#### STOCKHOLM SCHOOL OF ECONOMICS

Department of Marketing and Strategy Course 2350: Thesis in Marketing and Media Management Spring 2015

## INTEREST AND EXPERTISE

On the effects of salesperson and customer characteristics in a consumer goods purchasing situation

#### Adam Åbonde<sup>†</sup>

#### Abstract:

It is well established that a salesperson's expertise and vocational interests are predictive of their job performance. Still, these have not been studied simultaneously and from the perspective of the customer. The purpose of this thesis was to study how salesperson and customer characteristics interact in provoking customer responses in service encounters. Through a survey-based experiment with ratings from 113 participants, it was tested how different combinations of perceived employee interest and perceived employee expertise influenced customer satisfaction in a consumer goods purchasing situation. The experiment also examined whether the results differed depending on the customer's self-assessed level of expertise. Results indicated that higher employee expertise and/or interest both increased the customer's level of satisfaction. Novice customers reacted more strongly than expert customers to different levels of employee expertise, while employee interest was found equally important for both novice and expert customers. The data was examined through statistical analysis involving comparisons of mean group differences. Although the results were deemed rather robust, further research is needed and invited. Implications for recruitment procedures and employee training programs as well as suggestions for future research are discussed.

Keywords: service encounter, vocational interests, expertise, customer satisfaction

Supervisor: Magnus Söderlund Examiner: Anna Nyberg

Discussants: Emilia Köpberg and Linnéa Bergman

Date submitted: 17/5 2015 Date of presentation: 28/5 2015

## Grubbel

Det är så erbarmligt lite en människa kan förstå. Man skulle ej grubbla och tänka men tänker och grubblar ändå. Och dagarna fogas till veckor, veckorna fogas till år. Man skulle ej snärjas av grubbel så hastigt som livet går.

– Nils Ferlin, Från mitt ekorrhjul (1957)

## **DEFINITIONS**

**Experiment** A controlled setting where one or more variables are manipulated

and the effects on another (dependent) variable is measured.

Commonly employed in research as a means to investigate cause-

effect relationships.

**Expertise** Skills, knowledge or deep understanding related to a certain topic.

**Interest** Reflects preferences for certain activities or outcomes, a curiosity

or wish to pay special attention.

**Participant** Individual participating in a research experiment.

Satisfaction A positive emotional state as a result of something you have done

or experienced.

Service encounter A buyer-seller dyad where a salesperson and customer interact,

either in a business-to-consumer or business-to-business setting.

For ease of reading and variability it is used interchangeably with

'sales encounter' throughout the paper.

Treatment An experimental condition where certain variables have been

manipulated. The outcomes from several treatments are then

compared in order to make inferences about different

relationships.

**Vocational** Relating to a vocation or occupation. "Vocational interest" relates

to an individual's interest for their work and related activities.

## TABLE OF CONTENTS

Definitions	i
Introduction	1
Delimitations	4
Disposition	5
Theoretical framework	6
Employee expertise	6
Vocational interests	8
Customer expertise	12
Summary of the theoretical framework	16
Method and experimental design	18
Sample	19
Product	20
Stimuli development	20
Measures	23
Hypothesis testing	26
Statistical analysis	27
Reliability and validity	29
Results	32
Overview of collected data	32
Assessing the hypotheses	33
Robustness of the results	37
Additional insights	39
Summary of the results	41
Discussion of results	44
Main findings	44
General strength of the results	46
Limitations	49
Implications	50
Future research	52
Conclusion	53

Acknowledgements	55
References	55
Appendices	62
Appendix I: English translation of the treatment 'expert, interested'	62
Appendix II: English translation of the treatment 'expert, not interested'	63
Appendix III: English translation of the treatment 'novice, interested'	64
Appendix IV: English translation of the treatment 'novice, not interested'	65
Appendix V: English translation of the main study questionnaire	66
Appendix VI: Statistical outputs, robustness analysis	68
Appendix VII: Statistical outputs, tests of mediation	69

## 1 | INTRODUCTION

In the introductory chapter the background, purpose and expected contributions of this paper are described and research questions are formulated. The chapter concludes with delimitations and a description of the thesis' disposition.

It is well established that different features of salespeople affect the customers' evaluations of a retailer (Brown & Lam, 2008; Churchill, Ford, Hartley, & Walker, 1985; Keh, Ren, Hill, & Li, 2013). Among other things, this includes the employee's level of attractiveness (Ahearne, Gruen, & Jarvis, 1999), their facial expression (Schmidt, Levenstein, & Ambadar, 2012) and display of emotions (Söderlund & Rosengren, 2010). Recently, however, researchers and practitioners have started to recognize that by aligning frontline employees' behavior with the positioning of the brand, employees can also play an important role in corporate communications and the brand building process (Sirianni, Bitner, Brown, & Mandel, 2013). Whenever we encounter a new person, we make instant judgments and evaluations about them (Ambady & Rosenthal, 1993; Willis & Todorov, 2006). The brief sequence of a salesperson's behavior that a customer is exposed to is, accordingly, likely to influence the customer's attitudes towards the same.

One aspect of employee behavior that has been extensively researched is their display of expertise. Expertise, or level of knowledge, is arguably one aspect of employees' behavior that customers would expect to encounter in a retailing setting and it is generally considered to lead to desirable business outcomes. Examples include an increase in the likelihood of customers making a purchase (Crosby, Evans, & Cowles, 1990; Johnson & Grayson, 2005; Woodside & Davenport, 1974), an increase in the salesperson's trustworthiness (Busch & Wilson, 1976; Doney & Cannon, 1997; Erdem & Swait, 2004), and a positive effect on customer satisfaction (Homburg & Stock, 2005; Sweeney & Swait, 2008).

Another behavioral feature, closely related to expertise, is interest. Research has established that vocational interests, just like expertise, can be a good predictor of both employee performance and business outcomes (e.g. Nye et al., 2012; Rounds & Su, 2014). In a sales encounter, an employee's vocational interests represent dimensions like an interest in their work, in the company they work for, or the products that are sold.

Vocational interests are, for example, considered to be a good predictor of job satisfaction (Podsakoff, Whiting, Podsakoff, & Blume, 2009; Van Iddekinge, Roth, Putka, & Lanivich, 2011), and there is a substantial body of research suggesting that there is a link between employee job satisfaction and job performance (e.g. Harter, Schmidt, & Hayes, 2002; Johnson & Grayson, 2013; Judge, Thoresen, Bono, & Patton, 2001). Especially in provoking higher customer satisfaction (Brown & Lam, 2008; Frey, Bayón, & Totzek, 2013; Gounaris & Boukis, 2013; Homburg & Stock, 2004, 2005; Jeon & Choi, 2012; Wangenheim, Evanschitzky, & Wunderlich, 2007). Despite being generally acknowledged, and deemed important on the business-side, little research has examined the effect of salespeople's vocational interests on customer responses. Or more specifically, previous research has not considered how consumers' perceptions of employees' level of interest affects the consumers' behavioral intentions. This might seem odd, as an employee characteristic as prevalent as vocational interest is likely to be noticed by the customer even during a brief encounter, and thus be reflected in the customer's behavioral intentions.

Employee expertise has been studied both from the employee's and the customer's perspective. But even though it is closely related to vocational interests (Rounds & Su, 2014), employee expertise and interests has to my knowledge not been part of the same study. One possible explanation for this is that the notions of employee expertise and interests to a large extent stems from different lines of research. While expertise has been regarded in service encounter literature (Jamal & Al-Marri, 2007; Johnson & Grayson, 2005; Sweeney & Swait, 2008), interests have instead been in focus in employee selection research (Nye et al., 2012; Rounds & Su, 2014; Van Iddekinge et al., 2011). Service encounter research is commonly conducted either from the perspective of the customer (measuring the consumer's perception of different employee or context characteristics and linking this to behavioral intentions) or by collecting dyadic sales data (e.g. service performance measures from both parties in the sales encounter dyad). Studies on personnel selection, however, mostly approach the topic from the perspective of the employee (self-assessed measures of the employee's own characteristics, often linked to objective sales data and firm performance).

In service encounters, the level of knowledge is likely to vary among customers as well. Customers who are more knowledgeable in a product or service category have a more

elaborate cognitive structure than less knowledgeable customers (Alba & Hutchinson, 1987), and customers with different levels of expertise value the aspects of a service encounter differently (Dagger & Sweeney, 2007). The service encounter is a dyadic and interactive process, and the customer and salesperson are both influenced by and influence each other's behaviors (Ma & Dubé, 2011). As such, it is possible that customers with varying levels of expertise will react differently to a specific set of employee characteristics.

Studying how different combinations of employee and customer characteristics interrelate is an important part of improving our understanding of what drives customer's behavioral intentions and post-purchase responses. One customer response that has been of particular interest to study is that of customer satisfaction. Satisfaction represents a direct evaluation of a service encounter, and is generally acknowledged to be positively linked to future customer behaviors (Athanassopoulos, Gounaris, & Stathakopoulos, 2001; Jeon & Choi, 2012; Söderlund, 2002). Previous research has shown that both employee expertise (e.g. Homburg & Stock, 2005; Sweeney & Swait, 2008) and employee interest (e.g. Brown & Lam, 2008; Homburg & Stock, 2004, 2005), directly or indirectly, influence customer satisfaction, which makes it highly relevant to use as main outcome measure in this study.

The joint testing of employee and customer characteristics will have important managerial implications related to employee selection (what traits to value when recruiting) and practical implications for personnel training (how to train frontline employees to give better customer service). That said, incorporating both employee expertise and interest in the same study, and measuring it from the point of view of the customer, is novel. As is adding the dimension of consumer expertise. This thesis is thus, in a sense, explorative in its approach. Furthermore, in order to try and assess cause-effect relationships between sets of personal characteristics and customer responses, the thesis makes use of an experimental research method (Field, 2009, p.13; Harrison & List, 2004).

It is acknowledged that customer retention is much less costly than the acquisition of new customers (Sweeney & Swait, 2008). In order to attract and keep customers in the cluttered retailing industry, branding has grown increasingly important (Ailawadi &

Keller, 2004). Marketers and managers strive to keep competitive by continuously developing their core offerings. However, this can only get you so far. As an industry matures competitors' offerings tend to converge. To stand out, brands need to widen their scope and begin to focus on the "small details that make big differences to customers" (Bolton, Gustafsson, McColl-Kennedy, Sirianni, & Tse, 2014). It is vital for retailers to understand, and satisfy, the consumer throughout the whole customer journey, at all touch points.

This thesis sets out to advance the knowledge of a specific aspect of the customer journey, related to employee and customer characteristics. It aims to contribute in bridging the gap between service encounter literature and selection literature through an experiment, wherein the effects of perceived employee expertise and employee interest are simultaneously investigated in a consumer goods purchasing situation. Additionally, in an attempt to further enrich the understanding of the dynamics of service encounter interactions, this paper also distinguishes between different levels of customer knowledge. The purpose of this thesis is hence to shed light on the following research questions:

- 1. How do different combinations of employee expertise and employee interest affect customer satisfaction?
- 2. Given this, do customers react differently depending on their own level of expertise?

### **Delimitations**

As the study does not aim to investigate attitudes towards or effects on brands, only towards the salesperson and sales encounter as a whole, it was decided to keep all brands (both company and product) unknown. This way, possible biases due to differences in participants' preconceived assumptions about a company could be avoided.

Because of the explorative nature, it was desirable to ensure high control over the experiment. Due to the importance of obtaining a spread in customer knowledge about the product at hand, it was deemed appropriate to use a nonstandard subject pool.<sup>1</sup>

The experiment included measures of both employee expertise and interest, but only of customer expertise. Even if it would be possible to obtain a subject pool with sufficient spread in interest, this would have limited implications in practice. This is because, in a real-life setting, most customers can be argued to possess some degree of interest in the product category they are shopping (regardless if they feel a *need* or *want* to buy the product, they can be considered more or less interested as they actively seek information in order to purchase an item within this category).

The study looks at a consumer goods purchasing situation to investigate the effects of different employee characteristics on customer responses. The experiment focuses on technological products and incorporates only one product (tablets). The purpose of this was to design the experiment in an as tangible and credible setting as possible, to facilitate for participants to identify with the experimental situation.

## Disposition

This paper is divided into five chapters. After this introductory chapter, the second chapter reviews the theoretical framework on which the study is built and outlines the research hypotheses. Next, the third chapter describes the scientific approach applied and how the experiment was carried out. Chapter four reports the results from the experiment. In the fifth and concluding chapter the results, implications thereof and suggestions for future research are discussed. Happy reading.

-

<sup>&</sup>lt;sup>1</sup> In experimental research, due to convenience and availability, the sample often consists of students. This is generally viewed as the 'standard subject pool' (Harrison & List, 2004).

## 2 | THEORETICAL FRAMEWORK

This chapter reviews the theoretical framework the study is based upon. A conceptual model is formalized into research hypotheses and the section ends with a summary of the literature and suggested relationships.

## Employee expertise

In service encounter literature, there is a comprehensive amount of research discussing how a salesperson's behavior affects the outcome in an employee-customer interaction (Churchill et al., 1985; Doney & Cannon, 1997; Keh et al., 2013; Schmidt et al., 2012; Söderlund 2002; Söderlund & Rosengren, 2008, 2010). One especially researched aspect has been that of employee expertise (e.g. Busch & Wilson, 1976; Crosby et al., 1990; Erdem & Swait, 2008; Johnson & Grayson, 2005; Woodside & Davenport, 1974). Expertise is typically assessed in terms of a service provider's level of knowledge and experience with the company's offerings (Homburg & Stock, 2005; Johnson & Grayson, 2005) as well as the employee's ability to use this knowledge to fulfill certain tasks (Parasuraman, Zeithaml & Berry, 1985). Employee expertise is further characterized by the consumer's trust or belief that the salesperson is capable to deliver what has been promised (Doney & Cannon, 1997; Erdem & Swait, 2004) as well as the salesperson's ability to demonstrate and prove their expertise in the field (Busch & Wilson, 1976; Sweeney & Swait, 2008).

The construct of employee expertise is thus bilateral and involves both parties in a dyadic sales encounter: partly the employee's ability to prove their competence, partly the customer's perception that the employee possesses relevant knowledge and is able to keep promises that are made. In this paper, employee expertise is defined as:

An employee's ability to prove their competence as well as the customer's perception that the employee possesses relevant knowledge and experience concerning the focal service and has the capability to deliver what has been promised.

In an experiment from 1976 the effects of different social power bases (expertise and referent power, i.e. attraction between the employee and customer due to perceived similarities in personal goals, interests or values) on the variables of customer trust, attitude towards the salesperson and behavioral intentions were tested (Busch & Wilson, 1976). The experiment was set in a personal selling situation of life insurance. Busch and Wilson's (1976) findings suggested that both expert and referent power were positively linked to producing the intended customer responses, but that expert power was significantly more important than referent power when struggling to gain customer trust.

In another study, set in an organizational buying situation, the authors argue that trustworthiness is required just to enter the customer's consideration set when browsing for suppliers (Doney & Cannon, 1997). They also found that employee expertise worked as an antecedent of trust. Trust in turn had a positive influence on the buyer's anticipation of doing business with the supplier firm in the future. This suggested that developing trust in a salesperson-customer relationship represents an investment with long-term payoff. Later research agrees that brand credibility (trustworthiness and perceived expertise) affect consumer choices and that it is an important determinant of brand consideration (Erdem & Swait, 2004). Through their study, tested over six consumer goods categories, Erdem and Swait (2004) support the idea that trustworthiness is directly and positively related to customer responses while expertise, by being an antecedent of trustworthiness, has a strong but indirect effect. A subsequent study further examined the role of brand credibility and suggested that it significantly enhances both word-of-mouth and customer loyalty (Sweeney & Swait, 2008). The authors showed that the dominant effects were mediated by customer satisfaction, generated by higher salesperson expertise and customer trust.

In a field experiment, Woodside and Davenport (1974) found that higher perceived employee expertise and employee-customer similarity had a positive impact on the likelihood that the customer would make a purchase (with the majority of the observed effect stemming from expertise). The authors argued that their results were valid for products requiring extensive problem solving, while for more routinized purchases (requiring limited problem solving) the importance of employee-customer similarity might be higher. Johnson and Grayson (2005) further clarified the relationships examined by Woodside and Davenport (1974) by including the mediating variable trust.

This study was also set in an extensive problem-solving context (financial services) and supported that both expertise and similarity was positively related to business outcomes and that the greatest effect originated from employee expertise. More specifically Johnson and Grayson (2005) suggested that similarity (via trust) was positively linked to anticipation of future interaction, while expertise (via trust) was positively linked to both anticipation of future interaction and sales effectiveness.

To conclude, employee expertise is generally acknowledged as an important antecedent of customer trust. Trust affects several desirable business outcomes (including increased sales effectiveness, anticipation of future interaction, and customer satisfaction) and salespeople with higher levels of job-related expertise are thus likely to provoke a range of positive customer responses, while employees with lower levels of expertise are less likely to do so.<sup>2</sup> This is summarized in the first hypothesis:

**H1:** When perceived employee expertise is high, the customer's level of satisfaction is higher than when perceived employee expertise is low.

#### Vocational interests

Another concept, closely related to expertise, is that of interests. In a seminal study, Ericsson, Krampe and Tesch-Römer (1993) argued that expertise was the outcome of "a life-long period of deliberate effort to improve performance in a specific domain". Interests affect the direction, vigor and persistence of goal-oriented behavior, and are likely to predict goal attainment (Rounds & Su, 2014). This implies that interests might be an antecedent of expertise, as interested individuals are more prone to learn and persist until they acquire the skills needed in order to perform a certain task better. Recent studies have found that the construct of vocational interests (much like employee expertise) can be a good predictor of both employee performance and business outcomes (Nye et al., 2012; Van Iddekinge et al., 2011).

Generally, vocational interests are considered as "a person's preferences for behaviors,

\_

<sup>&</sup>lt;sup>2</sup> As described in the introduction, customer satisfaction has been decided as the primary outcome measure in this paper, as it is recognized to be a good predictor of customers' behavioral intentions (e.g. Athanassopoulos et al., 2001; Jeon & Choi, 2012; Söderlund, 2002).

situations, contexts in which activities occur, and/or the outcomes associated with the preferred activities" (Nye et al., 2012). This definition can be broken down into a number of key aspects. First, it is widely regarded that interests serve as a motivational function and influence both human behaviors and outcomes (for example interests can increase motivation to perform certain work activities and inspire to increase knowledge and skills relevant to performing those activities). Second, interests are also considered to be similar to traits (implying that they represent individual differences that stabilize relatively early in life and change very slowly). Third, they must consist of an activity and an object of interest (e.g. a person prefers to perform a certain activity and prefers to perform it in a certain environment) (Rounds & Su, 2014; Van Iddekinge et al., 2011).

Interests thus have three distinct features: they influence human behaviors and outcomes through motivation, they are relatively stable over time, and they consist of an activity and a related object of interest. Accordingly, vocational interests are defined in this paper as:

Relatively stable individual differences that influence human behavior through motivation and reflect preferences for certain activities, contexts in which activities occur, or outcomes associated with preferred activities, related to ones occupation.

In a comprehensive meta-analysis the authors argue that vocational interests can result in improved employee performance, lower employee turnover and better employee performance during job training (Van Iddekinge et al., 2011). The authors also find that vocational interests are somewhat more strongly related to employees' training performance than to job performance. They suggest that this might be because new employees, whose interests are congruent with the job, are more motivated to perform during training and consequently to a greater extent acquire knowledge and skills relevant for the job.

Another meta-analysis supports the positive link between employee interest and performance (Nye et al., 2012). It suggests a theoretical model where interests, through substantial effects on motivation, drive performance in both educational and work settings. The authors further argue that a better fit between the individual and the

environment positively moderates the interest–performance relationship, and concur that interested employees are less likely to leave the organization. One reason why interested employees perform better and are less likely to switch jobs might be that they feel more satisfied with their situation than their less interested peers (Podsakoff et al., 2009; Van Iddekinge et al., 2011). It has for example been suggested that interested employees show greater workplace engagement (Bakker & Demerouti, 2008) and feel happier with their vocational situation (Fisher, 2010), which may be predictive of workplace satisfaction. The idea that satisfied workers are more prone to stay in an organization is substantially supported in prior research (e.g. Frey et al., 2013; Harter et al., 2002; Jeon & Choi, 2012) and in a combined qualitative and quantitative meta-analysis it was argued that there is a link between job satisfaction and performance (Judge et al., 2001). The authors estimated that there is a true correlation between overall job satisfaction and job performance as high as 0.30.

In another meta-analysis the authors found that employee satisfaction and employee engagement was positively related to customer satisfaction and customer loyalty as well as, although somewhat weaker, business-unit productivity and profit (Harter et al., 2002). When Homburg and Stock (2005) collected dyadic data across manufacturing and services industries in a business-to-business context, they too found that salesperson work satisfaction was positively related to customer satisfaction. They further argue that this link on one hand is moderated by the employee characteristics expertise and trustworthiness, and on the other hand is mediated through increased customer orientation (as customer orientation and engagement are closely related constructs this supports the study by Harter et al. from 2002).

Wangenheim et al. (2007) agree that the link between employee satisfaction and customer satisfaction exists, and found that this was true even for employee groups that were not in direct contact with customers. Brown and Lam (2008) also support the idea that employee job satisfaction is positively linked to customer satisfaction, and that it is mediated through service quality. Brown and Lam (2008) further suggests that the satisfaction link between employee—customer possibly is the result of emotional contagion. They argue that this is valid in both business-to-business as well as business-to-consumer contexts. Another study agrees that employee job satisfaction has a positive impact on perceived service quality and customer satisfaction, but extends this statement

by also suggesting that it in turn positively influence customer repurchase intentions (Gounaris & Boukis, 2013). Gounaris and Boukis (2013) also implied that job satisfaction led to the development of higher relational switching costs, which naturally strengthened the positive link to repurchase intentions.

When a consumer finds himself or herself in a sales encounter, it is usually with the intention to purchase or learn more about a product or service. As the consumer initiates the decision process, they are likely to show some degree of interest in the offering that they are evaluating. During the service encounter, the customer evaluates the salespersons image and relates it to their self-image, resulting in a self-employee (in)congruence (Jamal & Adelowore, 2008). If the salesperson is enthusiastic or shows a personal interest in the product at hand, the customer will probably experience higher self-employee congruence, as they perceive the two individuals to be more similar, compared to if the employee had shown less interest. Just like previous research has argued that we like people to whom we are similar (c.f. Jayanti & Whipple, 2008), Jamal and Adelowore (2008) suggest that higher self-employee congruence leads to higher employee likability.

A likable person is characterized as someone whom is pleasant and enjoyable to be around (Ahearne et al., 1999; Doney & Cannon, 1997). One might argue that employee expertise also would lead to likability. For example if a customer identifies with this characteristic, and especially as interests are viewed as a predictor of expertise. But previous research has suggested that although likability and expertise both have positive impacts on customer satisfaction, they cannot work as substitutes for each other (Jayanti & Whipple, 2008) and they have often been distinguished as separate constructs (e.g. Casciaro & Lobo, 2005; Singh & Tor, 2008). Both employee expertise and interest might thus be related to employee likability, and the effect of likability on customer evaluations could be stronger if also expertise is present (Keh et al., 2013). Overall it is suggested that employee interest would be more strongly linked to likability.

Previous literature consequently suggests that vocational interests are closely related to work satisfaction and that it might be an antecedent of employee expertise. Just like employee expertise, interests are believed to affect several desirable business outcomes (including employee performance/service quality, customer satisfaction, customer

repurchase intentions, and employee likability). Salespeople with higher levels of vocational interest are likely to provoke several positive customer responses, which less interested employees are not as likely to do. This is summarized in the second hypothesis.

**H2:** When perceived employee interest is high, the customer's level of satisfaction is higher than when perceived employee interest is low.

## Customer expertise

Just like employees, customers are likely to exhibit different levels of knowledge about certain products and services. Previous research has found that customers value aspects of the service encounter differently depending on if they have more or less prior consumption experience (Dagger & Sweeney, 2007). It has been argued that more knowledgeable customers (experts) are better at discriminating between important and unimportant information than novice customers (Alba & Hutchinson, 1987; Cowley, 1994) and that they have the "knowledge to select an appropriate product for a particular usage situation" (Brucks, 1985) as well as "the ability to perform product-related tasks successfully" (Alba & Hutchinson, 1987). The last being further supported in a paper that describes expertise as "knowledge necessary to use and maintain products from that product class" (Mitchell & Dacin, 1996).

Customers with higher levels of expertise will thus have a higher general understanding of a certain product category. As experts are better at discriminating between relevant and irrelevant information when they accumulate knowledge about a product, they know what product will be most appropriate in a certain context. Later they know how to use and take care of the product. At large this conforms to definitions previously employed in marketing literature (Jamal & Anastasiadou, 2009), and is also the definition used in this thesis:

The ability of customers to perform product related tasks successfully and their understanding of and knowledge about various attributes in a product category.

In later years, there has been a shift in the marketing literature. The idea of service encounters has changed towards a dyadic and interactive process where the parties jointly co-create value, instead of being viewed as a pure economic transaction of goods (Vargo & Lusch, 2004). As a dyadic interaction, the behavior, prior experiences and knowledge of both parties in a frontline service encounter are likely to influence the other party in several ways. Ma and Dubé (2011) make use of a framework called the Interpersonal Circumplex Model (ICM) to try and explain this dyadic interdependency that occurs in service encounters. The ICM recognizes that the interdependency can be divided into process and outcome components, and that it is possible to predict the behavior of these two interdependencies through the concept of complementarity (further explained below).

The service *outcome* refers to all consequences of the service encounter (Mohr & Bitner, 1995; Parasuraman et al., 1985). It could, for example, be the purchase of a product or service, some knowledge gained, or feelings provoked. As such, the service outcome can be thought to represent the goal of a service encounter. Using this perspective, the service *process* would instead relate to the way this goal is achieved (Mohr & Bitner, 1995). For example the interaction between parties, exchange of words or experiences. Due to the experimental setting of this study, process interdependency will not be considered. That is, as the participants only passively take part of the sales encounter (reading a case) instead of actively partaking in the interaction (actually conversing with a salesperson), there is little value in examining the aspect of process interdependency.

Complementarity denotes that "each party's behavior influences, and is influenced by, the other's behavior" (Ma & Dubé, 2011). Behaviors can be either complementary or anticomplementary, and depending on which aspect of the service encounter you study, these have different implications. The ICM further distinguishes between the dimensions of agency and communion. Expertise, as studied in this paper, belongs to the agency dimension (Friedman & Churchill, 1987). This relates to an individual's need for mastery and control, and ranges from submissiveness to dominance (Ma & Dubé, 2011). If one party exhibits dominant behavior and the other exhibits submissive behavior, this is said to be a complementary interaction. This ensures that the interaction runs smoothly by coordinating behaviors, which also facilitates task performance (Tiedens, Unzueta, & Young, 2007; Wiltermuth, 2009). If both parties exhibit the same behavior the

interaction will instead be an anticomplementary one, which will act inhibiting on the interaction (Leavitt, 2004; Wiltermuth, 2009).

Consider for example if two submissive individuals interact. It is likely that either no one feels confident in taking the initiative, or that they simply do not have particularly strong preferences about the topic at hand. Thus, there is a risk that the interaction becomes something of a stalemate where both are waiting for the other one to do something. In contrast, if both individuals instead are dominant in their behavior, this could also be harmful for the interaction as both parties could have strong preferences for one thing or the other, or at least prefers steering the conversation.

Measuring customer expertise can be done in several ways. A common distinction is that between objective and subjective knowledge. This represents genuine understanding about a certain task or product stored in long-term memory, and the participant's own perception of their genuine knowledge, respectively (Brucks, 1985; Wirtz & Mattila, 2003). Although capturing different aspects of the same quality, these measures should not be used interchangeably as they might have different implications for participants' behavioral responses (Raju, Lonial, & Mangold, 1995). For the purpose of this paper it was decided to employ a subjective measure of customer expertise, where participants assessed their own level of knowledge. People are often overconfident when assessing their own knowledge (Alba & Hutchinson, 2000), and such strong beliefs are more likely to be reflected in participants' behavior than their true levels of expertise are. Thus, the subjective scale is likely to better capture the dominant and submissive behaviors considered in the ICM.

Using the ICM, Ma and Dubé (2011) suggest that the co-occurance of either employee and customer submissive behavior, or employee and customer dominant behavior, would negatively affect customer satisfaction in a frontline service encounter, as this is an anticomplementary pattern of behavior. Further they find that combining an employee with dominant (submissive) behavior and a customer displaying submissive (dominant) behavior elicits higher customer satisfaction, as this represents complementary behaviors. Translated into the setting of this study, it would suggest that a customer with a low level of expertise is likely to experience a steeper increase in satisfaction than a customer with

a high level of expertise, when going from a service encounter with a novice employee to a service encounter with an expert employee. This is formulated in the third hypothesis.

**H3:** The difference in customer satisfaction, when perceived employee expertise is high compared to when perceived employee expertise is low, is larger for novice customers than expert customers.

It is not as clear-cut if and how the aspect of employee interest could be incorporated in the framework provided by the ICM. Being thought of as an antecedent to expertise (Rounds & Su, 2014), it is possible that interest could work through the agency dimension represented by submissiveness and dominance. However, as an antecedent of expertise, interest will probably have a weaker effect on behavioral responses than expertise and it is possible that this effect will not be detectable in the current experimental setting.

As discussed earlier, customers in general are thought to appreciate that the employee is interested, and this is hypothesized to lead to higher customer satisfaction (H2). However, currently there is not enough research to support the idea that interest would be more or less important depending on the customer's level of expertise. It is possible that expert customers, with their more elaborate cognitive structure (Alba & Hutchinson, 1987; Cowley, 1994), are likely to better notice and respond to the varying level of employee interest than novice customers are. That is, as expert customers do not need to process the provided product information as much as novices, they can see beyond this and instead evaluate other aspects of the interaction. This would suggest that expert customers react more strongly to the varying level of employee interest and thus that their level of satisfaction would be more polarized than for novice customers.

On the other hand, it can be argued that since novice customers focus more on surface details in their interaction with the employee than the expert customers does, they will be more prone to evaluate the service encounter as a whole (thus taking into consideration their perception of the employee's level of interest). Expert customers on the other hand would probably notice, but choose to neglect, the aspect of employee interest in favor of the "hard facts" provided by a more knowledgeable (expert) employee, as this will help the customer to make more informed and rational decisions. The argument can thus be made in both directions. Employee interest could be more or less important for expert or

novice customers, but so far there is little research investigating this matter. With this in mind, and a wish to shed more light on the dynamics of employee interest, the forth hypothesis is formulated.

**H4:** The difference in customer satisfaction, when perceived employee interest is high compared to when perceived employee interest is low, is equally large for novice customers and expert customers.

## Summary of the theoretical framework

Building on the current state of knowledge, four hypotheses have been formulated. Below, the literature is summarized and in Table I an overview of all hypotheses is shown.

Employee expertise is a well-studied area within marketing, organizational and service literature, and is generally considered to positively affect customer responses (H1). The aspect of employees' vocational interests has also been thoroughly studied in previous research, and is acknowledged to have a positive impact on several desirable business outcomes (H2). In previous research, employee interest has primarily been studied from an internal business perspective (i.e. from the employees point of view). One aim of this paper is thus to try and further advance the field related to employee interest, by investigating this from the customer's perspective.

Just like salespeople, customers are likely to possess different levels of product or service related knowledge. Research suggests that customers with lower levels of expertise will be more sensitive to different levels of employee expertise, while customers with higher levels of expertise will be less sensitive to different levels of employee expertise (H3). It is possible that a similar effect will be visible with regards to employee interest as well. There is, however, not a sufficient amount of literature existing at present to support that expert and novice customers should react differently to varying levels of employee interest (H4).

# **TABLE I**OVERVIEW OF HYPOTHESES

Hypothesis	Description
H1	When perceived employee expertise is high, the customer's level of satisfaction is higher than when perceived employee expertise is low.
H2	When perceived employee interest is high, the customer's level of satisfaction is higher than when perceived employee interest is low.
НЗ	The difference in customer satisfaction, when perceived employee expertise is high compared to when perceived employee expertise is low, is larger for novice customers than expert customers.
H4	The difference in customer satisfaction, when perceived employee interest is high compared to when perceived employee interest is low, is equally large for novice customers and expert customers.

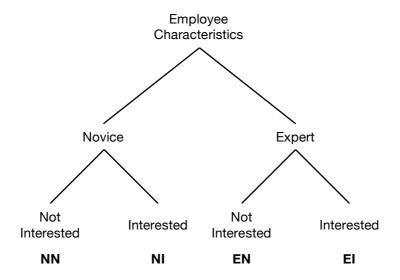
## 3 | METHOD AND EXPERIMENTAL DESIGN

The third chapter reviews the scientific approach and describes the general study design. Following is a list of the measures used and a discussion of the reliability and validity of the experiment. Last the statistical analysis is described.

One of the goals with this paper is to examine the effects of different combinations of employee expertise and interest on customer satisfaction. For this purpose four different treatments were developed. Each treatment consisted of a role-play scenario and a subsequent questionnaire. The role-play scenario entailed a descriptive case text that differed between each treatment, while the questionnaires were identical. Using scenarios in this way has been done extensively within satisfaction research (e.g. Alford & Sherrell, 1996; Dallimore, Sparks & Butcher, 2007; Söderlund, 2002; Söderlund & Rosengren, 2010). The salesperson characteristics, as described in the case texts, were manipulated between the treatments. In the first treatment, the salesperson was depicted as having a low level of expertise and not being particularly interested in their field of work. The second case also described the salesperson as having a low level of expertise, but as being interested in their work. The third and fourth cases instead involved a more expert salesperson. In the third case the salesperson was uninterested, and in the fourth case the salesperson was interested.

The main study thus consisted of a 2 x 2 design where the employee could either be a novice or an expert, and either interested or not interested. The experiment was carried out online and all participants were randomly assigned to one of the four treatments. Before reading their assigned case, the participants were asked to picture themselves as the customer in the text that followed. They were also informed that a short questionnaire would follow. In the questionnaire, participants were asked to rate their own level of expertise within the product category. This allowed for further analysis, discriminating between more knowledgeable ("expert") and less knowledgeable ("novice") customers. The study design is outlined in Figure I.

FIGURE I
OVERVIEW OF STUDY DESIGN, TREATMENT GROUPS



Note. The bolded letters denote abbreviations for the different treatments.

## Sample

The experiment was conducted using the web-based research platform Qualtrics. Responses were gathered during a span of two weeks between 20<sup>th</sup> of November and 4<sup>th</sup> of December 2014. Due to the tangibility of the experiment, and since it was of importance to obtain a spread in participants experience related to the product used, a nonstandard subject pool was desirable (Harrison and List, 2004). To ensure this spread, participants were recruited from both the business and academic sectors: three firms operating in different industries (a design and brand agency, a European clearing house, and a non-profit sports association); and university students from three different schools (business students, psychology students, and social sciences students).

The total sample (N=113) consisted of 80 females and 33 males. In order to not exclude any participant, the questionnaire included the alternative "Other" as for their sex. However, no one chose this alternative. There was no significant difference in the male-female distribution between the treatments ( $\chi^2=2.29,\ p=.53$ ). The age of the participants ranged from 19 to 79 years old ( $M=35.88,\ SD=11.51$ ). As all participants

were living in the Stockholm County, the study was conducted in Swedish to reduce the risk of misinterpretations. To incentivize participation there was a lottery for a gift voucher of 500 SEK at the Swedish department store Åhléns. All responses were anonymous, but in order to partake in the lottery participants were asked to provide an email address.

## **Product**

To reliably investigate the research questions, it was important that (1) the sales encounter would be perceived as realistic regardless of the combination of employee expertise and interest, (2) participants could identify with the scenarios described, and (3) there would be a spread in participants' knowledge about the product used. To successfully produce credible role-play scenarios for the different combinations of employee characteristics, and ensure that as many participants as possible could identify with the scenario, it was deemed appropriate to use a consumer goods purchasing situation. To achieve a spread in customer knowledge, there was a need for a widely known product category, and with a relatively high level of complexity. Several technological products satisfied this purpose, and ultimately the choice fell on tablets.

The product category of tablets has been growing very rapidly since its market introduction in 2010 (i.e. launch of Apple's iPad in Sweden; Findahl, 2014) with an increase in the proportion of the Swedish population having access to tablets with 48 percent over the last three years. If the current trend continues during 2015, tablets will be one of the new technologies with the fastest rates of market spread in Sweden for a very long time, outrunning both the Internet and smartphones. Today 45 percent of the Swedish population use tablets, 25 percent on a daily basis (Findahl, 2014). This implies that most participants will be able to recognize themselves in the service encounter depicted in the scenarios. While the usage of tablets often is quite intuitive, the technical specifications are more difficult to interpret and understand. Hence this would provide a good base for discriminating between high and low knowledge participants.

## Stimuli development

As shown in Figure I, the study consisted of four treatments with different sets of salesperson characteristics (NN = novice, not interested; NI = novice, interested; EN = expert, not interested; EI = expert, interested). Each treatment consisted of a role-play

scenario and a subsequent questionnaire. These scenarios were gender neutral in that the employee was not assigned to any sex, only referred to as "the salesperson". The four scenarios are featured in full length in appendices I-IV.

In this paper, employee expertise was defined as An employee's ability to prove their competence as well as the customer's perception that the employee possess relevant knowledge and experience concerning the focal service and has the capability to deliver what has been promised, as outlined in the theoretical framework above.

Following this definition, and in order to properly capture all aspects of employee expertise, the expert salesperson scenario should: a) demonstrate relevant knowledge (e.g. knowledge of how to use the product, knowledge and experience concerning the focal service, technical knowledge, knowledge of the company's products as well as procedural knowledge); b) transmit perceived capability to deliver what has been promised (e.g. years of sales experience, ability to communicate verbally, knowledgeable about the needs of the customers, ability to demonstrate knowledge and competence, competent problem solver, able to operate in complex domains, perception that the salesperson has valuable knowledge, information, or skills in a relevant area); and c) include proof of competence (e.g. success measured by number of times sales quotas were met or exceeded, ratings of knowledgeability, proof of expertise in the field, years of formal education, amount of specialized and advanced training in the field). In contrast, the novice salesperson scenario was generated to convey that the salesperson had little work experience in the field as well as a feeling of the salesperson's uncertainty about the company's products and their function. No proof of competence was included in this scenario.

In the theoretical framework, vocational interests were defined in this paper as *Relatively* stable individual differences that influence human behavior through motivation and reflect preferences for certain activities, contexts in which activities occur, or outcomes associated with preferred activities, related to ones occupation.

As the trait-like feature of interests (stability over time) is unlikely to be noticed in a live setting during an initial encounter with a salesperson, this aspect was not considered in the development of the interest stimuli. The remaining features were considered and, accordingly, the interest stimulus should: a) reflect employee engagement (e.g. motivation

to perform work activities and increase knowledge and skills relevant to performing those activities, by "going the extra mile" in helping customers to secure good service performance and because the salesperson is genuinely interested in learning more about the topic at hand); and b) demonstrate interests congruent with work activities and the environment (e.g. traits that reflect preferences for certain types of work activities and environments, congruence between vocational interests and work environment).

In order to make sure that the manipulations were effective, two pre-tests were performed before conducting the main study. The first pre-study consisted of a "screening round" were the cases were distributed digitally among a convenience sample of business students and people with sales and management experience from similar retail settings as depicted in the cases (N = 16, data was collected during 2014-11-16 and 2014-11-17). The purpose of the screening was to test whether the four cases were perceived as similar and different on the dimensions intended, as well as examining the quality of the translated version of the questionnaire. In both pre-studies the respondents were asked to rate the salesperson's expertise and interest using the same measures as employed in the main study. In none of the pre-studies did the participants receive compensation for their participation.

Although the four cases were rated as intended in the initial screening, it was deemed that the employee's interest (in particular for the low expertise scenario) could be explained more explicitly in order to refine the effect of the stimuli. Further it was discovered that the employee interest measure could be misinterpreted for a general interest for sales, rather than an interest in this specific store context and product at hand. This was further elaborated upon during in-depth follow-up telephone interviews with three of the respondents. The interest stimuli, as well as the measure for employee interest, were re-formulated accordingly.

The second pre-study was performed so as to confirm that the alterations made after the screening round were favorable. This time the study was printed and distributed among a random sample of people waiting for the local railway in Stockholm (N = 16, station Luma, Hammarby Sjöstad, 2014-11-20). As the main study would be carried out among a diversified sample of people living in the Stockholm region, it was considered appropriate to gather responses this way. The location was chosen due to two reasons:

the local railway generally departures more seldom than the metro and city buses, which should make the respondents feel less pressured to complete the survey in time for their departure; Luma is a well-visited station with a high turnover of commuters with many residential and office buildings, restaurants and local stores encompassing the ground, ensuring greater diversification of the sample.

One case was randomly assigned to each respondent and they were encouraged to take their time reading the scenario before answering the attached questions on the back of the paper. Only commuters with at least eight minutes until the next departure were approached, to ensure that they would not finish the survey in haste. The respondents were not aware that several versions of the survey existed. In the EI case the salesperson was perceived as both an expert (M = 6.3; where 1 = low expertise and 10 = high expertise) and as interested (M = 7.3; where 1 = low interest and 10 = high interest) compared with the novice cases. Also in the EN case the salesperson was perceived as an expert (M = 5.3), compared with the novice cases and, as intended, the salesperson was not perceived as interested (M = 4.8) compared with the EI and NI cases. In the two other scenarios the salesperson was not perceived as an expert in either case (NI: M = 3.2; NN: M = 3.2) compared with the EI and EN cases, but as interested in the NI case (M = 6.5) and uninterested in the NN case (M = 2.0). The results from the second prestudy were in line with the intended outcomes of the manipulations and thus indicated that all four cases were feasible to use in the main study.

#### Measures

Like the four case descriptions, the survey was also gender neutral. The employee was not assigned to any sex, only referred to as "the salesperson". Below follows a review of the measures and corresponding items used in the experiment. The full questionnaire can be found in Appendix V.

Customer expertise was measured in order to be able and discriminate between more and less knowledgeable customers, as suggested by the second research question. This made it possible to study how different participants were affected by the stimuli, depending on their own level of expertise. It was measured on a ten-point subjective knowledge scale with the following endpoint items: "I know very little about tablets/I know a lot about tablets", "I am uninformed about tablets/I am well informed about

tablets", and "I am not an expert on tablets/I am an expert on tablets" (reversed) (Alba & Hutchinson, 1987; Cowley, 1994; Jamal & Al-Marri, 2007; Jamal & Anastasiadou, 2009). Cronbach's alpha for this item was .91.

Customer satisfaction was used as the primary outcome measure, representing customer responses to the different stimuli. It was gauged using a three-item measure extensively used in prior research (Fornell, 1992; Gounaris and Boukis; 2013; Johnson, Gustafsson, Andreassen, Lervik, & Cha, 2001; Söderlund and Rosengren 2008, 2010), which was adapted to fit the context of this study. Each item was measured on a tenpoint semantic differential scale: "How satisfied or dissatisfied are you with this store?" (1 = very dissatisfied, 10 = very satisfied), "To what extent does this store meet your expectations?" (1 = not at all, 10 = totally), "Imagine a home electronics store that is perfect in every respect. How near or far from this ideal do you find this store?" (1 = very far from, 10 = cannot get any closer). The unweighted mean response to the three items was used as satisfaction measure and Cronbach's alpha was .95.

**Employee expertise** was the first stimuli in the experiment. This was measured in order to validate that the manipulations of the treatments were successful. It was measured on a three-item ten-point scale (1 = do not agree at all, 10 = agree completely): "The salesperson is very knowledgeable", "The salesperson knows the company's products very well", and "The salesperson is not an expert". The measure was taken from Doney and Cannon (1997) and Johnson and Grayson (2005). The items were averaged to produce an index (Cronbach's alpha = .77).

Employee interest was the second stimuli in the experiment. This was included in order to validate that the manipulations of the treatments were successful. It was measured with the following statement: "The salesperson is personally interested in the store's products". It was measured on a ten-point scale with the endpoints 1 = "Do not agree" and 10 = "Agree completely". Since much of the literature studying vocational interests takes its starting point from the employee's point of view, existing items are often self-reported measures of the employee's own level of interest. The measure reported here was developed for the purpose of this study by adapting a definition of vocational interests from employee selection literature (Nye et al., 2012; Rounds & Su, 2014; Van Iddekinge et al., 2011), as reported in the stimuli development section above.

Vocational interests incorporate more dimensions than employees' fascination for the firm products and services. In an initial service encounter, however, it is unlikely that the customer will discover more than the employee's interest for the product at hand. The measure employed is thus considered to be a fair proxy for perceived employee interest. As the measure for Employee interest had not been previously used, it was decided to keep it focused and only include one item. Through this it was possible to test one specific aspect of vocational interests, namely that of the sales person's interest in the company's products. This facilitates interpretation of the results and provides higher validity, but at the expense of lower reliability.

Employee likability was included in order to investigate if this mediated the effect of employee interest on customer satisfaction, as suggested in the theoretical framework. The measure was adopted from existing multi-item measures of attitude (Dahlén et al., 2005; MacKenzie & Lutz, 1989) and likability (Söderlund & Rosengren, 2010; Jayanti & Whipple, 2008). Attitude and likability can be considered conceptually similar and the measures employed in both contexts often contain similar items. This is demonstrated by Söderlund and Rosengren (2010) whom assessed participants' liking of an employee by using a similar measure as they employed in earlier research to assess participants attitude (Söderlund & Rosengren, 2008). In this paper the question "What do you think about the salesperson?" was followed by four items rated on a ten-point semantic differential scale with the following endpoints: "Bad/Good", "Dislikable/Likable", "Unpleasant/Pleasant", and "Negative impression/Positive impression" (Cronbach's alpha = .92).

Employee trustworthiness was included in order to explore whether this mediated the effect of employee expertise on customer satisfaction, as suggested in the theoretical framework. Employee trustworthiness has been extensively studied in earlier research and the measures employed have varied in definition, wording and number of items included. In this paper a six-item scale was taken from Homburg and Stock (2005) and Doney and Cannon (1997). The items were rated on a ten-point scale (1 = do not agree at all, 10 = agree completely). The six items ("I trust this salesperson to a large extent", "I am convinced that this salesperson will keep promises made to me", "I believe that this salesperson is fair and honest with me", "I believe the information provided by this salesperson is correct", "I am convinced that this salesperson delivers the products

correctly", and "I am convinced that this salesperson keeps my best interest in mind") were averaged to produce an index (Cronbach's alpha = .93).

## Hypothesis testing

The hypotheses were tested through mean comparisons between the different treatments. The first and second hypotheses were examined by comparing the mean level of customer satisfaction between all four treatment groups. According to H1, participants exposed to a more knowledgeable employee (treatment EN and EI) would experience a higher level of satisfaction, compared to participants exposed to a less knowledgeable employee (treatment NN and NI). Similarly, H2 suggested that participants exposed to a more interested employee (treatment NI and EI) would experience a higher level of satisfaction, compared to participants exposed to a less interested employee (treatment NN and EN). In conclusion, these hypotheses suggested an ordering of the treatments according to participants' level of satisfaction: NN will have the least satisfied participants and EI the most satisfied ones, EN and NI will be rated somewhere in the middle but it is not clear in what order.

Testing of the third and forth hypotheses required a different grouping of the participants. For H3, treatments with the same level of employee expertise were grouped together (i.e. NN together with NI, and EN with EI) and participants were divided into high-knowledge and low-knowledge groups (split at the median value of their self-reported level of expertise). H3 stated that novice customers would be more strongly affected than expert customers by employee expertise. Hence, a diff-in-diff comparison was performed where the difference between the high and low employee expertise treatments was expected to be greater for novice customers than for expert customers.

H4 included the same division of the participants as for H3, but pooled the treatments with the same level of employee interest instead of employee expertise (NN with EN, and NI with EI). Here a diff-in-diff comparison was also performed, except that it was expected not to be any difference between the increase in customer satisfaction for novice customers compared to the increase for expert customers (when going from the uninterested employee to the interested employee treatment). The next section describes the statistical procedure used to test the hypotheses.

## Statistical analysis

The hypotheses outlined above were investigated through statistical analysis. All analyses were performed using the statistical analytics software IBM® SPSS® (version 22). The conventional significance level of 5 percent was used for all tests.

As the intention of the study was to compare the effects of experimental stimuli on participant responses, a number of ANOVAs (analysis of variance) were performed.<sup>3</sup> This allowed for making certain inferences about the experimental data, as an ANOVA tells whether group means significantly differ from one another or not. One of the simplest ways to statistically compare two group means would otherwise be to use the Student's *t*-test. Using *t*-tests, however, can become problematic if performing multiple hypotheses testing, as this leads to inflated error rates. More specifically, when statistical tests are used repeatedly on the same data there is an increase in the probability of making a Type I error, i.e. the risk of rejecting a true null hypothesis (Field, 2009, p.348). The ANOVA performs an *F*-test and adjusts for this increase in the familywise error rate.

In the analysis, one-way independent ANOVAs as well as factorial ANOVAs and ANCOVAs (analysis of covariance) were used. In several cases, more than one test was used to test a specific hypothesis. The purpose of performing factorial ANOVAs in addition to the seemingly simpler one-way ANOVA was to enable testing of both main effects and interaction effects. A significant interaction effect would imply that the relationship, i.e. direction and/or strength of the relation, between the independent and dependent variable was moderated by a third variable (Baron & Kenny, 1986). Relating to the first research question of this study (how different combinations of employee characteristics affect customer satisfaction), it was important to examine the potential interaction between employee interest and employee expertise. For example, do employee expertise and interest reinforce, or counteract, each other's effect on customer satisfaction?

<sup>&</sup>lt;sup>3</sup> Since the research method employed in this paper was experimental, it was decided to test the hypotheses mainly through analysis of variance (ANOVA) rather than regression analysis. ANOVAs have historically been favored among experimental researchers although, looking at the underlying mathematics, this is just a special case of regression (Field, 2009, p. 349).

Although an ANOVA is considered to be rather robust against violations of the assumption of homogeneity of variances, there is a risk that the *F*-ratio might become biased if group sizes are unequal. To assess the homoscedasticity of the data, Levene's test was used. As recommended by Field (2009, p. 150), any significant results of Levene's test were then followed up by a manual calculation of the variance ratio using Hartley's homogeneity of variance test. Where homoscedasticity could not be assumed, the robust Welch *F*-ratio was instead reported.

An ANCOVA is a form of ANOVA, but with another factor included as a covariate in the analysis. The purpose of including a covariate is to statistically control for a certain factor, thus reducing the variance in the dependent variable not related to the independent variable(s). This way a "purer" estimation of the relationship between the independent and dependent variables can be obtained (Field, 2009, p. 396). There has been some controversy of when it is appropriate to run ANCOVAs and not (Miller & Chapman, 2001). In this paper, ANCOVAs were used to be able and jointly test e.g. the two expert employee treatments against the two novice employee treatments. This means that two treatment groups exposed to the same level of employee expertise, but exposed to different levels of employee interest, were pooled. From a statistical point of view, the perceived level of employee interest would accordingly have to be controlled for. As the perceived level of employee interest do not reflect some meaningful pre-treatment difference between participants in different groups, including such a covariate would not affect the statistical testing in a potentially problematic way and was thus justified (Miller & Chapman, 2001).

When conducting an ANOVA with an independent variable consisting of more than two categories, it is not enough to look at the overall test statistic (this only tells you *if* the there is a significant difference between groups, not what these differences look like). Thus, the analyses were supplemented with multiple pairwise comparisons of means. After inspecting the data, it was decided that two such post hoc tests would be reported: in general, as simple sizes were slightly different over the four treatments, it was decided to use Gabriel's test. In a few cases, there were signs of heteroscedasticity in the data, why the Games-Howell test was instead employed (Field, 2009, p. 374).

It is increasingly acknowledged within communication research that significance tests should be supplemented with measures of effect size (Ferguson, 2009; Levine & Hullett, 2002). Consequently, all factorial ANOVA results in this paper were reported with both p-value and measure of effect size. The standard effect size reported in SPSS outputs is partial eta squared. However, following the recommendation of Levine and Hullett (2002), these values have been recalculated and instead the eta squared (denoted  $\eta$ ) is presented.

In the theoretical framework it was suggested that employee expertise is an antecedent to trustworthiness, while employee interest more strongly relates to the characteristic likability. Although not posed as formal hypotheses, it was found worthwhile to examine these relationships. Following the procedure outlined by Zhao, Lynch and Chen (2010) two bootstrap tests of these indirect effects were run: one with employee expertise as independent variable and one with employee interest as independent variable. To run the tests of mediation Hayes' SPSS macro 'INDIRECT' was used, employing bias corrected bootstrapping with 5,000 bootstrap samples (Preacher & Hayes, 2008).<sup>4</sup>

## Reliability and validity

Reliability refers to "the degree to which a test produces similar scores each time it is used" (Gerrig & Zimbardo, 2002). For this thesis, it relates to the quality of measurement and repeatability of the study. To ensure high quality, all measures were taken and/or adapted from well-cited and peer-reviewed papers. When adapting the measures to the current setting, this included translating them from English to Swedish. The purpose of this was to minimize the risk of participants misinterpreting them, as all participants were swedes. To improve translation equivalence the questionnaire was first translated into Swedish, then translated back into English (Hui & Triandis, 1985; Jamal & Al-Marri, 2007; Lysonski & Durvasula, 1996). As an additional precaution, the questionnaire was independently translated by both the author and another person not related to the study, but knowledgeable in item-development and psychometrics. The two versions were then coordinated.

-

<sup>&</sup>lt;sup>4</sup> The macro can be downloaded free from www.afhayes.com/spss-sas-and-mplus-macros-and-code.html, along with documentation.

<sup>&</sup>lt;sup>5</sup> Å MSc student in Psychology at Karolinska Institutet, Stockholm.

Most of the measures consisted of two or more items. This is generally considered a way to strengthen the internal consistency of a measure, as respondents are asked to rate two or more near-identical items, which increases the reliability of the scale (Peterson, 1994). The  $\alpha$  coefficient was then calculated for related items to estimate the measurement precision (Cronbach, 1951). All multi-item measures except for employee expertise had a Cronbach's  $\alpha$  larger than .90, which can be considered well above most recommended reliability levels. For employee expertise, the  $\alpha$  was calculated to .77. Had the third item in the employee expertise measure been dropped ("The salesperson is not an expert"), the value would have been .94. The lower value was probably due to the fact that this specific item was reversed, compared to the rest of the survey. However, the measure as a whole was taken from previous research, and the  $\alpha$  level was still considered to be sufficiently high not to exclude the item.

The measure for Employee interest was only measured through a single item. This facilitated interpretation of the results and provided higher validity, but at the expense of lower reliability. It was decided to include only one item as the measure had not been used in previous studies, this in order to focus the measure and reduce potential biases as a result of insufficient psychometric testing.<sup>7</sup> It should be noted that this study focus on one specific aspect of the effects of vocational interest on customer responses, and that other dimensions of vocational interest still remain to be studied.

The four role-play scenarios employed in the experimental treatments, and the measure of perceived employee interest, were developed for the purpose of this thesis. Although building on previous literature, there was a risk of experimental errors. For example that participants would misunderstand or not react as intended to the stimuli. This necessitated thorough pre-testing, which was done through two pilot studies. These aimed at assuring that the stimuli were perceived as intended (i.e. expert/novice employee, and interested/not interested employee), as well as checking the overall experimental design, instructions and survey layout. Constructive feedback was gathered from these pre-studies and incorporated prior to the main experiment. Overall, the

-

 $<sup>^6</sup>$  For a more extensive discussion on Cronbach's  $\alpha$ , see Peterson (1994).

<sup>&</sup>lt;sup>7</sup> In order to properly develop a multi-item measure for vocational interest, it would have to undergo rigorous psychometric testing, which was outside the scope of this paper.

stimuli aligned very well with the intended responses, and all aspects of the survey were considered easy to understand by the participants in the pilot studies.

If the cases had not been perceived as equally credible, it could pose a risk that different participants found it more or less difficult to picture himself or herself as the customer in the assigned scenario. This could then influence the participants' responses in unintended ways. The same could be true if anyone correctly guessed the purpose of the experiment while participating. It may then be the case that the participants tried to answer strategically by giving the "correct" answers, instead of answering intuitively as a response to the treatment (Söderlund, 2005). In order to minimize the risk of such measurement errors, all participants were asked to rate how realistic they found the role-play scenario they had been exposed to and to write down what they believed to be the purpose of the study.

The overall study design allowed for strong internal validity. The role-play scenarios were developed specifically for the purpose of this study, which ensured high control of the stimuli. Participants were randomly allocated to the experimental groups, and both measures and manipulations were thoroughly pre-tested. Using a scenario approach to collect data is a good way to test complicated concepts, which are sometimes hard to explore in natural field settings (Eroglu, 1987). However, higher control at times comes at the expense of lower external validity. The scenario method employed in this study involves such a trade-off between control and generalizability (Alford & Sherell, 1996).

That said, it is worth mentioning that within the limits of this thesis it was not possible to extend the scope of the experiment. Consequently, the study design allowed for examining the research questions in a specific context, for one product and with a limited subject pool. It is thus not clear how generalizable the results are to other situations and to other populations. In an effort to encourage replication and validation of the results from this thesis, the experimental instructions, scenarios and questionnaire related to all four treatments are featured as appendices.

### 4 | RESULTS

In this section the results from the main analysis are reported, the robustness of the results are examined, and additional insights are presented. Finally there is a summary of the results and how they relate to the hypotheses.

### Overview of collected data

The total sample consisted of 117 participants. However, in four cases the participants had failed to complete the whole survey and left the last section (with self-reported expertise, age and sex) blank. As one of the research questions was related to differences between groups of expert and novice customers, these four participants were excluded from the subsequent analysis, leaving 113 acceptable cases.

As a manipulation check, two one-way independent ANOVAs were used to test the mean differences of perceived employee expertise and perceived employee interest between the four treatments. Both ANOVAs employed the four treatments as the independent variable. In the first analysis, perceived employee expertise was the dependent variable, while in the second it was perceived employee interest. There was a significant effect of employee expertise on treatment scenario (p < .01), as well as a significant effect of employee interest on treatment scenario (p < .01). In the first ANOVA, results showed that participants in the two expert treatments rated the employee as having a higher level of expertise ( $M_{\rm EN} = 4.45$  and  $M_{\rm EI} = 6.58$ ; where 1 = low expertise and 10 = high expertise) than participants in the two novice treatments ( $M_{\rm NN} = 1.69$  and  $M_{\rm NI} = 2.18$ ). In the second ANOVA, participants in the two interest treatments rated the employee as being more interested ( $M_{\rm NI} = 6.28$  and  $M_{\rm EI} = 8.21$ ; where 1 = low interest and 10 = high interest) than participants in the two no interest treatments ( $M_{\rm NN} = 1.74$  and  $M_{\rm EN} = 3.08$ ). A multiple pairwise comparison of differences in means indicated that these differences were significant (p < .01).

<sup>&</sup>lt;sup>8</sup> In both ANOVAs there were some indications that local homogeneity of variance could not be assumed for all pairwise comparisons, why the Games-Howell post hoc test was employed (Field, 2009, p. 374).

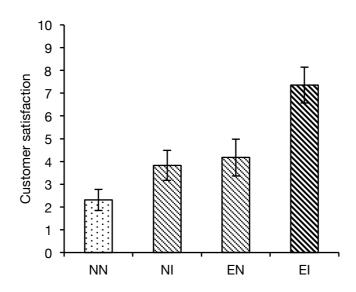
An additional ANOVA found that there was no difference in rated credibility between the treatments (F = .798, p = .497) and, based on an open-ended question in the survey, no participant correctly guessed the purpose of the study. This indicated that the treatments per se did not produce any unintended effects on the ratings of the participants, but that any observed effects were more likely to be related to the actual stimuli (i.e. variations of employee characteristics in the treatments). The manipulations were thus successful in producing the intended performance combinations of high versus low employee expertise and interest. The results of these ANOVAs are presented in Table II.

### Assessing the hypotheses

The first two hypotheses stated that higher employee expertise as well as higher employee interest would lead to higher customer satisfaction. To investigate these hypotheses, a one-way independent ANOVA was conducted. Experimental treatment was used as factor in the analysis and the dependent variable was customer satisfaction. By visual inspection, both hypotheses seemed to be supported. Adding employee expertise ( $M_{\rm EN}=4.17$ ; where 1= low satisfaction and 10= high satisfaction) or employee interest ( $M_{\rm NI}=3.83$ ) increased customer satisfaction compared to when the employee was neither an expert nor interested ( $M_{\rm NN}=2.31$ ), adding both expertise and interest increased customer satisfaction even further ( $M_{\rm EI}=7.36$ ). Figure II provides an overview of these values.

Results indicated that treatment had a significant effect on customer satisfaction (p < .01) and post hoc tests supported the hypothesized differences. More specifically, NN was significantly lower than NI (p < .05), EN (p < .01) and EI (p < .01). Further, it was shown that EI was significantly higher than both NI and EN (p < .01). There was no significant difference between the NI and EN treatments. Overall, these findings lend support in favor of H1 and H2. The results are illustrated in Figure II and further presented in Table II.

**FIGURE II**MEAN LEVEL OF SATISFACTION PER TREATMENT



Note. Error bars represent 95% confidence intervals.

**TABLE II**ONE-WAY ANALYSIS OF VARIANCE, TESTS OF GROUP MEAN DIFFERENCES

		Group mean values (SD)							
Variable	NN	NI	EN	El	Pairwise differences <sup>a</sup>				
Employee expertise b <i>F</i> (3,57.38) = 56.76	1.69 (1.06)	2.18 (1.43)	4.45 (1.56)	6.58 (1.93)	1,2 < 3 < 4				
Employee interest <sup>b</sup> F(3,55.56) = 89.97	1.74 (1.12)	6.28 (2.39)	3.08 (1.98)	8.21 (1.97)	1 < 3 < 2 < 4				
Customer satisfaction $^{\circ}$ F(3,109) = 38.56	2.31 (1.32)	3.83 (1.81)	4.17 (2.07)	7.36 (2.12)	1 < 2,3 < 4				
Customer expertise $^{\circ}$ F(3,109) = 1.28	5.13 (2.23)	4.29 (1.93)	4.24 (2.32)	4.18 (2.20)	n.s.				

*Note.* n = 113. <sup>a</sup> p < .05. <sup>b</sup> Local homogeneity of variance could not be assumed, why Welch F-ratio and Games-Howell post hoc test are reported. <sup>c</sup> Local homogeneity of variance could be assumed, why standard F-ratio and Gabriel's test are reported.

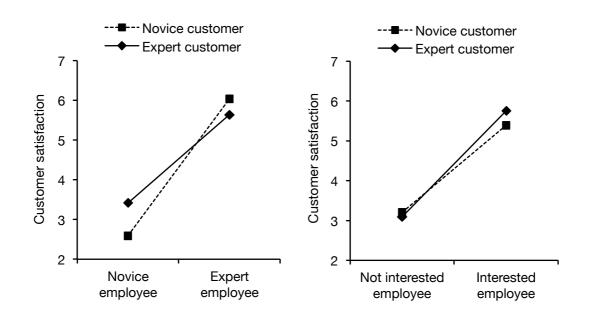
To examine if there was an interaction effect between employee expertise and employee interest, a two-way ANOVA was performed. The employee's level of expertise (expert vs. novice) and the employee's level of interest (interested vs. not interested) were used as independent variables. Customer satisfaction was the dependent variable. The main effect for employee expertise was significant (p < .01), as was the main effect for employee interest (p < .01). The interaction effect for employee expertise and employee interest was also significant (p < .05), indicating that when combining employee expertise and employee interest this provoked an even stronger effect on customer satisfaction (see ANOVA 1 in Table III). These results were also in line with H1 and H2.

The remaining hypotheses incorporated varying levels of customer expertise in the model. Hence, participants were split at the median value (Mdn = 4.33) into two groups (Expert customers, n = 56, and Novice customers, n = 57) according to their self-reported levels of expertise.

The third hypothesis, stating that novice customers' level of satisfaction would be more strongly affected than expert customers' level of satisfaction by the level of employee expertise, was examined through a two-way independent ANCOVA (see ANCOVA 1 in Table III). The employee's level of expertise (expert vs. novice) and the participants' level of expertise (expert vs. novice) were used as independent variables. Customer satisfaction was the dependent variable. Employee interest was included as a covariate in the analysis in order to be able to jointly test the NN and NI treatments compared to the EN and EI treatments.

The main effect of customer expertise was not significant, but in accordance with H1 there was still a significant main effect for employee expertise (p < .01). And, as predicted by H3, there was a significant interaction for employee expertise and customer expertise in favor of novice customers (p < .05). The significant interaction suggests that novice customers are more sensitive to varying levels of employee expertise than expert customers are, as suggested by H3. This is illustrated on the left-hand side of Figure III.

FIGURE III
SATISFACTION LEVELS AND CUSTOMER EXPERTISE



The fourth hypothesis related to the effect of different levels of employee interest on customer satisfaction, given different levels of customer expertise. This was also tested using a factorial ANCOVA (see ANCOVA 2 in Table III). Employee interest (interested vs. not interested) and customer expertise (expert vs. novice) were used as factors, and customer satisfaction as dependent variable. The employee's level of expertise was included as a covariate. The main effect of employee interest was significant (p < .01), while the main effect of customer expertise was not. As proposed by H4, the interaction effect was not significant, indicating that the two customer groups were affected equally by the employee interest stimuli. This is illustrated on the right-hand side of Figure III.

**TABLE III**FACTORIAL ANALYSIS OF VARIANCE, TESTS OF GROUP MEAN DIFFERENCES

Source	<i>M₁</i> (SD)	M <sub>2</sub> (SD)	df <sup>a</sup>	F	η²	р
ANOVA 1						
Main effect	0.04 (4.74)	F 00 (0 00)	4 400	00.44	0.7	000
Employee expert	3.04 (1.74)	5.86 (2.63)	1,109	60.41 45.91	.27	.000 .000
Employee interested Employee expert x	3.14 (1.92)	5.56 (2.64)	1,109 1,109	45.91 5.78	.20 .03	.000
Employee interested			1,109	5.76	.00	.010
ANCOVA 1						
Main effect						
Employee expert	3.04 (1.74)	5.86 (2.63)	1,108	39.39	.12	.000
Customer expert	4.38 (2.65)	4.35 (2.58)	1,108	2.42	00	n.s.
Employee expert x Customer expert			1,108	5.08	.02	.026
Covariate						
Employee interest			1,108	110.22	.35	.000
Zmpioyee interest			.,	110122	.00	.000
ANCOVA 2						
Main effect						
Employee interested	3.14 (1.92)	5.56 (2.64)	1,108	20.47	.07	.000
Customer expert	4.38 (2.65)	4.35 (2.58)	1,108	1.59		n.s.
Employee interested x			1,108	0.20		n.s.
Customer expert  Covariate						
Employee expertise			1,108	114.21	.40	.000
Employed expertise			1,100	117.61	10	.000

*Notes.* n = 113. n.s. =not significant. Factor Employee expert: group 1 = not expert, group 2 = expert; factor Employee interested: group 1 = not interested, group 2 = interested; factor Customer expert: group 1 = not expert, group 2 = expert.  $^a$  = Degrees of freedom, Error degrees of freedom.

#### Robustness of the results

In general, homoscedasticity could be assumed by either Levene's test and/or Hartley's test. During the manipulation check, however, there were some indications that the data might be heteroscedastic. In the first ANOVA (where treatment served as independent variable and employee expertise as dependent variable) when comparing the NN group with the EI group, and in the second ANOVA (where treatment served as independent variable and employee interest as dependent variable) when comparing the NN group with the NI group, local homogeneity of variance could not be assumed. Even though ANOVAs are considered relatively robust against violations of its underlying assumptions (Field, 2009, p. 360), it was decided to run robust analyses for the

manipulation check (i.e. reporting Welch *F*-ratio and Games-Howell post hoc test, instead of standard *F*-ratio and Gabriel's test).

This did not considerably affect the results. Employing the standard F-ratio there was still a significant effect of employee expertise on treatment scenario (p < .01), as well as a significant effect of employee interest on treatment scenario (p < .01). For the post hoc tests, there were no considerable differences between results reported using Gabriel's test and the Games-Howell test (Gabriel's test showed that the expert treatments were still rated higher on expertise than the novice treatments, and the interest treatments were still rated higher on interest than the no interest treatments, all p < .01). The results from these two standard ANOVAs are reported in Table V in Appendix VI.

As one of the research questions initially asked whether there might be differences between how novice and expert customers are affected by employee characteristics, it was decided to complement the findings from the first factorial ANOVA (with employee expertise and employee interest as factors) with an ANCOVA (see ANCOVA 3 in Table VI in Appendix VI). This additional analysis also employed employee expertise and employee interest as factors, but included customer expertise as a covariate. Including the covariate did not considerably change the results. The main effects of employee expertise and employee interest were still significant (both p < .01) and the significance of the interaction only slightly decreased (from p = .018 to p = .024).

The main analysis of the experiment only considered participants' subjective level of knowledge, but as a robustness check data was also gathered on tablet ownership (i.e. the participants were asked whether or not they owned a tablet). The purpose of this was to include a proxy for objective knowledge, as participants owning a tablet with good reason could be expected to, in general, have higher knowledge about tablets than participants not owning any tablet. It was hence decided to run ANCOVA 1 and 2 again, but with tablet ownership instead of self-reported expertise as discriminator.

As can be seen in Table VI in Appendix VI, these complementing ANCOVAs still yielded highly significant main effects for employee expertise (see ANCOVA 4, p < .01) and employee interest (see ANCOVA 5, p < .01), and no significant interaction between employee interest and customer expertise (now replaced by tablet ownership). The

previously significant interaction between employee expertise and customer expertise, however, was no longer significant (i.e. the interaction between employee expertise and tablet ownership was not significant). This could be an indication that it is not familiarity or objective knowledge per se, but the perception of one's own level of knowledge that matters. This would in turn lend further support to the rationale of employing a subjective knowledge measure in this paper.

Relating to participants self-reported expertise, there was a potential risk of "contamination". That is, since participants first were exposed to one of the four treatments and afterwards rated their own level of expertise, it was possible that the treatment would influence how they rated their own expertise. Consider for example if a participant was exposed to a high (low) knowledge employee. The participant might then have perceived his or her own expertise as *relatively* lower (higher) than if the employee had been less (more) knowledgeable. A one-way ANOVA was conducted to ensure that no such contamination had occurred. Treatment was used as factor and customer expertise as dependent variable. The results indicated that there was no significant difference in mean customer expertise between the treatments (p = .29), thus suggesting that no meaningful contamination had occurred. The results are presented in Table II.

### Additional insights

In the theoretical framework it was suggested that employee expertise might influence customer satisfaction through higher perceived trustworthiness, while employee interest might work through the channel of higher salesperson likability. Using the steps outlined by Zhao et al. (2010), it was tested whether employee trustworthiness and employee likability mediated the effect of employee expertise and/or the effect of employee interest on customer satisfaction. Following the suggested procedure, two multiple mediator models were tested through two bootstrap tests. Employee interest and employee expertise were independent variables in one test each, employee trustworthiness and likability were mediators and customer satisfaction was the dependent variable in both tests. Throughout, two dummy variables were included in the analysis to control for the different treatments (i.e. one dummy for employee expert treatments, and one for employee interest treatments).

The first bootstrap test included employee expertise. Results showed that the total indirect effect of employee expertise on customer satisfaction, via trustworthiness and likability, was positive and significant, with a 95% confidence interval excluding zero (.28 to .60). The simple indirect effects, via trustworthiness (BC 95% CI = .04 to .33) and likability (BC 95% CI = .14 to .41), were also significant. The direct effect of employee expertise on customer satisfaction was not significant (p = .07), suggesting an indirect-only mediating relationship (Zhao et al., 2010). Due to the significance value being close to the 5% borderline value, however, it is possible that the observed relationship instead should be classified as a complementary mediation. That would imply that there either is some omitted mediator variable in the test, or support that employee expertise has a direct effect on customer satisfaction.

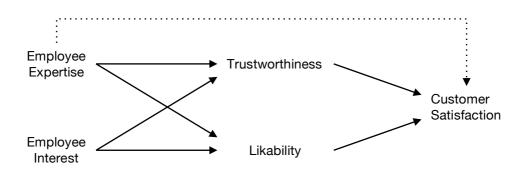
The second bootstrap test included employee interest. The results were similar to those obtained in the first mediation analysis. The total indirect effect of employee interest on customer satisfaction, via trustworthiness and likability, was positive and significant (BC 95% CI = .32 to .64). The simple indirect effects for trustworthiness (BC 95% CI = .07 to .32) and for likability (BC 95% CI = .17 to .44) were also significant. The direct effect of employee interest on customer satisfaction was not significant (p = .58), suggesting an indirect-only mediating relationship.

The mediating relationships were investigated further by contrasting the indirect effects, in order to test whether they were equal in size or not. In both mediation analysis 1, including employee expertise, and mediation analysis 2, including employee interest, the hypothesis that the indirect effects of trustworthiness and likability were equal could not be rejected. The bootstrapped confidence intervals did not exclude zero either for employee expertise (BC 95% CI = -.31 to .15) or employee interest (BC 95% CI = -.32 to .09).

Although the sizes of the indirect effects were not significantly different in any of the bootstrap tests, the regression coefficients yielded further insights. Employee expertise was more strongly related to trustworthiness ( $\beta = .77$ , p < .05) than to likability ( $\beta = .59$ , p < .01), while employee interest was equally related to both trustworthiness ( $\beta = .64$ , p < .01) and likability ( $\beta = .69$ , p < .01). In both tests of mediation, the results showed that the effect of likability on customer satisfaction was approximately twice as large as the

effect of trustworthiness on customer satisfaction. In mediation analysis 1, likability had an unstandardized  $\beta$  coefficient of .42 (p < .01) while trustworthiness had an unstandardized  $\beta$  coefficient of .23 (p < .05). In mediation analysis 2, the coefficient for likability ( $\beta = .42$ , p < .01) was also larger than the coefficient for trustworthiness ( $\beta = .29$ , p < .01). To further illustrate, Figure IV outlines the observed relationships.

FIGURE IV
OBSERVED RELATIONSHIPS, TESTS OF MEDIATION



*Notes.* Solid arrows indicate main effects, dashed arrows secondary effects. Employee expertise and Employee interest are both mediated by Trustworthiness and Likability. Employee expertise has a direct, but weak, effect on Customer satisfaction.

Overall, these results support a model of mediating relationships consistent with the hypothesized theoretical framework. But, contrary to what was proposed, employee expertise and interest were both almost equally mediated by trustworthiness as well as likability. Although both employee expertise and employee interest were related to both mediators (trustworthiness and likability), the results indicate that employee expertise might be mediated somewhat more strongly by trustworthiness than by likability, while employee interest might be mediated by trustworthiness and likability equally. Employee interest was fully mediated in the model, while there were some indications that employee expertise might also have a direct effect on customer satisfaction. The results are reported in detail in Appendix VII in Table VII and Table VIII.

### Summary of the results

Overall, the results show support in favor of all four hypotheses. Participants exposed to a salesperson with higher level of expertise were more satisfied than participants exposed

to a less knowledgeable salesperson. The same was true for employee interest. Participants exposed to an interested salesperson were more satisfied than participants exposed to a salesperson who did not show interest. When customers were split into groups according to their self-reported level of expertise, it was shown that novice customers reacted more strongly to different levels of employee expertise than did expert customers. For employee interest, there was no difference in how strongly novice and expert customers reacted.

In excess of testing the hypotheses, additional insights were gathered through a mediation analysis. This indicated that both employee expertise and employee interest influenced customer satisfaction through the mediating variables of perceived trustworthiness and perceived likability. Employee expertise was somewhat more strongly related to trustworthiness than likability, and could potentially have a direct effect on customer satisfaction. Employee interest was fully, and equally strongly, mediated by trustworthiness and likability.

Table IV provides an overview of all results.

# **TABLE IV** SUMMARY OF MAIN FINDINGS

Hypothesis	Finding	Short interpretation
H1	Support in favor of	Customer satisfaction is higher when perceived employee expertise is high rather than low.
H2	Support in favor of	Customer satisfaction is higher when perceived employee interest is high rather than low.
НЗ	Support in favor of	The perceived level of employee expertise has a stronger effect on novice customers, with regards to satisfaction, than on expert customers.
H4	Support in favor of	The perceived level of employee interest has the same effect on novice customers, with regards to satisfaction, as on expert customers.
Additional insi	ight	Short interpretation
Mediation anal	ysis: Employee expertise	The effect of employee expertise on customer satisfaction is mediated by trustworthiness and likability.
Mediation anal	ysis: Employee interest	The effect of employee interest on customer satisfaction is mediated by trustworthiness and likability.

### 5 | DISCUSSION OF RESULTS

In the concluding chapter, the main findings are discussed as well as the general strength of the results. Limitations and implications of the study, as well as suggestions for future research are reviewed. Last, there is a summarizing conclusion.

### Main findings

The purpose of this thesis was to shed light on two research questions, which can be summarized as studying how different combinations of salesperson and customer characteristics interact in service encounters and affect customer responses, particularly the level of customer satisfaction. This was formalized into four research hypotheses, which were experimentally tested and statistically evaluated. Overall, the results favored the posed hypotheses and gave valuable insights related to the research questions.

As hypothesized, higher employee expertise and higher perceived employee interest both resulted in more satisfied participants. The findings support previous research in suggesting that employee expertise is an important characteristic affecting customer responses (e.g. Doney & Cannon, 1997; Homburg & Stock, 2005; Johnson & Grayson, 2005; Sweeney & Swait, 2008). It also conforms to selection literature stating that employee interest has a positive influence on customer responses (e.g. Nye et al., 2012; Rounds & Su, 2014). It was further found that when both of these employee characteristics were present (i.e. the EI treatment), participants rated their satisfaction even higher, indicating that the two characteristics positively reinforced each other's effects. This seems quite intuitive but, nonetheless, these two characteristics have previously not been examined jointly in a setting as the one presented in this study. In that respect, this paper contributes in advancing the understanding of the interpersonal dynamics present in the sales encounter dyad.

The findings further highlight an important aspect of the sales encounter that has been largely neglected in previous literature, namely the impact of *perceived* employee interest on customers' behavioral intentions. Although vocational interests have been linked to employee performance and desirable business outcomes (Nye et al., 2012; Rounds & Su, 2014; Van Iddekinge et al., 2011), this study is novel in the sense that it focuses on the

customer's point of view. Previous research has suggested that perceived employee expertise is predictive of customer satisfaction (Homburg & Stock, 2005; Sweeney & Swait, 2008). This paper supports that also perceived employee interest has a substantial positive impact on customer satisfaction. The results thereby underline that vocational interests not only are important from an employer perspective, but also from a business perspective.

Taking into account the varying levels of customer expertise yielded further insights. Statistical analysis revealed that employee expertise had a stronger influence on novice customers than on more knowledgeable customers. More specifically, if a customer perceived himself or herself to have less knowledge about the product, they appreciated that the salesperson had high expertise. If the customer perceived himself or herself to be more knowledgeable about the product, the expertise of the employee became less relevant for the customer's overall perception of the sales encounter. A possible explanation for this finding could be that novice customers feel less confident in the purchasing situation, and hence appreciate that the salesperson is knowledgeable and able to guide them through the decision process. A customer with a higher level of expertise instead feels more confident, and is thus less dependent on the guidance from the employee.

Looking at perceived employee interest the findings indicated differently. In the theoretical framework it was argued that there was not sufficient support in previous research to state a qualified hypothesis about differences between novice and expert customers regarding employee interest. It was suggested that the case could be made in both directions, either promoting novices stronger reaction to the interest stimuli, or experts stronger reaction to the same. In line with H4, results supported the notion that perceived employee interest was equally important for customer satisfaction, regardless of the customer's level of expertise. As argued above, employee expertise and firm assistance may prove more important to novice customers than to expert customers in frontline service encounters. In comparison, employee interest might represent the 'icing on the cake'. Everyone appreciates it and prefers having it rather than not having it.

In assessing the hypotheses, several analyses of variance (and covariance) were performed and this yielded insights about different moderating relationships. But

moderator variables simply stipulate when a certain effect will occur. In contrast, mediator variables go deeper and "explain how external physical events take on internal psychological significance" (Baron & Kenny, 1986), i.e. how or why the effect occurs. The main analysis was therefore followed by tests of mediation. The purpose of this was to further explore the mechanisms behind different salesperson characteristics.

This additional analysis suggested that the effect of employee expertise on customer satisfaction was mediated both by perceived trustworthiness and perceived likability. It was somewhat more strongly related to trustworthiness than likability, but this difference was not significant. There were some indications that employee expertise had a direct effect on customer satisfaction, in spite of including both mediators in the analysis. This could imply that there either was some omitted mediator variable in the test, or that employee expertise had a direct effect on customer satisfaction. Either way, it seems as if participants facing a more knowledgeable employee (expert treatment) perceived this salesperson to be trustworthier and more likable than a less knowledgeable employee (novice treatment). This had a positive effect on customer satisfaction.

The results also indicated that the effect of employee interest on customer satisfaction was strongly mediated by both perceived trustworthiness and perceived likability. These results showed stronger relationships than those for employee expertise. This suggested that employee interest might be more dependent on the mediating variables than employee expertise. Overall, the results implied that when the salesperson displayed a higher level of interest, the participant perceived this employee as more trustworthy and likable, which in turn positively influenced the customer's level of satisfaction. These findings were made possible by including both the feature of employee expertise and the feature of employee interest in the same study. Through these clarifying indications, this paper supplements the existing body of literature regarding the mechanisms behind perceived trust and likability.

### General strength of the results

Overall, the statistical analysis yielded strong results in favor of the posed hypotheses. When testing the first and second hypothesis, both one-way and factorial ANOVAs showed highly significant results, indicating that both employee expertise and interest affected customer satisfaction positively. This was true both for main effects as well as

the interaction between employee expertise and interest, suggesting that these effects had a reinforcing effect on each other (see Figure II). From an applied perspective this follows quite intuitively, as a customer reasonably could be assumed to appreciate a salesperson even more if they show both interest and expertise. In excess of statistical significance, effect sizes in support of H1 and H2 could also be considered moderately large<sup>9</sup>.

For the third hypothesis there was also a highly significant effect supporting the hypothesized relationship, namely the interaction between employee expertise and customer expertise (illustrated on the left-hand side of Figure III). The effect size for the interaction, however, could only be considered as small given Cohen's (1988) recommendations. This was not very surprising, as the third hypothesis had not been investigated as thoroughly in previous research as H1 and H2, and given the sample size included in this paper these results could not be seen as anything but fully satisfactory.

The forth hypothesis also gained support, as the analysis failed to find any significant interaction effect between employee interest and customer expertise. There were some indications in the data of an interaction in favor of expert customers (i.e. that expert customers would be more strongly affected by employee interest than novice customers would be; illustrated on the right-hand side of Figure III). It is possible that such an effect could have been detected with a larger sample size. At present though, there is not enough research to support that such an effect should exist.

H4 differed from the other hypotheses in that it suggested there to be no difference between the groups of interest, while the other hypotheses all implied that it would be. In testing H1-3, the null hypotheses of no difference between the groups of interest were all rejected in favor of the alternate hypotheses. In line with H4, the data failed to reject that there was a difference between the groups of interest. However, the failure to reject a hypothesis provides weaker evidence than the successful rejection of one. Accordingly, the conclusions related to H4 are not as strong as for H1-3, despite that the findings were in line with the hypothesis.

\_

<sup>&</sup>lt;sup>9</sup> For ANOVAs, eta-squared values of .02 represent small effects, .13 medium effects, and .26 large effects (Cohen, 1988). Although Ferguson (2009) suggests a more conservative approach, values around .25 still represent a moderate effect.

This thesis also attempted to investigate the effects of employee expertise and employee interest individually. However, these constructs are likely to be intertwined. As interest may even be an antecedent of expertise, as suggested in the theoretical framework, it could prove difficult to isolate their respective effect on participants' behavioral responses. This relationship is further reflected in their strong<sup>10</sup> and positive correlation with each other (r = .57, p < .01).

The purpose of the design of the main study, with four separate treatments, was hence to try and disentangle the two constructs from each other. Sequentially adding expertise, interest, or both, as stimuli allowed for a more refined analysis where employee expertise and interest could be (at least theoretically) separated. Not surprisingly, both significance levels and effect sizes provided somewhat weaker support for the effects of employee interest on customer responses, as compared to employee expertise. This follows quite naturally if interest really is an antecedent of expertise.

Using a median split to distinguish different participants groups (in this case to identify "novice" and "expert" customers) has been discussed and sometimes criticized in previous research (Field, 2009, p.339; MacCallum, Zhang, Preacher, & Rucker, 2002). Hypothetical concerns related to this study could be either a loss in true effect size and power, or an overestimation of effect sizes due to spurious statistical significance. Although the dichotomization in this paper was considered justifiable, as such methodology has been extensively used in previous literature on customer expertise (e.g. Cowley, 1994; Jamal & Al-Marri, 2007; Raju et al., 1985; Söderlund, 2002), results related to differences between expert and novice customers should be viewed with a healthy skepticism.

Not surprisingly, male participants rated their own level of expertise significantly higher than female participants ( $M_{\rm male} = 5.63$ ,  $M_{\rm female} = 4.01$ , p < .01). For obvious reasons this could have biased the results from the study. Fortunately, there was neither any significant difference in the female-male proportion nor in customer expertise levels

<sup>&</sup>lt;sup>10</sup> For correlation coefficients, values of  $\pm$  .1 represent small effects,  $\pm$  .3 medium effects, and  $\pm$  .5 large effects (Field, 2009, p. 173).

across the treatments. Thus, in spite of this skewness in self-assessed knowledge between the sexes, the statistical analysis and conclusions thereof were still highly feasible.

In conclusion, no unexpected patterns or biases could be detected, and the results supported the posed hypotheses.

### Limitations

As much of the previous research on vocational interests has been conducted from the perspective of the employee, not the customer, it is worth discussing the transferability to this study. Some theories were not applicable, and others were adopted to fit this setting. Had there been more time and resources, it would have been favorable to conduct a more comprehensive experiment. This could have included a larger sample, testing the effects on several products, or included follow-up experiments with the purpose of replicating the present findings. This paper is exploratory and, even though the results relating to employee interest seem quite convincing, they have to be confirmed in future research in order to draw definite conclusions about its applicability.

Conducting the experiment online was beneficial in the sense that it facilitated the collection of data and minimized the risk of human errors related to manually transcribing analogous survey data. As it was not possible to gather all participants and provide them with computers set up specifically for the purpose of this study, the experiment was distributed via e-mail. This reduced the control of the experiment, as external factors possibly influencing the participants could not be observed.

Another limitation with the digital nature of the survey was reflected in the drop-out rate; in total 196 surveys were started, but only 117 were completed. Although the survey was programmed and pre-tested to be responsive<sup>11</sup>, there seem as if this might have been a problem. There were some comments from participants that they had experienced problems when trying to conduct the experiment on other devices than a computer such as, ironically, a tablet. This resulted in a notably smaller sample size than initially intended, meaning that it would be harder to find small effects in the data. Fortunately,

In technological terms, res

<sup>&</sup>lt;sup>11</sup> In technological terms, responsiveness indicates that the layout is flexible and will adapt to the screen of the receiver (e.g. the resolution changes depending on if the content is viewed on a tablet, smartphone or computer).

the results from the study still proved to be statistically robust, implying that the true effects might be moderate to large given the setting of this study.

### Implications<sup>12</sup>

Apart from the theoretical contributions of this thesis, the results presented also have important implications for business strategy. One of the key takeaways is that companies need to look beyond candidates' level of (current) knowledge when hiring. Today, it is common practice to screen applicants by looking at some quantitative measure of knowledge or expertise. This could be Grade Point Average for graduates, or previous job experience for professionals. It is not wrong in the sense that knowledgeable employees will probably do a good job and be appreciated by customers, while less knowledgeable employees possibly will give less accurate service and make more mistakes. However, this view is considerably flawed, as it is does not take into account the candidates' level of interest.

In employee selection literature, vocational interests have long been considered a predictor of favorable business outcomes (Nye et al., 2012; Van Iddekinge et al., 2011). Now there is initial evidence that customers also strongly favor interested employees over less interested ones. This paper indicates that both employee expertise and interest has a positive impact on customer satisfaction, and that a characteristics combination of both expertise and interest is likely to perform even better. Previous research has suggested that interest might lead to expertise (Rounds & Su, 2014), but looking at the opposite, expertise does not necessarily lead to interest. As recruitment of new employees is often seen as long-term investments from the company, an important managerial implication is that companies should focus more on candidates' level of interest. It is easier to help an interested individual gain expertise, rather than inspiring a knowledgeable but uninterested individual. In the end, this is likely to yield a higher return on investment as the newly employed, interested individual gradually increase their knowledge and, accordingly, generate higher customer satisfaction. This is ultimately reflected on the firm's bottom line.

<sup>&</sup>lt;sup>12</sup> In contrast to the rest of the thesis, this section includes personal opinions and subjective interpretations of the results.

Apart from candidate screening, there are also consequences for employee training programs. As suggested by previous research, there is a link between employee satisfaction and customer satisfaction (e.g. Brown & Lam, 2008; Frey et al., 2013; Gounaris & Boukis, 2013; Jeon & Choi, 2012), even for employees that do not have direct customer contact (Wangenheim et al., 2007). As interested employees are likely to show greater workplace engagement (Bakker & Demerouti, 2008) and feel more happy with their vocational situation (Fisher, 2010), it is predicted that they will feel more satisfied than less interested colleagues. Employee management and training should thus encourage all personnel to cultivate their interests. As suggested by the results in this thesis, for frontline personnel it is also important to display their interest in customer encounters.

But the implications vary between different industries. As shown in this paper, novice customers are more strongly affected by varying levels of employee expertise than expert customers are. Consequently, if the customers on average are believed to be less knowledgeable in the product or service category it is important that the salespeople have a high level of expertise. While if the customers are believed to be more knowledgeable displaying expertise is not as crucial. As a result, business managers and human relation executives operating in industries with novice customers do not have the same freedom of focusing solely on candidates' interests in the recruitment process. And a company with mostly novice customers has more to gain from educating their employees and improving the overall level of expertise, than a company with mostly expert customers. Important to point out, though, is that it regardless of how knowledgeable the customers are it is vital to attend to the employees' vocational interests.

The findings can further prove valuable to students and graduates. Just like employers are encouraged to look for interested candidates, students should think about their interests before applying for a university program, as well as job seekers before applying for a position. As a reaction to the societal presumption that you must learn for the sake of learning, students should focus less on "forced" intake of information, and instead cultivate their interests. <sup>13</sup> This might be hard if they are enrolled at a university that requires them to pass certain mandatory courses, and it thus becomes very important for

<sup>&</sup>lt;sup>13</sup> This reasoning might not be applicable for pupils in elementary school, however, as it is vital to gain some general knowledge in order to function in society at large.

students-to-be to carefully think through their university application beforehand. Is this something they want because it is expected from them/it is respectable/it is prestigious, or do they truly find it interesting? This paper strongly suggests that people should nurture their interests, as this is a valuable characteristic to posses. Expertise is likely to follow anyway.

Continuing, graduates are likely to have accumulated expertise through past experiences, or increased their knowledge in a certain area as a requirement for some position. On the other hand, it is fully possible that they do not love what they currently do. If this is the case, the person will probably be able to do a good job due to knowledge and experience, but not excel in it. The old saying "choose a job you love, and you will never have to work a day in your life" might be cliché and not literally true. But if a person has a strong interest and pursues a career related to this, they are likely to experience potent synergies between their preferences and work-related performance. Which, in the long run, will boost their career.

#### Future research

This thesis set out to contribute in bridging employee selection literature and service encounter literature by conducting an artefactual lab experiment. Given the setting of this study, the results seemed quite strong and one of the focal conclusions was the rather influential (positive) effect of employee interest on customer satisfaction. However, due to the exploratory nature of this study, further research would have to be conducted in order to validate these results. As argued by Harrison and List (2004), no single form of research is in itself universal and the most convincing inferences can be made if data from several kinds of experiments are combined.

Apart from the obvious extension of replicating this study but using another product or altering the service setting, it would be valuable to conduct a framed, or even a natural, field experiment on the same kind of subject pool and setting used in this study. That would complement the findings and provide more distinctive evidence on the effects of employee interest on customer responses, as well as how this varies depending on the customer's level of expertise.

Future studies could also examine if the results differ when other measures of customer expertise are considered. Previous research has sometimes distinguished between subjective knowledge (e.g. self-assessed expertise as in this paper) and measures of objective knowledge, suggesting that these measures would not necessarily be perfect substitutions for each other and that their effects might differ (Wirtz & Mattila, 2003). In this paper, the purpose was to investigate different effects related to participants' self-assessed knowledge. If the main interest, on the other hand, would lie in studying effects with regard to participants true expertise, employing a measure of objective knowledge would probably better capture this as customers in general have a tendency to be overconfident about their own level of knowledge (Alba & Hutchinson, 2000).

Furthermore, while most of the previous research dealing with employee interest has been from employee's point of view, this paper was novel in that it focused on the customer experience. This was valuable as it had clear implications for businesses dealing with service encounters. Forthcoming research could be aimed at replicating the results provided in this paper but with dyadic data, i.e. collecting responses from both sides of the salesperson-customer interaction. Doing so would enhance the understanding of dyadic service encounters by allowing for a more refined and thorough analysis.

### Conclusion

This paper set out to investigate two research questions. The first related to the effects of employee expertise and employee interest on customer satisfaction in a consumer goods purchasing situation. Adjoining to this, the second research question asked whether customers with different levels of expertise would react differently to such salesperson characteristics. Building on previous literature, four hypotheses were formulated and later tested through an economics experiment.

In summary, findings were in line with the posed hypotheses. They indicated that higher employee expertise and/or interest both seemed to enhance a customer's level of satisfaction in a sales encounter. If the customer was less knowledgeable about the product at hand, the employee's level of expertise became relatively more important. That is, novice customers react more strongly to increased employee expertise than expert customers do. Employee interest, on the contrary, was found equally important for both novice and expert customers. Statistical analysis supported all four hypotheses

and, although further research is needed to properly validate the findings, the results were deemed rather robust.

The findings have important managerial implications related to recruitment procedures, employee training and for students and graduates building their career. As employee interest seems to provoke the same positive response from customers as employee expertise do, and as interest is believed to be an antecedent of expertise, business executives are encouraged to focus more on the dimension of interests than is currently practiced. This is especially true in industries where there are mostly expert customers, while for industries with novice customers employee expertise is still important and should be considered (both in recruitment processes as well as employee training programs).

In a well-cited article from the Harvard Business Review, Reichheld (2003) argues that when it comes to customer satisfaction, there is only 'one number you need to grow'. Given the findings from this thesis, when it comes to employees, there is one *question* you need to know.

Are they interested?

### **ACKNOWLEDGEMENTS**

I want to thank my supervisor Professor Magnus Söderlund for valuable input regarding the topic of the thesis, relevant literature, experimental methodology, and his general guidance through the academic jungle. Further I want to express my sincere gratitude to Maria Garke for her interest and expertise. May she never incorrectly apply the APA citation guidelines. Lastly, a thanks goes out to everyone participating in the experiment, whom, for obvious reasons, this study would not have been possible without.

### **REFERENCES**

- Ahearne, M., Gruen, T. W., & Jarvis, C. B. (1999). If looks could sell: Moderation and mediation of the attractiveness effect on salesperson performance. *International Journal of Research in Marketing*, *16*(4), 269-284.
- Ailawadi, K. L., & Keller, K. L. (2004). Understanding retail branding: conceptual insights and research priorities. Journal of retailing, 80(4), 331-342.
- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. *Journal of Consumer Research*, 13(4), 411-454.
- Alba, J. W., & Hutchinson, J. W. (2000). Knowledge calibration: What consumers know and what they think they know. *Journal of Consumer Research*, *27*(2), 123-156.
- Alford, B. L., & Sherrell, D. L. (1996). The role of affect in consumer satisfaction judgments of credence-based services. *Journal of Business Research*, *37*(1), 71-84.
- Ambady, N., & Rosenthal, R. (1993). Half a minute: Predicting teacher evaluations from thin slices of nonverbal behavior and physical attractiveness. *Journal of Personality and Social Psychology*, *64*(3), 431.
- Athanassopoulos, A., Gounaris, S., & Stathakopoulos, V. (2001). Behavioural responses to customer satisfaction: an empirical study. *European Journal of Marketing*, 35(5/6), 687-707.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173.
- Bolton, R. N., Gustafsson, A., McColl-Kennedy, J., Sirianni, N. J., & Tse, D. K. (2014). Small details that make big differences: a radical approach to consumption experience as a firm's differentiating strategy. *Journal of Service Management*, 25(2), 253-274.
- Brown, S. P., & Lam, S. K. (2008). A meta-analysis of relationships linking employee satisfaction to customer responses. *Journal of Retailing*, 84(3), 243-255.
- Brucks, M. (1985). The Effects of Product Class Knowledge on Information Search Behavior. *Journal Of Consumer Research*, *12*(1), 1-16.
- Busch, P., & Wilson, D. T. (1976). An experimental analysis of a salesman's expert and referent bases of social power in the buyer-seller dyad. *Journal of Marketing Research*, 13(1), 3-11.
- Casciaro, T., & Lobo, M. S. (2005). Competent jerks, lovable fools, and the formation of social networks. *Harvard Business Review*, *83*(6), 92-99.
- Cohen, J. (1988). Statistical power analysis for the behavioural sciences (2nd ed.). New York: Academic Press.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Churchill Jr, G. A., Ford, N. M., Hartley, S. W., & Walker Jr, O. C. (1985). The determinants of salesperson performance: A meta-analysis. *Journal of Marketing Research*, 22(2), 103-118.
- Cowley, E. J. (1994). Recovering Forgotten Information: A Study in Consumer Expertise. *Advances In Consumer Research*, *21*(1), 58-63.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: an interpersonal influence perspective. *Journal of Marketing*, 68-81.
- Dagger, T. S., & Sweeney, J. C. (2007). Service quality attribute weights how do novice and longer-term customers construct service quality perceptions?. *Journal of Service Research*, 10(1), 22-42.
- Dahlén, M., Lange, F., Sjödin, H., & Törn, F. (2005). Effects of ad-brand incongruence. Journal of Current Issues & Research in Advertising, 27(2), 1-12.

- Dallimore, K. S., Sparks, B. A., & Butcher, K. (2007). The influence of angry customer outbursts on service providers' facial displays and affective states. *Journal of Service Research*, 10(1), 78-92.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61(2), 35-51.
- Erdem, T., & Swait, J. (2004). Brand credibility, brand consideration, and choice. *Journal of Consumer Research*, 31(1), 191-198.
- Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological review*, 100(3), 363.
- Eroglu, S. (1987). "The scenario method: a theoretical, not theatrical, approach", in Douglas, S.P. *et al.* (Eds), *AMA Educators' Conference Proceedings*, AMA, Chicago, IL, p. 227.
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, 40(5), 532.
- Field, A. (2009). Discovering statistics using IBM SPSS statistics (3rd ed.). London: Sage.
- Findahl, O. (2014). Svenskarna och internet 2014 [Swedes and the internet 2014]. SE Stiftelsen för Internetinfrastruktur.
- Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews*, 12(4), 384-412.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6-21.
- Frey, R. V., Bayón, T., & Totzek, D. (2013). How customer satisfaction affects employee satisfaction and retention in a professional services context. *Journal of Service Research*, 16(4), 503-517.
- Friedman, M. L., & Churchill Jr, G. A. (1987). Using consumer perceptions and a contingency approach to improve health care delivery. *Journal of Consumer Research*, *13*(4), 492-510.
- Gerrig, R. J. & Zimbardo, P. G. (2002). *Psychology And Life* (16th ed.). Boston, MA: Pearson Education.
- Gounaris, S., & Boukis, A. (2013). The role of employee job satisfaction in strengthening customer repurchase intentions. *Journal of Services Marketing*, *27*(4), 322-333.
- Harrison, G. W., & List, J. A. (2004). Field experiments. *Journal of Economic Literature*, 42(4), 1009-1055.

- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, 87(2), 268.
- Homburg, C., & Stock, R. M. (2004). The link between salespeople's job satisfaction and customer satisfaction in a business-to-business context: A dyadic analysis. *Journal of the Academy of Marketing Science*, 32(2), 144-158.
- Homburg, C., & Stock, R. M. (2005). Exploring the conditions under which salesperson work satisfaction can lead to customer satisfaction. *Psychology & Marketing*, 22(5), 393-420.
- Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology a review and comparison of strategies. *Journal of Cross-Cultural Psychology*, 16(2), 131-152.
- Jamal, A., & Adelowore, A. (2008). Customer-employee relationship: The role of self-employee congruence. *European Journal of Marketing*, 42(11/12), 1316-1345.
- Jamal, A., & Al-Marri, M. (2007). Exploring the effect of self-image congruence and brand preference on satisfaction: The role of expertise. *Journal of Marketing Management*, 23(7-8), 613-629.
- Jamal, A., & Anastasiadou, K. (2009). Investigating the effects of service quality dimensions and expertise on loyalty. *European Journal of Marketing*, 43(3/4), 398-420.
- Jayanti, R. K., & Whipple, T. W. (2008). Like me... like me not: The role of physician likability on service evaluations. *The Journal of Marketing Theory and Practice*, 16(1), 79-86.
- Jeon, H., & Choi, B. (2012). The relationship between employee satisfaction and customer satisfaction. *Journal of Services Marketing*, 26(5), 332-341.
- Johnson, D., & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research*, 58(4), 500-507.
- Johnson, M. D., Gustafsson, A., Andreassen, T. W., Lervik, L., & Cha, J. (2001). The evolution and future of national customer satisfaction index models. *Journal of Economic Psychology*, 22(2), 217-245.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction—job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407.

- Keh, H. T., Ren, R., Hill, S. R., & Li, X. (2013). The beautiful, the cheerful, and the helpful: The effects of service employee attributes on customer satisfaction. *Psychology & Marketing*, 30(3), 211-226.
- Leavitt, Harold J. (2004). Why Hierarchies Are Here to Stay and How to Manage Them More Effectively. Cambridge, MA: Harvard Business School Press.
- Levine, T. R., & Hullett, C. R. (2002). Eta squared, partial eta squared, and misreporting of effect size in communication research. *Human Communication Research*, 28(4), 612-625.
- Lysonski, S., Durvasula, S., & Zotos, Y. (1996). Consumer decision-making styles: a multi-country investigation. *European Journal of Marketing*, *30*(12), 10-21.
- Ma, Z., & Dubé, L. (2011). Process and outcome interdependency in frontline service encounters. *Journal of Marketing*, 75(3), 83-98.
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, 7(1), 19.
- MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, *53*(2), 48-65.
- Miller, G. A., & Chapman, J. P. (2001). Misunderstanding analysis of covariance. *Journal of Abnormal Psychology*, 110(1), 40.
- Mitchell, A. A., & Dacin, P. A. (1996). The Assessment of Alternative Measures of Consumer Expertise. *Journal Of Consumer Research*, 23(3), 219-239.
- Mohr, L. A., & Bitner, M. J. (1995). The role of employee effort in satisfaction with service transactions. *Journal of Business Research*, 32(3), 239-252.
- Nye, C. D., Su, R., Rounds, J., & Drasgow, F. (2012). Vocational interests and performance a quantitative summary of over 60 years of research. *Perspectives on Psychological Science*, 7(4), 384-403.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal Of Marketing*, 49(4), 41-50.
- Peterson, R. A. (1994). A Meta-analysis of Cronbach's Coefficient Alpha. *Journal Of Consumer Research*, 21(2), 381-391.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *94*(1), 122.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Raju, P. S., Lonial, S. C., & Mangold, W. G. (1995). Differential effects of subjective knowledge, objective knowledge, and usage experience on decision making: An exploratory investigation. *Journal of Consumer Psychology*, 4(2), 153-180.
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard business review*, 81(12), 46-55.
- Rounds, J., & Su, R. (2014). The Nature and Power of Interests. *Current Directions in Psychological Science*, 23(2), 98-103.
- Schmidt, K., Levenstein, R., & Ambadar, Z. (2012). Intensity of smiling and attractiveness as facial signals of trustworthiness in women. *Perceptual & Motor Skills*, 114(3), 964-978.
- Singh, R., & Tor, X. L. (2008). The relative effects of competence and likability on interpersonal attraction. *The Journal of Social Psychology*, 148(2), 253-256.
- Sirianni, N. J., Bitner, M. J., Brown, S. W., & Mandel, N. (2013). Branded service encounters: Strategically aligning employee behavior with the brand positioning. *Journal of Marketing*, 77(6), 108-123.
- Sweeney, J., & Swait, J. (2008). The effects of brand credibility on customer loyalty. Journal of Retailing and Consumer Services, 15(3), 179-193.
- Söderlund, M. (2002). Customer familiarity and its effects on satisfaction and behavioral intentions. *Psychology & Marketing*, 19(10), 861-879.
- Söderlund, M. (2005). Mätningar och mått: I marknadsundersökarens värld. Malmö: Liber ekonomi.
- Söderlund, M., & Rosengren, S. (2008). Revisiting the smiling service worker and customer satisfaction. *International Journal of Service Industry Management*, 19(5), 552-574.
- Söderlund, M., & Rosengren, S. (2010). The happy versus unhappy service worker in the service encounter: Assessing the impact on customer satisfaction. *Journal of Retailing and Consumer Services*, 17(2), 161-169.
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology*, 84(3), 558.

- Van Iddekinge, C. H., Roth, P. L., Putka, D. J., & Lanivich, S. E. (2011). Are you interested? A meta-analysis of relations between vocational interests and employee performance and turnover. *Journal of Applied Psychology*, 96(6), 1167.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.
- Wangenheim, F. V., Evanschitzky, H., & Wunderlich, M. (2007). Does the employee–customer satisfaction link hold for all employee groups?. *Journal of Business Research*, 60(7), 690-697.
- Willis, J., & Todorov, A. (2006). First impressions making up your mind after a 100-ms exposure to a face. *Psychological Science*, 17(7), 592-598.
- Wiltermuth, S. S. (2009). The benefits of dominance complementarity in negotiations. Stanford University.
- Wirtz, J., & Mattila, A. S. (2003). The effects of consumer expertise on evoked set size and service loyalty. *Journal of Services Marketing*, 17(7), 649-665.
- Woodside, A. G., & Davenport Jr., J. W. (1974). The Effect of Salesman Similarity and Expertise on Consumer Purchasing Behavior. *Journal Of Marketing Research* (*JMR*), 11(2), 198-202.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197-206.

### **APPENDICES**

### Appendix I: English translation of the treatment 'expert, interested'

*I am a student at Stockholm School of Economics and need your help with a short survey.* 

On the next page you will find a story about an encounter between a customer and a salesperson. **Imagine** yourself as the customer. Read the text carefully before answering the subsequent questions. There are no right or wrong answers. All responses are anonymous.

Thank you for participating!

In later years the product category of *tablets* has grown rapidly. In fact, many of your closest friends own tablets of different brands. You consider buying one for yourself and decide to visit a well-known store for home electronics. You are browsing different products as a salesperson approaches.

"Hello, what can I do for you?"

"Hi, I am looking for a tablet and was wondering if you could recommend any?"

"Of course. I have been working here for several years and of all the tablets I have sold, this is the most popular one. It is excellent for daily uses like browsing the web, reading and streaming videos."

You examine the product, which does not look much different from any other tablet, and ask the salesperson why this so popular.

"This brand use a different kind of technology for their screens, making it more comfortable to read on, while still maintaining a long battery life and competitive prices," the salesperson explains.

"Okay," you answer. "Do you know whether I could connect this tablet to my TV when I want to watch movies and listen to music at home?"

"I really like to learn stuff about the products we market. Just this weekend I actually spent several hours in different online forums investigating such a matter. It depends on what kind of TV you have and whether you want a wireless solution or a cable."

You cannot remember the exact model of your TV, but you tell the salesperson about the brand, approximately how old it is and describe how it looks. The salesperson immediately suggests a solution, which allows you to transfer both audio and video from the tablet to your TV.

"Okay. Let me think about this for a while," you say.

You make a decision and then leave the store. On your way out you notice that there are pictures of all employees on the wall behind the checkout counter. Beneath the picture of the salesperson that has been helping you it says: "Manager – technology department".

### Appendix II: English translation of the treatment 'expert, not interested'

I am a student at Stockholm School of Economics and need your help with a short survey.

On the next page you will find a story about an encounter between a customer and a salesperson. **Imagine** yourself as the customer. Read the text carefully before answering the subsequent questions. There are no right or wrong answers. All responses are anonymous.

Thank you for participating!

In later years the product category of *tablets* has grown rapidly. In fact, many of your closest friends own tablets of different brands. You consider buying one for yourself and decide to visit a well-known store for home electronics. You are browsing different products as a salesperson approaches.

"Hello, what can I do for you?"

"Hi, I am looking for a tablet and was wondering if you could recommend any?"

"Of course. I have been working here for several years and of all the tablets I have sold, this is the most popular one. It is excellent for daily uses like browsing the web, reading and streaming videos."

You examine the product, which does not look much different from any other tablet, and ask the salesperson why this so popular.

"This brand use a different kind of technology for their screens, making it more comfortable to read on, while still maintaining a long battery life and competitive prices," the salesperson explains.

"Okay," you answer. "Do you know whether I could connect this tablet to my TV when I want to watch movies and listen to music at home?"

"I do not particularly enjoy tablets, but we are required to learn much about the products we market. In addition I have received this question before, as I have been working here for some time. It depends on what kind of TV you have and whether you want a wireless solution or a cable."

You cannot remember the exact model of your TV, but you tell the salesperson about the brand, approximately how old it is and describe how it looks. The salesperson immediately suggests a solution, which allows you to transfer both audio and video from the tablet to your TV.

"Okay. Let me think about this for a while," you say.

You make a decision and then leave the store. On your way out you notice that there are pictures of all employees on the wall behind the checkout counter. Beneath the picture of the salesperson that has been helping you it says: "Manager – technology department".

### Appendix III: English translation of the treatment 'novice, interested'

I am a student at Stockholm School of Economics and need your help with a short survey.

On the next page you will find a story about an encounter between a customer and a salesperson. **Imagine** yourself as the customer. Read the text carefully before answering the subsequent questions. There are no right or wrong answers. All responses are anonymous.

Thank you for participating!

In later years the product category of *tablets* has grown rapidly. In fact, many of your closest friends own tablets of different brands. You consider buying one for yourself and decide to visit a well-known store for home electronics. You are browsing different products as a salesperson approaches.

"Hello, what can I do for you?"

"Hi, I am looking for a tablet and was wondering if you could recommend any?"

"Of course. I have not been working here for so long, but apparently this is the most popular one. I do not really know how it works but they tell me it is excellent for daily uses."

You examine the product, which does not look much different from any other tablet, and ask the salesperson why this so popular.

"I have heard that this brand is more comfortable to read on. I do not know exactly why, but we could probably figure it out by reading on the packaging," the salesperson explains.

"Okay," you answer. "Do you know whether I could connect this tablet to my TV when I want to watch movies and listen to music at home?"

"I really like to learn stuff about the products we market. Just this weekend I actually spent several hours in different online forums investigating such a matter. As I understood it, and if I remember correctly, it depends on what kind of TV you have."

You cannot remember the exact model of your TV, but you tell the salesperson about the brand, approximately how old it is and describe how it looks. The salesperson compares a few products and then suggests a solution that, according to the instructions, should connect a tablet to a TV.

"Okay. Let me think about this for a while," you say.

You make a decision and then leave the store.

### Appendix IV: English translation of the treatment 'novice, not interested'

I am a student at Stockholm School of Economics and need your help with a short survey.

On the next page you will find a story about an encounter between a customer and a salesperson. **Imagine** yourself as the customer. Read the text carefully before answering the subsequent questions. There are no right or wrong answers. All responses are anonymous.

Thank you for participating!

In later years the product category of *tablets* has grown rapidly. In fact, many of your closest friends own tablets of different brands. You consider buying one for yourself and decide to visit a well-known store for home electronics. You are browsing different products as a salesperson approaches.

"Hello, what can I do for you?"

"Hi, I am looking for a tablet and was wondering if you could recommend any?"

"Of course. I have not been working here for so long, but apparently this is the most popular one. I do not really know how it works but they tell me it is excellent for daily uses."

You examine the product, which does not look much different from any other tablet, and ask the salesperson why this so popular.

"I have heard that this brand is more comfortable to read on. I do not know exactly why, but we could probably figure it out by reading on the packaging," the salesperson explains.

"Okay," you answer. "Do you know whether I could connect this tablet to my TV when I want to watch movies and listen to music at home?"

"I do not particularly enjoy tablets, but we are required to learn much about the products we market. Thus a colleague has tried to explain to me how it works. As I understood it, and if I remember correctly, it depends on what kind of TV you have."

You cannot remember the exact model of your TV, but you tell the salesperson about the brand, approximately how old it is and describe how it looks. The salesperson compares a few products and then suggests a solution that, according to the instructions, should connect a tablet to a TV.

"Okay. Let me think about this for a while," you say.

You make a decision and then leave the store.

## Appendix V: English translation of the main study questionnaire

How satisfied or diss	satisfied	d are	you wi	th this	store?								
	1	2	3	4	5	6	7	8	9	10			
Very dissatisfied											Very sa	atisfied	
To what extent does this store meet your expectations?													
	1	2	3	4	5	6	7	8	9	10			
Not at all											Totally	y	
Imagine a home ele How near or far fror				-		-	espect	t.					
	1	2	3	4	5	6	7	8	9	10			
Very far from											Canno	ot get ar	ny
What is your impression of the salesperson?													
			(1 = Do	not ag	ree at a	ıll)				(10 = Agree completely)			oletely)
			1	2	3	4	5		6	7	8	9	10
The salesperson is very knowledgeable	у												
The salesperson know company's products ve													
The salesperson is <b>not</b>	an expe	ert											
			(1 = Do	not ag	ree at a	ıll)				(10	) = Agre	ee comp	oletely)
			1	2	3	4	5		6	7	8	9	10
The salesperson is per interested in the store's		ets											
			(1 = Do not agree at all)						(10	) = Agre	ee comp	oletely)	
			1	2	3	4	5		6	7	8	9	10
I trust this salesperson extent	to a larg	ge											
I am convinced that thi salesperson will keep pmade to me	-	3											

I believe that this salesplair and honest with me		is											
I believe the information by this salesperson is contact.		ded											
I am convinced that this salesperson delivers th products correctly													
I am convinced that this salesperson keeps my interest in mind													
What do you think about the salesperson?													
	1	2	3	4	5	6	7	8	9	10			
Bad											Good		
Dislikable											Likabl	е	
Unpleasant											Pleasa	ant	
Negative impression											Positiv		
How realistic do you	ı find t	he de	scription	on of w	/hat ha	ppene	d in th	ne sto	re?				
	1	2	3	4	5	6	7	8	9	10			
Very unrealistic											Very re	ealistic	
Some background q	uestio	ns:											
	1	2	3	4	5	6	7	8	9	10			
I know very little about tablets											I know about	a lot tablets	
I am uninformed about tablets												ell infortablets	med
I am not an expert on tablets											I am a on tab	n expert llets	:
I own a tablet:	□ <b>Y</b>	'es	[	□ No		□ld	on't k	now					
My age (year of birth):													
I am:	mm: □ Male □ Female			□ Otl	ner								
I currently live in (name of municipality):													
Finally, please summ	Finally, please summarize what you believe was the purpose of this study:												

### Appendix VI: Statistical outputs, robustness analysis

Variable	NN	NI	EN	El	Pairwise differences <sup>a</sup>
Employee expertise $^{b}$ $F(3,109) = 63.64$	1.69 (1.06)	2.18 (1.43)	4.45 (1.56)	6.58 (1.93)	1,2 < 3 < 4
Employee interest $^{b}$ $F(3,109) = 69.08$	1.74 (1.12)	6.28 (2.39)	3.08 (1.98)	8.21 (1.97)	1,3 < 2 < 4

*Note.* n = 113. <sup>a</sup> p < .05. <sup>b</sup> Reported values relate to standard *F*-ratio and Gabriel's test.

**TABLE VI**FACTORIAL ANALYSIS OF VARIANCE, TESTS OF GROUP MEAN DIFFERENCES

Source	<i>M₁</i> (SD)	$M_2$ (SD)	df <sup>a</sup>	F	η²	р
ANCOVA 3						
Main effect						
Employee expert	3.04 (1.74)	5.86 (2.63)	1,108	62.50	.28	.000
Employee interested	3.14 (1.92)	5.56 (2.64)	1,108	47.68	.21	.000
Employee expert x			1,108	5.20	.02	.024
Employee interested						
Covariate						
Customer expertise			1,108	1.82		n.s.
ANCOVA 4						
Main effect						
Employee expert	3.04 (1.74)	5.86 (2.63)	1,108	35.00	.12	.000
Tablet ownership	4.53 (2.71)	4.26 (2.55)	1,108	0.16		n.s.
Employee expert x	,	,	1,108	0.09		n.s.
Tablet ownership			,			
Covariate						
Employee interest			1,108	100.00	.34	.000
. ,			,			
ANCOVA 5						
Main effect						
Employee interested	3.14 (1.92)	5.56 (2.64)	1,108	18.06	.06	.000
Tablet ownership	4.53 (2.71)	4.26 (2.55)	1,108	0.13		n.s.
Employee interested x	,	- ( /	1,108	0.09		n.s.
Tablet ownership			,			-
Covariate						
Employee expertise			1,108	111.06	.40	.000
=			.,			

*Notes.* n = 113. n.s. = not significant. Reported values relate to standard F-ratio. Factor Employee expert: group 1 = not expert, group 2 = expert; factor Employee interested: group 1 = not interested, group 2 = interested; factor Tablet ownership: group 1 = owns no tablet, group 2 = owns tablet.  $^a$  = Degrees of freedom, Error degrees of freedom.

### Appendix VII: Statistical outputs, tests of mediation

TABLE VII
BOOTSTRAP RESULTS FOR INDIRECT EFFECTS OF INDEPENDENT VARIABLES
ON DEPENDENT VARIABLES THROUGH PROPOSED MEDIATORS

		BC 95% CI			
Variable	Point estimate	Lower	Upper		
MEDIATION ANALYSIS 1 a					
Indirect effects					
Trustworthiness	.18	.04	.33		
Likability	.25	.14	.41		
TOTAL	.42	.28	.60		
Contrast					
Trustworthiness vs. Likability	07	31	.15		
MEDIATION ANALYSIS 2 b					
Indirect effects					
Trustworthiness	.18	.07	.32		
Likability	.29	.17	.44		
TOTAL	.47	.32	.64		
TOTAL	.47	.32	.04		
Contrast					
Trustworthiness vs. Likability	11	32	.09		

*Notes.* n = 113. BC = Bias Corrected bootstrapping; CI = Confidence Interval. <sup>a</sup> = Employee expertise as independent variable, customer satisfaction as dependent variable. <sup>b</sup> = Employee interest as independent variable, customer satisfaction as dependent variable.

**TABLE VIII**REGRESSION COEFFICIENTS, TESTS OF MEDIATION

Variable	Unstandardized β	t	р
MEDIATION ANALYSIS 1 a			
IV on Mediators			
Trustworthiness	.77	7.49	.000
Likability	.59	5.68	.000
Mediators on DV			
Trustworthiness	.23	2.53	.013
Likability	.42	4.68	.000
Direct effect of IV on DV			
Employee expertise	.18	1.84	n.s.
Total effect of IV on DV			
Employee expertise	.61	6.10	.000
MEDIATION ANALYSIS 2 b			
IV on Mediators			
Trustworthiness	.64	7.67	.000
Likability	.69	9.93	.000
Mediators on DV			
Trustworthiness	.29	3.30	.001
Likability	.42	4.02	.000
Linability	. 12	1.02	.000
Direct effect of IV on DV			
Employee interest	.05	.55	n.s.
Total effect of IV on DV			
Employee interest	.52	6.56	.000
. ,			

*Notes.* n = 113. n.s. = not significant; IV = independent variable; DV = dependent variable.  $^a$  = Employee expertise as independent variable, customer satisfaction as dependent variable.  $^b$  = Employee interest as independent variable, customer satisfaction as dependent variable.