social media advertising and how decision makers therein should use the categorization tools available to them, and what consequences categorization has.

2.Theoretical Framework

In the following chapter we explain previous research on categorization of individuals, this is done by discussion of studies on social identity theory. We move on to relate this to effects of categorization in a commercial context. We also consider potential incongruence effects of incorrect categorization in advertising. The later section focuses on spillover effects on attitudes to other advertising in a medium as well as to the medium itself. The final section covers potential effects on self-esteem of the categorized consumer.

2.1 Effects of Categorization

The following paragraphs will focus on the effects of categorizing consumers. First we cover the topic of social groups and their relation to the individuals' perception of self. We then move on to look at effects of being categorized into a group that does not correspond to the individuals' view of the self.

2.1.1 Effects of Categorization on the Individual

An individual's sense of self is the sum of surrounding influences, including both physical and psychological attributes. It also interacts with the various roles an individual takes on. The sense of self is the individual's subjective view of themselves and not an objective view of the person. An example of sense of self would be a CEO who is also a mother; she views herself as a CEO when at work and as a mother when spending time with her children. In this thesis we will focus on the social aspects of a persons sense of self. The social aspect is how we categorize ourselves as members of different social groups. The study of this is called social identity theory (Mehta 1999).

2.1.2 Social Identity Theory

Researchers define social identity as "that *part* of the individuals' self-concept which derives from their knowledge of their membership of a social group(s) together with the value and emotional significance of the group membership (Tajfel 1982). Individuals who are asked to describe themselves often use groups they belong to as a mean to define themselves (Ellemers, Spears & Doosje 2002). The groups with which we identify are important to us and to our perception of ourselves. One way in which this is expressed is that individuals

who feel belonging to certain groups adapt the group's behavior to signal to others their group belonging. For example by changing their manner of dressing or speaking to match the other individuals of that group and thus making it visible to others that they are members of the group (Barreto, Ellemers 2003). People can also choose to identify more with certain groups than others. Even if a person can be both soccer player and a university student at the same time, one of these identities can have higher relevance for the unique individual who choses to identify with the one group (Barreto, Ellemers 2003). Individuals can actively chose how they want to identify themselves, and how they want to be categorized by others, by choosing to accept or refute a categorization that is assigned to them. This choice will be reflected in the manner they choose to interact with others (Barreto, Ellemers 2003).

2.1.3 Effects of Mistakenly Being Categorized Into a Group

The importance individuals place on signaling their group belonging to others indicate the level of discomfort that follows if signaling fails (Ellemers, Spears & Doosje 2002). In accordance with social identity theory we feel better when other people's view of which category we belong to correlates with our own view of ourselves. However we feel worse and experience stress when we are categorized into a category where we feel that we do not belong (Burke 1991). As stated in *The effects of being categorized,* "while we tend to place great value on our own subjective sense of self, we neither can nor want to ignore what others think of us – we want to avoid social costs and, whenever and in what ways possible, we wish to persuade others of how we view ourselves" (Barreto, Ellemers 2003). By being incorrectly categorized into a group to which we do not feel we belong will make us feel psychological discomfort.

2.2 Categorization in Commercial Situations

In the following paragraphs we will examine how discomfort created by incorrect categorization have implications on customer satisfaction in a commercial context.

2.2.1 Categorization in Service Encounters

Research has been done on how correct versus incorrect categorization affects the customer in a commercial context. The studies found that customers who are incorrectly categorized in a service encounter were significantly less satisfied with the service level than customers who were correctly categorized (Söderlund 2012). This proved true both in a jeans-store and at a travel agent. In the jeans-store consumers were given jeans to try on. The manipulation was performed so that the jeans the consumer received were either the correct size, too small, or too large. Thus implicating the service attendant's categorization of their size. The customers then were asked to fill out a survey relating to their service experience in the store. The results showed that customers who had been incorrectly categorized, either as skinnier than they actually were or as larger than they actually were, were significantly less satisfied with the service encounter. Another experiment was conducted at a travel agency. In the experiment customers were either categorized as travellers looking for an active or relaxing vacation. In this experiment it was obvious that incorrectly categorized customers were significantly less satisfied with the service encounter than those customers who were correctly categorized (Söderlund 2012).

2.2.2 Categorization in Advertising

Categorization studies have been conducted in advertising settings. Consumers were exposed to advertisements featuring differing product images. The objective was to see if individuals would choose products with images congruent with their own self-concept over products that have images incongruent with their self-image. "…results of these studies have been generally supportive of the hypothesis that consumers prefer, intend to buy, or use brands/products /stores which are more congruent with their self-concept" (Mehta 1999).

2.3 Effects of Incongruent Advertising

When incorrectly categorizing consumers the advertisement shown will seem more surprising. By being less expected the advertisement receives more cognitive attention. This can in turn lead to higher liking by the consumer.

2.3.1 Effects of Incongruent Advertising on the Processing of Information

Consumers expect advertisements to match the content of the medium. Therefore the reader will spend more time processing the information on an advertisement when the ad is placed in an incongruent medium (Dahlén et al. 2008). For example advertisements for running shoes are more likely to appear in sports magazines than in a gardening magazines. Incongruent information is therefore likely to stand out from other content and receive more attention from a reader when the reader tries to resolve incongruence. When more time and energy is spent on processing information in an advertisement the reader will be more confident in her or his evaluation of the advertisement. This increased confidence is usually interpreted as a higher liking of the brand and the advertisement (Lee 2000). Thus, placing ads incongruently, or as Dahlén puts it, in a surprising setting, can lead to enhanced ad attitudes and strengthened brand associations (Dahlén 2005).

2.3.2 Competing Effects

The research on categorization in advertising presented above leads us to believe that categorizing consumers on social media should have an effect on consumer's perceptions of the advertisement and brand. These effects run the risk of being mitigated by incongruence effects depending on how unexpected incorrectly targeted advertisements will be perceived on social media. Still we believe that the effects will be shown related to correct or incorrect categorization of the advertisement. This leads us to the following hypotheses:

> H_1 – Consumers are more (less) positive to an advertisement when the advertisement correctly (incorrectly) categorizes them.

> H_2 – Consumers are more (less) positive to a brand when the advertisement correctly (incorrectly) categorizes them.

> H_3 – Consumers are more (less) positive to a product when the advertisement correctly (incorrectly) categorizes them.

2.4 Effects of Categorization on the Attitudes to the Social Media Vehicle

Media vehicles are often filled with advertisements and advertisements in magazines are usually congruent with the magazine theme. The expected congruence includes certain expectations of the level of sophistication of advertisements. High end magazines are likely to feature high end products in their advertisement in prints of good quality and vice versa. Advertisers expect their ads to be received more favorably when placed in media vehicles that have a better standing with their target audience (Rosengren, Dahlén 2013). Research also suggests that the reverse might be true. In experiments performed by researchers at Stockholm School of Economics results show that by manipulating advertising content in magazines the perception of the quality of the magazine also shifted. Higher quality advertising indicated that also the magazine was of higher quality (Rosengren, Dahlén 2013). Thus the perception of the advertisement also affects the perception of the media. This leads us to believe that in the social media context, not only the quality of the advertisement, but also the ability of the advertiser to correctly categorize the consumer, should have effects on how the social media vehicle is perceived by the consumer. Therefore our next hypothesis is formulated as follows:

> H_4 – Consumers are more (less) positive to the social media when the media features advertisement that correctly (incorrectly) categorizes them.

2.4.1 Effects of Categorization on the Attitudes to Other Advertising in the Social Media Vehicle

Large companies have seen huge drops in sales when a competitor has faced a crisis, those companies have been considered guilty by association (Roehm, Tybout 2006). This makes us wonder whether this also holds for advertisement in social media. We believe that the attitude towards the first advertisement will spillover and affect both the medium it is advertised in as well as surrounding advertisements. If this effect exists it should be stronger for products and brands in the same category as the main advertisement as they would be more likely to be deemed guilty by association. Thus hypothesis 5 reads as follows:

> **H₅** – Consumers are more (less) positive to other advertising in the social media when the media features advertisement that correctly (incorrectly) categorizes them.

2.5 Effects of Categorization on the Individual's Self-Esteem

Researchers who study self-esteem define the concept broadly. The common definition is that individuals see themselves as objects and have attitudes toward themselves. Attitudes include behavioral components (e.g., I make myself run daily), cognitive components (I believe I am an intelligent person), and affective components (I like myself) (Durgee 1986). For this thesis the cognitive components are of greatest interest. We previously mentioned that incorrect categorization creates psychological discomfort for the individual. This discomfort stems from conflicting views of the self. Thus the way individuals choose to identify themselves (internal categorization) is not necessarily the same as how they are perceived by others (external categorization). For example when a person identifies her- or himself as an athlete and someone else thinks that this person is primarily an office worker. Not being seen as the person she or he identifies as creates discomfort. A mismatch in external and internal categorization is uncomfortable for the individual and constitutes a threat to the self-perception (Ellemers, Spears & Doosje 2002). This person is forced to either reevaluate their own self perception – "Am I actually really an office worker?" or reinforce their personal identity by for example dressing in more sporty outfits. This threat to self-perception can be very stressful and cause harm to the self-perception and thus the self-esteem. It has been reported leading to higher rates of depression and suicidal thoughts among racial groups frequently being incorrectly categorized (Campbell, Troyer 2007). We believe that being incorrectly categorized by advertisers will lead to inner conflict among individuals, which in turn will affect the individuals' self-esteem. Our final hypothesis is therefore:

> **H₆** – Consumers who are incorrectly categorized will experience lower self-esteem

3. Research Method

In this chapter the research method will be presented. The chapter will begin with explaining the research approach and research design, continuing with the procedures preceding the main study. Thereafter steps taken during the main study will be explained and finally we conclude with a discussion about the credibility of the study and tools used for analysis.

3.1 Research Approach

This study is built upon a deductive approach; the hypotheses are generated by existing theories (within consumer categorization, media choice for advertising and self-esteem). The hypotheses generated are then tested through studying empirical data (Bryman, Bell 2011). An experimental study was deemed most suitable for this study due to the aim of studying the effects of one manipulated variable, categorization. Similar advertisement manipulation studies have previously been used by e.g. Dahlén et al. (2008). The reason for creating a quantitative study was that with the help of a sample we would be able to draw general conclusions. These general conclusions we find relevant for future researchers and thus the choice of a quantitative study was deemed most fitting (Eliasson 2004).

3.2 Overview of the Research Design

This study consists of two parts. The first part is the research part and pilot testing of advertisements. The second part is a quantitative main study. The overall objective of the pilot testing is to test responses for advertisements. The responses for the tested advertisements are vital to ensure that the advertisements chosen has the possibility to ensure that participants in the main study feel that they have been categorized. The main study is carried out in order to give empirical material for analysis, ultimately to answer the research question: What are the effects of consumer categorization in social media?

3.3 Research and Pilot Studies Preceding the Main Study

Previous literature and research on advertising was read to find a suitable area to study and to create a study in line with previous findings. This led us to the conclusion that in order to generate relevant results for our study it was important to ensure that our single manipulation variable, categorization, had an effect. In addition we chose the social media vehicle we found most fitting and selection of participants was made.

3.3.1 Choice of Social Media Channel

Facebook was chosen as the social media channel to test early on in the process. The reasoning behind this choice was first and foremost because it was here we first observed that we felt we received advertisements meant for someone else. Secondly Facebook is, when counting registered users, more than twice the size of the second largest social media channel (www.statista.com 2015). These two reasons in combination with the good opportunity to recruit participants in the target group made Facebook our social media vehicle of choice.

3.3.2 Selection of Participants

The two main criteria for participants were that they had to be registered Facebook members and identify themselves as either men or women. The member criterion was chosen because the wording of the questions would involve words and instructions supposedly familiar to a user, however might not be suitable for someone who has never used Facebook. One example of this is when we in the main survey refer to the main advertisement as the one shown in "the middle of the feed". Another reason for this was the reality aspect. How relevant would advertisement on Facebook be for non-Facebook members? The second criterion, gender, was chosen because there are real brands who segment their consumers based on this, especially for products in the beauty and personal care category, it is easy to find participants identifying themselves with one gender or the other and gender is recorded by Facebook (Facebook 2015).

Considering that we try to test a psychological effect, categorization, the population of the sample can be proven to be of less importance (Söderlund 2010). We did use convenience sample for all surveys sent out, which can be seen as negative since there is a risk that this is not a representation of Swedish Facebook users (Malholtra 2010). The advantage however was that we could directly ask participants through Facebook to participate, ensuring at least one of our two main criteria. This trade off between convenience and the risk of our sample being skewed seemed worthwhile considering the sample composition would play a lesser role in our case.

3.3.3 Pilot Study 1: Choosing Categorizing Ads

The first pilot study was conducted in order to receive an indication about the categorization effect of the advertisements. Six advertisements were tested, two were Gillette ads targeted toward men and two were Gillette ads targeted toward women. The Gillette advertisements were tested as pairs, to later be able to choose the pair that would be similar enough to eliminate effects of testing two completely different ads. In addition two gender-neutral ads, one for Nivea shower gel and one for Dove soap, were tested to see which one would be considered more neutral and therefore better suited as an ad to test spillover effects on (See appendix 7.7 for ads in the pilot study).

The first pilot study was carried out by letting 47 participants (43% female, 57% male) answer a survey through the survey tool Qualtrics. Each participant was randomly shown three out of the six advertisements tested. The participants were shown print advertisements of different brands followed by six questions for each advertisement, each question having three statements. The motive for showing the advertisements in print form is that it allows for differences in attention and elaboration. The print advertisement form is also the one used in the main study, with the exception of added clutter from the Facebook feed. According to Lee (2000) using print advertisement has been proved to be effective when testing consumer response to variations of presented information (Dahlén et al. 2008).

The indication of the pilot study led to the choice of two categorizing ads; Gillette ProGlide for men and Gillette Venus for women. Neither of the ads we had perceived neutral was considered neutral by participants. The indication was in fact that both ads were, according to the participants, targeted toward women. The mean values were on a seven-point Likert scale close to six for both advertisements (1 − being targeted toward men, 7- being targeted toward women). We therefore decided to launch a second pilot study with the objective of finding a more neutral advertisement.

3.3.4 Pilot Study 2: Selecting Gender Neutral Ads

Due to the data from the first study indicating that the gender-neutral products were in fact not neutral at all, a second study was carried out in order to find a gender-neutral advertisement. This study was similar to the first pilot study in execution. The difference was that this time three seemingly gender-neutral advertisements were shown and all participants saw all the ads in the same order. The second pilot study was completed by 19 participants. This we considered as acceptable since the purpose was not to find the ultimate gender neutral advertisement, but the purpose served was as an indicator that indeed, the advertisement finally chosen was neutral, and above all, more neutral than the first ones tested. The outcome of the second pilot study generated a choice of Sensodyne toothpaste as our neutral advertisement. (For ads in pilot study, see appendix 7.7)

3.4 Main Study

The following sections will explain the design of the study, method of data collection and choice of variables tested.

3.4.1 Survey Design

The survey was designed using the web based survey tool Qualtrics. It introduced participants to a manipulated Facebook feed with 18 follow up questions about the ads, six regarding the Gillette advertisements and six regarding the Sensodyne advertisement. Following that was section where participants were asked for age and occupation, which ended with six questions about self-esteem.

In order to study the effects of consumer categorization, two Facebook feeds were manipulated and created to be identical with regard to visual elements and layout. The only difference between the two Facebook feeds was the advertisement exposed in the middle of the feed - the Gillette ad. The manipulated Facebook feed introduced participants to a feed with either a Gillette Pro Glide razor or Gillette Venus razor. The brands were chosen due to their distinct targeting of men and women, something that was tested in pilot study 1. In order to get an even number of participants that were correctly and incorrectly categorized, and an even distribution of men and women in those categories, a randomizing tool was used to randomly slot which participant saw which ad.

The survey was constructed in line with the aims of the study, to test the effect of categorization through the variables; ad attitude, brand attitude, product attitude and purchase intention for both the Gillette ad and a neutral secondary ad – Sensodyne. The majority of the questions were closed questions where the participants on a 7-point Likert scale were given the option to agree or disagree with different statements. With the aim of increasing (internal) reliability the majority of the variables were tested through the use of three similar, however very alike, statements. This was done firstly to give the participant one more opportunity to reflect upon the question, and secondly to test the reliability of the participants creating indices and testing for Cronbach's alpha (Bryman, Bell 2011). Before distributing the survey it was tested by ten other people who were asked to give comments and opinions on the survey. The final version is included in appendix 7.6.

3.4.2 Data Collection

The participants were recruited directly through Facebook and can be considered to be a convenience sample. The participants were mainly people who are a part of our network, however they all met an important criterion – they use Facebook. Our response frequency (69%) can to some extent have

been affected by the fact that we asked participants to do the survey on a computer screen. This since some respondents opened the survey on a cellphone, only to close it and later reopen it on a computer screen. The effect of a convenience sample is that it lowers the external validity, however the results are still interesting for testing existing theory, and contributing to create questions for future research (Bryman, Bell 2011). Out of the 214 participants gathered 149 were valid and complete responses. The respondents are in the age range of 17-68 and the mean age is 29 years. The majority of participants are students, 58%, 40% are working and 2% are neither working nor studying. 53% of participants were female and 47% of participants were male.

3.4.3 Variables Tested

The same measurements were used for testing both the Gillette ad and the Sensodyne ad, which was placed to the right in the feed. As recommended by Söderlund (2001) multiple question statements were used in the survey and indices have been created where possible, given a Cronbach's alpha higher than 0.7 (See section 3.5.1 Reliability).

Attitude Toward The Ad

The ads attitudes were tested on a seven point bipolar semantic scale testing the overall impression of the ads. The questions were: *What was your overall impression of the ad you just saw, ranging from bad-1 to good-7, What is your impression of the brand advertised and what is your impression of the product advertised?* (Malholtra 2010). Cronbach's alpha for these statements is 0.86 and out of the statements an index can be created.

Attitude Toward the Brand

The participants' attitudes toward the brands were recorded using three statements on a seven point Likert scale: …what was your impression of the brand advertised… Bad/Good, Negative/Positive, and Not appealing/ Appealing (Söderlund 2001)(Kirmani, Shiv 1998). Cronbach's alpha for these statements is 0.88 and an index can be created.

Attitude Toward the Product

The participants' attitudes toward the products were recorded using three statements on a seven point Likert scale: …what was your impression of the product advertised… Bad/Good, Negative/Positive and Not appealing/ Appealing (Söderlund 2001, Kirmani, Shiv 1998). Cronbach's alpha for these statements is 0.88 and an index can be created.

Categorization

The categorization variable for the participants was measured through three statements on a seven point Likert scale: *The company correctly identified your identity… The company did a correct analysis when targeting you with this ad and The company was very good at identifying who I am.* Cronbach's alpha for these statements is 0.96 and an index can be created.

Purchase Intention

The purchase intention for the participants was measured through three statements on a seven point Likert-scale: *I … am interested in the product, want to try the product* and *want to buy the product.* Cronbach's alpha for these statements is 0.96 and an index for the statement can be created.

Self-Esteem

To measure self-esteem the Rosenberg Self-Esteem Scale was used, a widely used self-report instrument for evaluating individual self-esteem. The Rosenberg self-esteem scale is a self-report instrument where participants are asked to rate ten statements. A sample item is "I feel I'm a person of worth" with the response being recorded on a four-point Likert scale ranging from "strongly agree" to "strongly disagree". Responses are then summed to determine a total score for each participant (Rosenberg 1989). In this study only six statements have been used to measure global self-esteem, similar to what Rosenberg himself has done in his studies (Rosenberg et al. 1995b). The scale has also been translated to Swedish, using the same translation as other studies of self-esteem in Sweden, e.g. Lundin et al. (Lundin, Wollin 2002).

3.5 Credibility of the Study

To ensure the credibility of the study the reliability and validity of the study will be evaluated. Evaluation of the reliability will evaluate if the measurements used are reliable as measurements and evaluation of validity will evaluate if the correct measurements have been used (Bryman, Bell 2011).

3.5.1 Reliability

There are three important factors to consider when evaluating reliability: test-retest ability, internal consistency and inter-judge reliability (Bryman, Bell 2011).

Stability is when the measurement, over time, is considered stable enough to produce similar results. This means, that when tested twice in a row, the measurements should not fluctuate much (Bryman, Bell 2011). The measurements for categorization, ad attitude, brand attitude, and purchase intention were used both in the pilot study and the main study, giving an indication (since the pilot study due to sample size is not statistically valid) that the measurements for these factors will be stable over time.

Internal Consistency refers to whether the variables tested have been tested several times and produced consistent answers. One common way to measure this internal consistency is through the use of Cronbach's alpha (Bryman, Bell 2011). The study was conducted so that categorization, ad attitude, brand attitude and purchase intention were all tested several times through the use of similar questions (Malholtra 2010). The lowest value of Cronbach's alpha used in the study is 0.86.

Inter-judge Reliability has been tested by letting both authors individually analyze the results, this to eliminate subjectivity when categorizing data (Bryman, Bell 2011).

3.5.2 Validity

Validity is when the results and conclusions of the study can be said to be free of both random as well as systematic faults in measuring (Söderlund 2005) thus

concluding that the results can be comparable to reality. There are two ways of measuring validity, through internal and external validity.

External validity can be said to exist when the results from the study also are applicable outside of the experimental environment (Bryman, Bell 2011). Söderlund has shown that external validity very rarely can be obtained from studies of experimental nature (Söderlund 2010). Additional research would thus be needed to prove the external validity for this case.

Internal Validity is evaluated to which extent the casual conclusion of the study is based and warranted by the right variables (Bryman, Bell 2011). Another use of internal validity is to measure the casualties between the experiments' dependent and independent variables. Internal validity thus concerns whether it was manipulation of the independent variables that caused the changed behavior for the dependent variables, and nothing else (Malholtra 2010). The surveys distributed were identical with the exception of the ad exposed in the middle − the categorizing ad. Potentially disturbing external factors were eliminated, such as elimination of profile name, picture and brand names other than the ones tested. The participants were all given the same information and same instructions before the study and no information regarding the purpose of the study were given beforehand, something that would have affected the outcome. However, since the study was distributed online and we asked participants to pass it on no control of where the participant(s) chose to answer the questions existed. This is something that possibly can have had an effect on the results; there is no guarantee that enough attention was given to the survey when answered. To mitigate this effect control variables were used, where the participant was asked to answer which brand the advertisements were for.

3.6 Tools for Analysis

For analysis of the data collected, the statistics program IBM SPSS Statistics; version 22 has been used for all survey analyses. The test used was primarily independent t-tests to find significant means between the correct and incorrectly categorized groups and one Pearson correlations test.

4. Results and Analysis

In this section results from the experiment will be presented to see the effects of categorization in advertising on social media.

4.1 Hypotheses Testing

Hypotheses H_1-H_3 test categorization effect on attitudes toward the advertisement itself, the advertised brand and the product advertised. Hypotheses H_4-H_5 test effect of categorization on the medium and the surrounding advertisements the categorizing advertisement was featured in. Lastly hypothesis H_6 tests how categorization affects self-esteem. All hypotheses are tested through independent t-tests. In addition an independent t-test is done on the manipulated variable to see if participants have felt they have been categorized, and the following results can be deemed credible.

4.1.1 Control of the Manipulated Variable

In section 2.2 Categorization in Commercial Situations we describe categorization effects on consumer attitudes. Correlation exists between categorization of consumers and their perception of a brand. In this study we aim to explore this relationship in social media – will the categorization effect persist when the context is different from previous studies? Thus, two stimuli were produced with one difference, the manipulated variable, whether the ad featured Gillette Venus or Gillette Fusion ProGlide. To check if the manipulation was successful respondents were asked if they felt the ad was targeted toward them on a 7-point scale – expected to be truer for people who saw the ad congruent with their gender.

Table 1: Manipulated Variable

	Correctly Targeted μ (SD)	Incorrectly Targeted μ (SD)	Difference	Significance
Ad Targeted toward you?	3.70 (1.7990)	1.65 (1.1093)	2.05	0.00
Purchase Intention	3.03 (1.6810)	1.58 (1.0741)	1.45	0.00

The above result shows a significant effect ($p < 0.05$) on perceived targeting due to the manipulated variable. Respondents who have been shown the ad congruent with their gender have perceived the ad as correctly targeted toward them (3.70), whereas respondents who have been shown the ad incongruent with their gender perceive the ad as incorrectly (1.65) targeted toward them. In addition purchase intention was affected significantly ($p < 0.05$) something that was to be expected. It is however further evidence of the success of the manipulation.

4.2 The Effect of Categorization

Knowing that categorization is something that affects consumers regarding their satisfaction levels in service encounters (Söderlund 2012) we aimed to test this categorizing effect in advertisements on social media. Believing that a higher mean value in attitudes toward the advertisement, brand and product would signal a higher satisfaction level we tested these three factors through an independent t-test, which yielded the following results:

Table 2: Categorization Effect

	Correctly Targeted μ (SD)	Incorrectly Targeted μ (SD)	Difference μ	Significance
Ad Attitude	3.72 (1.1576)	3.79 (1.2496)	0.07	0.70
Brand Attitude	4.15 (1.1667)	4.19 (1.1589)	0.04	0.79
Product Attitude	4.17 (1.2404)	4.23 (0.9986)	0.06	0.74

In contrast to theory and our hypothesis the test shows no significant difference between the mean value of those who have been correctly and those who have been incorrectly categorized. There is a slight tendency that incorrect categorization in contrast to our beliefs have a positive effect, although very small and nothing that should be interpreted too much due to the weak significance level ($p > 0.7$). The reason behind the categorization not having any effect is that this particular advertisement can be described as surprising for the consumer, something that would lead to enhanced attitudes (Dahlén 2005).

H_1– Consumers are more (less) positive to an advertisement when the advertisement correctly (incorrectly) categorizes them. → Rejected		
H_2 – Consumers are more (less) positive to a brand when the advertisement correctly categorizes them. → Rejected		
H_3 – Consumers are more (less) positive to a product when the advertisement correctly (incorrectly) categorizes them. → Rejected		

Thus we can reject our hypotheses that categorization would have any significant effects on attitudes toward the advertisement, brand or product.

4.3 The Effect of Categorization on the Social Media Vehicle

According to theory the perception of advertising has been found to affect the perception of the media it is advertised in (Rosengren, Dahlén 2013). We believed that advertising on Facebook would affect the perception of Facebook itself. We tested this perception by asking the respondents to grade their perception of Facebook after seeing a feed in which they were either correctly or incorrectly categorized. The results were then generated through using a t-test and the results are as follows:

Table 3: Facebook Attitude

	Correctly Targeted μ (SD)	Incorrectly Targeted μ (SD)	Difference μ	Significance
Facebook Attitude	4.64 (1.2271)	4.81 (1.417)	0.17	0.42

Yet again, in contrast to theory and our hypothesis the attitude toward Facebook was not affected negatively for those who had been incorrectly categorized. In fact, the result show a tendency for the reverse, however not significantly so (p=0.42). Something worth noting is the high mean value score for Facebook attitude. The attitude was measured on a 7-point Likert scale, where 1 – strong disliking and 7- strong liking. The result for both groups shows a very positive attitude toward Facebook in general. The explanation can yet again be that incongruent ads leads the consumer to spend more time reflecting

on the ad and the social media vehicle itself, thus resulting in a more confident answer interpreted as a stronger liking (Lee 2000). We believe that once again the mitigating effect in this case of the categorization effect have been the incongruent setting the ad was seen in. We can therefore reject H4; there are no significant effects of categorization on attitudes toward Facebook.

H₄ – Consumers are more (less) positive to the social media when the media features advertisements that correctly (incorrectly) categorize them. → Rejected

4.3.1 Facebook and General Ad Attitude

Noting that general attitude toward Facebook was high, we decided to test if the attitude toward Facebook had correlation with the attitudes toward the ads, brands and products. According to theory, the ad affects the perception of the medium (Rosengren, Dahlén 2013). Results should then be that respondents who liked Facebook more should also like the ad more. We tested this through dividing the respondents into two groups – those who rated Facebook 5 or higher and those who rated it lower. Results can be found in the table below:

Table 4: Facebook Attitude and Ad Attitude

	Like Facebook μ (SD)	Dislike Facebook μ (SD)	Difference μ	Significance
Gillette Ad Attitude	4.05 (1.0912)	3.42 (1.2093)	0.63	0.001
Gillette Brand Attitude	4.37 (1.1452)	3.88 (1.1191)	0.49	0.01
Gillette Product Attitude	4.42 (1.0402)	3.91 (1.1844)	0.51	0.006
Sensodyne Ad Attitude	4.06 (1.1149)	3.79 (1.1843)	0.27	0.218
Sensodyne Brand Attitude	4.19 (1.0257)	3.90 (1.1155)	0.29	0.148
Sensodyne Product Attitude	4.4 (1.1844)	3.81 (1.0848)	0.59	0.07

From the table above we see a significant difference in attitude toward the Gillette ad, regardless of categorization. The mean ad attitude is consistently higher by the participants who like Facebook versus those who reported a more negative attitude. With these results we were curious to see if we could find if a general positive attitude could have affected the results. Therefore we divided the sample into two - those who had ranked the Gillette ad above four on a seven-point Likert scale and those who ranked it three or below. Results are as follows:

Table 5: General Ad Attitude

	Like Gillette Ad μ (SD)	Dislike Gillette Ad μ (SD)	Difference μ	Significance
Gillette Ad Attitude	4.43 (0.6296)	2.33 (0.8165)	-2.09	0.000
Gillette Brand Attitude	4.63 (0.8711)	3.20 (1.1958)	-1.43	0.000
Gillette Product Attitude	4.63 (0.8526)	3.30 (1.1112)	-1.33	0.000
Sensodyne Ad Attitude	4.49 (0.9953)	4.15 (1.3585)	-0.34	0.012
Sensodyne Brand Attitude	4.21 (0.9261)	3.69 (1.2549)	-0.52	0.031
Sensodyne Product Attitude	4.29 (1.1054)	3.80 (1.2556)	-0.49	0.036

The table above shows that, regardless of categorization, those participants who gave a higher rating of the first ad (Gillette) consistently rated ads, products and brands higher. These results are significant on a 5 % significance level.

The results from table 4 and 5 will be discussed further in the discussion chapter of this thesis. Noting the significant results for both the Gillette and

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Sensodyne ad in table 5 gives further weight to theories about spillover effects. (Roehm, Tybout 2006). Therefore we will test whether there is any effect from categorization on surrounding advertisement.

4.4 Effect of Categorization on Surrounding Advertisement

Spillover effects have been seen when companies have been considered guilty by association, even though it was their competitors and not them who faced a crisis (Roehm, Tybout 2006). Therefore we also believe that this spillover effect might exist in attitudes – if we have negative attitudes toward one ad, the risk of it spilling over and affecting other brands is a risk for the associated brand. Chosen for this experiment was the toothpaste Sensodyne, still in the product group beauty and personal care (same as Gillette razors) however considered neutral by the target population. The results from the attitudes have been generated through t-tests and are as follows:

Table 6: Categorization, Effects on Attitudes

	Correctly Targeted μ (SD)	Incorrectly Targeted μ (SD)	Difference μ	Significance
Neutral Ad Attitude	3.88 (1.2363)	4.02 (1.0512)	0.14	0.53
Neutral Brand Attitude	4.08 (1.1831)	4.05 (0.9445)	-0.03	0.87
Neutral Product Attitude	4.12 (1.1945)	4.21 (1.1662)	0.09	0.68
Neutral Purchase Intention	3.18 (1.8086)	3.05 (1.5831)	-0.13	0.68

In contrast to theory, however expected due to our previous results, no negative spillover effect has been found. Since respondents' attitudes were not

immediately affected in regards to the main advertisement and brand, there is no negativity that should spillover. We can therefore conclude that no short-term spillover effect exists due to categorization.

> **H₅ – Consumers are more (less) positive to other advertising in the social media when the media features advertisements that correctly (incorrectly) categorize them. → Rejected**

4.5 Categorization and Self-Esteem

Being categorized into a group which we do not identify with leads to psychological discomfort which makes us feel worse about ourselves and we can experience raised levels of stress (Burke 1991). Our last hypothesis is thus that individuals who are incorrectly categorized should feel worse than those individuals who are correctly categorized. We measured this through using Rosenberg's Self-Esteem Scale (Rosenberg et al. 1995a) at the end of the survey. The results have been tested using t-test and the results are shown in the table below:

Table 7: Categorization, Self-Esteem

	Correctly Targeted μ (SD)	**Incorrectly Targeted μ (SD)**	**Difference μ**	**Significance**
Self-Esteem	20.58 (2.3528)	19.96 (3.2390)	-0.62	0.18

In accordance with our notion we can in the above table see that self-esteem scores differ between the two groups. The correctly targeted individuals see a higher mean value (20.58) than those who have been incorrectly targeted (19.96). The p-value above (0.18) is the value generated by a two-tailed t-test and can be divided for a one-tailed t-test generating a p-value of 0.09. Since we are only interested in testing our hypothesis in one direction, will categorization lower self-esteem; we cannot say anything about the effect in the other direction.

A correlation for the data showed that the level of self-esteem and being correctly or incorrectly categorized were significantly related, r= -0.11, N = 149, p < 0.1, one tail. The negative correlation suggests that being incorrectly (correctly) categorized and low (high) self-esteem are related. The correlation is modest, however we will discuss this finding in discussion and implications (see section 5.1.2). The results for lower self-esteem are significant on a 10% significance level. We can therefore keep H_6:

H_6 - Consumers who are incorrectly categorized will experience lower self-esteem. → Not rejected

4.6 Summary of Findings

A table follows which summarizes the hypotheses from the earlier chapters and the studies results in rejecting versus not rejecting them.

Table 8: Summary of findings

H1	Consumers are more (less) positive to an advertisement when the advertisement correctly (incorrectly) categorizes them.	Rejected
H2	Consumers are more (less) positive to a brand when the advertisement correctly categorizes them.	Rejected
H3	Consumers are more (less) positive to a product when the advertisement correctly (incorrectly) categorizes them.	Rejected
H4	Consumers are more (less) positive to the social media when the media features advertisements that correctly (incorrectly) categorizes them.	Rejected
H5	Consumers are more (less) positive to other advertising in the social media when the media features advertisements that correctly (incorrectly) categorizes them.	Rejected
H6	Consumers who are incorrectly categorized by the advertisement experience lower self-esteem	Not Rejected

5. Discussion and Implications

In this chapter the results will be explained, analyzed and discussed. The conclusions will then be discussed regarding their implications for both practice and future research.

The main purpose for this study was to study the effects of categorization in terms of effects on the advertisement, the brand, the product and the effect on the surrounding environment and if it had any impact on the individual. In the end it proved that categorization does have a noticeable effect on self-esteem for individuals. Following we will discuss all the results for the effects we study in order to fulfill our purpose – to answer the question what are the effects of categorization in advertising on Facebook?

5.1 Conclusions

A presentation of the conclusions of the study follows, separated into categorization effects, spillover effects and effect on self-esteem.

5.1.1 Categorization Effects

Contrary to our belief in the beginning of the study, categorization did not have a noticeable effect on advertisement, brand, product or the surrounding environment in our study. We believe the underlying reason for this is that the incorrectly categorizing ads have been experienced as novel and surprising. We believe the ad has been perceived as incongruent with the media, and in this case, mitigating the negative effects of categorization. Previous research has shown that incongruence can act as a positive effect (Dahlén et al. 2008). We did not see any significant positive effects on the advertisement, brand or product either for the participants who had been incorrectly targeted. Thus this furthers our belief that categorization and incongruence are two competing effects that cancel each other out.

Why would it at all be perceived as surprising getting an ad targeted toward the other gender in your Facebook feed? The reason, we believe, is that gender is

one of the variables Facebook use for ad segmentation (Facebook 2015). The majority of people identify their gender to be the same as their sex, thus the majority would think that the ad would be incongruent with the usual content they receive in their feed and spend more time looking at, and reflect upon, the ad, the brand and the product.

Another reason for the perception of the ads as novel could be the use of ad blockers or simply that people in general ignore or do not pay that much attention to what ads are shown in their feed.

5.1.2 Spillover Effects

As we did not see any effect on the categorization on attitudes toward the main ad, not entirely surprising, no effect of categorization spilled over onto nearby advertisement. An interesting aspect is that the there are indeed tendencies that general attitudes spillover. Participants who gave the main advertisement a high score continued on rating everything higher on average compared to those who gave a low score to the main advertisement, not caring whether they had been correctly or incorrectly categorized. (See table 5) Another interesting aspect is that participants were very positive toward Facebook in general. Perhaps the brand Facebook and the attitude toward it have spilled over in attitudes and therefore mitigating negative categorization spillover effects. We know the source behind the communication is important and influences how we perceive a brand, product or advertisement (Colliander 2012). If the perceived source in this case is Facebook this is an interesting question to look into further. Is the medium more than just a medium when it comes to social media?

5.1.3 Effect on Self-Esteem

In accordance to theory, being categorized to a group you do not feel you belong to caused stress among participants being incorrectly categorized (Burke 1991). It is especially interesting that we can see this effect on the participants' self-esteem even though there was no sign of lowered attitudes toward the advertised brands, or lowered attitude toward Facebook due to incorrect categorization. Thus, in the short run, respondents do not blame the brand featured in the advertisement neither do respondents blame Facebook for

showing you the wrong ad when being incorrectly categorized. Still it did have a negative impact on the respondent's self-esteem. The mean value did not differ by much (the difference being -0.62), however considering the scale of this experiment (scores ranging from 17-24) we still think the result is noteworthy. If incorrect categorization in this one-time experiment potentially affected the respondents' self-esteem, what are the effects of categorization from the marketing messages we are bombarded with daily?

The correlation test showed a modest negative correlation between being categorized and level of self-esteem. If the effects of categorization affect those with the lowest self-esteem or if low self-esteem creates a stronger sense of being targeted, should we not take this into consideration when trying to categorize people?

We believe this is a good reason to continue exploring this subject. Using segmentation and categorizing people on Facebook is still positive for the brand using this opportunity as no negative attitude effect was seen. However, at what cost? Are the effects of a temporarily lowered self-esteem among individuals really to be considered fair marketing? And we do also not know whether these effects are only temporary. We face hundreds of advertising messages each day, what effect does this have on self-esteem in the long run?

5.2 Implications

Our findings provide two important insights for marketers using gender as a segmentation variable. First off, there are no immediate negative effects of incorrect advertising on: the advertisement, the brand or the product. In addition no spillover effect on surrounding advertisement and their brand could be detected in this study.

The second insight is the suggestion that incorrect categorization has a negative impact on self-esteem, which leads us to encourage brands to think about ethics

when segmenting consumers. While it may not affect the brand or the product it has an impact on the individual. Following this insight, using categorizing advertisement on social media should be used carefully by brands. With great advertising power comes great responsibility.

5.3 Future Research

This study aimed to explore the effects of categorization of ads in social media. However, since incongruence likely has affected the results it would be interesting to explore the weight of the impact of incongruence versus categorization. Exactly how important are each of these factors?

Even though we have used a real social media, Facebook, and real ads, the feed was manipulated; it would be interesting to see how this experiment would work in real time rather than in a fixed moment. It would also be very interesting to study the long-term effects on self-esteem of incorrectly categorizing advertising. Although studying this in an experiment could prove ethically complicated.

This study focused only on the effect of ads on Facebook. With other media, Twitter specifically, recently launching ads in the feed, it would be interesting to compare and contrast ads in the different media.

Lastly, further research on the impact of incorrect advertising and self-esteem should be done. We do not know if there could have been other things affecting self-esteem. We also do not know if the results on self-esteem are short- or long term.

5.4 Limitations

The first limitation of this study is the use of a manipulated Facebook feed. Even though the ads used in the feed are real, the content might be different from what a user experiences. One example of this is the use of ad block software. For these people using ad blockers ads are novel. Another aspect is

that we force people to look and reflect upon ads they may not even notice in real life. However, this is a flaw with most studies using manipulated ads.

The second limitation of this study is the use of real brands. By using real brands there will be existing attitudes toward the brand and in this case, Gillette, dominates the market for razors in Sweden (Euromonitor). The strong brand can have been a factor eliminating the categorization effect of the ads. However, the other option of using made up brands would also have affected the results and made them less realistic and applicable to real world marketers.

A third limitation is the relatively small sample (149 participants). In this sample there were fewer than 30 participants that used razors less than once a month, less than 30 participants that had a score below 18 on the self-esteem scale, and less than 30 participants that rated Facebook as a company poorly. This resulted in the lack of analysis on these particular groups of people, something that could have clarified and explained our results further.

A fourth limitation, also regarding the sample, is the uneven distribution of variance of the variable self-esteem. This combined with a low number (149) of participants led us to the choice to exclude further analysis of this variable and leave it for future researchers interested in researching the area of advertising and self-esteem.

The final limitations are the time constraint and the lack of research experience of the authors. This study is completed during the months of January – May 2015 there was no possibility to study effects over time. The lack of experience shows since the process is slower and there is more time spent on reflecting upon method and research approach than for an experienced researcher.

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Digital Resources

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7. Appendices

7.1 Advertisement Targeted to Women Used in Main Study

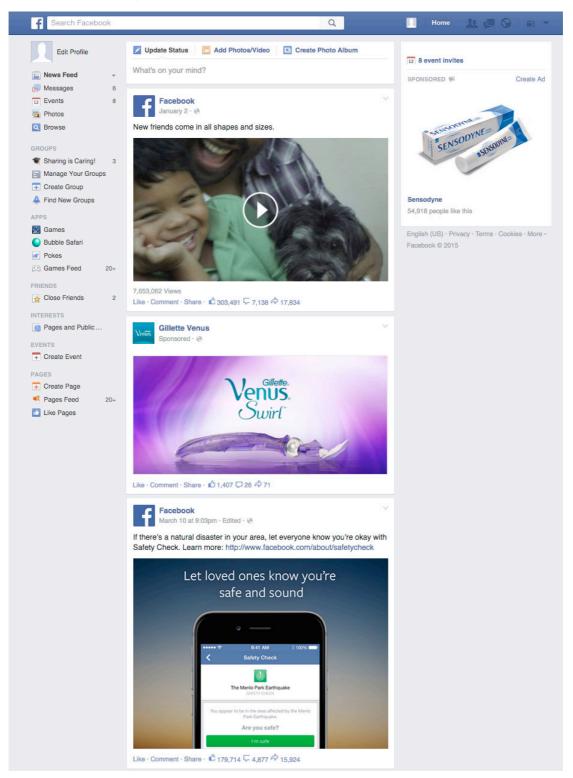## 7.2 Advertisement Targeted to Men Used in Main Study

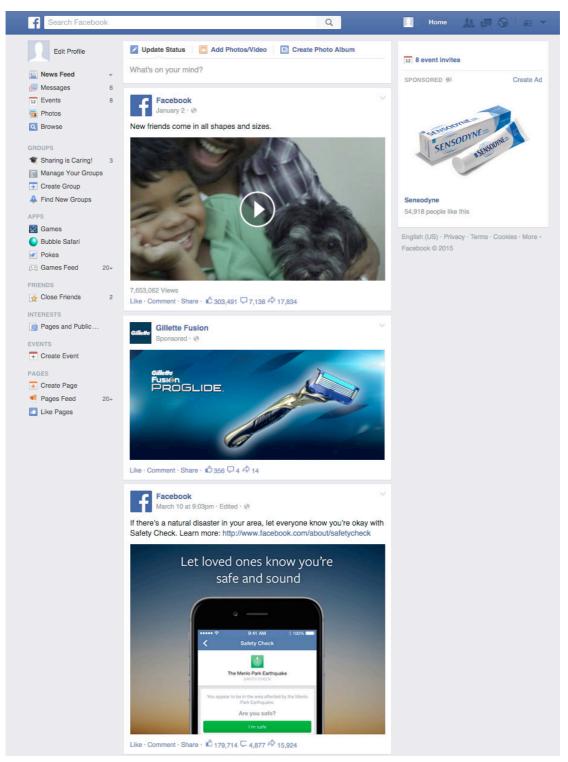## 7.3 Neutral Advertisement Used in Main Study

Sensodyne
sensodyne.se

7.4 Fictitious Facebook Feed Targeted to Women Used in Main Study

7.5 Fictitious Facebook Feed Targeted to Men Used in Main Study

7.6 Survey Main Study

Inledning och Kön

Tack för att du tar dig tid att delta i vår undersökning!

Då vissa av bilderna i studien kan vara svåra att se på en mobilskärm ber vi dig att utföra studien på en dator. Du svarar anonymt och dina svar används enbart i forskningssyfte.

Stort tack för din medverkan!

Med vänliga hälsningar,

Marika och Erika

Av administrativa skäl behöver vi först veta om:

Du har ett konto registrerat på Facebook

Du inte har ett konto registrerat på Facebook

Är du

Kvinna

Man

Du kommer nu att få se en stillbild av ett Facebookflöde, försök föreställa dig att detta är ditt personliga flöde. Ta en stund till att studera bilden, efteråt följer ett antal frågor som vi ber dig svara på.

Stimuli Kvinna

Stimuli man

Har du sett annonsen i huvudflödet?

De följande frågorna gäller annonsen som visades i **huvudflödet** på Facebook, det vill säga den annons som visades i mitten av bilden.

Kan du minnas om du sett annonsen, som visades i huvudflödet, vid ett tidigare tillfälle?

Ja, jag har sett den tidigare

Nej, jag har inte sett den tidigare

Minns ej

Jag såg ingen annons i huvudflödet

Frågor om annonsen i huvudflödet

Vad är ditt övergripande intryck av annonsen du just tittat på?

Dåligt	O	O	O	O	O	O	Bra
Negativt	O	O	O	O	O	O	Positivt
Ej tilltalande	O	O	O	O	O	O	Tilltalande

Efter att ha studerat annonsen, vad är ditt intryck av *varumärket* som annonserades?

Dåligt	O	O	O	O	O	O	Bra
Negativt	O	O	O	O	O	O	Positivt
Ej tilltalande	O	O	O	O	O	O	Tilltalande

Efter att ha studerat annonsen, vad är ditt intryck av *produkten* som annonserades?

Dåligt	O	O	O	O	O	O	Bra
Negativt	O	O	O	O	O	O	Positivt
Ej tilltalande	O	O	O	O	O	O	Tilltalande

Efter att ha studerat annonsen, hur väl stämmer följande påståenden?

	1 - Stämmer inte alls	2	3	4	5	6	7 - Stämmer mycket väl
Jag är intresserad av produkten	O	O	O	O	O	O	O
Jag skulle vilja prova produkten	O	O	O	O	O	O	O
Jag skulle vilja köpa produkten	O	O	O	O	O	O	O

Efter att ha studerat annonsen, hur väl stämmer följande påståenden?

	1 - Stämmer inte alls	2	3	4	5	6	7 - Stämmer mycket väl
Företaget som ligger bakom annonsen har gjort en korrekt bedömning av din identitet när de riktat denna annons till dig	O	O	O	O	O	O	O
Företaget gjorde en korrekt analys av din identitet när de riktade denna annons till dig	O	O	O	O	O	O	O
Företaget var mycket bra på att identifiera vem jag är	O	O	O	O	O	O	O

Vilket varumärke var annonsen i huvudflödet för, det vill säga den större annonsen som visades i mitten av bilden?

Dove

Gillette ProGlide

Gillette Venus

Rexona

Nivea

Har du sett annonsen i högerspalten?

De följande frågorna gäller annonsen som visades i **högerspalten** på Facebook, det vill säga den mindre annonsen som visades till höger.

Kan du minnas om du sett annonsen, som visades i högerspalten, vid ett tidigare tillfälle?

Ja, jag har sett den tidigare

Nej, jag har inte sett den tidigare

Minns ej

Jag såg ingen annons i högerspalten

Frågor om annonsen i högerspalten

Vad är ditt övergripande intryck av annonsen du just tittat på?

Dåligt	O O O O O O O						Bra
Negativt	O O O O O O O						Positivt
Ej tilltalande	O O O O O O O						Tilltalande

Efter att ha studerat annonsen, vad är ditt intryck av *varumärket* som annonserades?

Dåligt	O O O O O O O						Bra
Negativt	O O O O O O O						Positivt
Ej tilltalande	O O O O O O O						Tilltalande

Efter att ha studerat annonsen, vad är ditt intryck av *produkten* som annonserades?

Dåligt	O O O O O O O						Bra
Negativt	O O O O O O O						Positivt
Ej tilltalande	O O O O O O O						Tilltalande

Efter att ha studerat annonsen, hur väl stämmer följande påståenden?

1 - Stämmer inte alls	2	3	4	5	6	7 - Stämmer mycket väl

	1	2	3	4	5	6	7
Jag är intresserad av produkten	O	O	O	O	O	O	O
Jag skulle vilja prova produkten	O	O	O	O	O	O	O
Jag skulle vilja köpa produkten	O	O	O	O	O	O	O

Efter att ha studerat annonsen, hur väl stämmer följande påståenden?

	1 - Stämmer inte alls	2	3	4	5	6	7 - Stämmer mycket väl
Företaget som ligger bakom annonsen har gjort en korrekt bedömning av din identitet när de riktat denna annons till dig	O	O	O	O	O	O	O
Företaget gjorde en korrekt analys av din identitet när de riktade denna annons till dig	O	O	O	O	O	O	O
Företaget var mycket bra på att identifiera vem jag är	O	O	O	O	O	O	O

Vilket varumärke var annonsen i högerspalten för, det vill säga den mindre annonsen som visades till höger?

Pepsodent

Dove

Sensodyne

Colgate

Gillette

Vad tycker du om/hur ofta använder FB?

Vad är ditt intryck av företaget Facebook?

Dåligt O O O O O O Bra

Negativt	○	○	○	○	○	○	Positivt
Ej tilltalande	○	○	○	○	○	○	Tilltalande

Vilket påstående stämmer bäst överens med hur ofta du använder Facebook?

Flera gånger dagligen	1 gång om dagen	Flera gånger i veckan	1 gång i veckan	Aldrig

Vad tyckte du om bilden av facebook-flödet du fick se?

Realistiskt	○	○	○	○	○	○	Ej realistiskt
Verkligt	○	○	○	○	○	○	Overkligt
Trovärdigt	○	○	○	○	○	○	Ej trovärdigt

Personliga frågor

Slutligen skulle vi vilja be dig att svara på några frågor om dig själv, dina svar är anonyma.

Vilket påstående stämmer bäst med hur ofta du använder rakhyvlar eller liknande produkter?

Dagligen	2-3 gånger i veckan	2-3 gånger i månaden	2-3 gånger om året	Aldrig

Hur gammal är du?

[   ]

Vilken är din huvudsakliga sysselsättning?

Studerande

Arbetande

Pensionär

Annat

Här följer 6 påståenden i vilka du kan instämma eller inte. Kryssa det alternativ som bäst stämmer överens med din uppfattning.

	Instämmer helt	Instämmer	Instämmer inte	Instämmer inte alls
Jag tycker jag är en värdefull person, minst lika värdefull som andra	O	O	O	O
Jag tycker jag har en rad goda egenskaper	O	O	O	O
Jag kan uträtta saker lika bra som de flesta människor	O	O	O	O
Jag intar en positiv attityd gentemot mig själv	O	O	O	O
Jag tycker att jag att inte har så mycket att vara stolt över	O	O	O	O
Ibland tycker jag att jag inte alls är bra	O	O	O	O

7.7 Other Advertisements, Tested in Pilot Studies

7.7.1 Tested as Gender-Categorizing Ads in Pilot Study

7.7.2 Tested in First Pilot Study for Gender-Neutrality

7.7.3 Tested in Second Pilot Study for Gender-Neutrality