Stockholm School of Economics
Department of Marketing and Strategy
MSc Thesis in Marketing \& Media Management
Fall 2016

## LISTEN TO ME <br> A study to reveal mechanisms behind structural gender discrimination

ABSTRACT Previous research has revealed that women are perceived as less competent in comparison to men in the public world. One reason for this is that women are frequently portrayed in traditional stereotypes by the media, which leads to structural gender discrimination, hurting both individuals and society at large. This study applied an experimental approach, building on the Saying-Is-Believing paradigm, in order to investigate structural discriminatory behaviour against women in Sweden when communicating about a public world topic. The aim was to identify the mechanisms behind sexism and how it potentially could be counteracted by the use of priming. The result, based on studies of 179 seniors and conducted with the Ambivalent Sexism Inventory, demonstrated that sexism exists on a general level. However, this identified behaviour was only observable in interpersonal communication after the subjects were first primed with images of non-stereotypical women. The images triggered a backlash effect amongst the men while the women expressed an ingroup favouritism; stressing the media's important role in endorsing a gender equal society.

KEY WORDS Interpersonal Communication, Mass Communication, Saying-Is-Believing Paradigm, Structural Sexism, Stereotypes

AUTHORS<br>Frida Persson

SUPERVISOR
Per Henrik Hedberg
EXAMINER
Micael Dahlén

## We would like to give our sincerest thanks to:

our supervisor Per Henrik Hedberg for your great support,
SPF Seniorerna and Lönns Buss for your generosity in letting us perform the experiment in cooperation with you,
Per-Olov Edlund for your invaluable support regarding our statistical analysis, and last, but not least, all the participants in the experiment.

## Table of Content

1. INTRODUCTION ..... 6
1.1 GENDER EQUALITY ..... 6
1.2 The Media is Reinforcing Stereotypes and Gender Roles ..... 7
1.3 Sexism's Effect on Interpersonal Communication ..... 8
1.4 Research Gap ..... 8
1.5 PuRPOSE ..... 9
1.6 DELIMITATIONS ..... 10
1.7 EXPECTED KNOWLEDGE CONTRIBUTION ..... 10
1.8 DISPOSITION ..... 11
2. THEORETICAL FRAMEWORK ..... 12
2.1 MEDIA and MARKETING COMMUNICATION ..... 12
2.2. SOCIAL GROUPS AND STEREOTYPES ..... 13
2.2.1 Gender Stereotypes ..... 14
2.3 Structural Sexism and How to Measure it ..... 15
2.4 DISCRIMINATION IN INTERPERSONAL COMMUNICATION ..... 17
2.5 The Communication Game ..... 18
2.6 Priming: a Way to Counteract Structural Discrimination ..... 20
2.7 SUMMARY OF Hypotheses ..... 21
3. METHODOLOGY ..... 22
3.1 INITIAL WORK. ..... 22
3.2 SCIENTIFIC ApPROACH AND DATA GATHERING ..... 22
3.3 RESEARCH DESIGN ..... 22
3.4 EXPERIMENTAL DESIGN ..... 23
3.4.1 Experimental Groups ..... 23
3.4.2 Experiment Subjects ..... 24
3.5 Pre-Studies ..... 25
3.5.1. Pre-study 1 ..... 25
3.5.2 Pre-study 2 ..... 25
3.6 EXPERIMENT PROCEDURE. ..... 26
3.6.1 Information to the Participants ..... 27
3.6.2 Preparation of Experimental Material ..... 27
3.6.3 Introduction to the Experiment ..... 27
3.6.4 Experiment Part l: Priming. ..... 28
3,6.5 Experiment Part II: The Communication Game ..... 29
3.6.6 Experiment Part III: Control Check and Demographics. ..... 30
3.6.6.1 Block 1: Manipulation check of Experiment part 2 ..... 30
3.6.6.2 Block 2: Sexism ..... 31
3.6.6.3 Block 3: Demographics ..... 31
3.6.7 Debriefing ..... 31
3.7 DATA ANALYSIS ..... 31
3.8 DATA QUALITY ..... 32
3.8.1 Reliability ..... 32
3.8.2. Validity ..... 32
3.8.2.1 Internal Validity ..... 33
3.8.2.2 External Validity ..... 33
3.8.2.3 Measurement and Ecological Validity ..... 34
3.9 ETHICS ..... 34
4. RESULTS ..... 36
4.1 MANIPULATION CHECKS ..... 36
4.2 SEXISM ..... 37
4.2.1 How Gender and Age Affect the Level of Sexism ..... 37
4.3 The SAYING-Is-BELIEVING EFFECT ..... 39
4.3.1 Validating the Saying-ls-Believing Effect ..... 39
4.3.2 The Effects of Gender and Priming on SIB ..... 40
4.3.3 The Effects of Sexism and Priming on SIB ..... 43
4.3.4 Extended Regression Models with Multiple Interaction Effects. ..... 44
4.4 SUMMARY OF HYPOTHESES TESTING ..... 48
5. ANALYSIS ..... 49
5.1 Sexism is Highly Prevalent in Society ..... 49
5.2 Sexism is Not Automatically Transferred to the SiB ..... 51
5.3 The Effect of Priming is Ambiguous ..... 53
6. DISCUSSION ..... 55
6.1 CONCLUSION. ..... 55
6.2 CRITICAL REFLECTION ..... 56
6.2.1 Research limitations. ..... 56
6.2.2 Method limitations ..... 56
6.2.3 Data limitations ..... 57
6.3 GENERAL DISCUSSION AND CONTRIBUTION ..... 58
6.4 PRACTICAL IMPLICATIONS ..... 60
6.5 Suggestions for Further Research ..... 61
7. REFERENCES ..... 63
7.1 Books ..... 63
7.2 Journals and Publications ..... 63
7.3 Electronic Sources ..... 67
7.4. EXPERIMENTAL MATERIAL ..... 68
7.4.1 Image References ..... 68
APPENDIX ..... 71
Appendix A - EXPERIMENTAL SCRIPT ..... 71
Script in Swedish ..... 71
Script in English ..... 73
Appendix B - Experimental Material, Experiment Part 1 ..... 76
Experiment material in Swedish ..... 76
Experiment material in English. ..... 90
Appendix C - Experimental Material, Experiment Part 2 ..... 104
Experiment material in Swedish ..... 104
Experiment material in English. ..... 109
ApPENDIX D - EXPERIMENTAL MATERIAL, EXPERIMENT PART 3 ..... 114
Experiment material in Swedish ..... 114
Experiment material in English. ..... 122
Appendix E - Coding Template ..... 130
Coding template in Swedish ..... 130
Coding template in English. ..... 131
List of TABLES
Table 1. Summary of Hypotheses ..... 21
Table 2. Overview of Experimental Groups ..... 24
Table 3. Level of sexism among men and women ..... 37
Table 4. Baseline for the SIB effect ..... 40
Table 5. SIB-effect for Experiment Group 3. Control Group ..... 41
Table 6. SIB-effect for Experiment Group 1. Control Group ..... 41
Table 7. SIB-effect for Experiment Group 4. Experiment group ..... 42
Table 8. SIB-effect for Experiment Group 2. Experiment group ..... 42
Table 9. SIB-effect for Experiment Groups 2 and 4 with interaction effect ..... 44
Table 10. SIB-effect: full sample with interaction effects, (left side) ..... 47
Table 11. SIB-effect: full sample with interaction effects, (right side) ..... 47
Table 12. Summary of Hypotheses Testing ..... 48
LIST OF MODELS
Model 1. Overview of Experiment Procedure ..... 26

## 1. INTRODUCTION

This introductory chapter describes the motivations behind the choice of structural gender discrimination as a research topic and discusses the role of the media in this ongoing behaviour.

Thereafter follows the purpose of the study, the expected knowledge contribution, and delimitations. In the end, there is a short disposition of the thesis.

### 1.1 GENDER EQUALITY

Gender equality is a topic that has received a great deal of attention and traction in the Swedish society in previous years, even though Sweden is one of the leading countries in the world in terms of gender equality (World Economic Forum, 2015). However, if one looks more specifically into the business sector in Sweden, one will see that the level of equality is far from what would be expected and desired. When it comes to women's being paid equally, for equal work, Sweden is ranked $71^{\text {st }}$ in the world. One example of this inequality is that Swedish women are working for free, every day after 15:57, assuming that a normal working day ends at 17:00 (Sveriges Kvinnolobby, 2016). Additionally, an analysis of people in top managerial positions reveals that the representative gender is highly homogenous and male-dominated. However, there is some light at the end of the tunnel: the number of women in these leading positions is increasing at a record pace where one in five executives, in listed companies' in Sweden, is a woman (Allbright, 2016).

The mentioned factors embrace social issues when it comes to gender inequality in the business world, but it is also important to take into consideration the fact that inequality also harms the economy on a global level. A report from a management consulting firm (McKinsey\&Company, 2015) revealed that achieving gender equality in the world has a considerable economic effect, and the report went as far as to suggest that advancing women's equality could add $\$ 12$ trillion to global growth. There are many potential approaches, tools, and spheres of power, which can speed up the advancement towards a gender equal society. One of these spheres of power is the media industry, which enters our lives on a daily basis.

### 1.2 The Media is Reinforcing Stereotypes and Gender Roles

Media has the most important role in society when it comes to disseminating news and information to its citizens. Adults spend up to ten hours a day interacting with various kinds of media, and are exposed to approximately 360 advertisements on a daily basis (Media Dynamics Inc., 2014). This high degree of exposure demonstrates the media's power and omnipresence in our lives.

When digging deeper into the media's content when it comes to what is actually being published and in what way, will make raise your eyebrows in surprise. Inside this stream of information and news, women are considerable underrepresented. Even though women account for half of the global population, they only represent a quarter of the information that we consume in the media in Sweden (Edström \& Jacobsson, 2015). Not only are women underrepresented in the media, but they are also marginalised and portrayed in a less favourable manner therein. In contrast to men, who are often portrayed as experts and spokespeople, women are often portrayed as objects for the male gaze, producing media sexism (Calogero, 2004; Edström \& Jacobsson, 2015). One consequence, amongst others, is that the objectifying portraits confirm a well-recognised concept that women's looks are more important than what they are able to perform (Gervais, Vescio \& Allen, 2011). Added to this, women are also, in opposite to men, often portrayed in a family perspective in the media.

The abovementioned discrepancies concerning the various portraits of men and women in the media are reproduced over and over again. As humans, we are influenced by what we see, hear, and read, which implies that what the media produces is a part of our beliefs, perceptions, and view the world (Bandura, 1971). The repeated portraits of women in the media create beliefs about the social group of women, which leads to negative stereotypes and prejudices. The consumers of the media begin to take these stereotypes as the truth and acting in accordance with them (Bisell \& Parrott, 2013).

Thus, the fact that women are underrepresented and portrayed in a less favourable manner has consequences at a higher level than just the implicit facts. Whether media content mirrors society or not (Eisend, 2010; Holbrook, 1987; Pollay, 1986) their less dynamic stereotypes of women creates externalities outside its context. The derived implication is that media and marketing communications shape and reshape our realities, built on false stereotypes, which in
the long run leads to that the social group of women is perceived as less competent in the public world (Gervais et al., 2011; Hedberg, 2012).

### 1.3 SEXISM'S EFFECT ON INTERPERSONAL COMMUNICATION

The consequences with constantly repeating negative stereotypes of women to the masses are that prejudices are formed at a structural level. Ultimately, these prejudices lead to structural gender discrimination towards women (Bargh, Chen \& Burrows, 1996). Structural discrimination refers to the norms, routines, and laws in a social system that unintentionally or intentionally causes discriminating consequences to a social group of individuals (Nationalencyklopedin, 2016). In this case, the media and society's behaviour shapes a reality where women as a social group are seen as objects and not competent in the public sphere; the world away from home. The fact that the media reinforces these stereotypes, and that people act on them, creates structural gender discrimination on a subconscious level.

Gender discriminatory behaviour, called sexism, also influences social interactions and interpersonal communication (Ritson \& Elliott, 1999; Glick \& Fiske, 1996). When this form of discrimination occurs, women are impeded from influencing other people's shared realities within the public world. According to Hedberg (2012) this implies that half of the population are excluded from the shaping, and reshaping, of our shared view of the world. Thus, the usual way of portraying women, in media and marketing communications, affects the view and perception of women. Being objectified and seen as less competent, in the public world, reduces women's opportunities to develop and prosper in a professional career (Hedberg, 2012). With this in mind, the aim of this study is to better understand the mechanisms behind structural discriminatory behaviour in general, as well as in interpersonal communication, and further to investigate the media's potential to counteract the situation by portraying women in a more dynamic manner.

### 1.4 Research Gap

Several studies have been conducted within in the field of structural discrimination against women. Hedberg (2012) showed that both men and women discriminate against women in interpersonal communication and one explanation might be that women are perceived as less competent in the public world. Azadi and Torstensson (2013) built on Hedberg's (2012) finding and demonstrated that it is possible to counteract discrimination against women, in
interpersonal communication, by priming the subjects with non-stereotypical images of women before the communication was initiated. Further, it is important to keep in mind that Azadi and Torstensson (2013) drew conclusions that were not completely statistically valid, a gap this thesis aims to cover.

Previous studies within the domain (c.f. Azadi \& Torstensson, 2013; Jonsson \& Zhao, 2014; Lindgren \& Westerberg, 2015) were performed on the same narrow sample; high school students in the inner city of Stockholm. Therefore, the aim of this study is to add to the body of research by extending the investigated sample to Swedish seniors from the North of Sweden. Contrary to previous samples, this sample has been exposed to media and marketing communication for more than half a century and is more acculturated when it comes to gender stereotypes. Thus, the question is whether it is possible to counteract discrimination towards women by using priming, even for this older population where their many decades of acculturation may be a challenge (Hedberg, 2012; Ruble \& Ruble, 1982).

In this study, the authors' point of departure is to investigate the general level of sexism among the Swedish population, and add to previous research by Glick and Fiske (1996). From there, the study will investigate how the identified general level of sexism, as an explanatory mechanism, affects discriminatory behaviour in interpersonal communication.

### 1.5 PURPOSE

The purpose of this thesis is to find the mechanisms behind structural gender discrimination against women and, in extension, to find ways to counteract it in order to create a more equal business environment. In order to achieve this aim, our approach is divided. The study's first point of departure is to establish that there is discriminatory behaviour among the population in Sweden. The second aim is to further investigate Azadi and Torstensson's (2013) findings by examining whether seniors do discriminate against women in interpersonal communication. The communication game, a well-established way of detecting gender discrimination in interpersonal communication, will be used as a tool to achieve this. The third step will be to investigate the possibility of using priming of non-stereotypical images of women as a way of counteracting discriminatory behaviour.

In the end, the overall aim is to show that priming can be used to counteract discriminatory behaviour and that the media has a responsibility to fulfil in accelerating the movement towards
an equal society, by portraying women in a more dynamic manner. In the long run, this will contribute to erasing the perception of incompetence among the female population.

### 1.6 Delimitations

Due to the restricted time frame, some delimitation was necessary in order to fulfil the study's purpose. Firstly, this study will investigate the media's impact and role when it comes to structural gender discrimination. That means that any other factors that may have an explanatory power will be excluded. Secondly, the thesis will investigate structural gender discrimination against women and how women are portrayed in the media. Although, discrimination against men does occur, it will not be examined in this thesis. Thirdly, the portrayals of women in the media affect women both on an individual and a structural level. This thesis will not cover the impact on the individual level. Fourthly, discrimination in the public sphere, as averse to the private sphere, will be studied by using the communication game as part of the Saying-Is-Believing (SIB) paradigm. This implies that the structural implications on interpersonal communication will be studied. The decision to use the SIB paradigm to detect this kind of discrimination, over other methods, was made since one of the study's objectives is to compare this thesis finding to previous investigations within the same domain (c.f. Azadi \& Torstensson, 2013; Hedberg, 2012).

### 1.7 EXPECTED KNOWLEDGE CONTRIBUTION

Firstly, the authors want create an initial understanding of the situation by showing that both men and women exhibit sexist behaviour that affects the social group of women in a negative way. This investigation will be made by using the Ambivalent Sexism Inventory (ASI), a wellproven sexism scale, which has not been conducted over the Swedish population before (Glick \& Fiske, 1996). Secondly, previous research (c.f. Azadi \& Torstensson, 2013; Hedberg 2012) has shown that women are structurally discriminated against in interpersonal communication. This thesis will contribute to the existing body of research by adding seniors' behaviour; testing if previous findings also are valid for seniors and controlling how seniors' levels of sexism affect the outcome. Finally, the authors will investigate how the older population responds to priming with images of non-stereotypical women, in order to counteract the perceived competence inadequacy among women, built on the negative stereotypes in mass communication.

### 1.8 DISPOSITION

This thesis is divided into six chapters. The first chapter introduced the reader to the topic and it's relevance to further research. In chapter two, the theoretical framework, which forms the basis for the derived hypotheses of this study, is outlined. The scientific approach and research method are described in detail in the third chapter. Chapter four presents the results from the performed study and chapter five contains an analysis of the results, based on the presented theoretical framework and methodology. The final chapter presents a self-critical discussion on the conducted study, as well as an examination of the practical implication, and suggestions for further research.

## 2. THEORETICAL FRAMEWORK

This chapter will describe the theories, concepts, and previous research that will constitute this study's theoretical framework. It introduces research on gender stereotypes, objectification, social roles, structural gender discrimination, the Saying-Is-Believing paradigm, and priming. The authors have derived hypotheses, based on this framework, in order to satisfy the purpose of this thesis.

### 2.1 Media and Marketing Communication

Media and marketing communications surround us no matter where we are, and their omnipresence is increasing with the growing use of multiple screens and social media. This makes the industry very influential and powerful in society at large, and the term "fourth estate" indicates that it is one of the most powerful elements outside official institutions. One of the main objectives of media and marketing communication is to boost brand equity and sales in order to maximise profit. This profit comes from sales, which are often derived from advertising and brand-building activities. The communication creates a need to consume by connecting the product and its message to specific desirable traits, identities, and social values (Fournier, 1998). These qualities are often expressed by the use of stereotypes in order to simplify the message for the specific target group.

The environment in media and marketing communication- what we see, hear, and read influence a consumer's perceptions, attitudes, and behaviour. These impressions do not only influence our consumption behaviour, but they also shape our own reality since the content in media is given social legitimacy (Bandura, 1971; Bussey \& Bandura, 1999; Gerbner \& Gross, 1976). This implies that attaching communication to different traits, identities, and social values, has side effects that lie outside the objective of consumption and profit maximising.

In summary, media and marketing communication play an important role in society since they influence people's everyday lives. In this role, the media has a responsibility to reflect people and society in an equitable way, even if the main objective is to maximise profit (Bergström, 2014; Pollay, 1986). However, it is a common shortcut, in the creation and building of product images, to use simplified representations of, and information about, individuals and social groups with the aim of facilitating the interpretation of a marketing message so that the intended target group understands and processes the message as intended (Belkaoui \&

Belkaoui, 1976). This approach has unintended consequences that affect consumers psychological and social ecology (Pollay, 1986).

### 2.2. Social Groups and Stereotypes

As humans, we encounter an enormous amount of information and we have to be selective about what we pay attention to. The simple explanation is that we are unable to take it all in. Thus, we select the information we think is the most important in any given situation (Jones, 1982). The implication is that when we meet new people, either in real life or in the media, we categorise them into different social groups, as segments, based on their behaviour, appearance, and visible cues and marks (Allport, 1954). This categorisation relies on our automatic cognitive systems and occurs unconsciously, or subconsciously, in a systematic manner. It is within this categorisation process that stereotypes are created and maintained, and which can be explained as simplified representations of a social group or member thereof (Mastro, Behm-Morawitz \& Ortiz, 2007).

Categorising people into different social groups has been a vital part in our survival, over generations, and we do so in order to interpret and make sense of our world (Allport, 1954). This subconscious categorisation is based on intuitive judgement that is sometimes called fast thinking (Kahneman, 2015). However, these judgments and categorisations into stereotypes are not based on an objective and real world, but rather on one's own perception of the world (Lippmann, 1922), which implies that some assumptions in these processes are inaccurate and overgeneralised. Examples could be that women are not as smart as men or that all black people are good at sports.

The outcomes of this unconscious behaviour are oversimplified conceptions, misapplied knowledge evaluations, and in the end incorrect facts that might hurt the people in the specific social group (Eisend, 2010). Thus, the social world is divided into groups where every person is a member of some groups and not a member of others. At the same time, every person has their own view and perception of the world they live in and which social groups they are a part of. Based on this, people tend to evaluate their subjective ingroup memberships as being more favourable than the outgroups in order to maintain a positive self-image. However, positive evaluations of one's ingroup identities are therefore based on rejections of outgroups (Stephan \& Rosenfield, 1982). People in outgroups are seen as individuals we cannot recognise or have a hard time to relate to. On the other hand, ingroups are people that we identify us with based
on the context of the situation. In the long run, this behaviour leads to the "we" and "they", where the "we" are seen as superior in comparison to the "they" (Stephan \& Rosenfield, 1982).

When people enter situations with certain preconceptions about a social group, or a person therein, they are more likely to be receptive to information that confirms his or her perceptions (Lippmann, 1922). This means that when you encounter a marketing communication message that confirms a stereotype you have about a certain social group, you become more convinced about your view of that particular social group of people. One group that suffers from negative stereotypes is the social group of women; implying half of the global population.

### 2.2.1 Gender Stereotypes

There are two main stereotypes of women that are continuously reinforced in the media. Firstly, women are generally portrayed as more domestic, caring, and maternal in social contexts (Eagly, 1987). Secondly, women are also stereotyped as objects for the male gaze (Calogero, 2004). According to the social role theory, our gender stereotypes are derived from the different roles men and women are expected to hold in society, based on traits perceived as typical and desirable for each gender (Eagly,1987; Ruble \& Ruble, 1982).

The characteristics of the domestic stereotype of women have often been portrayed in media as a supportive role to the men. This stereotype is perceived to be less ambitious, dominant, and adventurous and to be more prone to give up easily. Conversely, men are often portrayed as more agentic, competent, and daring (Rudman \& Phelan 2008). Thus, at the extreme points of the scale, men are seen as competent and not warm, and women are seen as warm and incompetent when away from home (Eagly, 1987; Fiske et al., 2002).

In contrast to the stereotype of the domestic woman, women are also sexually objectified in a daily basis. Mainstream films, advertisements, sport photography, and women's magazines are some other channels where women's bodies are sexually objectified over and over again (Fredrickson \& Roberts, 1997). When men are portrayed in the media, their heads and faces are emphasised. However, when women are portrayed it is not uncommon that the images focus on their bodies and body parts, eliminating their heads. This is called body-ism and implies that the status of women is decreased from that of an individual to the status of an object. Or, as described in the literature "...the visual media portray women as though their bodies were capable of representing them" (Fredrickson \& Roberts 1997,177). One implication is that women recognise that they are being judged, more often, on their outward appearance
than their competencies and characteristics. On an individual level, this might lead to selfobjectification and body image concerns (Garcia, Earnshaw \& Quinn, 2015). But sexual objectification also hurts society at large. Previous studies indicate that women are objectified in the media, which leads to that they are perceived as less competent in real life (Heflick et al., 2011).

To sum up; even today the media reinforces these outdated stereotypes; men are prominent and independent professionals and their counterparts, women, are passive objects or dependent caretakers (Signorielli \& Kahlenberg, 2001). Thus, the stereotypes communicated through the media trigger people's prejudices about women, which in the end leads to discriminatory behaviour at a structural societal level (Gervais et al., 2011; Heflick \& Goldenberg, 2009; Mackie \& Smith, 1998).

### 2.3 Structural Sexism and How to Measure it

Sexism refers to unjustified negative behaviour against women or men, as a member of a social group. However, the term is used particularly when it comes to discrimination against women. When this behaviour occurs at a societal level, one talks about structural sexism or discrimination. As discussed in the previous section 2.2, women are perceived as less competent in the public world. This is a form of structural sexism, which is entrenched in the media's portrayals of women.

The term sexism can be divided into two forms, benevolent sexism (BS) and hostile sexism (HS) according to the Ambivalent Sexism Inventory (Glick \& Fiske, 1996). Benevolent sexism can be explained as positive attitudes towards women, but only when the women are viewed through a stereotypical lens that reinforces their position of subordination. Examples of benevolent sexism are men opening doors for women, or helping women to install computers. The other form is hostile sexism, which implies that the attitudes toward the women are negative, as well as the stereotype (Glick \& Fiske, 1996). This encompasses arguments such as females become excited by pretending they want a sexual relationship and then rejecting the man. The terms benevolent and hostile sexism together constitutes the ambivalent sexism framework, because the prejudices and biases contain both positive and negative evaluations of women. The negative evaluations, i.e. hostile sexism, are often expressed toward women who are acting against rooted gender stereotypes and social roles. In other words, towards women, or groups of women, who are perceived as a threat to the ingroup of men's power and status.

Conversely, when women are acting in line with prescriptive norms, they are glorified with benevolent sexism (Barreto \& Ellemers, 2005; Glick \& Fiske, 2001). This implies that benevolent sexism is connected to a paternalistic form of prejudices and is directed towards women that are nonthreatening and seen as lower in status (Glick \& Fiske, 2001).

The two forms of sexism create a system of reward and punishment that encourages women to remain in conventional gender roles. Thus, the ambivalent sexism inventory means that sexism serves to justify men's structural power and status in society. Men mainly display hostile sexism, but men and women alike support benevolent sexism. Why women would accept and hold favourable attitudes towards the existing status quo, by supporting benevolent sexism, is explained by Jost and Banaji's (1994) system-justification theory. It states that subordinate social groups tend to accept their inferior position and start to discriminate against themselves, thus their own ingroup. When it comes to level of sexism among the Swedish population, it seems to be relatively low based on the measured gender equality in the country (World Economic Forum, 2015). However, an investigation by the Eurage (2012) shows that Swedish women experience the fifth highest level of sexism in comparison to other women in Europe, regardless of age. This leads to our first hypothesis:

> H1: The men in Sweden are more benevolent and hostile sexist than the women, regardless of age.

Further, benevolent sexism encompasses three components; (1) women should be protected by men, (2) women have domestic qualities, and (3) women fulfil men's need when it comes to romance (Glick \& Fiske, 1996). Although there is no earlier empirical support, the authors argue that women acting in an opposite direction to the three stated components above can combat benevolent sexism. If this is possible, the overall level of sexism will decrease. But, career women and feminists are at the same time seen as a threat towards the social group of men by challenging the gender roles. This might in turn lead to a higher degree of hostile sexism and the women will suffer from disadvantageous treatment, called the backlash effect (Glick \& Fiske, 2001; Rudman, 1998). These women are perceived as too competent and not warm, in opposite to how a woman should behave, according to the stereotype. However, the later argument is considered to be less influential leading to:

## H2: Men who have had at least one female boss in the public world are less sexist than men who have not had a female boss.

As previously discussed, the way women are portrayed in the media, on an aggregated level, may influence and lead to discriminatory behaviour in several ways. Previous research has found that women, as a social group, is less capable of influencing a listener's memory when communicating about a public world topic (Echterhoff et al., 2005; Hedberg, 2012). This kind of structural discrimination will be investigated in the following sections.

### 2.4 DISCRIMINATION IN INTERPERSONAL COMMUNICATION

When people are building new relationships, they often communicate about information that they assume is socially shared, but the underlying objective of why speakers and listeners engage in communication is to achieve certain goals. These are (1) to share information that enhances group problem solving, (2) to optimise one's self-image, and (3) to maintain social bonds and to share inner states and thoughts with each other (Higgins, 1992; Higgins \& Pittman, 2008). The behaviour of sharing thoughts and creating a common ground is called shared reality. In order to achieve a shared reality, the communicators have to share their inner state successfully (Echterhoff, Higgins \& Levine, 2009). Having said that; not everybody is equally willing to create a shared reality with just anyone (Festinger, 1950). The shared reality is usually created with someone who is trusted and seen as a reliable source of information, which an ingroup member often fulfils (Echterhoff et al, 2005). Since women are seen as an outgroup member when it comes to communication about the public world, and thereby less trusted, they are continually excluded from this process and are unable to influence people's cognition and shared reality. This is partly an externality of the media's use of stereotypes, which causes women to be perceived as less competent when it comes to public world topics (Garcia et al., 2015). This implies that the possibility for women to be heard and listened to in interpersonal communication is limited and they are thereby structural discriminated against in the business world. A tool to detect discrimination in interpersonal communication is to apply the communication game within the SIB paradigm. This tool will be examined in the section below.

### 2.5 The Communication Game

The communication game is a tool that is tied to the SIB paradigm, which aims to detect structural discrimination in interpersonal communication (Higgins \& Rholes, 1978). The communication game consists of a participant, called the sender, and a fictional receiver, called the recipient. A description of the game follows below.

The first step in the game is that the sender receives some basic information concerning (1) who he or she will be communicating with, (2) which topic the sender and recipient will be communicating about, and (3) the recipient's attitude towards the topic. The purpose of this basic information is to manipulate the sender's mind into adapting to the recipient's attitude. In the next step, the sender reads a text about the specific topic. The text is removed when he or she has finished the reading. The sender is then asked to describe the topic in a written message, without mentioning the name of the topic, but in such a way that the recipient will be able to identify the topic at a later stage. If the manipulation is successful, the sender will tune his or her attitude towards the recipient's attitude. Thus, the message content and tonality will hopefully be affected towards the recipient's attitude (Higgins \& Rholes, 1978), called the "audience-tuning effect" (Higgins, 1992).

A few minutes after the written message has been sent, the sender will be asked to recall the original text and to write down a new message which should be as close to the original text as possible. This stage is called the recall stage. If successful, the previous audience-tuning effect will have an effect on the sender's memory. This will result in the sender remembering the original text in the way he or she first wrote the message to the recipient, and in accordance with the recipient's attitude. This is called the Saying-Is-Believing (SIB) effect. It occurs when a message that has been tailored to a particular recipient, influences the sender's subsequent memory and impression of the message's topic (Higgins \& Rholes, 1978). Thus, the sender who hopefully became tuned to the recipient's attitude in the first stage, remembers and believes what he or she wrote in the first message, rather than what he or she actually read in the original text. To be clear, a SIB effect takes place when a sender tunes his or her message according to the attitude of the recipient, which in the next step affects his or her memory and recall valence of the original text.

The communication game has been reproduced many times (Echterhoff et al., 2005; Hedberg 2012; Higgins \& McCann, 1984) and it has shown that it is not certain that a recipient can
influence a sender's memory and thereby the communicators will not achieve a SIB effect. When the SIB effect is not present in the interpersonal communication between the sender and recipient, it can be an indication of discrimination in interpersonal communication. When this occurs for a majority of recipients in a specific social group, structural discrimination is present. This means that some social groups have a smaller possibility of making their voices heard and being listened to, and are thereby excluded from the making of the social reality that are constantly reproduced, collectively, in our society (Hedberg, 2012).

Explanatory factors to structural discrimination in interpersonal communication are context and group belonging (Echterhoff et al., 2005; Hedberg, 2012). When it comes to group belonging, memory modification is more likely to occur when communicating with someone in the same social group, thus someone you rely on. Regarding the context, Hedberg (2012) showed that the production of shared reality also depends on the topic communicated about. For example, when communicating about a private topic, women are more likely to influence the shared reality. Conversely, when communicating about a public world topic, women are less able to create a memory modification since they are perceived as less competent in this world.

Based on the reasoning above, the authors hypothesised that both men and women will subconsciously categorise their recipient according to gender and stereotypical traits in the communication game. Furthermore, when communicating about a public world topic, both men and women will discriminate against female recipients since they are perceived as less competent in this area. Thus, when the sender recalls the original text about the public world topic, there will be no memory modification when communicating with a woman, for either male or female senders. This leads to the third hypothesis:

H3: When communicating about a public world topic with female recipients, recall valence is not affected by message valence, regardless of the sender's gender.

Further, research has found that the negative bias against women could be reduced by priming people with images of non-stereotypical women (Good, Woodzicka, \& Wingfield, 2010). Azadi \& Torstensson (2013) extended this finding and showed that it was possible to use the same method to counteract discrimination in interpersonal communication. This method, to counteract discrimination, will be discussed in the section below.

### 2.6 Priming: a Way to Counteract Structural Discrimination

Priming is an unconscious memory effect in which exposure to one stimulus impacts another stimulus (Bargh et al., 1996). For many years, the effects of priming of an individual's subsequent behaviour and impressions of others have been studied, and researchers postulate that a person who is exposed to a priming event will potentially behave according to the priming in a subsequent event (Bargh et al., 1996; Spencer, Steele \& Quinn, 1998). Based on media's continuous presence in everyday life, the published images and content can be considered as having a priming effect. Social learning theory suggests that models or actors in the media do indeed have the power to influence media consumers' behaviour (e.g., Bandura, 1971; Bisell \& Parrott, 2013; Gerbner \& Gross, 1976).

When you are primed with certain types of images on a daily basis, you will start to not question the images that you are being exposed to. One example was found by Gerbner and Gross (1976). They concluded that individuals who watch a great deal of television, compared to light viewers, believe that women have limited abilities and interests compared to men in the real life. According to the authors, the reason for this is that the messages communicated in television have such a great impact, that they suppress other sources of impressions from the context. Secondly, their research also found that heavy viewers expressed more stereotypic views about which professions were best suited for women. Thus, the media exposes its receivers to content that shape their perception of what a man and a woman should be like. Jost, Banaji \& Nosek (2004) and Good et al. (2010) found that exposure to images of female counter stereotypes had the effect of reducing bias against women. Additionally, Blair (2002) argued that it is possible to overcome negative stereotypes by the use of counter stereotypes and thereby alter people's old perceptions. Further, these findings were later strengthened within the SIB paradigm by Azadi and Torstensson (2013).

As previously hypothesised, we expect both men and women to discriminate against women. By priming people with non-stereotypical images of women, it might be possible to diminish their discriminatory behaviour. The reason behind the diminishing effect of discrimination could be that the processing of the images will affect certain cues in the brain, and influence the subsequent behaviour. However, the priming effect might be less prominent when processed by people who are more acculturated (Ruble \& Ruble, 1982) since they have been exposed to stereotypical media content for an extensive period of time. However, we consider this effect to be less substantial than the priming itself. Thus,

H4: By priming the sender with non-stereotypical images of women, recall valence will be affected by message valence.

### 2.7 SUMMARY OF HYPOTHESES

Table 1. Summary of Hypotheses

| H1 | The men in Sweden are more benevolent and hostile sexist than the women, <br> regardless of age. |
| :---: | :--- |
| H2 | Men who have had at least one female boss in the public world are less sexist than <br> men who have not had a female boss. |
| H3 | When communicating about a public world topic with female recipients, recall valence is <br> not affected by message valence, regardless of the sender's gender. |
| H4 | By priming the sender with non-stereotypical images of women, recall valence will be <br> affected by message valence. |

## 3. METHODOLOGY

The following chapter details the research method used in this study. It starts with a presentation of the initial work and the chosen scientific approach, and this is followed by an overview of the experimental design and the corresponding experimental procedure. Lastly, it holds a discussion regarding data analysis, validity, reliability, and ethical considerations.

### 3.1 INITIAL WORK

In order to contribute to the research within the field of structural gender discrimination and to understand how to counteract it, the ongoing debate was scanned. More specifically, the authors investigated public opinion in the written press, academia, and documentaries. The process began in May 2016, with a discussion with Per Hedberg, a researcher at the Stockholm School of Economics. Some weeks after the start of the process, a decision was made that this study would be built on Per Hedberg's previous research in the fields of sexism, stereotyping, and interpersonal communication.

### 3.2 SCIENTIFIC APPROACH AND DATA GATHERING

This thesis took a deductive approach since extensive knowledge and theories already exist within the domain. Theories within the fields of sexism, priming, stereotyping, and the SIB paradigm were used to derive hypotheses. The objective was to find causal relationships and generalisable results based on actual human behaviour. Thus, a quantitative data collection was appropriate.

### 3.3 RESEARCH DESIGN

Since the objective of this research was to find causal relationships and generalisable findings, an experimental research design was suitable. There were mainly three reasons. Firstly, in order to be able to draw conclusions regarding the existence of gender discrimination, and also to find new ways of changing widespread structural discriminatory behaviour, an experiment was necessary. This is because structural discrimination is not something you can see with the naked eye; it is hidden and an experiment makes it possible to actually observe it. Secondly, because the topic of this thesis is connected to social psychology, the choice of an experimental design to examine the reality is suitable. Thirdly, the author's objective was to
build on research that has already been carried out within the domain, a similar research design was necessary in order to gather comparable empirical data.

The experiment was conducted on tour buses, an environment that is non-artificial. Because of this, one could argue that it was a field experiment since the subjects were in a real environment and were unaware that they were a part of an experiment (Söderlund, 2010). However, the authors consider it to be a laboratory experiment since a cover story was used to eliminate speculations and to keep the subjects responsive to the tasks.

### 3.4 EXPERIMENTAL DESIGN

The experiment relies on the communication game within the SIB paradigm. The communication game was used as a tool to investigate the level of discrimination against women in interpersonal communication. Thus, in order to make comparisons and to derive conclusions comparable with previous studies, the experimental process has been more or less replicated - with some changes, adaptations, and extensions. Further, a classical experimental design was applied, constructed in a $2 \times 2$ matrix. Thus, the independent variables of interest could be manipulated and tested in a controlled environment and the control group removed the risk of any other explanations for causal findings.

The experiment was divided into three parts. In the first, two groups were primed with neutral images of fruit and two groups were primed with non-stereotypical images of women. In the second part, the communication game started. Here, the authors investigated whether discrimination against women in interpersonal communication took place and if the priming in part one affected the subsequent discriminatory behaviour. In the third part, all the subjects received identical surveys. The objective of the surveys was threefold: (1) to investigate the general level of sexism, (2) to ensure appropriate participation in the communication game, and (3) to gather demographic information.

### 3.4.1 Experimental Groups

The experimental design generated four different groups and the subjects were each randomly assigned to one of these (Table 2). The subjects' random seating and the order in which the experimental material was distributed decided the division of groups. Thus, the subjects were divided on a random basis and received different treatments (Söderlund, 2010). Groups one and three had the aim of establishing a baseline for structural gender discrimination in
interpersonal communication, both for men and women. Groups two and four had the aim of identifying whether priming could be used as a tool to counteract structural gender discrimination.

In the first part, all of the groups received a booklet consisting of 15 images (Appendix B). Groups two and four were primed to the stimulus of non-stereotypical images of women and groups one and three were primed to neutral images of fruit. In the second part of the experiment, the communication game, half of the sample communicated with a male recipient, called Stig, and the other half with a female recipient, called Karin. It was communicated that both the male and female recipients had a positive attitude toward the public world topic, a company called Beta (Appendix E). In the third and last part of the experiment, the full sample received the same survey.

Table 2. Overview of Experimental Groups

|  | Group 1 <br> Experiment Group | Group 2 <br> Experiment Group | Group 3 <br> Control Group | Group 4 <br> Control group |
| :---: | :---: | :---: | :---: | :---: |
| Stimuli | Neutral | Non-stereotypical <br> women | Neutral | Non-stereotypical <br> women |
| Topic | Mixed | Mixed | Mixed | Mixed |
| Receiver | Female | Beta | Beta | Beta |
| $\mathbf{N}$ | 42 | Female | Male | Male |

### 3.4.2 Experiment Subuects

The experiment subjects consisted of seniors, aged from 61 to 91 years old; all were members of the senior association SPF Seniorerna. Earlier researchers within the domain had all studied high school students living in the Stockholm area. This study investigates an older population, from different locations in the north of Sweden: Sundsvall, Örnsköldsvik, Härnösand and Sollefteå. Additionally, the experiment subjects are considered to be a heterogeneous group, since they originate from different locations and their ages extends over two generations. Thus, they are more or less representative of the senior population in Sweden, which increases the level of generalisable findings.

### 3.5 Pre-Studies

Two pre-studies were conducted between September $16^{\text {th }}$ and September $20^{\text {th }}$, 2016, with the objective of validating and tailoring the experimental material and thereby optimising the outcome.

### 3.5.1. Pre-study 1

The first pre-study was performed on September 16 ${ }^{\text {th }}$, 2016. A convenience sample of students from the Stockholm School of Economics participated in the experiment. The objective was to ensure that the experiment would be easy to understand and perform. In addition, the intended script was tested to ensure that there would not be any unclear expressions or instructions. Furthermore, the motive was also to check that the duration of the experiment was within the estimated time frame. The outcome showed that the instructions were clear and understandable. Some minor changes were made to the script in order to trick the subjects that they were communicating with other seniors in real time in the communication game.

### 3.5.2 PRE-Study 2

In order to further improve the chances of a clear outcome, a pilot case was conducted on September $20^{\text {th }}$, 2016. In this second pre-study the experiment was performed by two members of the relevant sample, the seniors. The purpose was to ensure that the oral and written instructions were clear enough for the elderly sample. The authors also wanted to ensure that the non-stereotypical images of women, in experiment part one, came across as competent.

The second pre-study resulted in a shortened script in order to not lose the seniors' attention. Moreover, the public world topic that the subjects would communicate around in the communication game was changed. This was done for two reasons. Firstly, the original public world topic, a Swedish industrial company, seemed too male dominated in the sense that a significant part of the female seniors had not worked within the industrial sector. Thus, the temptation to keep the industrial company, which was used in Azadi \& Torstensson (2013) studies, was too risky since it could have affected the outcome of the experiment. The second reason for modifying the public world topic was that the original text was considered too complex and technical to be easily understood and grasped in the experimental setting. Thus, the authors chose to rewrite the text about the public world topic to a more gender neutral one:
a company within the food industry that was called Beta. The text was also simplified and altered to resemble more everyday and real-life content.

### 3.6 EXPERIMENT PROCEDURE

Four separate experiments were carried out on September $27^{\text {th }}$ and $28^{\text {th }}, 2016$. All experiments took place on Lönns Buss buses' during a senior trip to and from Åland, Finland. In total, 199 subjects participated in the experiment and 179 answers were completed and validated, divided into 67 men, 103 women and nine subjects who decided to not reveal their gender.

Model 1. Overview of Experiment Procedure

| Experiment part 1 |  | Experiment part 2 | Experiment part 3 |
| :---: | :---: | :---: | :---: |
|  | $\pi$ | Experiment group 1 |  |
|  |  | 1. Read a text about a public world topic <br> 2. Write a message about the topic to a female recipient |  |
| Priming neutral images |  | 4. Recall the original text |  |
|  |  | Experiment group 2 |  |
|  |  | 1. Read a text about a public world topic <br> 2. Write a message about the topic to a male recipient <br> 3. Filler task | 1. Manipulation checks for experiment part 2 |
|  |  | 4. Recall the original text | 2. The Ambivalent Sexism Inventory |
|  |  | Experiment group 3 | 3. Demographic questions |
|  |  | 1. Read a text about a public world topic <br> 2. Write a message about the topic to a female recipient |  |
| Priming non-sterotypical images of women | $8$ | 3. Filler task <br> 4. Recall the original text |  |
|  |  | Experiment group 4 |  |
|  |  | 1. Read a text about a public world topic <br> 2. Write a message about the topic to a male recipient <br> 3. Filler task |  |

### 3.6.1 Information to the Participants

In order to inform the travellers that an experiment would take place, a mail was sent out three weeks before the trip. The main purpose was to make sure that the rate of participants would be as high as possible and to let them ask any questions they might have beforehand.

### 3.6.2 Preparation of Experimental Material

The first step in the preparation was to print the experimental material, which then was assembled into different booklets and blocks.

Experiment part 1 contained a booklet consisting of instructions and 15 images of either nonstereotypical women or neutral ones. That was followed by a survey to ensure that the images were processed and that the women were perceived as competent (Appendix B). Experiment part 2 consisted of four different blocks. The first block consisted of a short instruction, a text about Beta, and a handwritten note with the information about the recipient (name, gender and attitude towards Beta). The second block consisted of lined paper where the subjects would write down a descriptive message regarding Beta to his or her recipient. The third block was a filler task and the fourth block was lined paper where the subjects were asked to recall the original text about Beta (Appendix C). Lastly, Experiment part 3 was a survey (Appendix D).

Later on, the booklets and blocks were assembled into roughly two hundred complete experiments in four different piles, one pile for each treatment. Then, the four piles were blended, in line with the randomisation principle and divided into four new piles, one pile for each of the four buses; bus number one $(\mathrm{N}=38)$, bus number two $(\mathrm{N}=46)$, bus number three $(\mathrm{N}=77)$, and bus number four $(\mathrm{N}=54)$. The numbers represent the maximum number of respondents on each bus.

The next step in the preparations was to number all of the parts of the experimental material. This was done discreetly with the aim of keeping track of each subject's experimental parts, ensuring that the data was collected in a correct way.

### 3.6.3 Introduction to the Experiment

The experiment began with an introduction, and an (false) explanation regarding the purpose of the study. This deception by commission was made in order to avoid hypothesis guessing
which could otherwise have affected the results (Söderlund, 2010). In order to make the procedure as similar as possible, in the four experiments, a script was used (Appendix A).

### 3.6.4 Experiment Part I: Priming

The purpose of Experiment part 1 was to determine whether the differences in priming, would affect the subjects' subsequent behaviour in the second part of the experiment.

Experimenter A began the experiment by telling the subjects that she was a marketing student, currently in the process of writing her Master's thesis, at the Stockholm School of Economics and that her thesis concerned efficient communication in the media. Experimenter A emphasised the importance of reading the instructions carefully and of not talking during the study. She stated that there are no right or wrong answers, and she asked the subjects not to compare the content in their booklets with each other. Experimenter A then continued with more detailed information regarding the first part of the experiment: the priming part. The subjects were told that they were going to be assigned a booklet containing five pages of images, with three images on each page, and that their task was to rate the images, from one to three, depending on which images they found most appealing. They were either assigned images of either non-stereotypical women or natural images of fruits (Appendix B). The ranking task was inserted next to the images to ensure that the subjects had processed the images sufficiently, in order to ensure priming. After the five pages of images, a couple of questions followed. The purpose of these questions was two-fold: (1) to fortify the stimulus, and (2) to ensure that the subjects who were exposed to the non-stereotypical women perceived them as competent, trustworthy and skilled. Those three traits were chosen from Fiske et al. (2002) and the subjects were asked to rate the traits on a scale from 1-7 (Appendix B). Nevertheless, the perceived competence of the non-stereotypical images of the women could have been tested in a pre-study, but it was decided to insert the questions directly into the main study in order to ensure that they were perceived as competent in the context of the experiment. For the control groups, the questions at the end of the booklet were used to pace the timing with the experiment groups.

Experimenter A personally handed out the booklets to the subjects. When all of the subjects had received a booklet they had ten minutes to finish the task. When the ten minutes had passed, Experimenter A collected the booklets and handed over to Experimenter B.

### 3.6.5 Experiment Part II: The Communication Game

The purpose of Experiment part 2 was two-fold: (1) to examine if a SIB effect was present, thus if any discrimination in interpersonal communication took place, and (2) to test if, and how, the priming affected the SIB effect.

Experimenter B started part 2 by introducing herself as a management student, also writing her Master's thesis. She told the subjects that she studied how people communicate and understand each other by examining how people can make other people understand what they mean, using written messages.

After the introduction, the subjects were told that they were going to do the study together with another senior bus that also was on its way to or from Åland. They were also told that Experimenter B had met these seniors before, and that they had studied different food companies in Sweden. Experimenter B explained that, for this reason, she knew the other seniors' attitudes toward these companies. The subjects were then told that they were going to communicate with these other seniors. They were also informed that they would (1) be individually assigned to one of these other seniors to communicate with, (2) that the topic would be a specific food company, and (3) that their written messages would be sent electronically to their specific recipient on the other bus. Since they all had a number on their clipboard, they were told that this was the unique number that matched them with their 'partner' on the other bus.

After the aforementioned information was given, part 2 of the experiment began. As already mentioned, this part was divided into four blocks. In the first block, the sender (the subject) was given a handwritten message, containing: (1) the name of the company he/she was going write a message about (Beta), (2) the recipient of their message (Karin or Stig), and (3) information that their recipient had a positive attitude towards the specific food company. As mentioned earlier, the reason for telling the subject that his or her recipient had a positive attitude towards the company was to enable the audience tuning effect (Hedberg, 2012; Higgins \& Rholes, 1978). If successful, the sender will adapt his or her message according to the recipient's attitude and thereby send a more positive message. Together with the handwritten message, the subjects also received a text about Beta, as well as instructions to make the task as clear as possible.

Once the subjects had received the information, they were told that they had six minutes to read through the given information. After six minutes, the experimenters took back the material and handed out lined paper where the subjects were urged to describe Beta without mentioning the actual company name. The subjects were also informed that the reason why they were being asked to describe the company was to make it possible for their recipient (Karin or Stig) to identify the specific company. They had eight minutes to write their messages.

When the eight minutes had passed, Experimenter B collected all of the written messages and told the subjects that she would send the messages electronically to the seniors in the other bus. Then, the experimenters read through the messages to detect faulty ones. While they did this, the subjects were given a filler task and were then asked to sit quietly until Experimenter B came back with more information (Appendix C). After a number of minutes, Experimenter B returned to announce the results - had the receiving senior for each of the participants managed to identify Beta or not?

The results were written down and handed out to all of the subjects individually, together with lined paper (Appendix C). This informed each subject whether the recipient, Karin or Stig, had managed to identify the described company. The next task for each subject was to recall the original text about the company, Beta, and write it down in as detailed and correct manner as possible, on the lined paper. They had six minutes to recall and complete the task. When six minutes had passed, Experimenter B collected their recall messages and thanked them for their participation.

### 3.6.6 Experiment Part III: Control Check and Demographics

Experiment part 3 consisted of a survey, handed out to all of the subjects. The aim was to (1) ask manipulation check questions, (2) to investigate the general level of sexism, and (3) to gather demographic information (Appendix D).

### 3.6.6.1 BLock 1: MANIPULATION CHECK OF EXPERIMENT PART 2

The survey started with questions to ensure that the subjects had participated in the experiment correctly and to ensure that the subjects had not noticed that the two parts of the experiment were connected. The subjects were also asked; (1) if the gender of the recipient was male or female, (2) if the recipient's attitude towards the company was positive or negative, and (3) if their recipient succeeded or failed to identify the company. These questions were asked in order to assess whether a SIB effect was achieved or not.

### 3.6.6.2 BLOCK 2: SEXISM

As described in the theory section, an ASI scale was used to investigate the subjects' level of sexism. Unlike the original ASI scale, from Glick \& Fiske (2001), and as recommended in their article, the statements had non-reversed wording for all items. Because of the sensitive nature of some of these questions, the subjects' anonymity was emphasised when the survey was handed out. It was also explained that the questions were about society in general, and that there were no right or wrong answers. The aim of this investigation was twofold. Firstly, to understand how widespread sexism is in Sweden, but also to investigate how the level of sexism influences interpersonal communication.

### 3.6.6.3 BLock 3: Demographics

Lastly, the subjects answered a number of questions of a demographic nature.

### 3.6.7 Debriefing

There was a supposed risk that the subjects were going to discuss the experimental content with each other on the trip, so it was decided not to let them know the true purpose in connection to experiment since it could have influenced the outcome. Instead, they were told that the final study would be sent to the seniors' association in the middle of January 2017. Thanks to the good organisation of the SPF, it was clear that the dissemination of the final thesis would reach interested members smoothly.

### 3.7 DATA ANALYSIS

The data from the experiment was inserted into IBM SPSS Statistics Software, edition 23. The data from the Experiment part 2, i.e., the subjects' written messages and recall texts, were scored according to a coding template (Appendix E). The template consisted of the same amount of positive and negative statements. Experimenter A and Experimenter B reviewed the written messages and recall texts separately, and later on compared the outcome to ensure objectivity. Afterwards, a mean for every written message and recall text was computed and then entered into the data set. Further, in order to compare with earlier studies within the domain, findings were accepted on a 10\% significance level.

### 3.8 DATA QUALITY

The purpose of this section is to discuss the accuracy of the study's findings, in terms of reliability and validity. This is crucial in order to draw any well-grounded conclusions in a later stage.

### 3.8.1 Reliability

Reliability concerns the consistency of results over time. Thus a high degree of reliability implies that if the study is repeated under consistent conditions the same results will be achieved. Reliability can be evaluated in terms of stability over time, internal reliability, and inter-observer consistency (Bryman \& Bell, 2011).

In this study, there was a concern about stability over time as the experiment was performed on four different occasions. However, this weakness was offset by using the same script, procedure and experimenters on all four occasions (Appendix A). Further, to enhance the experiment's stability, the script and procedure were adapted from earlier studies within the same domain, with minor changes (c.f. Azadi \& Torstensson, 2013). Cronbach's Alpha was used to measure the internal consistency reliability, which implies coherence in the answers to multiple-item scales (Malhotra, 2010). Any value exceeding 0.80 was accepted. When it comes to inter-observer consistency, it defines the degree to which different authors give consistent judgement to the same phenomena. Inter-observer consistency was thus highly relevant in Experiment part 2, since the two authors made the coding and measurements. In order to improve the quality of the data, a coding template was developed (Appendix E). Both authors coded and computed the message and recall valence individually and the results were compared in a later stage. The authors' coding of message valence correlated 0.92 and recall valence 0.96. In the cases where judgements did not correspond, the two authors discussed the errors in order to reach an agreement.

### 3.8.2. VALIDITY

Validity concerns if a study measuring what it sets out to measure (Söderlund, 2005). There are a number of different kinds of validity, and in this study internal, external, measurement, and ecological validity will be examined.

### 3.8.2.1 INTERNAL VALIDITY

Internal validity concerns if the treatments had an effect on the dependent variable. In other words, it is the causality between the independent and dependent variable(s) (Bryman \& Bell, 2011). A high internal validity is reached if no external factors influences the examined effects. Given that, in our study the internal validity refers to whether the recall valence is caused by message valence, the priming, the gender of recipient, the gender of the sender, and level of sexism.

Two control groups were used in the experiment to increase internal validity. By having control groups, the authors could control possible external factors affecting the dependent variable and to secure that the effects on the dependent variable were caused by the treatments.

Furthermore, internal validity was enhanced by the random allocation of treatments and the experimenters did not know which group a specific subject was assigned to. Additionally, the control questions, in Experiment part 3, enhanced internal validity by ensuring; (1) that the subjects participated as intended, (2) that they did not make any connections between the priming and SIB parts, and finally, (3) that they correctly perceived whom they communicated with and the recipient's attitude towards Beta.

However, since the experiments took part on four different occasions the study lacks some strength in internal validity. External factors, such as a question being asked in one session but not in the others, or a bus driving in an urban area and the other on the highway, might have had an outcome on the subjects' ability to focus on the tasks. Notwithstanding these small shortcomings, all of the experimental sessions shared the same script, which reminded the subjects not to look at each other's answers, not to talk with each other during the session, and to remain focused throughout the whole session. However, it is impossible to be certain that all of the subjects complied with the instructions in the bus setting.

### 3.8.2.2 EXTERNAL VALIDITY

The term external validity means how likely it is that the results of the experiment will be valid and generalisable in other situations or settings, beyond the context of the study (Malhotra, 2010). However, in order for the results to be generalisable, it is a prerequisite that the internal validity is high, which it ought to be. The external validity is assumed to be decent, though not extremely high. The potential ingroup feeling of being an SPF member on a trip exclusively with other members, might affect the validity in a negative way. Additionally, a moving bus might also trigger other feelings and emotions, than a more traditional experimental setting, potentially
influencing the result. Even if this study is a quantitative one, and therefore seen as more suitable for generalisable findings, it is somewhat constrained. The sample of seniors from the north of Sweden will not be representative for the Swedish population at large. The results might however be generalisable to the population of the sample, and could serve as an indication of how the Swedish population behave when it comes to gender equality.

### 3.8.2.3 Measurement and Ecological Validity

The term ecological validity means whether the findings reflect real life behaviour and the term measurement validity concerns whether the measurements measure what they are supposed to measure (Bryman \& Bell, 2011).

As the communication game within the SIB paradigm is a commonly used tool to find hidden structural discrimination, it can be concluded that the findings will have high measurement validity (Echterhoff et al., 2005; Higgins \& Rholes, 1978). The ecological validity could be questioned. Firstly, the use of written messages as a substitute for oral communication may not be entirely natural, but some kind of measurement was essential in order to detect subconscious behaviour. Secondly, the laboratory setting impairs the ecological validity. However, the subjects did not "attend" an experiment session per se, and the experimenters appeared in the real-life setting of a bus trip to or from Åland. Thus, the possible downsides were clearly diminished.

### 3.9 ETHICS

Several ethical considerations emerged when collecting and analysing data. The greatest ethical concern was the fact that it was impossible for the participants to be informed about the real aim of the study in order to make a personally decision whether he or she wanted to be a part of the experiment (Bryman \& Bell, 2011). However, this was not possible since an explanation of the aim would have ruined the whole SIB paradigm. Previous studies within the domain (c.f. Azadi \& Torstensson, 2013; Lidgren \& Westerberg, 2015) have had a debriefing session afterwards to reveal the real aim of the study. This was not possible in our experimental setting, since there was a high risk that the true aim would have leaked out to other participants on the buses that had not yet participated. In order to finally spread the information about the true aim of the study and its findings, the senior association, SPF, will forward this thesis to interested members. Further, before starting the experiment the subjects were informed that they would remain anonymous, throughout the whole study. Also, the subjects were given the
information that their participation was totally voluntarily. Thus, any participant could decide not to take part at all, or at any point withdraw their participation.

## 4. RESULTS

This chapter presents the empirical findings of the conducted experiment. First, the result from the ambivalent sexism inventory is presented. This is followed by the SIB paradigm where gender discrimination within interpersonal communication is tested. Lastly, priming as a tool for counteracting structural gender discrimination is examined.

### 4.1 MANIPULATION CHECKS

Before the results were analysed, the control questions in Experiment part 3 were checked, in order to make sure that the communication game had been performed correctly. Twenty respondents were excluded from the data set since they either did not write a message, wrote a message that was not in line with the task, or did not understand that their recipient was a man/woman with a positive attitude towards the company Beta.

In the initial part of the experiment, the experimental groups who were primed with images of non-stereotypical women had to rank how they perceived the images according to three traits: competence, trustworthiness, and skill. This was primarily done in order to ensure that the images were perceived as intended: associated to competence. Another purpose was to ensure that the images were fully processed in order to achieve a priming effect. In total, 85 subjects rated the traits on a scale from 1 to 7 . The aggregated mean values were as follows: competence $=5.42$, trustworthiness=4.98, and skill $=5.37$. The three traits measured a Cronbach's Alpha of $a=0.85$, which indicates a high internal consistency. Since all means were well above the half value of the scale, 4 , it was concluded that the images had fulfilled their purpose.

Out of the full sample, nine subjects did not reveal their gender. They are excluded in t-tests based on gender, but are included in the data set for the rest of the analysis. Some subjects did not answer one, or a few questions, but completed the other parts correctly. Those subjects are included in the dataset. Furthermore, an open-ended question in Experiment part 3 revealed that none of the subjects understood the real purpose of the study. All in all, the final data set consisted of 179 subjects.

### 4.2 SEXISM

The thesis's first two hypotheses were connected to the level of general sexism in Sweden. The ASI scale was used, which measures both hostile and benevolent sexism. The scale contains 22 statements, where 11 statements measure benevolent sexism and 11 statements measure hostile sexism. The subjects rated their agreement on a Likert scale from 1-7. In order to make an analysis about hostile and benevolent sexism, the statements were indexed into new variables. The hostile sexism variables had a Cronbach's Alpha of $\mathrm{a}=0.91$, and the benevolent sexism variables measured $a=0.88$. Thus, the Cronbach Alpha's indicated a high internal consistency and two new index variables were computed. In a later stage, an overarching sexism variable for all the 22 statements was computed. This was possible since the overall Cronbach's Alpha was $a=0.94$. Additionally, the computed variables of benevolent and hostile sexism were significantly and positively correlated for both men and women.

### 4.2.1 How Gender and Age Affect the Level of Sexism

This study's first hypothesis aimed to examine whether men in Sweden are more sexist than women, regardless of age, by using the ASI scale. This implies that H 1 will be rejected if there are no statistically significant differences in the level of sexism between the genders and different age groups.

In order to examine the hypothesis, independent $t$-tests were performed. The level of sexism was demonstrated significantly higher for men, both when it comes to hostile and benevolent sexism.

Table 3. Level of sexism among men and women

|  | Mean <br> Full Sample <br> $\mathrm{N}=179$ | Mean <br> Men <br> $\mathrm{N}=67$ | Mean <br> Women <br> $\mathrm{N}=103$ | Mean <br> Difference |
| :---: | :---: | :---: | :---: | :---: |
| Sexism | 3,60 | 4,03 | 3,23 | $0,80^{* * *}$ |
| Benevolent <br> Sexism <br> Hostile Sexism | 3,70 | 4,15 | 3,34 | $0,81^{* * *}$ |
| Correlation <br> between HS <br> and BS | 3,49 | 3,92 | 3,12 | $0,79^{* * *}$ |

[^0]In order to evaluate whether the age of the subjects had any relationship with the level of sexism, the sample was divided into two groups, one older and one younger. The mean age of the sample was 73 . Based on that, the younger group comprised of those who were 73 years or younger and the older group contained subjects who were older than 73 years.

The study found that younger men showed more hostile sexism than younger women on a statistically significant level ( $\mathrm{p}<0.01$ ). The mean for the men ( $\mathrm{N}=31$ ) was 3.85 and for the women ( $\mathrm{N}=62$ ) it was 3.03. The same conclusion was shown for benevolent sexism, with a statistically significant result ( $p<0.01$ ). The mean for the men was 3.91 and for the women it was 3.21 .

When observing the older group, the men $(N=33)$ had a mean of 3.96 for hostile sexism and the women ( $\mathrm{N}=37$ ) had a mean of 3.23 . Even this difference is statistically significant ( $p<0.05$ ). When observing benevolent sexism. The difference was greater, with a statistically significant result ( $p<0.01$ ) with a mean of 4.37 for the men and 3.51 for the women.

Based on these findings, it can be concluded that both younger and older men demonstrated a higher level of both hostile and benevolent sexism than women, regardless of age. Thus, H1 failed to be rejected.

### 4.2.2 How a Female Boss Affects the Level of Sexism

The second hypothesis aimed to investigate if men who have had at least one female boss are less sexist than men who have not. Thus, H2 will be rejected if there is no statistically significant difference in the level of expressed sexism between the two groups. An independent t-test was performed.

The data showed that those who have had at least one female boss expressed a lower degree of both benevolent and hostile sexism. Men $(N=24)$ who have had at least one female boss during their working life scored a mean of 3.83 on benevolent sexism, while the men $(N=37)$ that have not had a female boss had a mean of 4.23 . The difference of 0.40 units is statistically significant ( $p<0.05$ ). Regarding hostile sexism, the men that have had at least one female boss had a mean of 3.77 , while their counterparts scored a mean of 3.94 . The difference of 0.17 units is not statistically significant ( $p>0.10$ ). However, the result revealed that men who have had a female boss during their working life are statistically significantly less benevolently sexist than men who have not had a female boss. Thus, H 2 failed to be rejected.

### 4.3 The Saying-Is-Believing Effect

In the following section, the results from the communication game will be presented. This section aims to detect whether discrimination in interpersonal communication occurs, and if priming can be used as a tool to counteract it for more acculturated people.

### 4.3.1 Validating the Saying-Is-Believing Effect

The purpose of hypothesis number three was to examine whether message valence affected recall valence for subjects who communicated about a public world topic with a female recipient. In other words, H3 will be rejected if recall valence is positively affected through message valence and is statistically significant for female recipients.

As earlier mentioned, the second part of the experiment was the communication game. A number of Ordinary Least Square (OLS) regressions were performed in order to examine the existence of a SIB effect in the different experiment groups. The first regression of the study aimed to investigate whether a SIB effect occurred in the full sample, irrespective of which experiment group the subjects belonged to. To be clear, recall valence measures what information the sender has memorised, based on how he/she initially formulated a message with the aim of matching the recipient of the message, Karin or Stig. Recall (i.e. recall valence) is the dependent variable and the regression examines whether the independent variable, message (i.e. message valence), affects recall. $\beta_{0}$ is the constant and $\mu$ is the residual. If the beta $\left(\beta_{1}\right)$ is statistically significant, a SIB effect exists. This leads to the following OLS regression:

$$
\text { Recall }=\beta_{0}+\beta_{1} \text { Message }+\mu
$$

In the table below, the baseline for the SIB effect was tested. It can be concluded that there is a statistically significant SIB effect ( $p<0.01$; adjusted $R^{2=}=0.356$ ). Based on the full sample, the message valence in the first stage affected the recall valence in the second stage. The size of $R^{2}$ implies that our model explains $35.6 \%$ of the variation in the dependent variable recall.

Table 4. Baseline for the SIB effect

| Independent variables | Full Sample <br> $\mathrm{N}=179$ | Female Senders <br> $\mathrm{N}=103$ | Male Sender <br> $\mathrm{N}=67$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,064 | 0,037 | 0,091 |
| Message | $0,681^{* * *}$ | $0,681^{* * *}$ | $0,590^{* * *}$ |
|  | $(0,070)$ | $(0,091)$ | $(0,135)$ |
|  | $R^{2}=0,36$ <br> Adjusted R-square <br> $=0,356$ | $R^{2}=0,367$ <br> Adjusted $=0,360$ | $R^{2}=0.237$ <br> Adjusted $=0.225$ |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses
${ }^{* * *} p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

### 4.3.2 The Effects of Gender and Priming on SIB

The results from previous section demonstrated a SIB effect in the full sample ( $\mathrm{N}=179$ ). In the following section we will report the SIB results based on the four experiment groups presented in the methodology chapter (Table 2). Firstly, the aim is to investigate hypothesis number three: if both men and women discriminate against women in interpersonal communication, and secondly to examine hypothesis number four: if exposure to non-stereotypical images of women counteracts discriminatory behaviour. Both hypotheses are examined in the context of the communication game by using the following OLS regression:

$$
\text { Recall }=\beta_{0}+\beta_{1} \text { Message }+\mu
$$

As seen in the tables below, recall valence in all four groups was positively affected by message valence, which implies that a SIB effect exists in all cases, and is statistically significant ( $\mathrm{p}<0.05$ ). The fact that the SIB effect was found for both male and female senders who communicated with a female recipient implies that structural discrimination against women in the communication game could not be proved. However, one experiment group differed from the others (Table 8). In the group of male senders, who communicated with a male recipient, and who were primed with neutral images, a SIB effect could not be proven ( $\mathrm{p}>0.10$; adjusted $\left.R^{2}=-0.018\right)$. However, as seen in Table 8, this model does not explain what it ought to measure due to the very low negative adjusted $R^{2}$. Therefore, this result is assessed as invalid.

To sum up; women are not discriminated against in the communication game, either by men or by women. Thus, it can be concluded that recall valence is affected by message valence regardless of the sender's gender. Therefore, H3 is rejected.

The outcome of hypothesis three implies that the (expected) premise for examining hypothesis number four is no longer relevant. This is because no structural gender discrimination was found to counteract by priming of non-stereotypical images of women. Thus, H 4 is rejected due to the premise of H 3 .

Table 5. SIB-effect for Experiment Group 3. Control Group

| Independent variable | Full Sample <br> $\mathrm{N}=48$ | Female Senders <br> $\mathrm{N}=25$ | Male Sender <br> $\mathrm{N}=19$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,011 | 0,177 | $-0,284$ |
| Message | $0,612^{* * *}$ | $0,624^{* * *}$ | 0,242 |
|  | $(0,144)$ | $(0,196)$ | $(0,286)$ |
|  | $R^{2}=0,297$ | $R^{2}=0,315$ | $R^{2}=0,046$ |
|  | Adjusted $\mathrm{R}-$ square | Adjusted $\mathrm{R}-$ square | Adjusted R-square $=$ |
| 0,281 | 0,284 | $-0,018$ |  |
|  |  |  |  |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses
*** $p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

Table 6. SIB-effect for Experiment Group 1. Control Group

| Independent variable | Full Sample $N=40$ | Female Senders $N=25$ | Male Sender $N=15$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,151 | 0,07 | 0,42 |
| Message | $\begin{gathered} 0,722^{* * *} \\ (0,145) \end{gathered}$ | $\begin{aligned} & 0,627^{* *} \\ & (0,210) \end{aligned}$ | $\begin{gathered} 0,980^{* * *} \\ (0,228) \end{gathered}$ |
|  | $\begin{gathered} \mathrm{R}^{2}=0,394 \\ \text { Adjusted } \mathrm{R} \text {-square }= \\ 0,378 \end{gathered}$ | $\begin{gathered} \mathrm{R}^{2}=0,279 \\ \text { Adjusted } \mathrm{R} \text {-square }= \\ 0,248 \end{gathered}$ | $\begin{gathered} \mathrm{R}^{2}=0,605 \\ \text { Adjusted } \mathrm{R} \text {-square }= \\ 0,572 \end{gathered}$ |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses
${ }^{* * *} p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

Table 7. SIB-effect for Experiment Group 4. Experiment group

| Independent variable | Full Sample <br> $\mathrm{N}=45$ | Female Senders <br> $\mathrm{N}=28$ | Male Sender <br> $\mathrm{N}=17$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,06 | $-0,161$ | 0,474 |
| Message | $0,650^{* * *}$ | $0,665^{* * *}$ | $0,697^{* * *}$ |
|  | $(0,136)$ | $(0,178)$ | $(0,234)$ |
|  | $R^{2}=0,343$ | $R^{2}=0,359$ | $R^{2}=0,373$ |
|  | Adjusted R-square | Adjusted R-square | Adjusted R-square $=$ |
|  | 0,328 | 0,333 | 0,331 |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses
${ }^{* * *} p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$
Table 8. SIB-effect for Experiment Group 2. Experiment group

| Independent variable | Full Sample <br> $\mathrm{N}=41$ | Female Senders <br> $\mathrm{N}=25$ | Male Sender <br> $\mathrm{N}=16$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,021 | 0,119 | $-0,173$ |
| Message | $0,805^{* * *}$ | $0,805^{* * *}$ | $0,703^{* *}$ |
|  | $(0,145)$ | $(0,164)$ | $(0,362)$ |
|  | $R^{2}=0,462$ | $R^{2}=0,547$ | $R^{2}=0,225$ |
|  | Adjusted R-square | Adjusted R-square | Adjusted R -square $=$ |
| 0,447 | 0,525 | 0,165 |  |
|  |  |  |  |

Dependent variable = Recall Valence
Standard deviation in parentheses.
*** $p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

Based on the presented findings, that a SIB effect was found in all groups, the authors are left with a lot of questions and concerns regarding the divergence between this study's result and previous studies' (e.g. Azadi \& Torstensson, 2013). In section 4.1 it was proven that sexism, on a general level, existed within the sample. However, in section 4.2., no discriminatory behaviour could be proven in interpersonal communication.

It is important to keep in mind that the regression equation used is rather simple, and does not include any complex interaction effects between different independent variables. With the aim of better understanding the mechanisms behind gender discrimination, the authors decided to move forward with a more explorative approach to find new answers in order to fulfil the study's purpose.

### 4.3.3 The Effects of Sexism and Priming on SIB

As earlier found in section 4.1, the level of sexism differs significantly between genders and generations. Additionally, in section 4.2.2 it was found that the gender of the recipient did not differentiate the result as no discrimination was proven. Based on those two facts, the level of sexism was incorporated as an independent variable in an OLS regression with the aim of investigating its effect on message and recall valence. This was done since it was not reasonable that the subjects rather high levels of sexism on the ASI scale, did not have any effect on their discriminatory behaviour in the communication game.

The independent variable sexism takes the values from $1=$ not sexist at all, to $7=$ very sexist. The variable Message*Sexism represents the interaction effect between the message valence and level of sexism. The term interaction effect implies the relationship between two or more independent variables and its effect on a dependent variable. This leads to:

$$
\text { Recall }=\beta_{0}+\beta_{1} \text { Message }+\beta_{2} \text { Sexism }+\beta_{3}(\text { Message*Sexism })+\mu
$$

The result revealed (Table 9) that for groups primed with images of non-stereotypical women, recall valence was negatively affected by the interaction effect between message valence and sexism. This result is valid for the male senders and is statistically significant ( $p<0.01$; adjusted $R^{2}=0.447$ ). The adjusted $R^{2}$ means that $44.7 \%$ of the variance in recall valence is explained by the model. By adding the independent variable sexism into the model, the adjusted $R^{2}$ increased from 0.165 (Table 8) to 0.447 (Table 9) for the male senders.

As seen in Table 9, the interaction effect Message*Sexism has a negative effect on recall valence for male senders ( -1.447 ). This means that male senders who were primed with images of non-stereotypical women and who communicated with a female recipient, did not tune their attitudes towards the sender, and their memories were not modified in accordance to the SIB effect. Instead the original texts were remembered in a negative way, even though the message valence in the first stage was more positive.

Table 9. SIB-effect for Experiment Groups 2 and 4 with interaction effect

| Independent variables | Full Sample $N=41$ | Female Senders $N=25$ | Male Sender $N=16$ |
| :---: | :---: | :---: | :---: |
| Constant | 0,141 | 1,645 | -1,700 |
| Message | $\begin{gathered} 1,848 \\ (0,621) \end{gathered}$ | $\begin{gathered} 1,730 \\ (0,825) \end{gathered}$ | $\begin{gathered} 6,716 \\ (2,192) \end{gathered}$ |
| Sexism | $\begin{gathered} -0,357 \\ (0,227) \end{gathered}$ | $\begin{gathered} -0,426 \\ (0,371) \end{gathered}$ | $\begin{gathered} 0,429 \\ (0,463) \end{gathered}$ |
| Message*Sexism | $\begin{aligned} & -0,261^{*} \\ & (0,159) \end{aligned}$ | $\begin{aligned} & -0,244 \\ & (0,222) \end{aligned}$ | $\begin{gathered} -1,447^{* * *} \\ (0,526) \end{gathered}$ |
|  | $\begin{gathered} R^{2}=0,522 \\ \text { Adjusted } R \text {-square }= \\ 0,480 \end{gathered}$ | $\begin{gathered} R^{2}=0,585 \\ \text { Adjusted } \mathrm{R} \text {-square }= \\ 0,516 \end{gathered}$ | $\begin{gathered} R^{2}=0,566 \\ \text { Adjusted } R \text {-square }= \\ 0,447 \end{gathered}$ |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses.
*** $p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

To sum up, sexism can be concluded to be a more prominent independent variable than the sender's gender. In this expanded regression analysis it was also discovered that there are indications that men do discriminate against women in interpersonal communication. However, this phenomenon was only found in the group that were primed with images of nonstereotypical women, and the effect increased with the higher level of expressed sexism. In the next section we will therefore delve deeper into the domain than all other previous studies, in order to fulfil the study's purpose: to better understand discriminatory behaviour in interpersonal communication measured by the variance in recall valence.

### 4.3.4 Extended Regression Models with Multiple Interaction Effects

Relying on the findings from the previous part, 4.2.2, our purpose of the coming section is to understand our findings using enlarged models. The study will present two regression models with the purpose of explaining the variance in recall valence more neatly. The first model (1) will comprise the independent variable sexism with other independent variables and the second (2) will comprise the independent variable sender's gender with other independent variables. The reason for having the sender's gender in one regression and sexism in the other, and not having them together, is to better understand the role of the two independent variables working as moderators, and affecting recall valence. If they were in the same regression model, it would
have been harder to understand their individual explanatory power, together with others, on the dependent variable recall valence.

Below are the models, and in order to draw statistically significant conclusions at least one of the interaction effects containing three factors, needs to be significant.

The first regression model:

$$
\left.\begin{array}{rl}
\text { Recall }= & \beta_{0}+\beta_{1} \text { Message }+\beta_{2} \text { Sexism }+\beta_{3} \text { Recipient }+\beta_{4} \text { Priming }+\beta_{5}(\text { Sexism }
\end{array} \text { Message }\right)++
$$

The second regression model:

$$
\begin{aligned}
& \text { Recall }=\beta_{0}+\beta_{1} \text { Message }+\beta_{2} \text { Sender }+\beta_{3} \text { Recipient }+\beta_{4} \text { Priming }+\beta_{5} \text { (Sender*Message) }+ \\
& \beta_{6}(\text { Sender*Priming })+\beta_{7} \text { (Sender*Recipient) }+\beta_{8}(\text { Message*Priming })+\beta_{9} \text { (Message*Recipient) }+ \\
& \beta_{10} \text { (Priming*Recipient) }+\beta_{11} \text { (Sender*Message*Priming) }+\beta_{12} \text { (Sender*Message*Recipient) }+ \\
& \beta_{13} \text { (Sender*Priming*Recipient) }+\beta_{14} \text { (Message*Priming*Recipient) }+\mu
\end{aligned}
$$

In order to make it easier to interpret the result of the regressions, some variables were coded as dummy variables, going from a value of 0 to 1 . For the variable priming, 0 equals neutral images (no stimulus), while 1 equals images of non-stereotypical women (stimulus). For the variable sender, 0 equals a male sender, and 1 equals a female sender. Finally, for the variable recipient, 0 equals a male recipient, and 1 equals a female recipient. Neither the variables sexism nor message were suitable to recode as dummies, since they are not binary but represent a nominal scale. As mentioned previously, sexism encompasses values from $1=$ not sexist at all, to $7=$ very sexist. As seen in the tables below (Table 10a, Table 10b) three interaction effects were found significant. These effects will now be interpreted and explained.

The first interaction effect in Table 10a, Sexism*Message*Priming, was statistically significant ( $p<0.1$; adjusted $R^{2}=0.346$ ). This implies that the interaction effect between the three independent variables has an impact on the dependent variable recall valence. The interaction effect's negative effect on recall valence ( -0.188 ) is explained by the subjects level of sexism, together with the priming of non-stereotypical images of women, through message valence. For those who (1) scored a high level of sexism, and (2) were primed with images of nonstereotypical women, an interesting result was found. Among them, it can be seen that the
effect of a generally more positive message leads to a generally more negative recall of the original text. This implies that no SIB effect is present, instead the opposite, a structural discriminatory behaviour is found. This strengthens the results presented in Table 9.

Moving on to the second statistically significant interaction effect ( $\mathrm{p}<0.05$ ) it can be seen that the interaction effect Sexism*Priming*Recipient had a negative beta, (-1.014). Thus, for subjects who were primed with images of non-stereotypical women, and who wrote to a female recipient, the recall valence was affected in a negative direction the more sexist the subjects were. This means that, the more sexist the subjects were, under the stated conditions above, the more negative was the effect on recall valence. Furthermore, both female and male senders were less influenced by the positive attitude of a female recipient (Karin), compared to a male recipient (Stig). This implies that these subjects did not tune their messages to the female recipient's positive attitude.

The last interaction effect, with statistically significant result (p<0.05) is Sender*Priming*Recipient. It reveals that the independent variables sender, priming, and recipient together have an impact on recall valence. The outcome on recall valence (1.515) implies that women who were primed with non-stereotypical images of women, and who communicated with a female recipient (Karin), wrote the original text in their recall messages in a more positive way than their first messages. In other words, a strong SIB effect was identified.

Table 10. SIB-effect: full sample with interaction effects, (left side)
Table 11. SIB-effect: full sample with interaction effects, (right side)

| Independent variables | Full Sample $N=179$ | Full Sample $\mathrm{N}=179$ | Independent variables | Full Sample $N=179$ | Full Sample $N=179$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Constant | -0,184 | 0,347 | Constant | 0,159 | -0,225 |
| Message | $\begin{gathered} 0,685^{* * *} \\ (0,071) \end{gathered}$ | $\begin{gathered} 0,328 \\ (0,360) \end{gathered}$ | Message | $\begin{gathered} 0,651^{* * *} \\ (0,076) \end{gathered}$ | $\begin{gathered} 0,353 \\ (0,236) \end{gathered}$ |
| Sexsim | $\begin{gathered} 0,071 \\ (0,105) \end{gathered}$ | $\begin{aligned} & -0,092 \\ & (0,172) \end{aligned}$ | Sender | $\begin{gathered} -0,082 \\ (0,238) \end{gathered}$ | $\begin{gathered} 0,419 \\ (0,488) \end{gathered}$ |
| Recipient | $\begin{gathered} 0,028 \\ (0,224) \end{gathered}$ | $\begin{gathered} -0,601 \\ (1,191) \end{gathered}$ | Recipient | $\begin{gathered} -0,004 \\ (0,230) \end{gathered}$ | $\begin{gathered} 0,569 \\ (0,556) \end{gathered}$ |
| Priming | $\begin{aligned} & -0,039 \\ & (0,223) \end{aligned}$ | $\begin{aligned} & -2,043 \\ & (0,992) \end{aligned}$ | Priming | $\begin{gathered} -0,074 \\ (0,230) \end{gathered}$ | $\begin{gathered} 0,625 \\ (0,544) \end{gathered}$ |
| Sexism*Message |  | $\begin{gathered} 0,082 \\ (0,100) \end{gathered}$ | Message*Sender |  | $\begin{gathered} 0,201 \\ (0,287) \end{gathered}$ |
| Sexism*Priming |  | $\begin{gathered} 0,572 \\ (0,267) \end{gathered}$ | Message*Recipient |  | $\begin{gathered} 0,449 \\ (0,332) \end{gathered}$ |
| Sexism*Recipient |  | $\begin{gathered} 0,211 \\ (0,326) \end{gathered}$ | Message*Priming |  | $\begin{gathered} 0,247 \\ (0,301) \end{gathered}$ |
| Message*Priming |  | $\begin{gathered} 0,724 \\ (0,518) \end{gathered}$ | Sender*Recipient |  | $\begin{gathered} -0,700 \\ (0,703) \end{gathered}$ |
| Message*Recipient |  | $\begin{gathered} 0,301 \\ (0,540) \end{gathered}$ | Recipient*Priming |  | $\begin{gathered} -1.113 \\ (0,770) \end{gathered}$ |
| Priming*Recipient |  | $\begin{gathered} 3,546 \\ (1,725) \end{gathered}$ | Priming*Sender |  | $\begin{gathered} -0,979 \\ (0,687) \end{gathered}$ |
| Sexism* Message*Priming |  | $\begin{aligned} & -0,188^{*} \\ & (0,143) \end{aligned}$ | Message* Sender*Recipient |  | $\begin{gathered} -0,293 \\ (0,353) \end{gathered}$ |
| Sexism* <br> Message*Recipient |  | $\begin{gathered} -0,045 \\ (0,147) \end{gathered}$ | Message* Sender*Priming |  | $\begin{gathered} -0,097 \\ (0,340) \end{gathered}$ |
| Sexism* Priming*Recipient |  | $\begin{gathered} -1,014^{* *} \\ (0,464) \end{gathered}$ | Message* Recipient*Priming |  | $\begin{gathered} -0,131 \\ (0,326) \end{gathered}$ |
| Message* Priming*Recipient |  | $\begin{gathered} 0,077 \\ (0,315) \end{gathered}$ | Sender* <br> Priming*Recipient |  | $\begin{aligned} & 1,515^{* *} \\ & (0,979) \end{aligned}$ |
|  | $\begin{gathered} \mathrm{R}^{2}=0,362 \\ \text { Adjusted } \\ \text { R-square = } \\ 0,347 \\ \mathrm{~N}=179 \end{gathered}$ | $\begin{gathered} \mathrm{R}^{2}=0,401 \\ \text { Adjusted } \\ \text { R-square = } \\ 0,346 \\ \mathrm{~N}=179 \end{gathered}$ |  | $\begin{gathered} \mathrm{R}^{2}=0,325 \\ \text { Adjusted } \\ \text { R-square = } \\ 0,307 \\ \mathrm{~N}=179 \end{gathered}$ | $\begin{gathered} \mathrm{R}^{2}=0,401 \\ \text { Adjusted } \\ \mathrm{R} \text {-square }= \\ 0,346 \\ \mathrm{~N}=179 \end{gathered}$ |

Dependent variable $=$ Recall Valence
Standard deviation in parentheses
${ }^{* * *} p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

To sum up: the three statistically significant interaction effects showed that all of the independent variables; sexism, priming, recipient's gender and sender's gender together had an explanatory power on the variance in recall valence. Furthermore, the regressions also indicated that the priming of non-stereotypical women had a negative effect on recall valence for male subjects, whereas this effect was positive for female subjects.

### 4.4 SUMMARY OF HYpotheses testing

Table 12. Summary of Hypotheses Testing

| H1 | The men in Sweden are more benevolent and hostile sexist than <br> the women, regardless of age. | Failed to be <br> rejected |
| :---: | :--- | :--- |
| H2 | Men who have had at least one female boss in the public world <br> are less sexist than men who have not had a female boss. | Failed to be <br> rejected |
| H3 | When communicating about a public world topic with female <br> recipients, recall valence is not affected by message valence, <br> regardless of the sender's gender. | Rejected |
| H4 | By priming the sender with non-stereotypical images of women, <br> recall valence will be affected by message valence. | Rejected due <br> to the premise <br> of H3. |

## 5. ANALYSIS


#### Abstract

In this chapter, the findings from the previous chapter will be analysed in accordance with the theoretical framework and methodology. Thus, the findings are analysed and discussed in the light of the study's context. A more general discussion follows in chapter six.


Before beginning the analysis, we would like to reiterate the purpose of this study. As described in section 1.5 , the purpose was firstly to prove that the Swedish population do discriminate against women on a general basis. The second aim was to identify new mechanisms behind structural gender discrimination in interpersonal communication, and to further investigate how this potential behaviour could be counteracted.

### 5.1 Sexism is Highly Prevalent in Society

In order to understand how widespread sexism is among male and female seniors in Sweden, the ASI was used to quantify its presence (Glick \& Fiske, 1996). The ASI measurement has been used in previous studies, but not in a Swedish context (Glick et al, 2000). Thus, the result can be seen as a baseline when it comes to negative gender discrimination against women in Sweden. Furthermore, it was hypothesised that men are more benevolent and hostile sexist than women regardless of age, which is in line with previous findings in other western European countries (Glick et al, 2000).

As expected, Swedish men are more sexist than Swedish women, both when it comes to benevolent and hostile sexism and this is valid regardless of age. In this thesis, it can be concluded that the level of sexism found is on pair with the mean in other western European countries, when comparing with Glick et al.'s (2000) study conducted within 19 countries. As Sweden is seen as a, more or less, equal country (World Economic Forum, 2015) it is interesting that the finding does not reflect the ranking. Additionally, our result is gathered twenty years after the result was presented by Glick et al. (1996) making this even more striking. However, it is important to keep in mind that Glick et al.'s (1996) result was conducted on a younger sample and our finding is based on a considerable older sample. Our samples' ages imply that they have been acculturated in society for a long period of time, which might have affected their level of expressed sexism (Hedberg 2012; Ruble \& Ruble, 1982). This is both in the sense that they have been reinforced by female stereotypes constantly present in the media, as well as the fact the sample grew up during, or with some connection to, World War Two; a time when society was less equal. These two factors might have shaped how
people see and interpret their environment, which is especially crucial during one's childhood (Bandura, 1971; Ruble \& Ruble, 1982).

Moving forward, our result also showed that the younger group of the male sample expressed less benevolent sexism than the older group, which strengthens a possible explanation that the society we grow up and live in forms our view of the world and subsequent behaviour. Still, it cannot be proved whether the level of sexism increases as age increases, or if it is a product of upbringing and history. However, we argue that the level of benevolent sexism is rather constant over one's lifetime and our finding shows the tendency that younger generations are less benevolent sexist than older generations. This is a positive finding, since benevolent sexism supports behaviour that can impede women's personal efficacy and competence, by neglecting the recipient's abilities (Davies et al., 2002; Hammond \& Overall, 2015).

Building on this, our result revealed that men who have had at least one female boss during their working life expressed a clearly lower level of benevolent sexism. One potential explanation is that men who have had a female boss have seen women acting in positions where their competence level is crucial (Glick \& Fiske, 2001). Thus, women in power positions might lead to that women are being perceived as equal to men, and not perceived as a weaker and incompetent in the public world. This finding stresses the importance of equal rights and opportunities in business life, in the movement towards a gender equal society. Thus, it is important that women, to a greater extent, are represented in contexts where their competence is judged, such as positions in boards and management teams. According to Glick et al. (2000) hostile and benevolent sexism go hand in hand where benevolent sexism legitimates the hostile. This implies, if it is possible to lower benevolent sexism, hostile sexism will not be accepted to the same extent, leading to less structural sexism in society.

In line with earlier theories (Glick et al, 2000; Jost \& Banaji, 1994) our result underlines the fact that the men's mean value of benevolent and hostile sexism also predicted the women's mean value. Thus, the disadvantaged social group of women adopts the system-justifying beliefs of the dominant group of men. In other terms, women unconsciously adjust their level of sexism in accordance to the level expressed by the social group of men (Glick et al., 2000) and the Swedish women score about 0.8 units lower on the ASI scale.

To conclude, our result stresses that men in Sweden are clearly sexist, both benevolent and hostile and that there is an indubitable difference between men and women. It was also shown
that with increasing age, the level of expressed sexism increased. Furthermore, by increasing the pace of women taking power positions, structural discriminatory behaviour could be lowered faster, since this will lower benevolent sexism on a general level (Glick \& Fiske, 1996). Moving forward, the fact that men in Sweden structurally discriminate against women will work as a baseline in the following analysis: how gender discrimination on a general level is expressed within interpersonal communication.

### 5.2 Sexism is Not Automatically Transferred to the SiB

The communication game within the SIB paradigm was used as a tool to measure gender discrimination towards women in interpersonal communication. To be clear, a SIB effect takes place when a sender tunes his or her message according to the attitude of the recipient, which in the next step affects his or her memory and recall valence of the original text. If this effect is missing for recipients of the social group of women, structural gender discrimination is present. Previous studies have pointed in the same direction, that discrimination in interpersonal communication against women exists among high school students (c.f. Azadi \& Torstensson, 2013; Hedberg, 2012). In this study, it was hypothesised that structural gender discrimination also is present among the elderly population, where it ought to be even more prominent (Ruble \& Ruble, 1982).

Our empirical data revealed that hypothesis three was rejected because a SIB effect was present for all subjects who were exposed to neutral images. Thus, the sender's gender and the recipient's gender did not impact the SIB effect, which was the case in Azadi and Torstensson's (2013) and Hedberg's (2012) studies. Recall valence was positively affected by message valence in all cases and this study failed to empirically support previous findings within the domain. This implies that the voice of the social group of women is heard by both men and women and that women are able to create the shared realties, within the public world, that are continuously produced in our society (Echterhoff et al., 2005; Hedberg, 2012).

The SIB effect that was present for the subjects who were exposed to neutral images, might be interpreted as there being no inter-group bias between the genders or, not a strong one. One explanatory factor could be the bus context. The fact that the subjects were travelling together on their way to or from Åland, and that they represented the senior association SPF, might have affected their categorisation process (Allport, 1954; Jones, 1982). Thus, it is likely that the categorisation of the recipient as a fellow traveller, or member of the SPF association, was
more pronounced than the recipient's gender in the communication game. As can be seen in the script (Appendix A), the experiment leaders emphasised that the subjects' recipients were SPF members, on another bus to or from Åland. This might also have strengthened the ingroup feeling between the SPF members, making the social group of gender less prominent.

Secondly, the fact that the experiment was conducted on buses might have influenced the presence of the SIB effect. To perform the experiment on a bus, in opposition to previous studies which were conducted in classrooms, might have affected the message and recall valence. As a traveller, you might be in a more positive mood and mindset (Hjalmarsson \& Wallin, 2010). On the other hand, there is also the possibility that the seniors might have been fatigued and bored at the end of the trips (Morris \& Guerra, 2015). These two opposite viewpoints might have affected the words written and valence in their messages.

A third and final potential explanation for our finding is the choice of the public world topic. What distinguished our method, in relation to previous studies within the domain, is that this study had another topic in the communication game. Previous studies' communication games (c.f. Azadi \& Torstensson, 2013; Lidgren \& Westerberg, 2015) were based on an industrial company. In this study, it was replaced with a food company. This decision was made since the industrial company have a heritage of a male dominated workforce and the authors saw a risk that the subjects would consider the topic to be a "man's world". This could imply that the topic, instead of the gender of the recipient, influenced the SIB since a male recipient would had been seen as more competent and trusted within the industrial sector than a female recipient. Based on this argumentation, the change of topic enabled the female recipients likelihood to influence the senders' shared realities.

To conclude, no discrimination could be proven in the communication game for the subjects who were primed with neutral images. One reason could be that the categorisation of the recipient as a fellow SPF member was more prominent than the recipient's gender. Another explanation might be that the change of the public world topic positively influenced the possibility to create a shared reality between the sender and the recipient, regardless of gender. The fact that no discrimination was proven for these subjects is a contribution to the existing body of research. This means that even if a subject expressed sexism against women on a general level, it is not automatically transferred to communication in interpersonal communication.

### 5.3 The Effect of Priming is Ambiguous

In this study, discrimination could not be proven for the subjects who were exposed to neutral images. Based on the knowledge that sexism existed on a general level, but was not proven in interpersonal communication, the authors enlarged the regression model with the objective to identify the underlying mechanisms to the discrimination. The independent variables sexism, priming, gender of the sender, gender of the recipient, and message valence were integrated as interaction effects, in order to examine their mutual effect on the dependent variable recall valence.

The results in the enlarged regression models revealed that the interaction effects of the independent variables sexism and priming of non-stereotypical women had a stronger explanatory power than gender of the sender together with priming. The authors therefore recommend to also evaluating the independent variable sexism in further research, and not only the gender of the sender, as previous studies have considered as the most prominent explanation of gender discrimination. By adding the independent variable sexism, as a part of the interaction effects, it was possible to see that the priming did have an effect on recall valence, which without the variable sexism would not have been revealed.

When it comes to male senders, who scored a high level of sexism, had been primed with nonstereotypical women, and communicated with a female recipient, they recalled the original text in a more negative way than their valence of their first message. This implies that the images of the non-stereotypical women had a negative effect on their memory modification and no SIB effect was present. Furthermore, the result also revealed that it is not only through message valence that the identified behaviour is shown to be valid. The male senders were also less influenced by the positive attitude of a female recipient, than of a male recipient, the higher level of sexism expressed. This implies that male senders took less notice of female senders, leading to no audience-tuning effect.

The overall outcome can be explained by the so-called backlash effect, which occurs when women challenge the female stereotypes by expressing more agentic traits, such as career women who do not behave as they "should do". Such behaviour is likely to provoke negative reactions in society and to cause a higher degree of hostile sexism (Eagly \& Karau, 2002; Glick \& Fiske, 2001; Prentice \& Carranza, 2002; Rudman \& Phelan, 2008). This is the outcome here:
the career women in the images do challenge the gender roles and are, by extension, a threat to the social group of men when it comes to their dominance over the social group of women.

When looking at the women, who were primed with images of non-stereotypical women, and who communicated with a female recipient, the result revealed that they are, in opposition to the men, not threatened but instead empowered. These women remembered the original text about the public world topic in an obviously more positive way in relation to the group of women who were primed with neutral images. The female senders perceived the female recipient as a reliable source of information and she (Karin) was thereby able to influence the female senders cognition and shared reality (Echterhoff et al., 2005). It can be concluded that the female senders did not endorse the system-justifying view as a disadvantaged social group (Jost \& Banaji, 1994). Instead they were empowered as the result stresses ingroup favouritism (Stephan \& Rosenfield, 1982).

To conclude, it was found that priming with images of non-stereotypical women had a different effect in the communication game, depending on whether the sender was a man or a woman. The men were threatened while the women were empowered. The reaction expressed by the male sample is explained as a backlash effect, where women in breadwinning roles are seen as a threat to the male dominated system. Secondly, when being primed with images of nonstereotypical women, the more sexism expressed on the ASI scale, the higher is the risk that a person will discriminate against women in interpersonal communication. In the next chapter, the findings analysed in this section will be discussed further, in the context of the media and society at large.

## 6. DISCUSSION

In this chapter the empirical results will be summarised and discussed in relation to the study's
purpose. We will also discuss the implications of the findings in the light of the media industry and society at large. Finally, directions for future research are suggested.

### 6.1 Conclusion

The aim of this study was firstly to investigate if the Swedish population do discriminate against women on a general basis. The second aim was to identify new mechanisms behind structural gender discrimination when it comes to interpersonal communication, and to further investigate how this potential behaviour could be counteracted with priming of non-stereotypical women.

Our result confirms that men in Sweden are clearly sexist, both benevolent and hostile. There is also an indubitable difference between men and women, regardless of age. This implies that the first hypothesis, that men in Sweden are more benevolent and hostile sexist than women, failed to be rejected. Furthermore, the result also revealed that men, who have had at least one female boss during their working life, expressed a lower degree of sexism. Based on that, the second hypothesis failed to be rejected.

The fact that no discrimination within interpersonal communication could be proven, implied that the third hypothesis was rejected. In this study, the SIB effect was found in both male-tofemale and female-to-female communication. This is not in line with previous research, where no SIB effect was found in the natural state, either in male-to-female or in female-to-female communication (Azadi \& Torstensson, 2013; Hedberg, 2012).

The fourth hypothesis aimed to examine if priming with images of non-stereotypical women could be used to counteract discrimination. Since the SIB effect was found in the full sample, there was positively no discrimination to counteract. However, our result revealed that the priming did affect the subjects' message and recall valence in an unexpected way. For the male subjects the priming influences the message and recall valence in a negative direction. Their behaviour could be explained as a backlash effect. This means that women are seen as a threat to the male dominated system. By adding the independent variable sexism as a part of the interaction effects, it was possible to conclude that the priming instead had a negative
effect on recall valence. This implies that women were perceived as competent in the public world, but at the same time, were considered as a threat.

To summarise, men are more sexist than women in Sweden and the level of sexism could possibly be lowered by increasing the percentage of women in top management positions. Moreover, our findings regarding discrimination within interpersonal communication are not in line with previous research within the domain. Within the communication game, no structural discrimination was found either in male-to-female or female-to-female communication when being primed with neutral images. However, when men were primed with non-stereotypical women, there is evidence proving discriminatory behaviour towards women, triggering a backlash effect. This implies that the traditional stereotype of the woman still is prevalent among seniors in Sweden, and more work is needed to achieve gender equality.

### 6.2 CRitical Reflection

### 6.2.1 ReSEARCH LIMITATIONS

An important aspect of this study was the investigation of several stimuli that may have an explanatory factor on the dependent variable, the recall valence. Great effort was put into the pre-studies that were carried out. However, due to time constraints, the authors did not have time to perform as many pre-studies as would have been optimal. It would have been of interest to: (1) make a deeper examination of the traits and characteristics connected to a nonstereotypical woman from our subjects' point of view, and (2) to choose the images that were seen as the most non-stereotypical. However, a manipulation check in Experiment part two ensured that the subjects perceived the selected women on the images as competent. Additionally, the fact of using the same non-stereotypical images of women as had previously been used (Azadi \& Torstensson, 2013), added value, since the results could be compared and the original findings either strengthened or questioned.

### 6.2.2 Method limitations

The communication game has been a widely used experiment for decades (Higgins \& Rholes, 1978). However, it was a challenge to control the extraneous variables and to secure that the subjects participated in the experiment as proposed. A majority of the subjects grasped the information about their recipients' attitude and gender and none of them understood the true purpose of the experiment. However, since the experiment was carried out on crowded buses,
it was hard to prevent the subjects from looking at each other's papers or performing the experiment quietly. Thus, there are risks that participants did not participate correctly, doubted the existence of the recipients Karin and Stig, or interrupted other participants in the study. For these reasons, a more controlled environment might have been preferred but at the same time, a more controlled environment would have had a negative effect on the experiment's ecological validity. Another way of resolving the uncontrolled environment would have been to have smaller groups of subjects per experiment, which unfortunately not was possible.

Another aspect that is important to highlight is the subjective coding template used to measure message and recall valence. It is possible that the perception of whether a statement or a sentence is positively or negatively charged could differ from one subject to another. This is a limitation in the chosen method. However, it is important to underline the fact that it is the correlation between the message valence and recall valence that is the main issue, and that a consistent method was used for all subjects. Furthermore, when it comes to the measurements of hostile and benevolent sexism, a scale from 1-7 was used. In previous studies (c.f. Glick \& Fiske, 1996) a scale from 1-5 was used. This disparity is a weakness, making the results less comparable with previous studies.

In this study, the authors were the two experiment leaders - two females acting in an authoritarian position. Therefore, we acted in a way that was opposite to the traditional female stereotype. Both Azadi and Torstensson (2013) and Lidgren and Westerberg (2015) conducted their experiments with one female and one male experiment leader. For the latter pair, they paid extra attention to this by hiring a man. The reason for this was to minimise the risk that the experiment leaders themselves would affect as priming themselves. In this study, the decision was made to have both the female authors as the experiment leaders because of the risks associated with hiring an external person. It was assumed, that an external person who was not knowledgeable in the theoretical framework and the procedure, would have affected the final outcome more negatively than by having two female experiment leaders.

### 6.2.3 DATA LIMITATIONS

One objective of this study was to have a sufficiently large sample size to be able to draw generalisable conclusions. 179 respondents is a marked increase in numbers from previous studies within the domain, but still not large and heterogeneous enough to draw generalisable conclusions that are valid for the entire population of Sweden. The uneven distribution of female (61\%) and male (39\%) respondents makes it harder to get statistically significant results, which
impacted the strength in some of the regression analyses. In future studies within the domain, we recommend to either enlarge number of respondents or/and have a more equal gender distribution.

### 6.3 GENERAL DISCUSSION AND CONTRIBUTION

Based on the ongoing debate in Sweden, that women as a social group do not have the same opportunities in the public world as men, the authors found it meaningful to widen the body of research. The motivation behind this thesis was to investigate whether the Swedish population structurally and subconsciously discriminate against women, both on a general level and in interpersonal communication. With the aim to better understand the behaviour, we wanted to investigate whether the reduced opportunities for women are explained by that women are perceived as less competent in the public world and/or if this behaviour is rooted in the male dominated system as a way to stay superior. Along with this, we wanted to see if the media, as a powerful stakeholder, could help to speed up the pace toward a gender equal Sweden. The question that was asked was: by publishing images of non-stereotypical women in the media, instead of the stereotypical ones that do not always mirror our contemporary society in a fair manner, would it be possible to decrease the assumed existing level of discrimination, or even to counteract it?

Earlier studies within the domain suggested to conduct a similar study to theirs, but investigating an older population since it was hypothesized, but not yet studied, that an older population would discriminate to a greater extent than a younger sample. Thus, in this thesis it was decided to investigate the general level of sexism, as well as building on previous findings within the SIB paradigm by focusing on the older population in Sweden. It could be questioned why the authors focused on the older population, who is not in the working life anymore and therefore are less important to investigate. However, our argument is that the elderly population is growing, constituting approximately $20 \%$ of the Swedish population (Boverket, 2016). These people are mom and dads, grandmothers and fathers, role models and board members. Thus, we found it important to understand this fifth of the population since they are influencing coming generations and are a part of the ongoing creation of our shared realities.

The starting point in this thesis was to create a baseline for general sexism in Sweden among the older population. As in line with the ongoing debate in society, the sample expressed a relatively high level of sexism, especially the older part of the sample. However, a positive
finding was that men who have had a female boss during their working life expressed a lower level of benevolent sexism, than the men who have not had one. When investigating if the general level of sexism was transmitted to interpersonal communication within the SIB, no discrimination against women in a natural state was proven. In a previous study by Lidgren and Westerberg (2015) it was found that discrimination was proven in the natural state and that it was possible to counteract men's discriminatory behaviour by priming of non-stereotypical women who are being spoken about. In our study, the result was reversed. The natural state led to no discrimination, whereas the priming of non-stereotypical women lead to discriminatory behaviour among men. Since it was the priming part that gave rise to the behaviour, the reason seems to be that women in power positions are seen as a threat to the male dominated system (Glick \& Fiske, 1996). Based on that, the women suffered a backlash effect, implying that women on a structural level not are seen as incompetent in the public world but rather as a threat (Rudman \& Phelan, 2008).

At the same time did women not discriminate other women, either in a natural state or when they were primed with images of non-stereotypical women. Instead, the priming created an even more positive impression than the natural state. As previously mentioned, women are adjusting their level of sexism in accordance to, and constantly lower than, the men (Glick et al., 2000). This could indicate that men are becoming more and more accepting and are adjusting their view of what women should and should not do in their roles as women. This might imply, since women do not discriminate at all, the level of sexism amongst men might not be far away from a level where women will not suffer a backlash effect or other gender-based discriminatory behaviour.

To conclude, these findings could be interpreted as the traditional stereotypes of women are still etched in our minds and are a part of our shared realities. At the same time, tendencies towards an improvement are also identified for this elderly population. However, when women go against the traditional stereotypes, it affects men in two ways. Firstly, the images of nonstereotypical women induce hostile sexism when being looked at for just a few minutes. Secondly, men who have had a female boss during their working life express a lower level of benevolent sexism. With this being said, it can be assumed that if the media began to more truly mirror how women look and behave, a short term effect of this might be an increase in hostile sexism via the backlash effect. However, in the long run it could be assumed that the representations of non-stereotypical women in the media might be seen as natural and thereby lower the level of benevolent sexism. When the level of benevolent sexism is lowered, the level
of hostile sexism follows (Glick \& Fiske, 2001). Our findings stress that the media does have the opportunity to accelerate the pace towards gender equality. In our study, 15 images of nonstereotypical women, used as priming, had a significant effect on both men's and women's behaviour. What would then happen if the media took more responsibility for making sure that women were portrayed in non-stereotypical ways, and that they had the same possibilities to express their thoughts and knowledge within the public world? The authors are convinced that the media industry has an important role to play in the gender equality movement.

### 6.4 PRACTICAL IMPLICATIONS

As discussed in the previous section, the media do have the power to influence our society towards a more equal reality. This can be done, by portraying women in a more dynamic manner and thereby reducing men's prejudices and discriminatory behaviour towards women. In the discussion below follows several practical implications, especially directed towards the media industry but also towards people who are publishing content in other industries.

We live in a society that is more or less gender equal when compared with other countries. However, when you are not aware of it, it is easy to miss the structural sexism identified in this thesis. The reasons to why it is easy to not pay attention to gender unequal media content is that it seems natural and in line with our norms. By this being said, we recommend all communicators to raise their awareness in this issue and take on their fair share of responsibility. This could be done in several ways: education, workshops, seminars, lectures, and the latest trends and research within the field. We believe that by paying more attention to, and by gaining deeper knowledge about gender equality, communicators could influence the movement in their daily tasks. Furthermore, this could improve the content that is produced and communicated in a wide range of channels.

As all publishing activities come with a great deal of responsibility, the authors would like to extend their recommendation to all companies and organisations that publish content. We urge that gender equality in communication should be implemented as a part of every company's tactics. Communication could be tracked on a weekly or monthly basis in order to ensure that the signals that are being communicated, both in text and images, are in line with gender equality. One example could be to implement a KPI that measures content diversity; how people are portrayed, as well as checking that content representation is evenly distributed between men and women.

At a strategic level, the authors would like to direct a recommendation towards CMO's, brand and communication managers, and other people in leading positions. The definition of advertising is changing towards a more brand directed communication that aims to influence people (Rosengren, 2016). This can be interpreted as that the marketing communication has a greater influence, especially outside the specific buying situation. The consumers have started to demand a more sustainable and conscious approach to the brands they identify themselves with. In order to stay relevant in the field and not to lose customers, it is important that every marketing and communication department evaluates their communication in a broader perspective. By broader, we mean that the communication should also contain and address environmental and social issues.

### 6.5 SUGGESTIONS FOR FURTHER RESEARCH

A number of limitations were made in the research design to allow it to fit into the given time frame. This factor, as well as the findings themselves, opens up a number of possibilities for further research within the domain.

This study did not find any discrimination in male-to-female or female-to-female communication in the natural state, and is therefore not in line with previous studies. The reason for this finding could be that seniors did not discriminate against women to the same extent as high school students, as found by Azadi and Torstensson (2013), and Lidgren and Westerberg (2015). However, as discussed, an explanatory factor for this ambiguity could also be the topic that was chosen to communicate around in the experiment. Thus, it would be of interest to alter the communicated topic even more, and to replicate this study on the elderly population to strengthen our findings.

The results also revealed that the priming with images of non-stereotypical women influenced subsequent behaviour. The subjects' behaviour were influenced by a single exposure of a few minutes duration. Therefore, it would be interesting to investigate how repeated exposures over a period of time would affect the sample's behaviour. For example, would more repetitions decrease or even remove the discovered backlash effect?

Finally, we also investigated sexism on a general level. The result showed that if you have had a female boss in your working life, you expressed a lower level of benevolent sexism. We think
this finding is really interesting, but we did not gather data to understand why this was the case. Therefore, it would be of interest to investigate further whether it is the fact of one's is having had a female boss that lowered the level of benevolent sexism, or if there are other explanations behind. Could it be possible that it is not the boss herself that explains this phenomenon, but rather the occupation or the industry?

## 7. REFERENCES

### 7.1 BOOKS

Allport, G. W. 1954. The nature of prejudice. Reading, Mass.: Addison-Wesley.
Bandura, A. 1971. Social Learning Theory. New York, NY: General Learning Press.
Bergström, B. 2014. Reklam, strategiskt och Kreativt. Stockholm: Carlsson Bokförlag
Bryman, A. \& Bell, E. 2011. Företagsekonomiska forskningsmetoder. 2nd edition. Oxford: Oxford University Press

Eagly, A. H. 1987. Sex Differences in Social Behavior: A Social-Role Interpretation. Hillsdale: NJ Jones, R.A. 1982. Perceiving other people: Stereotyping as a process of social cognition. In Miller, A. G. (Eds.), In the Eye of the Beholder: Contemporary Issues in Stereotyping. New York: Praeger

Lippmann, W. 1922. Public Opinion. New York: Harcourt, Brace.
Malhotra, N. K. 2010. Marketing Research: An Applied Orientation, 6th edition. Upper Saddle
Ruble, D.N. \& Ruble, T. L. 1982. Sex Stereotypes. In Miller, A. G. (Eds.), In the Eye of the Beholder: Contemporary Issues in Stereotyping. New York: Praeger

Stephan, W.G. \& Rosenfield, D. 1982. Contemporary issues in stereotyping. In Miller, A. G. (Eds.), In the Eye of the Beholder: Contemporary Issues in Stereotyping. New York: Praeger

Söderlund, M. 2005. Mätningar och mått. Malmö: Liber.
Söderlund, M. 2010. Experiment med människor. Malmö: Liber.

### 7.2 JOURNALS AND PUBLICATIONS

Azadi, A. \& Torstensson, E. (2013). Marketing equality: Counteracting structural gender discrimination using non-objectifing portrayals of women. Bachelor Thesis in Marketing, Stockholm School of Economics, Department of Marketing and Strategy.

Bargh, J.A., Chen, M. \& Burrows, L. 1996, "Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action", Journal of personality and social psychology, vol. 71, no. 2, pp. 230-244.

Barreto, M. \& Ellemers, N. 2005, "The burden of benevolent sexism: How it contributes to the maintenance of gender inequalities", European Journal of Social Psychology, vol. 35, no. 5, pp. 633-642.

Bissell, K. \& Parrott, S. 2013. "Prejudice: The Role of the Media in the Development of Social Bias". Journalism \& Communication Monographs, vol. 15, no. 4, pp. 219-270.

Belkaoui, A. \& Belkaoui, J.M. 1976, "A Comparative Analysis of the Roles Portrayed by Women in Print Advertisements: 1958, 1970, 1972", Journal of Marketing Research (JMR), vol. 13, no. 2, pp. 168-172.

Blair, I.V. 2002, "The Malleability of Automatic Stereotypes and Prejudice", Personality \& Social Psychology Review (Lawrence Erlbaum Associates), vol. 6, no. 3, pp. 242-261.

Bussey, K. \& Bandura, A. 1999, "Social cognitive theory of gender development and differentiation", Psychological review, vol. 106, no. 4, pp. 676-713.

Calogero, R.M. 2004, "A test of objectification theory: The effect of the male gaze on appearance concerns in college women", Psychology of Women Quarterly, vol. 28, no. 1, pp. 1621.

Dahlen, M. \& Rosengren, S. 2016, "If Advertising Won't Die, What Will It Be? Toward a Working Definition of Advertising", Journal of Advertising, vol. 45, no. 3, pp. 334-345.

Davidson, M.M., Gervais, S.J., Cavinez, G.L. \& Cole, B.P. 2013, "A Psychometric Examination of the Interpersonal Sexual Objectification Scale Among College Men", Journal of Counseling Psychology, vol. 60, no. 2, pp. 239-250.

Davies, P.G., Spencer, S.J., Quinn, D.M. \& Gerhardstein, R. 2002, "Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally", Personality and Social Psychology Bulletin, vol. 28, no. 12, pp. 1615-1628.

Eagly, A.H. \& Karau, S.J. 2002, "Role congruity theory of prejudice toward female leaders", Psychological review, vol. 109, no. 3, pp. 573-598.

Echterhoff, G., Higgins, E.T. \& Groll, S. 2005, "Audience-tuning effects on memory: The role of shared reality", Journal of personality and social psychology, vol. 89, no. 3, pp. 257-276.

Echterhoff, G., Higgins, T. E. \& Levine, J. M. 2009. "Shared Reality: Experiencing Commonality With Others' Inner States About the World". Perspectives on Psychological Science, vol. 4, no. 5, pp. 496-521.

Eisend, M. 2010, "A meta-analysis of gender roles in advertising", Journal of the Academy of Marketing Science, vol. 38, no. 4, pp. 418-440.

Festinger, L. 1950. "Informal Social Communication". Psychological Review, vol. 57, no. 5, pp. 271-282.

Fiske, S. T., Cuddy, A. J. C., Glick, P., \& Xu, J. 2002. "A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition". Journal of Personality and Social Psychology, vol. 82, no. 6, pp. 878-902.

Fournier, S. 1998, "Consumers and Their Brands: Developing Relationship Theory in Consumer Research", Journal of Consumer Research, vol. 24, no. 4, pp. 343-373.

Fredrickson, B.L. \& Roberts, T.-. 1997, "Toward understanding women's lived experiences and mental health risks", Psychology of Women Quarterly, vol. 21, no. 2, pp. 173-206.

Garcia, R.L., Earnshaw, V.A. \& Quinn, D.M. 2015, "Objectification in Action: Self- and OtherObjectification in Mixed-Sex Interpersonal Interactions", Psychology of Women Quarterly, vol. 40, no. 2, pp. 213-228.

Gerbner, G \& Gross, L. 1976, Living With Television: The Violence Profile. Journal of Communication, vol. 26, no. 2, pp. 173-199.

Gervais, S.J., Vescio, T.K. \& Allen, J. 2011, "When what you see is what you get: The consequences of the objectifying gaze for women and men", Psychology of Women Quarterly, vol. 35, no. 1, pp. 5-17.

Glick, P. \& Fiske, S.T. 2001, "An Ambivalent Alliance", American Psychologist, vol. 56, no. 2, pp. 109.

Glick, P. \& Fiske, S.T. 1996, "The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism", Journal of Personality \& Social Psychology, vol. 70, no. 3, pp. 491-512.

Glick, P., Fiske, S.T., Mladinic, A., Saiz, J.L., Abrams, D., Masser, B., Adetoun, B., Osagie, J.E., Akande, A., Alao, A., Brunner, A., Willemsen, T.M., Chipeta, K., Dardenne, B., Dijksterhuis, A., Wigboldus, D., Eckes, T., Six-Materna, I., Expósito, F. \& Moya, M. 2000, "Beyond Prejudice as Simple Antipathy: Hostile and Behavior and Benevolent Sexism Across Cultures", Journal of Personality \& Social Psychology, vol. 79, no. 5, pp. 763-775.

Good, J.J., Woodzicka, J.A. \& Wingfield, L.C. 2010, "The effects of gender stereotypic and counter-stereotypic textbook images on science performance", Joumal of Social Psychology, vol. 150, no. 2, pp. 132-147.

Hammond, M. D. and Overall, N.C. 2015, "Benevolent Sexism and Support of Romantic Partner's Goals: Undermining Women's Competence While Fulfilling Men's Intimacy Needs", Personality and Social Psychology Bulletin, vol. 41, no. 9, pp. 1180-1194.

Hedberg. P. H. 2012. Negative Discrimination by Memory Trace: Biased Recall and Liking of Conversation Topics after Communication with Females vs Males. In: Hedberg, P. H. (ed.), Interpersonal Society: Essays on shared beliefs, trust, mnemonic oppression, distributive faimess, and value creation. Stockholm: Stockholm School of Economics.

Heflick, N.A. \& Goldenberg, J.L. 2009, "Objectifying Sarah Palin: Evidence that objectification causes women to be perceived as less competent and less fully human", Journal of experimental social psychology, vol. 45, no. 3, pp. 598-601.

Heflick, N.A., Goldenberg, J.L., Cooper, D.P. \& Puvia, E. 2011, "From women to objects: Appearance focus, target gender, and perceptions of warmth, morality and competence", Journal of experimental social psychology, vol. 47, no. 3, pp. 572-581.

Higgins, E. T. (1992) Achieving "shared reality" in the communication game: A social action that creates meaning. Journal of Language and Social Psychology, 11, 107-131.

Higgins, E.T. \& McCann, C.D. 1984, "Social encoding and subsequent attitudes, impressions, and memory: "Context-driven" and motivational aspects of processing", Journal of personality and social psychology, vol. 47, no. 1, pp. 26-39.

Higgins, E.T. \& Pittman, T.S. 2008, "Motives of the Human animal: Comprehending, managing, and sharing inner states", Annual Review of Psychology, vol. 59, pp. 361-385.

Higgins, E.T. \& Rholes, W.S. 1978, ""Saying is believing": Effects of message modification on memory and liking for the person described", Journal of experimental social psychology, vol. 14, no. 4, pp. 363-378.

Hjalmarsson, S \& Wallin, J. 2010. Äldres motiv för resande. Bachelor Thesis, Södertörn University College, School of Business Studies.

Holbrook, M.B. 1987, "Mirror, Mirror, on the Wall, What's Unfair in the Reflections on Advertising?", Journal of Marketing, vol. 51, no. 3, pp. 95-103.

Jonsson, N \& Zhao, J. 2014. Counteracting Subconscious Gender Discrimination - A Study on Perspective-taking and Perceived Competence as Mediating Variables in Interpersonal Communication.
Master Thesis in Marketing and Media Management, Stockholm School of Economics, Department of Marketing and Strategy.

Jost, J. T. \& Banaji, M. R. 1994. "The role of stereotyping in system-justification and the production of false consciousness". British Journal of Social Psychology, vol. 33, pp. 1-27.

Jost, J.T., Banaji, M.R. \& Nosek, B.A. 2004, "A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo", Political Psychology, vol. 25, no. 6, pp. 881-919.

Kahneman, D. 2015, "Thinking Fast and Slow: From Bestseller to Textbook: Thinking, Fast and Slow", RAE Revista de Administracao de Empresas, vol. 55, no. 1, pp. 99-100.

Lidgren, J. \& Westerberg, E. (2015). Gender equality and media: Counteracting structural gender discrimination through equal representation of women and men media. Master Thesis in Marketing, Stockholm School of Economics, Department of Marketing and Strategy.

Mackie, D.M. \& Smith, E.R. 1998, "Intergroup Relations: Insights from a Theoretically Integrative Approach", Psychological review, vol. 105, no. 3, pp. 499-529.

Mastro, D., Behm-Morawitz, E. \& Ortiz, M. 2007, "The cultivation of social perceptions of latinos: A mental models approach", Media Psychology, vol. 9, no. 2, pp. 347-365.

Morris, E.A. \& Guerra, E. 2015. "Are we there yet? Trip duration and mood during travel", Transportation Research Part F: Traffic Psychology and Behaviour, vol. 33, pp. 38-47.

Prentice, D. A., \& Carranza, E. 2002. "What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes".
Psychology of Women Quarterly, vol. 26, pp. 269-281.
Pollay, R.W. 1986, "The Distorted Mirror: Reflections on the Unintended Consequences of Advertising", Journal of Marketing, vol. 50, no. 2, pp. 18-36.

Ritson, M. \& Elliott, R. 1999, "The social uses of advertising: An ethnographic study of adolescent advertising audiences", Journal of Consumer Research, vol. 26, no. 3, pp. 260-277.

Rudman, L.A. 1998, "Self-Promotion as a Risk Factor for Women: The Costs and Benefits of Counterstereotypical Impression Management", Journal of personality and social psychology, vol. 74, no. 3, pp. 629-645.

Rudman, L.A. \& Phelan, J.E. 2008, "Backlash effects for disconfirming gender stereotypes in organizations", Research in Organizational Behavior, vol. 28, pp. 61-79.

Signorielli, N. \& Kahlenberg, S. 2001, "Television's World of Work in the Nineties", Journal of Broadcasting \& Electronic Media, vol. 45, no. 1, pp. 4.

Spencer, S.J., Steele, C.M. \& Quinn, D.M. 1999, "Stereotype Threat and Women's Math Performance", Journal of experimental social psychology, vol. 35, no. 1, pp. 4-28.

### 7.3 ELECTRONIC SOURCES

Abrams, D \& Swift, H.J. 2012. Experiences of Sexism - Findings from the European Social Survey. European Research Group on Attitudes to Age.
http://www.eurage.com/files/Sexism_in_the_ESS_EURAGE_ResearchReport_1(1).pdf_Viewed: 2016-11-14).

Allbright, 2016. One in five executives are women. Allbright https://static1.squarespace.com/static/5501a836e4b0472e6124f984/t/570215caf699bbaade5 b89bc/1459754444879/AllBrightrapporten+2016_ENG.pdf (Viewed: 2016-11-10).

Edström, M \& Jacobsson, J. 2015. Räkna med kvinnor - Global Media Monitoring Project 2015 Nationell Rapport Sverige. Allt är möjligt. http://jmg.gu.se/digitalAssets/1559/1559115_rakna-med-kvinnor-2015.pdf (Viewed: 2016-10-28).

McKinsey Global Institute. 2015. How advancing women's equality can add $\$ 12$ trillion to global growth. McKinsey \& Company. http://www.mckinsey.com/global-themes/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth (Viewed 2016-11-01).

Media Dynamics, Inc. Adults Spend Almost 10 Hours Per Day With The Media, But Note Only 150 Ads Media Dynamics, Inc. http://www.mediadynamicsinc.com/uploads/files/PR092214-Note-only-150-Ads-2mk.pdf (Viewed 2016-10-23).

The Swedish Women's Lobby. 2016. 15:57-Lön hela dagen. The Swedish Women's Lobby http://sverigeskvinnolobby.se/en/project/1552-campaign-on-the-gender-pay-gap/ (Viewed: 2016-11-03).

World Econmic Forum. 2015. Global Gender Gap Report 2015. World Econmic Forum. http://reports.weforum.org/global-gender-gap-report-2015/economies/\#economy=SWE (Viewed 2016-11-18).

Boverket. 2016. Andelen ädre ökar. Boverket.
http://www.boverket.se/sv/samhallsplanering/bostadsplanering/bostadsmarknaden/bostadsma rknaden-for-olika-grupper/aldre/ (Viewed 2016-12-02).

Nationalencyklopedin, 2016. Diskriminering. Nationalencyklopedin,
http://www.ne.se/uppslagsverk/encyklopedi/lång/diskriminering (Viewed 2016-12-03).

### 7.4. Experimental Material

### 7.4.1 Image References

Page 84/98
Image A:
Unknown. (n.d) Untitled. http://arc.hhs.se/download.aspx?Mediumld=1867 (Viewed: 2016-0910).

Image B:
Unknown. (n.d) Untitled. http://arc.hhs.se/download.aspx?Mediumld=1867 (Viewed: 2016-0910).

Image C:
Unknown. (n.d) Untitled. http://arc.hhs.se/download.aspx?Mediumld=1867 (Viewed: 2016-0910).

## Page 85/99

Image A:
Simonsson, A. (n.d) Untitled. http://chef.se/chef-har-testat-stina-honkamaa/ (Viewed: 2016-0910).

Image B:
Persson, B-Å. (n.d) Untitled.
http://www.nsd.se/inc/imagehandler.ashx?id=3479864\&height=312\&width=468\&quality=high (Viewed: 2016-09-10).

Image C:
Unknown. (n.d) Untitled. http://btnaringsliv.files.wordpress.com/2013/01/stina.jpg (Viewed: 2016-09-10).

Page 86/100
Image A:
Rupp, N. (2012) Untitled.
http://www.zimbio.com/pictures/OuTQcskhuYG/DLD+Conference+2012+Day+2/GykTdfkLw_R (Viewed: 2016-09-10).

Image B:
Schulz, H-R. (2009) Untitled.
https://www.welt.de/wirtschaft/article4076766/Siemens-Vorstand-Kux-krempelt-den-Einkaufum.html (Viewed: 2016-09-10).

Image C:
Unknown. (n.d) Untitled. http://www.swissleader.ch/img/teaserbilder/kux_800x533920x600.jpg (Viewed: 2016-09-10).

## Page 87/101

Image A:
Acker, D. (n.d) Untitled http://thelegacyproject.co.za/2015/08/quotes-from-ursula-burns-chairwoman-ceo-of-xerox/ (Viewed: 2016-09-10).

Image B:
Unknown. (n.d) Untitled.
http://geronimo.typepad.fr/geronimo/2010/03/6-leadership-lessons-from-ursula-burns-bold-bets-and-back-to-basics.html (Viewed: 2016-09-10).

Image C:
Unknown. (n.d) Untitled. http://static.makers.com/maker/UrsulaBurns_Thumbnail_RightSize.jpg (Viewed: 2016-09-10).

## Page 88/102

Image A:
Unknown. (n.d) Untitled. http://arc.hhs.se/download.aspx?Mediumld=1867 (Viewed: 2016-0910).

Image B:
Segar, M. [n.d] Untlitled.
http://www.theatlantic.com/sexes/archive/2013/03/sheryl-sandberg-gives-american-women-a-performance-review/273865/ (Viewed: 2016-09-10).

Image C:
Unknown. (2013) Untitled. http://thinkers50.com/biographies/sheryl-sandberg/ (Viewed: 2016-09-10).

## Page 77/91

Image A:
Abhiiit, T. (2009) Red Apple. http://commons.wikimedia.org/wiki/File:Red_Apple.jpg (Viewed: 2016-09-10).

Image B:
Roberta, F. (2007) Apple Stark. http://commons.wikimedia.org/wiki/File:Apple_stark_s.jpg (Viewed: 2016-09-10).

Image C:
Fir0002/Flagstaffotos (2005) Golden delecious apple fruit.
http://commons.wikimedia.org/wiki/File:Golden_delicious_apple.jpg (Viewed: 2016-09-10).
Page 78/92
Image A:
Fir0002/Flagstaffoto (2009) Orange and cross section.
http://commons.wikimedia.org/wiki/File:Orange_and_cross_section.jpg (Viewed: 2016-09-10).

Image B:
Ankara (2011) Citrus sinensis. http://commons.wikimedia.org/wiki/File:Citrus_sinensis_closeup.jpg (Viewed: 2016-09-10).

Image C:
Unknown (2005) Ambersweet oranges.
http://commons.wikimedia.org/wiki/File:Ambersweet_oranges.jpg (Viewed: 2016-09-10).

## Page 79/93

Image A:
Fir0002/Flagstaffotos (2006) Bananas white background.
http://commons.wikimedia.org/wiki/File:Bananas_white_background.jpg (Viewed: 2016-09-10).
Image B:
Hopson, S. (2006) Bananas. http://commons.wikimedia.org/wiki/File:Bananas.jpg (Viewed: 2016-09-10).

Image C:
Fir0002/Flagstaffotos (2009) Banana and cross section. Viewed: 2016-09-10 from URL:
http://commons.wikimedia.org/wiki/File:Banana_and_cross_section.jpg

## Page 80/94

Image A:
Unknown (2005) Pears. http://commons.wikimedia.org/wiki/File:Pears.jpg (Viewed: 2016-0910).

Image B:
Unknown (2005) Blake's Pride pears.
http://commons.wikimedia.org/wiki/File:Blake\'s_Pride_pears.jpg (Viewed: 2016-09-10).
Image C:
Kombucha (2010) Alexander Lucas.
http://commons.wikimedia.org/wiki/File:Alexander_Lucas_10.10.10.jpg (Viewed: 2016-09-10).

## Page 81/95

Image A:
Fir0002/Flagstaffotos (2005) Wine grapes.
http://commons.wikimedia.org/wiki/File:Wine_grapes03.jpg (Viewed: 2016-09-10).
Image B:
Unknown (2006) Concord Grapes. http://en.wikipedia.org/wiki/File:ConcordGrapes.jpg (Viewed: 2016-09-10).

Image C:
Unknown (2006) More Grapes. http://commons.wikimedia.org/wiki/File:More_grapes.jpg (Viewed: 2016-09-10).

## APPENDIX

## Appendix A - EXPERIMENTAL SCRIPT

## Script in Swedish

Experimentledare A: Hej! Jag heter Anna Söderlind, och går sista året på Handelshögskolan. Tillsammans med min studiekamrat Frida så skriver vi nu varsin avslutande examensuppsats på skolan och båda två behöver er hjälp för att skriva klart.

Vi kommer nu göra två undersökningar tillsammans med er, och eftersom båda två gör undersökningar kom vi på att vi kunde slå ihop två tillfällen och dessutom hjälpa varandra. Ni kommer alltså att göra två separata undersökningar idag och vi kommer att börjar med min. Ditt deltagande är anonymt och helt frivilligt.

Jag skriver min uppsats inom marknadsföring som handlar om att kommunicera effektivt med bilder. Ni kommer att få varsitt häfte, med tre bilder per sida. Det är totalt fem sidor, och alltså 15 bilder. Din uppgift är att:

1. Titta noggrant på bilderna
2. Rangordna de tre bilderna på varje sida från 1 till 3 . Du skriver en etta vid den bild du gillar bäst, en tvåa vid den bild du gillar näst bäst och en trea vid den bild du gillar minst.
3. Efter bilderna kommer en enkät som handlar om undersökningen i stort.

Det finns inga rätt eller fel svar. Det är viktigt att ni inte pratar med varandra under tiden ni fyller i häftet och ni har 10 minuter på er. Jag kommer dela ut häftena.

## [EXPERIMENTET DEL 1 UTFÖRS] (10 min)

Tack så jättemycket för att ni deltog i min studie!

Experimentledare B: Hej, jag heter som sagt Frida och jag skriver min masteruppsats inom ledarskap. Jag undersöker hur människor kommunicerar med och förstår varandra. Mer specifikt tittar jag på hur människor, genom skriftliga meddelanden, lyckas få andra att förstå vad de menar.

Min undersökning är lite mer komplicerad än Annas. Ni i denna buss, har idag blivit ihopmatchad med en annan buss med SPF:are, som också är på väg till/från Åland. Denna buss kallar vi er systergrupp, och ni kommer att göra min undersökning tillsammans med dem. Ni har alla, via era nummer på plattan, blivit ihopmatchad med en varsin person på den andra bussen med hjälp av min uppsatskollega. Din uppgift i min undersökning är att skriva ett meddelande till din syste senior i den andra bussen.

Ditt meddelande kommer att handla om ett visst företag. Jag har tidigare träffat er systergrupp, där vi pratat om olika företag, vilket gör att jag vet om just din systersenior är positivt eller negativt inställd till företaget.

Jag kommer att börja med att dela ut två papper. På det ena står det vilken senior just du ska kommunicera med, vilket företag ni ska kommunicera kring, samt om din senior är positiv eller negativ till företaget. På det andra pappret finns information om ditt företag.

Du kommer att få ca sex minuter på dig att läsa den här texten så noggrant du bara kan och sen kommer vi att samla in texterna igen. Du får då ett tomt papper där du ska beskriva företaget du precis läst om, på ett sätt så att din mottagare i den andra bussen förstår vilket företag du beskriver utan att du nämner företagets namn

## [EXPERIMENT PART 2, BLOCK 1 UTFÖRS] (6min)

Vi kommer nu hämta in papperet med information om ert företag, och ge er ett tomt papper där du ska skriva ditt meddelande om företaget. Ditt meddelande kommer jag att fota av och skicka till den senior du har blivit ihopmatchad med. Hans eller henne uppgift är då, att med hjälp av din beskrivning, lista ut vilket företag du har beskrivit. Därför är det väldigt viktigt att du inte nämner företagets namn i din beskrivning. Ni har nu åtta min på er att skriva era meddelanden.

## [EXPERIMENT PART 2, BLOCK 2 UTFÖRS ] (8 min)

Vi kommer nu att hämta in, fota av och skicka era meddelanden till systergruppen, som sitter redo att ta emot era meddelanden. Om några minuter kommer ni då att få reda på huruvida just din mottagare har lyckats identifiera företaget du har beskrivit. Under tiden som ni väntar på svar får ni en annan uppgift att utföra. Det är viktigt att ni är tysta även under denna del.

## [EXPERIMENT PART 2, BLOCK 3 UTFÖRS ] (NÅGRA MINUTER)

Nu är klockan XX:XX, och vi har fått svar från den andra bussen. Det är viktigt att ni inte pratar med varandra medan jag delar ut svaren och att ni inte jämför era resultat.

Ni får även ett tomt papper, och jag vill att ni där skriver ned originaltexten om företaget som du läste i början av experimentet så ordagrant som möjligt. Skriv så läsligt ni bara kan. Ni har 6 minuter på er och om ni blir klara innan, sitt bara tysta och invänta vidare instruktioner.
[EXPERIMENT PART 2, BLOCK 4 UTFÖRS] (6 min)

Nu har det gått sex minuter, och jag har bara en sista enkäten kvar. Det är frågor om undersökningen, om samhället, och frågor om er själva. Det är ganska många frågor, men det
är som sagt det sista momentet. Jag är väldigt tacksam för att ni fyller i hela. När ni är klara, räck upp handen så kommer vi och samlar in.

## [EXPERIMENT PART 3 UTFÖRS] (20 min)

Tack så mycket för att ni deltog i min undersökningar!

## Script in English

Experimenter A: Hello! My name is Anna Söderlind, and I am in my last year at the Stockholm School of Economics. Together with my friend Frida, we are both currently writing a Master's thesis in school, and we need your help in order to finalise our two theses.

We are going to do two experiments with you, because we both are looking at older people in society, and we thought that we could do both at the same time, and help each other at the same time. You will do two separate studies today, and we will start with mine. Your participation is anonymous and totally voluntarily.

I am doing my thesis within marketing and more specifically how to communicate effectively with pictures. You will get a booklet each, with three pictures per page and five pages. In total 15 pictures. Your task is to:

1. Look at the pictures carefully
2. Rank the three pictures on each page from 1 to 3 . You write a " 1 " for the picture that you like the most, a " 2 " for the picture you like second best and a " 3 " for the picture that you like the least.
3. After the pictures comes a short survey, about this study in general.

There are no right or wrong answers, and it is important that you do not talk to each other while you are filling out the booklet. You have ten minutes to complete the task. I will now start to hand out the booklets.

## [EXPERIMENT PART 1 IS UNDERWAY] (10 min)

I want to thank you all for participating in the study.
Experimenter B: Hi! As Anna already told you, my name is Frida, and I am writing my Master's thesis in management. I am looking at how people communicate and understand each other. More specifically am I investigating how people can make others understand what they mean through written messages.

My study is a bit more complicated than Anna's. You in this bus, have been paired with another bus, also representing SPF on its was to/from the Åland ferry. The other bus is called your "sister bus" and you will do this study together with them. Thanks to the number on your clipboard, you have all, been matched with a person in the other bus, with my thesis partner.

Your task in my study is to write a message to the person you have been matched with on the other bus.

Your message will be about a certain company. I met your sister group earlier, and we talked about different companies. This makes it possible for me to know if the person you are being matched with feels positively or negatively towards the company.

I will start by handing out two papers. On the first, there is information about which senior you have been matched with, and which company you will communicate about, and whether your senior partner is positive or negative towards the company. On the other paper, information will be provided about the company.

You will have about six minutes to read the text as careful as you can, and then we will collect the company information text again. Then will you receive an empty sheet of paper, where you should describe the company you just read about, in such a way that you partner in the other bus can figure by name.

## [EXPERIMENT PART 2, BLOCK 1 IS UNDERWAY] (6min)

We will now collect the paper with the information about "your" company, and give you an empty sheet of paper where you write your message about the company. Then, I will photograph it and send it to the other bus. Your partner senior's task is to figure out which company you have described to them with help of your message. Therefore, it is very important than you do not mention the name of the company in your message. You have eight minutes to write your message.

## [EXPERIMENT PART 2, BLOCK 2 IS UNDERWAY] (8 min)

We will now collect, photograph, and send your messages to the sister group, who are ready in the other bus to receive your messages. In a few minutes, you will find out if your partner senior managed to figure out which company you described. While you are waiting, you will be given another task. It is important that you are quiet even during this part.

## [EXPERIMENT PART 2, BLOCK 3 IS UNDERWAY] (A FEW MINUTES)

Now the time is $\mathrm{XX}: \mathrm{XX}$, and we have got the answers from the other bus. It is important that you do not talk to each other while I am handing out the results, and that you do not compare your different results.

You will also be given an empty sheet of paper, where I want you to write down the original text about your company, that you read in the beginning of the study, as carefully as possible. Please write as legibly as possible. You have six minutes to do this, and if you finish early, please just sit quietly until we give you further instructions.

## [EXPERIMENT PART 2, BLOCK 4 IS UNDERWAY] (6 min)

Now the six minutes have passed, and we only have the final survey left. It consists of questions about the study, about society and about yourself. I will be grateful if you could fill out all of the questions. When you are done, raise your hand and I will collect it.
[EXPERIMENT PART 3 IS UNDERWAY] (20 min)

Thank you very much for participating in my study.

# Appendix B - Experimental Material, Experiment Part 1 

## EXPERIMENT MATERIAL IN SWEDISH

## Instruktioner

Detta häfte innehåller totalt 15 bilder. 3 bilder per sida. Var vänlig titta på bilderna noggrant samt rangordna dem enligt instruktionerna på nästa sida.

När Du är klar, var vänlig lägg ihop häftet. Därefter kommer vi att samla in svaren.

Du har 10 minuter på Dig att genomföra undersökningen och Du får inte prata med någon under tiden. Dina svar kommer att behandlas anonymt.

Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


## BILD B



BILD C


Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


## BILD B



## BILD C



Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


## BILD B



BILD C


Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3:a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


## BILD B



BILD C


Var vänlig rangordna bild $A, B$ och $C$ på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


BILD B


BILD C


Nedan följer några frågor rörande undersökningen. Ringa in den siffra som överensstämmer med din uppfattning:

Bilderna ger mig en positiv känsla
Stämmer inte alls Stämmer mycket väl
1
2
3
4
5
6
7
Stämmer mycket väl
6
7

Bilderna är tilltalande
Stämmer inte alls
1
2
3
4
5
Stämmer mycket väl
$6 \quad 7$

## Instruktioner

Detta häfte innehåller totalt 15 bilder. 3 bilder per sida. Var vänlig titta på bilderna noggrant samt rangordna dem enligt instruktionerna på nästa sida.

När Du är klar, var vänlig lägg ihop häftet. Därefter kommer vi att samla in svaren.

Du har 10 minuter på Dig att genomföra undersökningen och Du får inte prata med någon under tiden. Dina svar kommer att behandlas anonymt.

Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.


BILD B


## BILD C



Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2: a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A


BILD B


BILD C


RANGORDNA 1-3:


Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A
RANGORDNA 1-3:


BILD B


## BILD C



Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A


BILD B


## BILD C



RANGORDNA 1-3:


Var vänlig rangordna bild $\mathrm{A}, \mathrm{B}$ och C på denna sida genom att sätta en 1:a i rutan vid den bild Du tycker bäst om, en 2:a i rutan vid den bild Du tycker näst bäst om, och en 3: a i rutan vid den bild Du tycker sämst om.

BILD A


BILD B


BILD C


RANGORDNA 1-3:


Nedan följer några frågor rörande undersökningen. Ringa in den siffra som överensstämmer med din uppfattning:

Bilderna ger mig en positiv känsla
Stämmer inte alls
Stämmer mycket väl
1
2
3
4
5
6
7
Jag tycker om bilderna
Stämmer inte alls
Stämmer mycket väl
1
2
3
4
5
6
7
Bilderna är tilltalande
Stämmer inte alls
1
2
3
4
5
Stämmer mycket väl
6
7

Baserat på bilderna på kvinnorna, hur tycker du att följande ord stämmer in på personerna? Ringa in den siffra som överensstämmer med din uppfattning.

|  | Stämmer inte alls |  | Stämmer helt |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kompetent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Pålitlig | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Skicklig | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## Experiment material in Enguish

## Instructions

This booklet contains 15 pictures in total. Three pictures per page. Please look at the pictures carefully and then rank them according to the instructions on the next page.

When you are done, please close the booklet. We will then collect them.
You have ten minutes to complete the survey, and you are not allowed to talk to anyone during the task. Your answers will be treated anonymously.

Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


RANK 1-3:


## PICTURE B



## PICTURE C



Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A
RANK 1-3:


PICTURE B


## PICTURE C



Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.


## PICTURE B



## PICTURE C



Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


## PICTURE B



## PICTURE C



Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A
RANK 1-3:


PICTURE B


## PICTURE C



Below you will find a few questions regarding the study. Please make a circle around the number that corresponds to your opinion.

The pictures give me a positive feeling Do not agree at all Agree totally
1
2
3
4
5
6
7

I like the pictures
Do not agree at all
1
2
3
4
5

- 2

Agree totally

The pictures are appealing
Do not agree at all
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
$\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & 6 & 7\end{array}$
Agree totally

## Instructions

This booklet contains 15 pictures in total. Three pictures per page. Please look at the pictures carefully and then rank them according to the instructions on the next page.

When you are done, please close the booklet. We will then collect them.
You have ten minutes to complete the survey, and you are not allowed to talk to anyone during the task. Your answers will be treated anonymously.

Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


RANK 1-3:


Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


PICTURE B

## PICTURE C




Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


PICTURE B


## PICTURE C



RANK 1-3:


Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


PICTURE B


## PICTURE C




Please rank the pictures $A, B$ and $C$ on this page by putting a " 1 " in the box right next to the picture you like the most, a " 2 " in the box right next to the picture you like the second best and a " 3 " in the box right next to the picture you like the least.

PICTURE A


PICTURE B


PICTURE C


Below you will find a few questions regarding the study. Please make a circle around the number that corresponds to your opinion.

The pictures give me a positive feeling
Do not agree at all
1
2
3
4
5
6
7

I like the pictures
Do not agree at all
1
2
3
4
5
6
7

The pictures are appealing
Do not agree at all
1
2
3
4
5
6
7

Based on the pictures of the women, how well do you think these words corresponds to the person? Please make a circle around the number that correspond to your opinion.

Do not agree at all
Agree totally

| Competent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Trustworthy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Skilful | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## Appendix C - Experimental Material, Experiment Part 2

## Experiment material in Swedish

## Instruktioner

Den här studien handlar om hur människor kommunicerar med och förstår varandra.

1. Du har blivit ihopmatchad med en av 50 pensionärer som också utför denna undersökning i detta nu på en annan buss.
2. Du ska nu kommunicera med denna person genom att skriva ett meddelande till honom/henne.
3. I detta häfte hittar du en beskrivande text om ett specifikt företag och Ditt meddelande till honom/henne ska handla om just detta företag.
4. Du har 6 minuter på dig att läsa igenom texten noggrant.
5. Efter 6 minuter samlar vi in texten och du får ett tomt papper. På det ska du skriftligt återberätta texten om ditt företag, på ett sätt så att mottagaren förstår vilket företag du menar, utan att du nämner företagets namn.

I ditt fall ska du skicka ett meddelande om företaget Beta till en man/kvinna som heter Stig/Karin. Det kan även vara intressant för dig att veta att han/hon har en positiv inställning till företaget.

Försök nu att beskriva det företag Du precis läst om med Dina egna ord så att Stig/Karin kan identifiera företaget. Meningen är att deltagaren Du kommunicerar med ska kunna identifiera vilket företag Du beskriver utan att Du nämner företagets namn i Ditt meddelande. Om raderna ej räcker till, skriv på baksidan av papperet.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Var vänlig rita av följande figurer. Det är viktigt att Du inte pratar med någon under tiden.
1.

2.

3.


Stig/Karin har lyckats identifiera företaget Beta. Försök nu att skriva ned originaltexten om företaget som Du läste I början av undersökningen så ordagrant som möjligt. Om raderna ej räcker till, skriv på baksidan av papperet. Var vänlig skriv läsligt.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Experiment material in English

## Instructions

This study is about how people communicate and understand each other.

1. You have been matched with one of 50 seniors who are also, in this moment, participating in this study on another bus.
2. You will now communicate with that person by writing a message to him/her.
3. In this booklet, you will find a descriptive text about a specific company, and your message to him/her will be about that company.
4. You have six minutes to read through the text carefully.
5. After six minutes will we collect the text and you will receive an empty sheet of paper. On that, you must recall the text, in a way that the recipient can understand what company you are describing, without mentioning the name of the company.

In your case, you will send a message about the company Beta to a man/women which name is Stig/Karin. It can also be interesting for you to know that he/she has a positive view of the company.

Now try to describe the company you just read about in your own words so that Stig/Karin can identify the company. The aim is that the participant you are communicating with should be able to identify which company you are describing, without mentioning the name of the company. If you need more space, please use the back of the paper.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Please sketch the following. It is important that you do not talk with others while doing the task.
1.

2.

3.


Stig/Karin has succeed to identify the company Beta. Now, try to recall the original text about the company that you read in the beginning of the session as similar as possible. If you need more space, please use the back of the page. Please write legibly.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix D - Experimental Material, Experiment Part 3

## EXperiment material in Swedish

Nedan följer ett antal frågor rörande undersökningen. Vi är mycket tacksamma för att du svarar på samtliga frågor. Ringa in den siffra som överensstämmer med din uppfattning:

1. Vad tycker du om företaget Beta som du skrev om?

Gillar inte alls
12
3
4
5
Gillar väldigt mycket
6
7
2. På vilket sätt skulle du beskriva företaget Beta?

| Mycket negativt |  |  |  | Väldigt positivt |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |

3. Vad tyckte du om personen du kommunicerade skriftligt med? Svara så gott du kan även om du inte fått något tydligt intryck av din mottagare.

Gillar inte alls
12

3
4
5
Gillar väldigt mycket
6 7
4. Vilken inställning har du till personen som du kommunicerade med? Svara så gott du kan även om du inte fått något tydligt intryck av din mottagare.
Mycket negativ
12
2
3
4
5
Väldigt positiv
6
7
5. Vilket kön hade mottagaren av Ditt meddelande?

|  | Mottagaren var en kvinna |
| :--- | :--- |
|  | Mottagaren var en man |

6. Vilken inställning hade mottagaren av Ditt meddelande till företaget?

|  | Mottagaren hade en positiv inställning till företaget |
| :--- | :--- |
|  | Mottagaren hade en negativ inställning till företaget |

7. Lyckades din mottagare identifiera att det var Beta Du beskrev?

|  | Ja |
| :--- | :--- |
|  | Nej |

8. Vilket par av cirklarna nedan (A-G) tycker Du bäst beskriver din kommunikation till mottagaren du kommunicerade med? Vänligen ringa in den ruta som du tycker stämmer bäst.
a.

b.

e.

f.


9. Var instruktionerna till undersökningen lätta att förstå?

|  | Ja |
| :--- | :--- |
|  | Nej |

10. Kändes undersökningen vid någon tidpunkt konstig?
11. Beskriv med egna ord hur du uppfattade syftet med undersökningen
12. Beskriv med egna ord hur du uppfattade studenterna som utförde dettas
13. Hur väl känner du till företaget Beta sedan tidigare?

| Känner inte alls till |  |  | Känner mycket väl till |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |

## Här följer ett antal påståenden. Ringa in den siffra som överensstämmer med din uppfattning

14. 

Oavsett hur fulländad han är, är en man inte riktigt fullkomlig som människa förrän han har en kvinnas kärlek.

| Instämmer inte alls |  |  |  | Instämmer helt |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

15. Många kvinnor är faktiskt ute efter särskilda förmåner, till exempel vid anställningsförfaranden som gynnar dem mer än män, under täckmanteln att de ber om "jämställdhet".

| Instämmer inte alls |  |  |  |  | Instämmer helt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Vid katastrofer bör kvinnor räddas före män. |  |  |  |  |  |  |
| Instämmer inte alls |  |  |  |  | Instämmer helt |  |
|  | 2 | 3 | 4 | 5 | 6 | 7 |

17. De flesta kvinnor tolkar oskyldiga kommentarer eller handlingar som sexistiska.

| Instämmer inte alls |  |  | Instämmer helt |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

18. Kvinnor blir alltför lätt förolämpade.
Instämmer inte alls
12
3
4
5
Instämmer helt 6 7
19. Människor är inte verkligt lyckliga med livet utan en romantisk relation med en person av det andra könet.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
7
20. Feminister är ute efter att kvinnor ska ha mer makt än män.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
7
21. Många kvinnor har ett drag av renhet som få män har.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
7
22. Kvinnor bör bli vårdade och beskyddade av män.

| Instämmer inte alls |  |  |  | Instämmer helt |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

23. De flesta kvinnor uppskattar inte fullt ut allt som män gör för dem.

Instämmer inte alls
12

3
4
5

Instämmer helt
6
7
24. Kvinnor söker makt genom att ta kontrollen över män.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
7
25. Varje man bör ha en kvinna som han avgudar.

| Instämmer inte alls |  |  |  | Instämmer helt |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

26. Män är inte fullkomliga utan kvinnor.
Instämmer inte alls
1
2
3
4
5
Instämmer helt
6
27. Kvinnor överdriver problem de har på arbetet.
Instämmer inte alls
1
2
3
4
5

Instämmer helt
6
7
28. När en kvinna väl fått en man att binda sig till henne, försöker hon vanligtvis att hålla honom i strama tyglar.

| Instämmer inte alls |  |  |  | Instämmer helt |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

29. När kvinnor förlorar mot män i rättvis tävlan, klagar de ofta över att ha blivit diskriminerade.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
30. En bra kvinna bör sättas på en piedestal av sin man.
Instämmer inte alls
1
2
3
4
5
Instämmer helt
6
7
31. Många kvinnor får en kick av att reta män genom att verka sexuellt tillgängliga för att sedan avvisa mäns närmanden.
Instämmer inte alls 12 3
4
5
Instämmer helt
6
7
32. Kvinnor, i jämförelse med män, brukar ha en överlägsen känsla för moral. Instämmer inte alls Instämmer helt 12 3 4 5

6 7
33. Män bör vara beredda att offra eget välbefinnande för att sörja ekonomiskt för kvinnorna i sina liv.
Instämmer inte alls
12
3
4
5
Instämmer helt
6
7
34. Feminister ställer orimliga krav på män.
Instämmer inte alls
12
3
4
5

Instämmer helt
$6 \quad 7$
35. Kvinnor, i jämförelse med män, brukar ha ett mer förfinat sinne för kultur och god smak.

Instämmer inte alls
23
4
4
5
6
Instämmer helt 7
36. Jag identifierar mig som:

|  | Man |
| :--- | :--- |
|  | Kvinna |
|  | Annat |

37. Ange din ålder: $\qquad$ år
38. Vilken är din högsta avslutade utbildning?

|  | Lägre än grundskola |
| :--- | :--- |
|  | Grundskola |
|  | Gymnasium |
|  | Universitet |

39. Vilken plats har du i syskonskaran?

|  | Ensambarn |
| :--- | :--- |
|  | Äldst |
|  | Mellanbarn |
|  | Yngst |

40. Hur många systrar växte du upp med? Räkna ej in dig själv. $\qquad$ stycken.
41. Hur många bröder växte du upp med? Räkna ej in dig själv. $\qquad$ stycken.
42. 

Har du någon gång haft en kvinnlig chef?

|  | Ja |
| :--- | :--- |
|  | Nej |

43. Har du någon gång haft en manlig chef?

|  | Ja |
| :--- | :--- |
|  | Nej |

44. 

Hur många döttrar har du? $\qquad$ stycken
45.

Hur många söner har du? $\qquad$ stycken

Hjärtligt tack för din medverkan!

## Experiment material in English

Below you will find a number of questions regarding the study. We will be very grateful if you answer all the questions. Please make a circle around the number that corresponds with your opinion.

1. What do you think about the company, Beta, which you wrote about?

Do not like at all
1
2
3
4
5
6
7
2. How would you describe Beta?

Very negative
1
2
3
4
5
6
7
3. What is your opinion about the person you were communicating with? Please answer to the best of your knowledge, even if you do not have any clear impression about the recipient.

Do not like at all
1
2
3
4
5
6
7
4. What is your view about the person you were communicating with? Please answer to the best of your knowledge, even if you not got any clear impression about the recipient.

Very negative 12

## 3

4
5
6
7
5. Which gender did the receiver of your message have?

|  | The receiver was a woman |
| :--- | :--- |
|  | The receiver was a man |

6. What was the view your receiver had towards the company?

|  | The receiver had a positive attitude towards the company |
| :--- | :--- |
|  | The receiver had a negative attitude towards the company |

7. Did your receiver manage to identify that it was the company Beta you described?

|  | Yes |
| :--- | :--- |
|  | No |

8. Which pair of circles below (A-G) do you think reflects the communication you had with the receiver? Please make a circle around the box that corresponds to your opinion. (Jag = Me, Mottagaren = The receiver)
a.

b.

d.

e.

f.


9. 

Did the study felt weird at any point?
11. Describe in your own words what you think is the purpose of the study.
12. Describe in your own words how you perceived the students.
13. How well did you know Beta before?

Don't know at all
Know very well
1
2
3
4
5
6
7

Below you will find a number of statements. Make a circle around the number that corresponds with your opinion.
14.

No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
15. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality".

Do not agree at all
1
2
3
4
5
6
7
16. In a disaster, women ought to be rescued before men.

Do not agree at all
Agree fully

4
5
6
7
17. Most women interpret innocent remarks or acts as being sexist.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
18. Women are too easily offended.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
19. People are not truly happy in their life without being romantically involved with a member of the other sex.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
20. Feminists are seeking for women to have more power than men.

Do not agree at all

1
2
3

Many women have a quality of purity that few men possess.
Do not agree at all
1
2
3
4
5
6
Agree fully
22. Women should be cherished and protected by men.

Do not agree at all
1
2
3
4
5
6
23. Most women fail to appreciate fully all that men do for them.

Do not agree at all Agree fully
1
2
3
4
5
6
7
24. Women seek to gain power by getting control over men.

Do not agree at all Agree fully
1
2
3
4
5
6
7
25. Every man ought to have a woman whom he adores.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
26. Men are not complete without women.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
27. Women exaggerate problems they have at work.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
28. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
29. When women lose to men in a fair competition, they typically complain about being discriminated against.

Do not agree at all Agree fully
1
2
3
4
5
6
7
30. A good woman should be set on a pedestal by her man.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
31.

There are actually many women who get a kick out of teasing men by seeming sexually available and then refusing male advances.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
32. Women, compared to men, tend to have superior moral sensibility.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
33. Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
34. Feminists are making unreasonable demands of men.

Do not agree at all
Agree fully
1
2
3
4
5
6
7
35.

Women, as compared to men, tend to have a more refined sense of culture and good taste.

Do not agree at all
Agree fully

1
2
3
4
5
6
7
36. I identify myself as:

|  | Man |
| :--- | :--- |
|  | Women |
|  | Other |

37. What is your age? $\qquad$ years.
38. What is your highest completed level of education?

|  | Lower than elementary school |
| :--- | :--- |
|  | Elementary school |
|  | Upper secondary school |
|  | University |

39. Which place do you have among your siblings?

|  | I don't have any siblings |
| :--- | :--- |
|  | Oldest |
|  | In the middle |
|  | Youngest |

40. How many sisters did you grow up with? $\qquad$ . (Do not count yourself)
41. How many brothers did you grow up with? $\qquad$ (Do not count yourself)
42. Have you ever had a female boss?

43. Have you ever had a male boss?

|  | Yes |
| :---: | :---: |
|  | No |

44. 

How many daughters do you have? $\qquad$ .
45.

How many sons do you have? $\qquad$

Thank you very much for your cooperation!

## Appendix E - Coding Template

## Coding template in Swedish

Kooperativet Beta
Beta är ett kooperativ som säljer livsmedel. De har ca 12600 producenter anslutna, och det totala antal anställda är ca 20000 stycken. Huvudkontoret finns i Århus, och deras producenter finns i Belgien, Danmark, Luxemburg, Storbritannien, Sverige och Tyskland.

Beta har en rik historia, och kan stoltsera med att vara det första kooperativa bolaget i Sverige som omfattade flera orter ( +1 ). En av Betas populära produkter kallar sig "naturens egen sportdryck" (+1) och den svenska OS-truppen förknippas gärna med den (+1). Beta arbetar aktivt med sina förpackningar (+1). Deras svarta tetra, för att uppmärksamma "earth hour", vann pris (+2) för sin kreativa design.

Beta driver också ett populärt traineeprogram (+1) för unga människor som vill arbeta inom företaget.

De senaste åren har Beta fått ta emot massiv kritik (-1) för deras bristfälliga organisation (-1). Samtidigt som produkternas priser sänktes spenderade Beta mycket pengar på resor och representation. Detta uppmärksammades i en dokumentär på SVT, och ledde till en stark kritik mot ledningen (-1). Producenterna kände sig svikna (-1) och konsumenter började ifrågasätta om de kunde lita på kooperativet ( -1 ). I övrigt visar personalundersökningar att majoriteten av de anställda är nöjda (+1) med sin arbetsplats och känner att de kan utvecklas inom företaget (+1).

Företagets VD sades upp i samband med avslöjandet av företagets vidlyftiga representationskultur (-2). Företagets $\mathrm{f} d \mathrm{VD}$ hade en lön som fick stark kritik för sin storlek (-1). Året innan VD:n sades upp var ett positivt år för kooperativet (+1). Dock spås en svår framtid för Betas produkter på grund av låga världsmarknadspriser (-1).

## Coding template in English

The Cooperative Beta
Beta is a cooperative that sells food. They have about 12600 producers connected to them, and about 20000 employees. Their headquarters are located in Århus, and their producers can be founded in Belgium, Denmark, Luxembourg, Great Britain, Sweden, and Germany.

Beta has a rich history, and can proudly say that they were the first cooperative company in Sweden that was present in different cities (+1). One of Beta's popular products is called "the sport drink of nature" ( +1 ) and the Swedish Olympic team prefer to be associated with it ( +1 ). Beta works actively with its packages (+1). Their black tetra, which were made to shield light at earth hour, won a prize (+2) for its creative design.

Beta have a popular trainee program (+1) for young people that want to work within the company.

In the last years Beta has received massive criticism (-1) for their inadequate organisation ( -1 ). While the price given to the producers have been lowered, a lot of money have been spent on business trips and representation (-1). This was brought up in a documentary on SVT, and led to harsh criticism towards the top management ( -1 ). The producers felt betrayed ( -1 ), and the consumers started to question whether they could trust the cooperative business ( -1 ). Otherwise, employee surveys show that the vast majority of the employees are satisfied ( +1 ) with their workplace and feel that they can develop within the company ( +1 ).

The CEO of the company was fired in connection to the disclosure of the company's worldly culture of costly representation (-2). The former CEO of the company had a salary that was criticised because of its size ( -1 ). The year before the CEO was fired was a positive year for the cooperative (+1). Though, a difficult future is predicted because of lower prices on the world market (-1).


[^0]:    ${ }^{* * *} p<0.01,{ }^{* *} p<0.05,{ }^{*} p<0.1$

