SIMULATING EMPLOYEE PRESENCE IN STORE ENVIRONMENTS

A quantitative study investigating the possibilities of simulating mere employee presence in retail settings.

Abstract.

Research shows that employee mere presence is of greater importance than may have previously realized. The purpose of this thesis is to investigate whether it is possible to simulate employee mere presence in a retail setting. Through two survey-based experiments (123 respondents in a field experiment and 117 respondents in a lab experiment), it was tested whether a simulated employee generated customer pleasure and satisfaction, compared to conditions with no employee and a real employee, respectively. Results indicate that in a lab setting, simulated employees generate more positive responses than the no employee condition, but not as strong as the real employee condition. In the field experiment, however, these differences did not come across, despite successful manipulation in both cases. We conclude that employee presence can be simulated, but that its effect may diminish outside of a lab experiment setting.

Course 2350, Master Thesis in Marketing and Media Management, Fall 2015

Tutor Magnus Söderlund

Key words Mere presence, Employee presence, Simulation, Customer satisfaction, Customer pleasure
Acknowledgements

First we would like to thank Clas Ohlson, and Karin Målargården in particular, for being very supportive in our process, and enthusiastically helping us conduct our experiments.

We would also like to thank our tutor, professor Magnus Söderlund, for inspiration, guidance and expertise.

Last but not least, we would like to thank everyone participating in the experiments. Without you, writing this thesis would not have been possible.
## Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reality</td>
<td>What is experienced by a human through natural perception.</td>
</tr>
<tr>
<td>Real employee</td>
<td>A live employee who does not encounter the consumer through a medium, but in reality.</td>
</tr>
<tr>
<td>Simulated employee</td>
<td>An employee who encounters the consumer through a medium, such as a screen or a cardboard cut-out.</td>
</tr>
<tr>
<td>Single layer simulation</td>
<td>When an entity is experienced through one medium, such as when an employee is depicted on a cardboard cut-out and a consumer views that cardboard cut-out in real life. Also termed technology-mediated perception.</td>
</tr>
<tr>
<td>Double layer simulation</td>
<td>When an entity is experienced through two media, such as when an employee is depicted on a cardboard cut-out and then the scene itself is photographed or filmed, and a consumer views this depiction.</td>
</tr>
<tr>
<td>Presence</td>
<td>The experience of and response to a mediated entity as if it was unmediated.</td>
</tr>
<tr>
<td>Employee mere presence</td>
<td>When an employee is close to the consumer but not interacting with her.</td>
</tr>
</tbody>
</table>
# Table of contents

1. INTRODUCTION..................................................................................................... 5  
   1.1 INTRODUCTORY WORDS......................................................................................... 5  
   1.2 PURPOSE AND RESEARCH QUESTIONS ................................................................. 6  
   1.3 EXPECTED CONTRIBUTIONS .................................................................................... 7  
   1.4 DELIMITATIONS ...................................................................................................... 8  
   1.5 THESIS OUTLINE .................................................................................................... 8  

2. THEORETICAL FRAMEWORK .............................................................................. 9  
   2.1 MERE PRESENCE ................................................................................................... 9  
   2.2 OTHER AFFECTING STIMULI .................................................................................. 10  
      2.2.1 Store Environment Stimuli ............................................................................... 10  
      2.2.2 A Greeter’s Impact .......................................................................................... 10  
   2.3 SIMULATING PRESENCE ....................................................................................... 11  
      2.3.1 Anthropomorphism .......................................................................................... 11  
      2.3.2 Mediated Presence .......................................................................................... 12  
   2.4 EMOTIONAL RESPONSE TO HUMAN-RELATED ENVIRONMENTAL STIMULI ............ 12  
      2.4.1 The Effect of Mere Presence on Pleasure ......................................................... 14  
      2.4.2 The Effect of Mere Presence on Customer Satisfaction ................................... 14  
   2.5 MERE PRESENCE IN A SIMULATED SETTING ............................................................ 15  

3. METHOD ............................................................................................................... 18  
   3.1 SAMPLE AND SURVEYING METHODS ................................................................... 19  
      3.1.1 Study 1 .............................................................................................................. 19  
      3.1.2 Study 2 .............................................................................................................. 24  
   3.2 STIMULI DEVELOPMENT ....................................................................................... 25  
      3.2.1 Study 1 .............................................................................................................. 25  
      3.2.2 Study 2 .............................................................................................................. 31  
   3.3 MEASURES ......................................................................................................... 33  
      3.3.1 Study 1 .............................................................................................................. 33  
      3.3.2 Study 2 .............................................................................................................. 34  
   3.4 STATISTICAL ANALYSIS ....................................................................................... 35  
   3.5 RELIABILITY AND VALIDITY ..................................................................................... 36  

4. EMPIRICAL FINDINGS ........................................................................................ 38  
   4.1 OVERVIEW OF COLLECTED DATA ........................................................................ 38
4.1.1 Study 1

4.1.2 Study 2

4.2 ASSESSING THE HYPOTHESES

4.2.1 Study 1

4.2.2 Study 2

4.3 ADDITIONAL INSIGHTS

4.3.1 Study 1

4.3.2 Study 2

4.4 SUMMARY OF THE RESULTS

5. DISCUSSION

5.1 GENERAL DISCUSSION OF THE RESULTS

5.1.1 The Effects of Customer Loyalty and Store Familiarity on Customer Satisfaction

5.1.2 Presence Mediated by Anthropomorphism

5.2 LIMITATIONS

5.2.1 Limitations of the store experiment

5.2.2 Limitations of the survey experiment

5.2.3 Limitations of the comparison between the experiments

5.3 IMPLICATIONS

5.3.1 Theoretical implications

5.3.2 Managerial implications

5.4 FUTURE RESEARCH

5.5 CONCLUSION AND ATTEMPTS TO ANSWER THE RESEARCH QUESTIONS

6. BIBLIOGRAPHY

PERIODICAL

NON-PERIODICAL

 ELECTRONIC

CONFERENCES

7. APPENDICES

APPENDIX 1

APPENDIX 2

APPENDIX 3

APPENDIX 4
1. INTRODUCTION

1.1 Introductory Words

Shopping is often considered a social activity, a form of entertainment to share with friends and family, and an activity in which we mingle with strangers from our own towns, in our efforts to keep up with trends, and feeling part of a society. Retail sales people are part of this dynamic - one in ten employed Swedes work in retail (Svensk Handel, 2014), daily helping consumers find what they are looking for or helping them realize what they should be looking for. The pressure to constantly improve profitability is common in all industries, not least in retail. Much attention in marketing research has been devoted to how consumers can be impacted in a direction that translates to more sales and greater loyalty. Where should the store be located, how should the store be designed, what products should be carried, how should they be displayed, what appearance should salespeople have, what should they do and say, what should they think, what should they feel - these are just some general areas within the field of retail research. Indeed, one may get the impression that retail salespeople shortly will be as designed as the stores they work in. At the same time, the digitalization of our society entails the impending replacement of retail salespeople by cheaper and often more productive software and robots - such as self-service information desks and checkouts as well as online retail. The role of the human salesperson in retail seems to be changing, and the number of employees needed to run a store is likely falling.

Much research take for granted that attributes and actions of salespeople have perhaps the greatest effect on sales and other consumer responses. However, recent studies, such as Söderlund (2015), indicate that it is not so much what retail salespeople do that is important, but rather simply that they are there. In his study, Söderlund found that mere employee presence drove consumer emotional and cognitive responses, while attention from a salesperson did not increase this further. This shows once again the importance of human presence in a store - after all, we are social beings who typically prefer to evade solitude. The trend towards automation in retail together with the finding that employees in fact are important in themselves, leads to a new concern - will the realization of the importance of salespeoples’ presence in stores mean that they will be complemented by,
rather than replaced by, machines? Or is it possible that in the future, robots will be able
to take care of this type of value creation as well? Ten years ago, robots were tested in
online retail environments, with documented positive effects on for instance satisfaction
with the retailer (Holzwarth, Janiszewski & Neumann, 2006). Yet, they never seemed to
reach a breakthrough and wider adoption. Retailers, however, seem to continue
experimenting with automated salespeople. Already today, highly lifelike robots are
greeting and communicating with shopping mall visitors in Japan, being able to guide
them in several different languages (CBC News, 2015). But will they really be able to
produce the same magnitude of emotional, cognitive, and behavioural responses in
humans as real retail salespeople do?

One of several implications of us humans being a social and intelligent species with
considerable abilities for imagination, is that we are able to use media to depict and
communicate with other humans - we are intrigued by TV series and movies, and do not
find it strange to communicate through videoconferences, as if the people we see are
actually physically there, and the event happening in real time.

Taking these overall trends and findings together, we wonder; since
a) employee mere presence is so important to consumer experience, and
b) simply being somewhere is a very simple and passive task, and
c) human presence seems to be possible to simulate,
is it possible to simulate human mere presence in retail environments; i.e., could a
simulated salesperson generate the same responses in humans as real salespeople do?

1.2 Purpose and Research Questions

On a broad level, the main purpose of this study is to introduce the field of simulation to
the existing research within marketing and strategy. In order to do so the study is
separated into two parts. First, the aim is to empirically research the possibilities of
simulating mere employee presence in a physical retail environment in order to achieve a
boost in consumer emotional, cognitive, and behavioural responses. Secondly, we
investigate whether we reach the same conclusions when using another, and possibly the
most common, research method within the field if retail; a survey-based experiment
where the entire scenario is simulated through photos. This thesis will thereby set out to answer the following research questions:

RQ1: Is it possible to simulate employee mere presence in a physical, non-mediated retail setting?

RQ2: Is it possible to simulate employee mere presence in a physical retail setting, when the setting itself is simulated?

1.3 Expected Contributions

By answering these research questions, we expect to contribute to retail research and practice in three different ways. First, we expect to open up opportunities on a retail managerial level by making employee presence both more easily accessible and less resource demanding through simulation. By finding out if it is possible to simulate mere presence, we also expect to evoke new ways of utilizing presence in a retail environment in order to strengthen the relationship between the stores and their customers.

Secondly, we expect to raise awareness of the possible shortcomings created when utilizing simulation in experiment design. Given our results, we hope to be able to give recommendations regarding the accuracy of comparisons between the results from experiments using mediated settings versus non-mediated settings. Moreover, we aim for the results of this study to make scholars consider the different aspects of simulation in research methods and further investigate how it affects the results of the research.

Living in a constantly changing world, where more physical necessities are turned into digital versions every day, it will not be long until marketers will have to reconsider how consumers react to stimuli when they also get digitalized. The concept of virtual reality is growing rapidly, and as that basically is a digitally simulated version of the physical reality, employee presence is likely to become simulated as well. We see large potential for contributing to future marketing issues by raising awareness for this phenomenon, and hope that the field of simulation will be extended further.
1.4 Delimitations

Given the restrictions in terms of resources and time, the study carries some delimitations. One noteworthy restriction derives from the circumstances of our store experiment, both in terms of time restrictions and the dependence of the cooperation with Clas Ohlson. Being in a physical store, it would have been interesting to investigate for instance the customers’ approach behaviour – i.e., how prone they are to spend more time in the store and visit more departments. However, we had to restrict the number of dependent variables in our field study to two – pleasure and satisfaction.

Furthermore, the field experiment had to be restricted to one store and one day. If possible, we would have preferred conducting the field experiment in at least two different stores and for at least two days per store, thereby collecting a broader sample of respondents and thus possibly making the results applicable to a larger extent.

As the issue of simulation in experiment design per se is previously only touched upon in previous research, this study could only do a very broad and brief investigation of it. This limited our abilities in giving concrete recommendations. However, we do give indications on how to carry the research forward in the future.

1.5 Thesis Outline

This study consists of five chapters. Starting with this introductory chapter, where the background to the problematization and purpose of the thesis is explained. Following it is a review of the theoretical framework covering relevant, adjacent research as well as generation of hypotheses. The third chapter reviews the scientific approach applied and an in-depth description of why and how the experiments and analyses were carried out. Chapter four reports the empirical findings of the experiments, and compares these to the hypotheses stated. In the last chapter the results are discussed, from which implications, limitations, future research and conclusions are drawn.
2. THEORETICAL FRAMEWORK

Extensive studies have been made on the effects of the mere physical presence of employees in a store (further referred to as “mere presence”). Chapter 2.1 aims to cover the research made within that field. Chapter 2.2 conveys research around factors that are adjacent to employee presence in a retail setting, e.g., environmental variables. In sequence, chapter 2.3 introduces the concept of simulating employee presence and summarizes the scarce supply of prior studies conducted on that topic. Chapter 2.4 discusses the emotional response to human-related environmental stimuli, and how these could be measured. Finally, as an additional approach to the research questions the issue regarding double simulation is raised in chapter 2.5.

2.1 Mere presence

Mere and social presence is a well-explored subject. It has been shown that the presence of another human impacts human responses such as work performance, emotions and evaluation (Guerin, 1986; Markus, 1978; Zajonc, 1965; Sharma & Stafford, 2000). Moreover, not only physically present people have an impact on customers’ emotions. Studies have shown that by just leaving cues of previously having been there, other customers affect our behaviour (Argo, Dahl & Morales, 2006; Razzouk, Seitz & Kumar, 2001). Historically the literature has primarily focused on the presence of other customers, not the store employees. Some research has been conducted on the subject, though, and unsurprisingly the driving factors to customer satisfaction include employee presence. First, there are practical reasons behind this. Face-to-face interactions between customers and salespeople are traditionally viewed as effective information-, empathy- and personal connection providers (Barlow, Siddiqui & Mannion, 2004), where the information given by the seller is perceived as more accurate and is more likely to be believed (Soldow & Thomas, 1984). Wang, Baker, Wagner and Wakefield (2007) further showed that customers desire personal attention from salespeople, and therefore a present employee carries a stronger promise of quick service than an absent employee does. According to a study by Jones (1999), the respondents reacted positively to a salesperson being nearby and helpful when asked – thus, the mere promise of help by seeing an employee is enough to produce positive reactions among customers.
2.2 Other Affecting Stimuli

Besides the mere presence of an employee, there are other factors that affect consumers’ emotions and evaluations in retail settings. These are both unintended and intended inputs that make the customer react in different ways.

2.2.1 Store Environment Stimuli

Retailers spend an enormous amount of money on planning and designing their stores. They develop and execute tailored strategies for how their employees should behave towards the customers. All this hard work and money spent is being invested in order to improve the store and its personnel and thus affect the customers’ willingness to buy - both today and in the future (Baker, Levy & Grewal, 1992). According to a study by Sharma and Stafford (2000) both a store’s design and the ambience in it have a positive effect both on customers’ persuasion as well as their perception of the staff. Baker et al. (1992) investigated how ambient cues (such as lighting, smells, and music) versus social cues (friendliness and number of employees in the store) affect customers’ pleasure, arousal, and willingness to buy. The research showed that the ambient and social cues interact and jointly influence the respondents’ pleasure. However, a high level of social cues alone influences the customers’ level of arousal in the store. Both pleasure and arousal have a positive influence on the customers’ willingness to buy, but arousal show a significantly higher impact on the variable. This means that the retailer can impact the store’s success rate by increasing the number of employees and their level of friendliness.

2.2.2 A Greeter’s Impact

In order to increase the level of satisfaction, the employees’ mere presence must be perceived as natural in the given store context (Forgas, 1995). In a store there are numerous situations in which the presence of an employee would be perfectly natural. In the study made by Baker et al. (1992) the social cues in the experiment were represented as number and friendliness of employees greeting the customers at the store entrance. Since then, more studies have been made on the subject as it has shown to have a great impact on customers’ attitude in and towards the store. Baker, Grewal, and Parasuraman (1994) found that both perceived merchandise and service quality increased when an employee at the store entrance greets a customer. In fact, it has been proven that
customers who are greeted by friendly employees when entering a store are more satisfied (Otterbring, 2014), have higher future purchase intentions (Otterbring, 2015b), have to a higher extent approaching behaviour (Otterbring & Gustafsson, 2015) and will spend more money in the store (Otterbring, Ringler, Sirianni, & Gustafsson, 2013).

2.3 Simulating Presence

The benefits of an employee’s mere presence are speaking for themselves. However, there are some practical issues for the implementation. Having an employee whose duty solely would be to greet the customers, and therefore not contributing to the daily tasks in the store, would be very expensive. A store manager rarely measures willingness to buy and customer satisfaction on a daily basis, but increased employee costs are. Therefore, a store manager hiring a greeter is not very likely. However, the concept of presence does not only involve the actual meeting between two or more individuals. As Lombard and Ditton (1997) expressed it, “presence is the extent to which a medium is perceived as sociable, warm, sensitive, personal or intimate when it is used to interact with other people”. This means that the interpretation of presence is subjective and not mediated in absolute terms (Rice, 1992). Building on this thought, the question whether the benefits of mere employee presence can be simulated through other means than a person is raised.

2.3.1 Anthropomorphism

Lee (2004) explains humans as being social animals, having developed a special mechanism to instantly detect human beings among other physical objects due to their need of interaction with other social actors. However, these social actors have turned out to include non-human objects with human-like characteristics as well. Just like humans detect other humans among physical objects, they also seem to detect human characteristics among technologically simulated nonhuman objects (Ibid.). Technologically created humanity is, however, not the only inanimate object that can simulate sociability. Anthropomorphism is a human cognitive bias, explained as the tendency among people to mentally give human attributes and qualities to non-living things (Delbaere, McQuarrie & Phillips, 2011). For marketers, anthropomorphism is usually made use of in making people form relationships with brands or products by planting human cues to them (Aggarwal & McGill, 2007). It has been proven that images
showing human attributes on inanimate objects evoke emotional bonds towards the objects. These bonds include a more positive view of brand personality and increased liking for the brand. (Delbaere et al., 2011) However, the emotional effect of the stimulus depends on the perceptual fluency evoked by it. Perceptual fluency is to what extent and how easily the consumer can identify and process the visible characteristics of the stimulus, for example by its shape. (Lee & Labroo 2004; Labroo, Dhar, & Schwartz, 2008) When making consumers engage in anthropomorphism, perceptual fluency improves as consumers easily can relate to it due to their, by nature, deep knowledge in human behaviour and attributes. Increased perceptual fluency in turn affects the consumer’s perceived pleasure and ease, which results in more positive advertising outcome such as brand attitude (Delbaere et al., 2011).

2.3.2 Mediated Presence
Sensing mediated human presence is thus rooted in our genes, and is pre-eminently affecting the way we evaluate our surroundings. However, not much research has been conducted in order to explore to what extent this presence can be mediated. The main focus of the research made has been on how to increase the sense of human presence in an online environment. It has been proven that using avatars on websites increases both customer satisfaction, information value and entertainment value levels among its visitors (Barlow, Siddiqui, & Mannion 2004; Redmond, 2002). The reason behind this could be explained by the fact that avatars provide the customer with more easily accessible information. However, it would also have been possible to create that effect with a simple text box. The humanlike presences of the avatar anthropomorphize the interaction and make the lonely, impersonal shopping experience an interpersonal one (Holzwarth, Janiszewski & Neumann, 2006).

2.4 Emotional Response to Human-Related Environmental Stimuli
Söderlund (2015) investigated an employee’s mere presence in a store, and found that both customer satisfaction and pleasure increase when an employee is visibly present. As the study was conducted in a setting in which the customer did not feel a need to interact with the employee, the conclusion was drawn that it was the mere presence of the employee which improved the customer’s feelings about the store visit - not the practical benefits of having her/him there. The foundation of this phenomenon is that an
individual’s evaluations, behaviour and performance are mediated by her/his emotions. These emotions are, in turn, affected by the mere presence of other human beings. Kim and Kim (2012) suggest a model where human-related environmental stimuli, such as different kinds of interaction with either other customers or employees, triggers customer responses on three different levels. These include cognitional responses, such as satisfaction and loyalty; behavioural responses, including time spent and interactions in the store; and lastly emotional responses. There are two major, different models that are frequently used for measuring emotional responses to environments. The first one is called PAD, and was developed by Mehrabian and Russell (1974) and stands for Pleasure, Arousal and Dominance. The second one was created by Plutchik (1984), and instead measures emotional responses in terms of fear, anger, joy, sadness, disgust, acceptance, surprise and curiosity. These eight emotions are according to Plutchik what constitute an experience. There have been several tests conducted in order to decide which of these models is the most accurate. Despite the fact that it has been proven that it is not the most accurate model, PAD is the most commonly used (Nordfält, 2007). However, Havlena and Holbrook (1986) found that the different models are useful in different situations. When doing qualitative research, Plutchik’s scale is more appropriate whereas PAD should be used when using a quantitative research approach. Moreover, Nordfält (2007) argues that PAD could be the emotional states that result from Plutchik’s eight foundational emotions. Therefore, measuring PAD is an indirect way of measuring Plutchik. However, the three variables do not have the same impact on measuring consumers’ emotions. According to Donovan, Rossiter, Marcoolyn and Nesdale (1994), pleasure has a significantly larger impact on time spent in a store than arousal. Moreover, according to Donovan and Rossiter (1982) arousal strengthens both positive and negative emotions. Thus, measuring high levels of arousal could imply either high positive or negative emotions, whereas pleasure is solely positively charged. At last, it has been proven that customers more easily express their emotions as positive-negative, which does not speak in favour of using arousal or dominance. Thus, measuring pleasure will give a more accurate result than arousal and dominance (Nordfält, 2007).
2.4.1 The Effect of Mere Presence on Pleasure

That pleasure is positively affected by the mere presence of an employee is confirmed by Söderlund (2015). The reason behind this positive emotional charge lies within the way of how we relate to objects, words, and surroundings reminding us of humanness and socialness. This includes being exposed to human-relating words (such as “person”, “woman” and “man”) (Bradley, Lang & Cuthbert, 1997) and to “sociable” websites (Wang et al., 2007). It also includes our positive emotional reaction to other present customers in a store. This is based on the fact that humans are social (Wilson, 2012), and therefore have a fundamental need to belong, experience intimacy, and be part of a community (Baumeister & Leary, 1995; Peplau & Perlman, 1982). In fact, it is the increased likelihood of actually getting in contact with someone, signalled by the presence of others, that creates the positive emotional reaction (Lombard & Ditton, 1997). Thus it seems that mere presence of a human being can be successfully simulated through human-like media. Integrating this to a retail environment would mean that it is possible to simulate the mere presence of a store employee. Given what Söderlund (2015) found on an employee’s mere presence effect on customers’ perceived pleasure, a simulated store employee would likely create the same reaction. Therefore, it can be hypothesized that;

H1a: The mere presence of a simulated employee in a physical retail setting evokes a higher level of pleasure than the absence of any manifestation of an employee.

Further, given the findings from Söderlund’s study and as the mere presence created by the simulated greeter should be comparable with a human greeter it can also be hypothesized that;

H1b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of pleasure as a real employee.

2.4.2 The Effect of Mere Presence on Customer Satisfaction

According to Forgas (1995) there is a connection between our emotional response and evaluation. This connection is derived from the theory of affect infusion, which is defined...
as when information triggers our emotions, which in turn affects our evaluation of it. However, Forgas further argues that this phenomenon is more likely to occur during certain circumstances. First, when the object under evaluation is typical, that is, it does not deviate from the common view of the object’s characteristics. Second, there should not be any specific motivational objectives, and lastly the situation should not implicate any detailed considerations. These are all characteristics that would naturally occur for customers in physical retail settings (Söderlund, 2015). A frequently used dependent variable to measure the influence of human factors in retail settings is customer satisfaction (Kim and Kim, 2012). The variable depends significantly on both the behavioural and physical attributes of store employees, but also the level of crowding in the store (Eroglu & Machleit, 1990; Menon & Dube, 2000). The variable is further widely used to measure post-purchase or post-consumption evaluation, and it is also known for its effect on other evaluating variables (Söderlund, 2015). It is not until recently that Söderlund (ibid.) brought the concepts of mere presence and customer satisfaction together, showing that the mere presence of an employee in a retail setting does have a positive influence on customer satisfaction with the store. Given affect infusion, Söderlund’s findings, and our previous hypotheses regarding simulation, it can be hypothesized that:

H2a: The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee.

H2b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee.

2.5 Mere Presence in a Simulated Setting

One of the objectives with this thesis is to investigate the field of simulation due to the lack of previous research on it, yet a significant part of research is itself based on simulation. When measuring a stimuli’s effect on specified independent variables, it is common to do so using simulated stimuli. For example, Söderlund (2015) conducted his experiment using a text-based role-play scenario, a commonly used method in retailing and service marketing experiments (Sharma & Stafford, 2000; Cowart & Brady, 2014).
However, even though the subject has not yet been investigated, the concern has previously been raised. When investigating the concept of presence, Lombard and Ditton (1997) also questioned the consequences of using mediated settings in experiments. Researchers within for example psychology and communication aim to gain a better understanding of physiological and psychological processes in real-life, non-mediated settings, yet they use mediated stimuli to accomplish this. The reason behind this is that it is easier to both gain control and convenience when being able to design the setting yourself, and then interpreting the results as if they automatically apply to both settings. These researches all exist under the assumption that the mediated effect would be the same with a non-mediated stimulus (Ibid.). Given these assumptions, it should be possible to assume that the same effects would occur as hypothesized above when conducting the experiment through a mediated setting. Thus, the following hypotheses are created.

H3a: The mere presence of a simulated employee in a physical retail setting evokes a higher level of pleasure than the absence of any manifestation of an employee, when the setting itself is simulated.

H3b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of pleasure as a real employee, when the setting itself is simulated.

H4a: The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee, when the setting itself is simulated.

H4b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee, when the setting itself is simulated.
Summary of hypotheses

H1:  
A. The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee.  
B. Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee.

H2:  
A. The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee.  
B. Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee.

H3:  
A. The mere presence of a simulated employee in a physical retail setting evokes a higher level of pleasure than the absence of any manifestation of an employee, when the setting itself is simulated.  
B. Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of pleasure as a real employee, when the setting itself is simulated.

H4:  
A. The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee, when the setting itself is simulated.  
B. Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee, when the setting itself is simulated.
3. METHOD

This chapter presents the scientific approach and methods for each of the two studies that we conduct, along with information on the measures that we have used and a discussion of the reliability and validity of the studies. We end this chapter with an outline of the statistical analyses that we use.

Our research questions concern primarily whether employee presence can be simulated and, secondarily, whether this simulation can be studied with a survey that itself uses simulation. To investigate this, two separate studies were conducted. They are based on the assumption that if a simulated greeter produces the same emotional, cognitive, and behavioural responses as a real employee, the simulation is successful. They are both between subjects’ experimental designs. The first study was a field experiment in a department store in the town of Borlänge in western Sweden. The purpose of this study was to test whether a simulated employee produces the same responses in consumers as a real employee does, when the consumer is experiencing the simulated employee through one layer of simulation. Study 2 is as similar to Study 1 as possible, while being a survey-based experiment instead. The stimuli of Study 2 consisted of a photo-based simulated scenario in which an employee was either real or simulated, using photos taken during the field experiment. Study 2 thereby compares double layer simulation to single layer simulation while Study 1 compares single layer simulation to real experience. Study 2 will thereby shine a light on the possibility of studying simulated phenomena with a simulated scenario. To be able to compare the two studies, we will minimize the differences between them. Since the studies will be so similar, we have chosen to present the chapters on methods and results thematically rather than one study at a time.

Much of the research in the field of marketing is conducted through the use of between-subjects experiments where the stimuli is simulated through texts, images, or videos, leveraging a large number of benefits, such as allowing a high level of control over stimuli (Kim & Kim, 2012). In order to test our hypotheses, we are instead conducting a field experiment. The choice fell on this alternative for several reasons, first, since we are testing to what extent the impact of employees on consumers can at all be simulated, we want to use a real environment rather than a simulated one since the latter would entail a double simulation of stimuli in some scenarios, and a single simulation of stimuli in
other. By using a field experiment, we are able to test simulation against real experience. Another reason for using a field experiment is that it enables the investigation of the impact of stimuli on actual levels of responses such as pleasure and satisfaction. By relying on experiments with simulated scenarios, the possible causal relationship between stimuli and response are only estimated. We will be using a real store and real customers who are not aware that they are part of an experiment when they are exposed to the stimuli. This ensures that responses to the stimuli are as natural and genuine as possible.

Several other studies on the impact of design-, social-, and ambient factors make use of lab experiments where the stimulus is a video with sound (Baker, Grewal & Parasuraman, 1994; Baker, Grewal & Levy, 1992; Baker, Grewal, Parasuraman & Voss, 2002). However, Baker, et al. (2002) found limitations in this method. They suspected that social, design, and ambient factors in the store impact the consumer to different extents through video compared to in the real life setting. More importantly, they believed that design factors are more dominant to the consumer in the simulated experience than in reality, exaggerating the impact of design factors on consumer responses compared to social and ambient factors. In their manipulation checks, however, all manipulations were significant and the ones for ambient and social factors were stronger. Still, we choose to perform a field experiment rather than a lab experiment in investigating our first research question, to ensure that the level of consumer impact from the focal social factor is as close to real life levels as possible. Also, for practical and resource reasons, we had to resort to photos as stimuli for Study 2 rather than video, which might have been desirable.

3.1 Sample and surveying methods

3.1.1 Study 1

The field experiment was conducted during eight hours - 11 am to 7 pm - on Thursday, November 5th, 2015 at department store Clas Ohlson in Borlänge. This timing was primarily chosen to make sure the number of consumers and other employees would be as small as possible, since regular weekdays typically are slower for this type of store compared to weekends. The fewer the patrons, the larger share of them could be asked to participate in our study, and the more likely that our respondents are representative of
the population. We were, however, confident that the number of consumers would be sufficient to grant us a satisfactory number of respondents. A benefit of a lower number of consumers in the store was that this would minimize the social factor other than the stimuli used, minimizing unwanted variation in the number of other consumers and staff. Also, conducting a field experiment means a heterogeneous group of respondents, which ensures a high degree of validity, at the cost of requiring a larger number of respondents (Bryman & Bell, 2011). We were only able to conduct the field experiment during one day, so the number of respondents that we gathered needed to be large enough during that single day.

Our three conditions - human employee, simulated employee, and no employee - were active in different parts of the day. We started off with the no employee condition, since this had already been active for some time while we prepared for the data collection. This was active until 1 pm, when we switched to the human employee condition, which was then active until 3 pm and then again 6-7 pm. The simulated employee condition was in use 3-6 pm. When we made a switch in stimuli, one of us discretely tracked the consumers who were the last ones to be subjected to the previous stimuli. When these people reached the check-out, the interviewer was notified. Most consumers spent only about 10 minutes in the store, so this method was judged to be safe, even though this was difficult to verify. We attempted to do this, however, through our manipulation check that will be discussed further.

Since consumers enter this store from the outside rather from inside a shopping mall, we took note of the weather during the day of our experiment. Heavy rain could, for instance, potentially, have made consumers in more of a rush to get into the store and thereby paying less attention to our greeter or the absence of one. Throughout the day, however, the weather was very foggy, the temperature was constant at about 1°C, and there was no rain or wind. The fog might have added an extra effect to our study - when entering the store, not much else than the Clas Ohlson store was visible to the consumer, which likely contributed to minimizing the possible impact on the consumer from these other stores and impressions.
Our hypotheses concern both emotional and cognitive responses to the stimuli as well as purchasing behaviour. Ideally, emotional and cognitive response to the stimuli should be measured soon after stimuli, to ensure that the amount of time that passes between these two events is both controlled and not too long to possibly diminish the effects of the stimuli. On the other hand, we needed to be able to measure sales, preferably connecting sales data to individual respondents. Moreover, consumer pleasure and satisfaction were in relation to the current visit to the store, which would likely not have been easy for respondents to provide before the visit ended.

Since one of us had to be able to play the role of an employee, sometimes only one of us would be able to conduct the surveying, eliminating the possibility of conducting multiple simultaneous surveys. Possible solutions could have been to run two different studies on separate days - one with some dependent variables and one with others. We were, however, only granted one day for the field experiment. We concluded that the solution was to conduct the surveying after checkout, where each purchase is easily registered, and where questions could be asked about the shopping experience as a whole. The surveyor(s) were standing close enough to the counter to be able to read each consumer’s number of goods bought as well as the amount to pay, but not too close to be intrusive.

A few disadvantages of this method had to be accepted for us to be able to conduct this experiment. First and foremost, we had limited possibilities of measuring or controlling the duration between stimuli and surveying for each respondent. Therefore, we have no way of knowing whether the impact of employee presence diminishes over time and in that case how fast. During the field experiment, however, we do attempt to estimate how long a typical store visit is, by noting when a single person enters and exits the store. This is also the method used for judging when the last people from a previously active stimulus goes through the checkout. Secondly, we are unable to control how many employees or other consumers are present in the store, where they are positioned in relation to the respondent, or what they do.

During the field experiment, both of us are dressed in blue, regular Clas Ohlson uniforms, with nametags that say “New at work”. We chose to present ourselves as Clas
Ohlson staff rather than students for several reasons. A primary reason was of a practical nature; the one posing as greeter needed to be able to quickly switch between being a greeter and an interviewer, without interruption. Also, according to our contact at Clas Ohlson, visitors to this chain store are more willing to take part in surveys when asked by uniformed employees rather than people without a uniform.

When conducting the surveys, we first discretely noted the number of products, and the amount paid. If the person said yes to participate in our study, the information was entered in a questionnaire by the interviewer before further questions were asked. We chose to interview respondents rather than ask them to fill in the surveys themselves for several reasons. First and foremost, interviews typically entail higher response rates (Bryman & Bell, 2011), which was crucial in this study due to the limited time that we had. Secondly, interviewing allowed us to help respondents when they were unsure about the meaning of questions. Thirdly, self-serve questionnaires carry the risk of respondents not filling in answers to all questions (Bryman & Bell, 2011), which we needed to avoid since our pool of potential respondents was very limited. Admittedly, a weakness of interviewing compared to self-serve questionnaires is the risk of interviewer effects - the interviewer (unintentionally) impacting the responses. This was further added on since both of us carried out the interviewing, thereby possibly introducing variance in interviewer effects. We did, however, carefully make sure that we were as similar as possible in how we behaved and asked questions, so as to minimize any impact that the interviewer might have on responses (Bryman & Bell, 2011). Mean comparisons using independent samples t-tests on the pleasure variable, not assuming equal variances, showed that there were no differences within any treatment group between the two interviewers. Thereby we conclude that the risk of interviewer effects was small and that there was no difference between the interviewers.

Admittedly, a drawback of using a well-established store in a small town, where tourism is very limited in November, is that most consumers likely have visited the store before and therefore possibly recognize its regular store employees. This could entail that the store employee and simulated store employee (impersonated by one of the authors of this thesis) used as stimuli in our experiment would be deemed as unfamiliar and thereby affect consumer responses in an unintended way. This was one of several reasons why
we tested for typicality, which will be returned to in a later section. A store in a shopping area in the centre of a major city could have been more appropriate since fewer people here would likely be familiar with the store and its employees. However, we try to mitigate this possible effect by having the employee wear a name tag that says “New at work”, thereby providing a plausible explanation for her presence.

The total sample (N = 123 after exclusions that we will come back to) consisted of 57 women and 66 men. The questionnaire allowed a response of “Other/Do not want to say”, but no respondent chose this alternative. We found no significant difference in the gender distribution between conditions ($X^2 = 1.79, p = .41$). Ages of respondents ranged from 17 to 80 years old ($M = 54.57, SD = 15.72$). We conducted this study entirely in Swedish since we were in a Swedish town where the vast majority of people are native Swedish speakers. Using Swedish then minimized the spread in interpretation of questions by respondents. Respondents were incentivized to participate with a gift in the form of a tape measure. All respondents were anonymous.

Using this type of store in a small town likely means that most respondents have visited it before, are familiar with it, or even loyal to it. To check whether this was true, we included a question asking whether the respondent had visited the store before. 116 respondents said they had visited the store before while 7 said they had not (94.3% compared to 5.7%). Most respondents were therefore at least to some extent familiar with the store. This contributed to the risk of our treatments being perceived as atypical. Typicality was, however, high for all treatments, as will be showed in another section.

What is more, we received access to hourly sales data for the day of the experiment as well as the previous day. This data could not be used as a dependent variable, unfortunately, since data for time slots with the no employee condition differed greatly between the two days. This data was, however, possible to use in checking whether our sample was representative for the population of customers for that day. Our conditions were run during very specific time intervals. In order to get enough respondents, we compared the actual average receipt for each condition with our survey data on sales per respondent. We are not allowed to share the sales data, but can report that using a one-sample t-test to compare the means for each treatment group, we found that there were
no significant differences (p \geq .22 for any of the three treatments). We therefore conclude that our sample is successfully random and representative of the population of Clas Ohlson buying customers during this specific day.

### 3.1.2 Study 2

Our lab experiment was conducted in four different bachelor level classes at Stockholm School of Economics, on Monday, November 9th, 2015. It consisted of a paper survey where each survey was randomly allocated one of three stimuli and one copy of the questionnaire that was identical to all respondents. We chose to use a paper survey for its possibilities, compared to a web survey, of controlling the respondent’s environment and state of mind, to minimize all other interfering sensory stimuli differences between experiment conditions.

The choice of this convenience sample allowed rapid and controlled collection of surveys. Another benefit is that the sample would be highly homogenous, which means we only needed a small sample (Bryman & Bell, 2011). This is a very common sampling and surveying method, employed by for instance Söderlund (2015). What is more, since Study 1 finds no impact of store entrance employee presence on our dependent variables, we concluded that if those conclusions are robust, then they should hold when tested against a homogenous group since any differences in responses to stimuli likely would be more easily detectable.

The total sample (N = 117 after exclusions that we will come back to) consisted of 58 women and 59 men. The questionnaire allowed a response of “Other/Do not want to say”, but no respondent entered this response. We found no significant difference in the gender distribution between conditions (X^2 = 1.58, p = .45). Ages of respondents ranged from 19 to 31 years old (M = 21.71, SD = 1.88). Respondents were incentivized with candy. Just like in Study 1, the survey was conducted entirely in Swedish. All respondents were anonymous.
3.2 Stimuli development

3.2.1 Study 1

Type of store
The type of store and the product category influence consumer expectations on ambience, design, and social factors in stores through their schemas Baker et al. (2002) and this may impact hypothesized relationships between variables in our study. The type of store is also closely related to the type of shopping and the degree of involvement from the consumer. A common distinction is between utilitarian and hedonistic shopping (Nordfält, 2007), where the former for instance would comprise grocery shopping and the latter could be for instance clothes shopping. The latter has been used by Söderlund (2015) in his study of the effect of mere employee presence.

Several studies of store environments have used card and gift stores in their experiments [for instance ref 5, ref 6] mainly because these stores were believed to be used by people in most if not all consumer segments at the time of those studies. Similarly, Argo and Dahl (2005) focused on a battery display in a general store - a product that is commonly purchased by all age groups and genders. These general stores often compete by price, leading them to make use of what is termed “discount ambience” (Sharma & Stafford, 2000) - bright lighting and pop music as opposed to dimmed-down lighting and classical music in “prestige ambience” stores. Sharma and Stafford (2000) found that a reduction in the number of salespeople had a negative effect on consumers’ purchasing intentions in the “discount ambience” stores, but not in the “prestige ambience” stores. In short, employees are more important in stores such as general stores carrying batteries. On the other hand, Hassanein and Head (2005) found that unlike for products for which consumers seek fun and entertaining shopping experiences, products for which consumers primarily seek product information are not benefited by a higher degree of social presence. This thereby partly contradicts Sharma and Stafford (2000) since discount ambience stores are typically associated with the latter product category from Hassanein and Head (2005) and suggests that we should use a clothing retail store or similar instead. However, we find the former source to be more relevant in this case since it investigates a physical retail setting while Hassanein and Head (ibid.) study the realm of online retail. Moreover, what is considered a fun and entertaining shopping
experience likely varies between consumers, while the categorization of the ambience of the store is more objective. We find Sharma and Stafford (2000) more useful to our purposes and conclude that we should use a discount ambience store. To ensure that we get a wide and even demographical distribution among respondents, the store should attract both men and women and carry general goods. Preferably, the design of the store should not be too prominent, since we intend to use depictions of the store as stimuli in Study 2, and we do not want the design to capture too much attention or remind respondents about the store brand more than is necessary.

We have chosen to conduct our experiments at Clas Ohlson - a Swedish chain of general stores selling home and office products within the hardware, electrical, multimedia, home, and leisure areas. These are products that most people regularly need - both young and old, men and women. Stores are located in city centres and shopping malls, as well as in big-box store areas on the outskirts of towns, so most people have easy access to them. The particular store that we use is situated in the town of Borlänge - a small town close to where the chain was founded in 1918. As has already been shown, most visitors to this store have been there before. Respondent familiarity with a store environment has been avoided in previous studies, such as Baker et al. (1994), which uses video stimuli from a different town than where the surveying takes place. However, since we are conducting a field experiment rather than a lab experiment, lowering the share of respondents who are already familiar with the store would be challenging. Also, if the hypothesized relationships between variables exists and are strong enough, they would be less relevant at least to retailers if they were contingent on consumers not being familiar with the store.

Store layout
We chose a Clas Ohlson store that was deemed to be highly appropriate for this study. It was situated in a big-box store area on the outskirts of the small town of Borlänge in Sweden. After entering through the first pair of doors, consumers would find themselves in a vestibule with promotion and product displays before entering through a second pair of doors to get into the store. From that point, no store employees were typically visible since consumers either had to take a right to go into the store or take a left to go through a short corridor to the service desk and checkout. Also at this point, there was a pile of
shopping baskets and a few carts. We concluded that it would be natural for a greeter to be standing in a space next to these shopping tools. The layout of the rest of the store was like a labyrinth, with a predetermined but not easily visible or straight path for consumers to follow through all departments. This design allowed us to control with a high level of certainty what consumer received what stimuli.

The store environment
Baker (1986) categorized the store environment into design factors, social factors, and ambient factors. When investigating the impact of varying a form of social factor, we need to control other factors of the store environment as well as other aspects of the social factor. Clas Ohlson’s stores are a typical case of “discount ambience” stores, as outlined earlier, using bright lighting and pop music. Design factors are similarly simple and bright. Light blue is at the core of the graphic identity and this colour recurs in store design as well as employee uniforms. Keeping ambience and design factors constant during our study is not as challenging as controlling the social factors - especially the number and location of other customers in relation to each respondent.

This means the nature of the social factor will vary between consumers and potentially impact our results. However, we do know that there are no more than three employees in the store at any time (excluding the checkout) and they are typically spread out in the store. Also, we assume that the number of employees and other consumers will be fairly constant for all respondents and that any variation evens out with a large enough number of respondents. There may, however, be an advantage of the presence of regular staff and other consumers. Complete absence of staff or consumers or many of the same could likely be seen as atypical or at least unpleasant, which could possibly impact our dependent variables (Argo & Dahl, 2005). The number and location of other people is a delicate matter - Söderlund (2011) showed that other customers, who are strangers to a focal consumer, affect her overall evaluation of a store.

The role and actions of the real employee
To make sure that the simulated employee would feel as typical in its role as a real employee in the same role, and to make sure the stimuli worked as well in a survey as in a field experiment, it was concluded that the best role for our focal employee would be
that of a greeter - an employee who is stationed to the entrance of a store, saying welcome and inviting consumers to take a shopping basket. Clas Ohlson currently already use a simulated employee in some stores (not the one we ran our field experiment in) in the lighting department, where consumers often need extra help. However, we believe it would have been seen as atypical that a real employee would just stand still and wait for a consumer to come by. Also, greeters are increasingly common, at least in very large stores such as IKEA (where we have both seen it ourselves), WalMart (Snyder, 2015), and department stores in Japan (CBC News, 2015). Therefore, our treatments consist of a human Clas Ohlson employee (played by one of the authors of this thesis), greeting consumers and asking if they want a shopping basket. The simulated alternative is a cardboard cut-out featuring the same person as in the human greeter treatment. The third stimulus is the absence of any of the alternatives. We had limited possibilities of designing the appearance of the employee and since the employee was identical between the two employee treatments, we do not believe her physical appearance and characteristics to be of any issue. We did, however, ensure that no part of her appearance was unusual, to make sure excessive attention was not drawn to that. It was highly unlikely that any consumer in Borlänge would recognize any of us, and that was also the case. This has both benefits and drawbacks. If we would have had the possibility to use an employee who works in the focal store, responses may have been biased due to respondents’ familiarity with that person. On the other hand, if consumers are very familiar with the store, a new face might draw extra attention. To explain why we were there, we both wore Clas Ohlson uniforms and nametags that read “New at work”.

In this thesis our subject of interest is employee mere presence, not store greeters. However, as Söderlund (2015) showed, consumers do not react significantly differently to an employee who pays attention to the consumer, compared to an employee who does not pay attention to her. What is important is the employee’s presence. A greeter is, however, expected to greet, unless she is occupied with something else close to the entrance, such as hanging signs or organizing merchandize. However, we needed the simulated employee to be as similar to the real employee as possible, and a cardboard sign featuring an employee who does not pay attention to the consumer would likely be seen as odd and atypical, since one likely assumes that a greeting simulated employee is more welcoming than a simulated greeter who does not pay attention to the consumer.
When the simulated greeter cannot do anything else than provide one-way communication that presumably would be friendly and helpful, one would likely perceive a non-greeting simulated employee as an insult from the store to consumers. One alternative could have been to have the three outlined treatments, but also a fourth one, where the employee does not pay attention to the customer. However, that would have required many more survey responses. We could not risk getting too few responses on the three most important treatments, which is why we decided not to use the fourth treatment as well. Regarding what the employee did, we were guided by what we agreed to be the most natural and plausible - smiling, making eye contact with consumers, welcoming them - as is recommended by research such as (Kim & Kim, 2012).

The design of the medium

Our primary hypotheses are concerned with whether simulated presence of a greeter is at all possible. A rejection of such a hypothesis would be the most reliable if the simulation is of the highest possible quality, making the simulated employee appear as real and human as possible while still being simulated - that is, that the simulation is good enough to ensure that consumers are as likely as possible to experience presence.

The presence field of research has studied how presence can be accomplished. Regarding the characteristics of the medium, Lee (2005) and Lombard & Ditton (1997) states that two different types of realism enable the experience of presence. Perceptual realism is how life-like the portrayal is and also how rich their sensory stimulus is. Lombard and Ditton (2004) refer to this as sensory breadth (the number of sensory dimensions in use) and sensory depth (the resolution within which sensory dimension). We were limited to the use of cardboard, so we could not make use of sound or moving images even though this would have generated a higher level of perceptual realism through a wider sensory breadth. We were limited to visual stimuli. On the other hand, Lombard and Ditton (ibid.) shows that out of the various sensory outputs, visual ones are the most important, contributing the most to presence.

To maximize the sensory depth, our simulated greeter was produced using a colour photograph in high resolution with life-like colours, brightness, and contrast. Social realism, on the other hand, refers to how plausible or normal the portrayed phenomenon
feels (Lee, 2004) - could it occur in the real world? An employee, dressed in the store uniform, welcoming consumers to a store with eye contact and a smile should not be considered odd. Furthermore, the simulated greeter was reproduced in the same size as the human model, and the picture was shot from the height of a normal person’s eyes to ensure the most realistic angle. What is more, according to Lee (ibid.), humans are very easy to simulate, since evolution hardwired us to recognize the slightest cues of humanity because other humans could be either our greatest friends or enemies. Simply by simulating a human rather than anything else thereby contributes to the likelihood of successful presence. Another characteristic of the medium that needs to be managed is its obtrusiveness (Lombard & Ditton, 2004). There should be as little as possible that draws attention to the medium itself and away from the mediated phenomenon. To minimize obtrusiveness, the surface of the cardboard cut-out was matte, to minimize the occurrence of glare, and it was cut along the contour of the depicted greeter. In short, we did our best to maximize perceptual and social realism in the simulated greeter. According to Lee (2004), humans tend to accept incoming stimuli as real unless there is strong evidence that it is not.

Typicality assessment
As mentioned, several factors may make our treatments feel non-normal to consumers. First of all, we have mentioned that widespread consumer familiarity with the used store may make respondents more attentive to changes - such as the introduction of a greeter. Moreover, the greeter itself - whether real or simulated - may be seen as an unusual concept that receives more attention than intended. The importance of this is highlighted in a study by Winkielman and Cacioppo (2001), where typicality impacts processing fluency, which in turn is associated with pleasantness. That is, lower levels of perceived typicality leads to lower levels of processing fluency, which lowers pleasantness. Therefore, if one or more treatment is considered atypical compared to the others, this means the pleasantness experienced in that treatment is lower than it would have been if the treatment was not experienced as atypical, in effect weakening conclusions about relationships between variables. Holzwarth, Janiszewski and Neumann (2006), for instance, recognized that their study of avatar sales representatives in online stores was weakened by the fact that these avatars generated a novelty effect in respondents. To test whether treatments were perceived as unusual or not, and more importantly, whether the
level of typicality was different for different treatments, we measured to what extent consumers perceived the store to be typical or not during their visit.

To investigate typicality, we included a measure where we asked respondents; “When thinking about your impression of this store today, and compare it to a regular store of this type, do you find it…” and then followed by three adjective pairs on a 10-point scale - “Atypical-Typical”, “Non-normal-Normal”, and “Uncommon-Common”. The unweighted mean of responses to these three items was used as a measure of typicality. The Cronbach’s alpha was .92, showing internal reliability and supporting the construction of this measure, since the recommended minimum level is .7 (Bryman & Bell, 2011). As mentioned, Winkielman and Cacioppo (2001) found a positive relationship between typicality and pleasure. We found the same relationship, as expected (r = .34, p < .01).

To compare the degree of (un)typicality between the three conditions, we compared the typicality means between the three conditions. Averages were high in all cases (M ⩾ 8.14), indicating that none of the conditions were seen as atypical. A one-way ANOVA, however, showed significant differences (F = 3.27, p = .04), thus suggesting that the level of typicality was different between at least two conditions. More specifically, there was a significant difference between the real employee and simulated employee conditions (p = .04), with the real employee condition having the highest value for typicality. Considering the high level of typicality on all conditions, along with how close this ANOVA is to not showing significant differences, we conclude that the three different stimuli on Study 2 were not considered untypical.

3.2.2 Study 2

For the survey-based experiment, we photographed the entrance and three other spots in the store where we conducted the field experiment. We chose to use photos instead of richer or less rich media for several reasons. First, we wanted paper survey respondents to receive stimuli that were as close to the field experiment stimuli as possible. A text-based scenario that for instance has been used by Söderlund in a similar study (Söderlund, 2015) would have been difficult to design in a way that made the stimuli more similar to the field experiment than photos from the actual field experiment.
Moreover, we concluded that the simulated employee would in a text-based scenario not have been possible to portray without drawing unwanted attention and suspicion to it from respondents. We feared they would have deemed this scenario to be atypical and would have suspected the cardboard cut-out to be the focus of the study, thereby possibly impacted our dependent variables in conscious ways rather than subconscious, generating different levels on dependent variables than otherwise would have been reported.

When taking the photos, we made sure they would be as close as possible to the real impressions of the store that the visitors had during the field experiment so as to minimize the differences between the field experiment and the paper survey experiment. Other than the photo of the entrance, we chose to have three more photos from the store, for two main purposes. First, during a real visit to a store, a consumer experiences many sensory impressions over duration of, likely, at least ten minutes. However, in a lab experiment, the number of sensory impressions is limited for practical reasons. A larger number of photos from the store would at least make the simulated store visit longer and provide more impressions than when using fewer photos. Secondly, we wanted to minimize the possibilities of respondents suspecting what the study was about. Only having a photo from the entrance featuring either a member of the staff, a cardboard cut-out, or none of the two, could likely have led respondents to guess that the aim of the study is to test the impact of greeters on consumers. We chose to represent a typical store visit through one photo of the entrance, two photos from different and common departments inside the store, and one photo of the check-out. When taking these photos, we took care to mimic the perspective of a consumer. The three entrance photos were taken from the same spot and with the same view. The photos were cropped and their lightness were adjusted to make sure they were all as close to each other as possible, and as realistic as possible.

Typicality assessment
To investigate typicality in Study 2, we included the same question as in Study 1. The unweighted mean of responses to the three items was used as a measure of typicality. The Cronbach’s alpha was .94, suggesting strong internal reliability and supporting the construction of this measure. As mentioned, Winkielman and Cacioppo (2001) found a
positive relationship between typicality and pleasure. However, in Study 2, we found no significant relationship between these variables ($r = -.1$, $p = .28$). To compare the degree of (un)typicality between the three conditions, we compared the typicality means between the three conditions. Averages were moderate to high in all cases ($M \geq 6.92$), indicating that none of the conditions were seen as atypical. A one-way ANOVA, however, showed significant differences ($F = 7.98$, $p < .01$), thus suggesting that the level of typicality was different between at least two conditions. More specifically, there was a significant difference between the real employee and both the simulated employee condition ($p < .01$), and the no employee condition ($p < .01$), with the real employee condition this time having the lowest value for typicality (in Study 1 it was highest). The real greeter condition was thereby seen as less typical than both the simulated greeter and the no greeter conditions. Drawing from Winkielman and Cacioppo (2001), to the extent that this may have an impact on our main analyses, the low typicality on the human greeter condition should have lowered its degree of pleasure. However, as we will see in the Results chapter, the human employee condition generated significantly higher degrees of pleasure (and satisfaction) than both the other conditions. This indicates that the typicality of this condition does not impact the conclusion that is drawn in the Results chapter. Taken together with the finding regarding the correlation between typicality and pleasure, findings indicate that in Study 2, the human greeter was considered a positive surprise rather than an uncomfortable difference against expectations.

3.3 Measures

3.3.1 Study 1

Pleasure

Pleasure was measured using the question “How do you feel about this store today?”, followed by three pairs of adjectives that are very common in studies where pleasure is a dependent variable; (unpleasant-pleasant, bad-good, and dislike it-like it) scored on a 10-point scale. This has been used by, among others, by Söderlund (2015). The unweighted mean response to the three items was used as pleasure measure and Cronbach’s alpha was .89.
Satisfaction
We measured satisfaction with three questions that were minor adaptations of items that are very common in marketing research (Söderlund, 2015; Fornell, 1992) - “How satisfied or dissatisfied are you with this store today?” with items on a 10-point scale (very dissatisfied-very satisfied), “To what extent does this store meet your expectations today?” (not at all-totally), and “Imagine a store of this kind that is perfect in every way. How near or far from this ideal do you find this store?” (very far from-cannot get any closer). The mean of the three questions had a Cronbach’s alpha of .68. This is very close to, but still below the recommended level of .7 (Bryman & Bell, 2011), thereby indicating unsatisfactory reliability. Still, the alpha is very close to the mentioned level, and the unweighted average of the three questions is accepted as a measure of the variable of satisfaction.

We conducted a validity check using the repatronizing intentions item - “How likely is it that you would visit this store again?” scored on a 10-point scale (very unlikely-very likely). The correlation between satisfaction and intention was positive and significant (r = .33, p < .01), indicating that the satisfaction measure’s predictive validity was acceptable - satisfaction is closely connected to repatronizing intentions, as expected.

Manipulation check
Towards the end of the survey, we had a manipulation check. Respondents were asked firstly, “When you think about when you entered this store today, did you see an employee there?”, followed by four alternatives - “I was welcomed by a member of the staff”, “I was welcomed by a depiction of staff”, “There was no staff in the entrance when I arrived”, or “Not sure”.

3.3.2 Study 2
Pleasure
Pleasure was measured using the question “How do you feel about this store today?”, followed by three pairs of adjectives that are very common in studies where pleasure is a dependent variable; (unpleasant-pleasant, bad-good, and dislike it-like it) scored on a 10-point scale. This has been used by, among others, by Söderlund (2015). The unweighted
mean response to the three items was used as pleasure measure and Cronbach’s alpha was .94.

Satisfaction
We measured satisfaction with three questions that were minor adaptations of items that are very common in marketing research (Söderlund, 2015; Fornell, 1992) - “How satisfied or dissatisfied are you with this store today?” with items on a 10-point scale (very dissatisfied-very satisfied), “To what extent does this store meet your expectations today?” (not at all-totally), and “Imagine a store of this kind that is perfect in every way. How near or far from this ideal do you find this store?” (very far from-cannot get any closer). The mean of the three questions had a Cronbach’s alpha of .82, thereby indicating satisfactory reliability, whereby the unweighted average of the three questions is accepted as a measure of the variable of satisfaction.

We conducted a validity check using the repatronizing intentions item - “How likely is it that you would visit this store again?” scored on a 10-point scale (very unlikely-very likely). The correlation between satisfaction and intention was positive and significant ($r = .67, p < .01$), indicating that the satisfaction measure’s predictive validity was acceptable - satisfaction is closely connected to repatronization intentions, as expected.

Manipulation check
Towards the end of the survey, we had a manipulation check. Respondents were asked, “When you think about when you entered this store today, what did you see?”, followed by four alternatives - “I was welcomed by a member of the staff”, “I was welcomed by a depiction of staff”, “There was no staff in the entrance when I arrived”, or “Not sure”.

3.4 Statistical analysis
All our hypotheses were investigated using analysis in the statistical analytics software IBM® SPSS® (version 23). The conventional significance level of 5 percent was used in all tests.

Since our hypotheses concerned comparing mean levels of dependent variables between condition groups, we chose to use analyses of variance (ANOVAs). An ANOVA shows
whether means are significantly different from each other or not. It provides the opportunity to investigate several groups together, which is ideal when using a between-subjects experimental research design.

3.5 Reliability and validity

Reliability concerns “whether the results of a study are repeatable” (Bryman & Bell, 2011). This was ensured primarily through construct reliability through the use of several items for the same construct. An acceptable level of Cronbach’s alpha signals that construct reliability has been achieved. All constructs were judged to pass this criterion by considerable margin except for one which was very close to the acceptable level. The possibility to replicate our results has been ensured through highly detailed descriptions of our methods in the sections above.

Validity has four main categories. Measurement validity is also called construct validity and has to do with “whether or not a measure that is devised of a concept really does reflect the concept that it is supposed to be denoting” (Bryman & Bell, 2011). This was tested by investigating the relationship between satisfaction and repatronizing intentions, and we found that construct validity has been achieved. Also, we made use of questions and items that have been successfully used and approved by prominent researchers and peer-reviewed research, ensuring high quality measures.

The second validity category is internal validity which is “concerned with the question of whether a conclusion that incorporates a causal relationship between two or more variables holds water” (Bryman & Bell, 2011). Our independent variable is the degree to which employee presence can be varied, while our dependent variables include pleasure and satisfaction. We have conducted both a field experiment and a lab experiment. While the former is weaker in internal validity, the lab experiment is stronger in this aspect.

External validity concerns “whether the results of a study can be generalized beyond the specific research context” (Bryman & Bell, 2011). Specifically, this concerns whether samples are representative. In this case the opposite relationship holds compared to internal validity - our field experiment is strong in terms of external validity, but the lab experiment is weaker in terms of external validity.
Finally, ecological validity “is concerned with the question of whether or not social scientific findings are applicable to people’s everyday, natural, social settings” (Bryman & Bell, 2011). This dimension was ensured through very careful design of stimuli and our ensurance of maximized perceived typicality, as developed in other sections.
4. EMPIRICAL FINDINGS

In the following section, we present analysis results from Study 1 and Study 2, together with additional findings, and a summary.

4.1 Overview of Collected Data

4.1.1 Study 1

Study 1 was conducted to investigate our first research question; Is it possible to simulate employee mere presence in a physical, non-mediated retail setting? The question is answered through four hypotheses - 1a, 1b, 2a, and 2b and a field experiment. In total, we collected responses from 132 people. No respondent gave responses to less than all questions.

Towards the end of the survey, we asked respondents what they remembered of the instance when they entered the store as a manipulation check. For most of the respondents, this very open question was enough for them make statements such as “there was a person welcoming me” (real employee present condition) or “there was a person on a sign welcoming me” (simulated employee condition), or else they were confused by the question - they did not notice anything about the entrance (no employee condition). In some cases, a follow-up question was needed - “Did you notice whether there was a person in the entrance or not?”. Nine people answered a different stimulus than we expected, whereby we excluded those respondents. Seven people said they were unsure about what they had seen. We decided to keep those since it was highly likely that they received the stimuli that we expected. Moreover, four respondents were excluded because they correctly guessed the subject of the study. Thereby, analyses for Study 1 are based on data from 123 people.

4.1.2 Study 2

Study 2 was conducted to investigate our second research question: Is it possible to simulate employee mere presence in a physical retail setting, when the setting itself is simulated? Connected to this question are hypotheses 3a, 3b, 4a, and 4b. In total, we collected responses from 130 people and excluded five people who did not complete all
questions. Similarly to the first study, we conducted a manipulation check by at the end of the survey asking the respondents what they remembered of the instance when they entered the store in the scenario. Eight people answered a different stimulus than we expected, whereby we excluded those respondents. Three people said that they were unsure about what they had seen. We decided to keep those since it was highly likely that they received the stimuli that we expected. Thereby, analyses for Study 2 are based on data from 117 people.

4.2 Assessing the Hypotheses

4.2.1 Study 1

We tested Hypotheses 1a and 1b using a one-way ANOVA on the pleasure variable. The mean pleasure was high for all three conditions but highest for the real employee condition (M = 8.71) while the simulated employee condition (M = 8.49) and no employee condition (M = 8.53) were very close to each other. An omnibus test showed that all means were equal (F = .293, p = .75). A post-hoc comparison (again using the Sheffe test) of the means showed that there was no significant difference between the employee absence and simulated employee presence conditions (p = .99). Hypothesis 1a was therefore rejected. Even though the means for the simulated employee and real employee conditions are not significantly different (p = .77), this is rendered less relevant since the real employee condition did not produce a significantly higher level of pleasure than the no employee condition either (p = .84), which leads us to reject Hypothesis 1b as well.

### TABLE 1

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: The mere presence of a simulated employee in a physical retail setting</td>
<td>Rejected</td>
</tr>
<tr>
<td>evokes a higher level of <strong>pleasure</strong> than the absence of any manifestation</td>
<td></td>
</tr>
<tr>
<td>of an employee.</td>
<td></td>
</tr>
<tr>
<td>H1b: Given that the mere presence of an employee in a physical environment</td>
<td>Rejected</td>
</tr>
<tr>
<td>produces a higher level of customer satisfaction than the absence of an</td>
<td></td>
</tr>
<tr>
<td>employee, the mere presence of a simulated employee evokes as high a level</td>
<td></td>
</tr>
<tr>
<td>of <strong>pleasure</strong> as a real employee.</td>
<td></td>
</tr>
</tbody>
</table>
In assessing Hypothesis 2a and 2b, we compared customer satisfaction levels between the three conditions and once again levels were high. In this case, the no employee condition produced the highest mean ($M = 8.52$), while the real employee condition came close behind ($M = 8.48$) and the simulated employee condition had the lowest mean satisfaction ($M = 8.16$). The omnibus test in this case showed that all means were equal ($F = 0.92, p = .40$). The Sheffe post-hoc comparison showed that the simulated employee condition did not produce a significantly higher level of satisfaction than the no presence condition ($p = .46$). Hypothesis 2a was therefore rejected. Even though the means for the simulated employee and real employee conditions are not significantly different ($p = .56$), this is rendered less relevant since the real employee condition did not produce a significantly higher level of satisfaction than the no employee condition either ($p = .99$), which leads us to reject Hypothesis 1b as well.
TABLE 2  
HYPOTHESIS 2a AND 2b

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2a: The mere presence of a simulated employee in a physical retail setting</td>
<td>Rejected</td>
</tr>
<tr>
<td>evokes a higher level of satisfaction than the absence of any manifestation of an employee.</td>
<td></td>
</tr>
<tr>
<td>H2b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

FIGURE 2  
STUDY 1 – MEAN SATISFACTION PER CONDITION

Note. Error bars represent 95% confidence intervals.
4.2.2 Study 2

We tested Hypotheses 3a and 3b using a one-way ANOVA on the pleasure variable. The mean pleasure was moderate for all three conditions compared to the field experiment levels. The highest mean was for the real employee condition (M = 7.58), followed by the simulated employee condition (M = 6.32) and no employee condition (M = 5.09). An omnibus test showed that all means were not equal (F = 50.77, p < .01). A post-hoc comparison (again using the Sheffe test) of the means showed that they were all significantly different from each other (p < .01 in all cases). Since the simulated employee presence condition produced significantly higher levels of pleasure than the employee absence condition (p < .01), Hypothesis 3a was accepted. The real employee presence condition produced significantly higher levels of pleasure than the no employee presence condition (p < .01), but the simulated employee presence condition produced significantly lower levels of pleasure than the real employee condition (p < .01), which leads us to reject Hypothesis 3b.

**TABLE 3**

HYPOTHESIS 3a AND 3b

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H3a:</strong> The mere presence of a simulated employee in a physical retail setting evokes a higher level of <em>pleasure</em> than the absence of any manifestation of an employee.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H3b:</strong> Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of <em>pleasure</em> as a real employee.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
FIGURE 3
STUDY 2 – MEAN PLEASURE PER CONDITION

Note. Error bars represent 95% confidence intervals.

We also investigated employee presence impact on customer satisfaction. In assessing Hypothesis 4a and 4b, we compared satisfaction levels between the three conditions and once again levels were moderate compared to in the field experiment. Just as with the pleasure variable, the real employee condition produced the highest mean (M = 7.59), while the simulated employee condition came in second place (M = 6.80), and the absent employee condition had the lowest mean satisfaction (M = 5.85). The omnibus test in this case showed that all means were not equal (F = 23.77, p < .01). A Sheffe post-hoc comparison of the means showed that they were all significantly different from each other (p ⩽ .01 in all cases). Since the simulated employee presence condition produced significantly higher levels of satisfaction than the employee absence condition (p < .01), Hypothesis 4a was accepted. The real employee presence condition produced
significantly higher levels of satisfaction than the no employee presence condition \((p < .01)\), but the simulated employee presence condition produced significantly lower levels of satisfaction than the real employee condition \((p = .01)\), which leads us to reject Hypothesis 4b.

**TABLE 4**

HYPOTHESIS 4a AND 4b

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4a: The mere presence of a simulated employee in a physical retail setting evokes a higher level of satisfaction than the absence of any manifestation of an employee.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b: Given that the mere presence of an employee in a physical environment produces a higher level of customer satisfaction than the absence of an employee, the mere presence of a simulated employee evokes as high a level of satisfaction as a real employee.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

**FIGURE 4**

STUDY 2 – MEAN SATISFACTION PER CONDITION

*Note. Error bars represent 95% confidence intervals.*
4.3 Additional Insights

4.3.1 Study 1

Other than our main dependent variables, we also studied the impact of stimuli on respondents’ willingness to return to the store using a one-way ANOVA. The mean willingness to return was high for all three conditions. The highest mean was for the real employee condition (M = 9.68), followed by the simulated employee condition (M = 9.53) and no employee condition (M = 9.40). These levels, together with the fact that 94% of Study 1 respondents had visited the store before, indicate a high degree of customer loyalty to this store. An omnibus test showed that all means were equal (F = .47, p = .63). A post-hoc comparison (again using the Sheffe test) of the means showed that none of them were significantly different from each other (p > .62 in all cases). Our conditions thereby had no impact on consumer willingness to return to the store.

We also measured to what extent consumers felt welcomed when entering the store in the experiment. Once again, we ran a one-way ANOVA. The mean degree to which consumers felt welcome was high for all three conditions. The highest mean was for the real employee condition (M = 9.35), followed by the simulated employee condition (M = 8.30) and no employee condition (M = 7.79). An omnibus test showed that all means were not equal (F = 7.98, p < .01). A post-hoc comparison (again using the Sheffe test) of the means showed that the real employee condition produced significantly higher degrees of feeling welcomed than both the no employee condition (p < .01) and the simulated employee condition (p = 0.04). There was no significant difference between the no employee condition and the simulated employee conditions (p = .44). The real employee thereby produced one significant positive impact; that on feelings of being welcome to the store.

4.3.2 Study 2

Other than our main dependent variables, we also studied the impact of stimuli on respondents’ willingness to return to the store using a one-way ANOVA. The mean willingness to return was high for all three conditions. The highest mean was for the real employee condition (M = 8.11), followed by the simulated employee condition (M = 7.85) and no employee condition (M = 6.83). An omnibus test showed that all means
were not equal ($F = 7.66, p < .01$). A post-hoc comparison (again using the Sheffe test) of the means showed that both the real employee ($p < .01$) and the simulated employee ($p = .02$) conditions produced higher willingness to return to the store compared to the no employee condition. There was no significant difference between the real employee condition and the simulated employee condition ($p = .76$), indicating that the simulated employee actually was able to produce as strong a response as the real employee.

We also measured to what extent consumers felt welcomed when entering the store in the experiment. Once again, we ran a one-way ANOVA. The mean degree to which consumers felt welcome varied greatly between the conditions. The highest mean was for the real employee condition ($M = 8.92$), followed by the simulated employee condition ($M = 7.15$) and no employee condition ($M = 5.35$). An omnibus test showed that all means were not equal ($F = 99.14, p < .01$). A post-hoc comparison (again using the Sheffe test) of the means showed that the mean differences were significantly different in all cases ($p < .01$). The real employee thereby produced a high degree of feeling of being welcomed compared to the no employee condition, and so did the simulated employee condition, even though it was weaker than for the real employee condition.

4.4 Summary of the Results

Our results are not the same between the two studies. In Study 2, we find that exposure to a simulated employee produced higher levels of pleasure and satisfaction than the no employee condition, but not as high as for the real employee condition. In Study 1, however, pleasure and satisfaction levels were high and not significantly different from each other, indicating that an employee of any kind did not impact their shopping experience in any direction, compared to the no employee condition.
## TABLE 5
SUMMARY OF FINDINGS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Finding</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Rejected</td>
<td>In a field experiment, customers do not feel that the shopping is more pleasurable when exposed to a simulated employee compared to the absence of an employee of any kind.</td>
</tr>
<tr>
<td>H1b</td>
<td>Rejected</td>
<td>In a field experiment, customers do not feel that the shopping is more pleasurable when exposed to a real employee compared to the absence of an employee of any kind, so even though the pleasure level as a response to the simulated employee is as high as for the real employee condition, this is less interesting.</td>
</tr>
<tr>
<td>H2a</td>
<td>Rejected</td>
<td>In a field experiment, customers do not feel that the shopping is more satisfactory when exposed to a simulated employee compared to the absence of an employee of any kind.</td>
</tr>
<tr>
<td>H2b</td>
<td>Rejected</td>
<td>In a field experiment, customers do not feel that the shopping is more satisfactory when exposed to a real employee compared to the absence of an employee of any kind, so even though the satisfaction level as a response to the simulated employee is as high as for the real employee condition, this is less interesting.</td>
</tr>
<tr>
<td>H3a</td>
<td>Accepted</td>
<td>In a lab experiment, customers feel that the simulated shopping is more pleasurable when exposed to a simulated employee compared to the absence of an employee of any kind.</td>
</tr>
<tr>
<td>H3b</td>
<td>Rejected</td>
<td>In a lab experiment, customers feel that the simulated shopping is more pleasurable when exposed to a real employee compared to the absence of an employee of any kind. However, the presence of a simulated employee within the simulated shopping experience does not produce as high levels of pleasure as the real employee does.</td>
</tr>
<tr>
<td>H4a</td>
<td>Accepted</td>
<td>In a lab experiment, customers feel that the simulated shopping is more satisfactory when exposed to a simulated employee compared to the absence of an employee of any kind.</td>
</tr>
<tr>
<td>H4b</td>
<td>Rejected</td>
<td>In a lab experiment, customers feel that the simulated shopping is more satisfactory when exposed to a real employee compared to the absence of an employee of any kind. However, the presence of a simulated employee within the simulated shopping experience does not produce as high levels of satisfaction as the real employee does.</td>
</tr>
</tbody>
</table>
### TABLE 6
**ADDITIONAL FINDINGS**

<table>
<thead>
<tr>
<th>Additional insights</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Simulated) employee does not impact willingness to return in the field experiment,</td>
<td>Inconclusive; employees may increase willingness to return.</td>
</tr>
<tr>
<td>but in the lab experiment, the real employee and the simulated employee are equally</td>
<td></td>
</tr>
<tr>
<td>good at improving customer willingness to return.</td>
<td></td>
</tr>
<tr>
<td>A real employee increases feelings of being welcome to the store in the field</td>
<td>A real employee produces increased feelings of being welcome to a store,</td>
</tr>
<tr>
<td>experiment, but in the lab experiment, both the real and the real employee</td>
<td>regardless of whether this is tested in reality or in a simulated scenario.</td>
</tr>
<tr>
<td>increases feelings of being welcome, even though the real employee produces a</td>
<td>However, a simulated employee also produces this effect in the simulated</td>
</tr>
<tr>
<td>stronger effect than the simulated employee.</td>
<td>scenario, albeit weaker.</td>
</tr>
</tbody>
</table>


5. DISCUSSION

Going back to the purpose of this thesis, its main focus is to investigate the compatibility of the concepts of mere presence and simulation. The first task was to investigate whether or not it is possible to simulate employee mere presence in a physical, non-mediated retail setting. This question focused on comparing simulated employee presence to actual employee presence and lastly no presence at all. The second question to examine was whether or not it is possible to simulate employee mere presence in a physical retail setting, when the setting itself is simulated. This was investigated by comparing the results between the field and lab experiments.

5.1 General Discussion of the Results

The results of the first experiment challenges current research - both Söderlund’s (2015) about mere presence, Otterbring’s (2014) about greeters, and also the theories relating to simulating presence. The first experiment showed that there was no significant difference between either of the stimuli, both regarding pleasure and customer satisfaction, rejecting H1a and H2a. Further, H1b and H2b were also rejected despite that there was no significant difference among the results from simulated versus living employee presence. However, the fact that the similarity also included the case with no employee present at all means that it may not have been the effect of the simulated presence that caused the similarity between the simulated and human greeter, but the lack of it. Because of the lack of significant differences between the three scenarios in the first experiment, it is hard to derive from which theoretical framework the weakness of the hypotheses stems. Söderlund (2015) found that there was no significant difference on focal dependent variables between the presence of a greeting versus a passive employee. This implies that how the stimuli were presented (placed as a greeter in order for the simulated employee to have a natural function) should not have had an effect on the result, or the lack of it.

In contrast to the first experiment, the findings from the second one did not reject the impact of a greeter’s simulated mere presence on customer satisfaction and pleasure. This indicates that both real and simulated mere presence, indeed, can have an impact on the customer when simulated in an experiment. However, the results are not directly comparable to the effects of the same situation when it is played out in a non-mediated setting. However, the second experiment showed that, in this case, there was a significant
difference between the simulated and the physical greeter. Thus, simulating mere presence through a mediated setting does not generate the same level of presence as a physical person. Somehow the vividness of the actual person shines through the scenario simulation better than the simulated person does.

5.1.1 The Effects of Customer Loyalty and Store Familiarity on Customer Satisfaction

Considering our extra findings, we may find other reasons to the contradicting results of the two experiments. Our findings from the first experiment showed that the customers in the particular store where the experiment was run had very high levels on both customer satisfaction and pleasure, regardless of stimuli. Another factor that we found from the experiment was that the retention rate of the customers was very high. 94% of participants had been to the store before, and the average repatronize intention level for them was between 9.40-9.68 for all stimuli, with no significant difference in between them. According to Jones and Sasser (1995) one way of determining customer loyalty is to measure the retention rate of the customers, meaning that the customers of this particular store, most likely, could be defined as loyal. One attribute of loyalty is that customer satisfaction tends to be higher (Söderlund, 2010), which in this case could explain the high level on the variable in question. Under this assumption, it is given that the customers already had a high level of satisfaction when entering the store and the results thus were skewed, the effect of the different stimuli might have been diminished.

Moreover, entering a familiar store does not provoke the same type of behaviour as when entering it for the first time. First time visitors have to rely on their external memory when orienting themselves in a new store, meaning that they focus on for example the in-store information displays. Visitors familiar with a store focus less on the environment and more on evaluating different brands and products, as they do not have to focus their time and energy to locate themselves in the store (Alba & Hutchinson, 1987). Thus, another explanation to the rejection of H1a and H2a could be that since the high percentage of returning customers visiting Clas Ohlson in Borlänge indicates that they already were familiar with the store layout when entering. They saw the greeter as a part of the store interior and instead, their main task and point of focus was on more detailed product search.
Comparing the results of the second experiment to the ones of the first, there are several aspects that separate the mind-sets of the different customer groups. When respondents answer a survey containing pictures of an unspecified store, the likelihood of them being familiar with the store is very small. Moreover, when answering a survey, the respondent has not got one, or more, specific product(s) in mind when “entering” the store. Jointly these two factors mean that the main focus of the simulated “visit” will be on the store externalities and not on product browsing. Therefore, the likelihood of the customer in the lab experiment noticing and absorbing the different stimuli is larger, in accordance with our findings. Moreover, in the store experiment it was showed that, similarly to the results of the customers’ levels of pleasure and satisfaction, there was no significant difference in the customers’ willingness to return to the store. Logically this would imply that the willingness to return reflect the measured levels of satisfaction and pleasure. In the mediated experiment, however, there was no significant difference between the willingness to return to the store between the real and simulated employee stimulus. This does not reflect the satisfaction and pleasure levels of the same tests, indicating that there has to be other factors impacting the willingness to return. One explanation could be that the simulated employee is enough to convince the consumer that she would not be alone in this store - that the store wants to make sure there is always some kind of employee visible. Even though the simulated employee does not produce as high levels of pleasure and satisfaction as a real employee, it does enough to eliminate the feeling of being alone in a retail setting, which may be more important than pleasure and satisfaction. A third aspect that separates the two experiments is regarding noise surrounding the store visit. According to Simonson (2005), one disadvantage with unconscious inputs aiming to affect customers is the significant risk of them being lost in the “noise” created in a typical retail environment. The reason behind this is that this input is processed in parallel with the other task-irrelevant inputs existing in the store. Thus, the impact of one particular unconscious input becomes hard to distinguish. This is highly relevant to this study as the stimulus used is intended to be unconscious. In the lab experiment, we had almost full control over the noise surrounding the respondent. Except for what was going on in the classroom surrounding the respondent, the only unconscious input she/he was exposed to was the greeter (except for the situation where there was no greeter present). In the physical store experiment the unconscious inputs
were many, affecting the customers’ evaluations of the store in different ways. These findings may be interpreted in two different ways. Either they mean that the mediated setting help extracting the real effect of the stimuli as it is a setting that has been cleared from other, unintended, noise. Another way of interpreting the results is to conclude that it is not possible to apply them to a non-mediated setting when conducted in a mediated one, due to the differences of the situations.

5.1.2 Presence Mediated by Anthropomorphism

All hypotheses of this thesis were based on the assumption that the force of anthropomorphism is strong enough to make a person register the mere presence of a full-sized and human-shaped picture of a human as the one of a living one. However, it was only in the first study where there was no significant difference recognized between the simulated and real employee. In the second experiment it was shown that a real employee evoked a higher level of both satisfaction and pleasure. Given our logic behind our hypotheses this indicates that the real employee produced a higher level of mere presence than the simulated one, despite both of them being featured in a mediated setting. One reason behind this could be explained by Tremoulet and Feldman (2000) who argue that even though the tendency to anthropomorphize normally is pervasive, people do not apply it to all objects. Moreover, the degree to which people anthropomorphize are different between the objects depending on their features. Examples of the features that determine to what ease an object is anthropomorphized are movement, shape, facial features, sounds/voices, intentionality, imitation, and communication ability (Tremoulet & Feldman, 2000; Graham & Poulin-Dubois, 1999; Dennett, 1996). Given the discussion in paragraph 5.1.1, a possible reason for this effect not coming through in the non-mediated experiment is that the unintended noise diminishes it.

5.2 Limitations

Conducting a field experiment is not completely problem free as there are many aspects to consider that do not lie within the experiment executor’s control. Moreover, making a comparison between two different types of experiments is also not completely unproblematic.
5.2.1 Limitations of the store experiment

As for the field experiment in the store, there were several aspects that might have weakened the final results. First, there were the surrounding circumstances that were not possible for us to control such as which demographical characteristics of the customers, what intentions they had with the store visit and, as discussed above, how familiar they were with the store before entering. One weakness derived from the fact that the respondents in the field experiment were a highly heterogeneous group is that this type of population demands a higher number of respondents in order to get a representative result than a homogenous one does. Since the heterogeneity of the population was discovered only when analysing the findings, it was not possible to increase the number of respondents in order to strengthen the results. Moreover, there were some practical limitations to the actual experiment. Firstly, in consultation with the store manager we were dressed as employees when conducting the experiment. This may also have had an effect on the results since the respondents might have been more willing to express positive feelings towards us in order not to offend us by criticising the store - many of them appeared to be highly loyal to this store, and thereby likely emotionally committed to the relationship to it. This was also confirmed as a majority of the respondents that did have complaints about the store apologized before stating their dissatisfaction. Having had neutral clothes and presenting ourselves as students before them answering the survey could have changed the outcome of the experiment, at the expense, possibly, of getting lower response rates, since once again, many consumers were friendly towards this store. Further, if the respondents would have gotten to fill in the surveys themselves the effect might also have diminished, but again with the likely drawback of lower response rates. Moreover, we could not be sure of how long every individual customer was in the store. We tried to decrease this error rate firstly by pausing the experiment for twenty minutes between each stimulus to “clear out” the customers having been exposed to the previous one. We also had a manipulation check question to see what stimulus the customers’ thought that they had been exposed to. If we wouldn’t have had limited time and monetary resources, we could have stayed in Borlänge for several days to test one stimulus for each day. Another problem that occurred during the experiment was the lack of control of how the permanent employees behaved. Even though there were not overflowing with employees in the store, they were indeed visible from time to time while doing their job. The mere presence of these employees may also have contributed
to the high levels of pleasure and customer satisfaction in the experiment. Moreover, it is not only the presence of an employee that affects customers. As discussed in chapter two, other customers also increase each other's perceived presence of others. The fact that we could not control how many times each respondent interacted with other humans during their visit also weakens the strength of the result. At last, one limitation that needs to be further investigated is the possibility that this particular result only holds for one type of store.

5.2.2 Limitations of the survey experiment

The simulated experiment faced limitations both similar and dissimilar from the store experiment. Just like in the store, the demographic characteristics of the respondents were a limiting factor, but in this case the limitation was made when we decided on the method for the experiment. As it was conducted in a classroom, with all the benefits that comes with it, the demographic profiles of the respondent were both homogenous and not representative for Clas Ohlson’s average customer (given that the average customer was represented in the store experiment). Moreover, even though we managed to make the surrounding the same for all respondents as they had just been to the same class in the same or similar classrooms, we could not control what their state of mind was. The experiment was conducted after the class finished, and even though the students who did not have time to do the survey left the classroom before completing it, the ones who stayed might still have had commitments that brought their attention somewhere else. Further, the survey was designed so that the pictures of the store were placed in a separate booklet in the beginning of the survey that the respondents were asked to put aside after finishing looking at it. This was in order to measure if the respondent noticed and remembered the stimuli at the end of the survey. Yet, there still is a risk that the respondents did not register this request and looked at it more than once anyway, and the results might have been affected. However, doing the experiment with a survey helped us control the amount of people in the “store” and guaranteed that we could keep track on which respondent got which stimuli, making the results measure the pure effects of the different stimulus.
5.2.3 Limitations of the comparison between the experiments

Making the comparison between the two experiments, in order to answer research question two, also entails a few limitations. In a completely perfect case the two experiments, in order to compare them, would have exposed the respondents to the exact same scenarios except for one being in a physical store and one on a paper survey. However, there were some differences that make the comparability weaker. First, the survey did not show any other visible employees except for the stimulus, whereas the experiment unintentionally did. This resulted in the store-visiting respondents being exposed to more mere presence than the survey respondents. Further, the sample in the physical store experiment was randomly selected, whereas the survey respondents were a convenience sample of students taking the same course. This both made the demographic characteristics of the two groups different, but also likely their mind-set “entering” the store. The different populations also had different store familiarity, and their “visit” in the store were of different durations shortening or lengthen their time to be exposed to other distracting inputs in the store. Yet, we saw that the benefits of keeping the paper survey as free from noise as possible in order to get as good results on the actual tests as possible, despite decreasing the comparability. Moreover, the typicality levels were high in both experiments, indicating that there were no significant deviations from the respondents’ perceptions of a typical store visit. Thus, the results were overall satisfying given the circumstances.

5.3 Implications

This thesis investigated the subject of simulation from two different angles, first from a practical point of view in a retail setting and secondly from a methodological perspective. For this reason, the results will generate both theoretical and managerial implications.

5.3.1 Theoretical implications

Even though the results did not support many of our hypotheses, as the effect of both of the active stimulus in the store experiment were rejected, there are still factors to consider. The fact that the results from the survey experiment showed that both simulated and physical employee presence do have an impact on customers’ minds, does trigger a discussion regarding simulation-based research. Apparently, the pure effect of a
stimulus is better shown in a simulated store than in an authentic one. One reason behind this may be that the researcher holds more control over the experiment when simulating the environment, since situation, noise and store recognition can be decided on beforehand. This result does not mean, however, that simulation-based research shows the wrong results. On the contrary, since this type of research narrows the situation down to as close to what is to be measured as possible, one could argue that this is a purer form of research. This is the true effect of how the stimuli affect the customer. However, what this form of research does not take in mind is how strong the effect of the stimulus compared to other distracting forces. In this case, it seemed like that mere employee presence, simulated or not, does have a clear effect on customer pleasure and satisfaction. Nevertheless, there were forces, such as store loyalty and familiarity, which were stronger and skewed the evaluations. Therefore, researchers should continue working with simulation-based experiments, yet keep in mind that the effect might not be as substantial in an authentic environment as their results show.

5.3.2 Managerial implications

The implications also concern store managers and their planning of what customer pleasure and satisfaction increasing actions to take. Given the results of the second experiment, there are indeed positive effects to benefit from by making sure that a customer is within reach of the mere presence of an employee - simulated or not. Using full-sized and shape picture of an employee is both cheaper and more easily controlled than hiring more employees to be within reach for all customers at all times. However, this implication is mostly applicable to stores and situations when customers are not in great need of help. In those situations, the simulated mere presence may be an annoyance for the customer as it signals the potential of help within reach, but cannot deliver any. Instead focusing on the result of the store experiment, store managers should have in mind that even though one activity aiming to increase customer satisfaction and pleasure will have an impact, the effect of it might diminish due to the noise of other, both unintended and intended, inputs created in a store environment. Therefore, the manager should carefully plan what feeling that she or he wants her/his customers to have when exiting the store. Based on this plan different actions should be taken that are adjusted to serve the particular effect. All in order to make a store as much congruent as possible, making a lasting impact on the customers.
5.4 Future research

The aim of this research was to explore the very lightly investigated area of simulation. More specifically, we have extended the research on how mere employee presence can be used in order to increase pleasure and customer satisfaction in a retail environment by investigating if the effect can be achieved through simulation. Further we started to investigate how the effects of mere presence, both authentic and simulated, affect customers through mediated research methods. Thus, there are several different angles from which future scholars can take on the research. First, it could be investigated how far the limits of simulated employee presence can be taken. Questions to examine could include if it is possible to replace part of the staff and still signal employee mere presence to the customers through employee simulation. As has been discussed, simulated employee presence from avatars has proven to simulate human presence in online retail settings. Many physical stores have already implemented self-service checkouts and electronic self-help desks, thus it would be interesting to investigate if it is possible to make them more human, signalling human presence. Further, it could be researched if simulated employee presence has different impact on different stages in the consumer’s purchasing process. For example, how it impacts the consumer’s approach behaviour, both before entering and while being in the store. It could also be investigated how long the effects of simulated employee presence lasts. Our survey was conducted after the store visit was over; there is a possibility that the effect would have been stronger if it had been measured directly after the stimuli exposure. If that would be the case, it would be interesting to know when the effect diminishes, and why. At last, a broader study which covered different type of retailers would be interesting to research in order to see how widely simulated presence has an effect.

Instead focusing on the second research question of this thesis, there are more subjects to study. A question was raised by Lombard and Ditton (1997), whether the results of a study conducted with a mediated setting could be applied to a non-mediated setting. This thesis has proven that their concern was justified, as the results from the mediated versus the non-mediated settings were not the same. This is alarming information as it is very common to conduct mediated experiments and apply the results on non-mediated situations. Thus, there is a large need for future research within this field in order to determine the reasons for this deviation.
5.5 Conclusion and Attempts to Answer the Research Questions

According to previous studies, human presence in retail environments plays a great role in creating customer pleasure and satisfaction. In turn, customers become loyal and return to the store. As technology enables the physical stores to move into a virtual reality, the question of how to interpret human presence needs to be reassessed. This study has taken the first steps in bridging a gap between simulation and the effects of employee presence. This was done by asking the question if it is possible to simulate employee mere presence in a physical, non-mediated retail setting. The results showed that the mere presence of an employee, real or simulated, did not come through in a physical, non-mediated retail setting. As the findings were contradictory to existing research, we concluded that the force of mere employee presence in our experiment did not overrule the additional, unintended inputs that a customer faces when visiting a store. Moreover, the high level of store loyalty and familiarity among the respondents also contributed to weakening the results of the study, thus complicating answering the first research question.

Moreover, the study has investigated how the role of simulation affects interpretation of results conducted in a mediated setting, which aims to be applicable to non-mediated situations. This was done by asking a second research question, namely if it is possible to simulate employee mere presence in a physical retail setting, when the setting itself is simulated. In the second experiment, conducted in order to answer this question, the results were striking. The findings indicated that it in a simulated setting is possible to, through a simulated employee, evoke both higher customer pleasure and satisfaction than in the case of no employee.

Yet, having been able to evoke positive effects of mere employee presence in a mediated setting, but not in a real life scenario does raise some concern. It can be concluded that mere employee presence does affect customers, but as it turns out other, stronger, forces easily disrupt the effect. What these results imply to researchers in this field is that using simulated experiment does give results showing the pure effect of a stimulus, but gives no indication on how strong this effect is compared to other forces. Thus, researchers should, when using mediated settings in their experiments, take the clarifying effect of simulation in consideration when evaluating their results. Moreover, store managers
should have the positive effect of employee presence in mind when planning their stores, but also be aware of other distracting forces diminishing the effect of their employees being present.


**Non-periodical**


**Electronic**

Robot starts work as greeter at Japanese department store. *CBC News, 2015, April 20.*

Snyder, B. Here’s where you’ll soon find Walmart’s greeters. *Fortune, 2015, June 18.*
<http://fortune.com/2015/06/18/walmart-greeters/> 

<http://www.svenskhandel.se/globalassets/handelns-betydelse-for-sveriges-ekonomi2.pdf>
Conferences


7. Appendices

Appendix 1

Study 1 Survey – Original language

Enkätundersökning som ligger till grund för en masteruppsats inom marknadsföring

**Om du tänker på hur du känner inför ditt besök i denna butik just idag, tycker du att det var…**

<table>
<thead>
<tr>
<th>Otrivigt</th>
<th>Trevligt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dåligt</th>
<th>Bra</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tyckte inte om det</th>
<th>Tyckte om den</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

**Tänk på denna butik som helhet just idag.**

Hur nöjd eller missnöjd är du med denna butik?

<table>
<thead>
<tr>
<th>Mycket missnöjd</th>
<th>Mycket nöjd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

I vilken utsträckning motsvarar denna butik dinas förväntningar?

<table>
<thead>
<tr>
<th>Inte alls</th>
<th>Helt och hållet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

Föreställ dig en butik av den här typen som är helt perfekt på alla sätt. Hur nära eller långt ifrån detta ideal är just denna butik, tycker du?

<table>
<thead>
<tr>
<th>Mycket långt ifrån</th>
<th>Mycket nära</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

Hur sannolikt är det att du kommer besöka denna butik igen?

<table>
<thead>
<tr>
<th>Mycket osannolikt</th>
<th>Mycket sannolikt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>
Om du tänker tillbaka på när du kom in i denna butik idag, kändes du dig välkommen då?

<table>
<thead>
<tr>
<th>Instämmer inte alls</th>
<th>Instämmer helt och hållet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

Jämfört med en liknande butik, tycker du att denna butik just idag är...

<table>
<thead>
<tr>
<th>Otypisk</th>
<th>Typisk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Onormal</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ovanlig</th>
<th>Vanlig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
</tbody>
</table>

Har du varit i denna butik tidigare?
- Ja
- Nej
- Vet ej

Vilket av följande stämmer på vad du såg när du kom in i butiken:
- Jag blev välkomnad av någon ur butikspersonalen, och jag blev erbjuden en kundkorg
- Jag blev välkomnad av en bild av personal, som erbjud en kundkorg
- Det fanns ingen personal eller bild av personal i entrén
- Osäker/Annat

Slutligen, vänligen uppgör följande om dig själv:
- Kvinna
- Man
- Annat/Vill ej uppgöre
- Ålder:

Stort tack för ditt deltagande!

Fyll in av marknadsundersökare:
- S: 
- Art: 
- Kl: 
- Stim: 
- U/S: 
- Nr: 

68
Appendix 2

Study 2 Stimuli 1 including cover letter and survey

Enkätundersökning som ligger till grund för en masteruppsats inom marknadsföring

Stort tack för att du vill hjälpa oss genom att fylla i denna enkät!

Du kommer få läsa en kort text och se ett antal bilder innan du besvarar en kort enkät. **Gå inte tillbaka till bilderna** när du väl börjat svara på enkäten.

Ta den tid du behöver, läs frågorna noggrant och ringa in det alternativ som känns bäst för just dig.

Glöm inte att kontrollera att du **svarat på alla frågor**, även om vissa frågor kan känna lika varandra.
Appendix 3

Study 2 – Stimuli 2 – Simulated employee present (differences compared to Appendix 2)

Appendix 4

Study 2 – Stimuli 3 – No employee present (differences compared to Appendix 2)