

# **Three Essays on Success Factors of Digital and Non-digital Services**

Inaugural-Dissertation  
zur Erlangung des Doktorgrades  
des Fachbereichs Wirtschaftswissenschaften  
an der Wirtschaftswissenschaftlichen Fakultät  
der Universität Passau

vorgelegt von

Björn Armin Hüttel M. Sc.  
geboren am 10. Oktober 1987 in Bonn

Hennengasse 4  
94032 Passau

12. September 2017



Dissertation an der  
Wirtschaftswissenschaftlichen Fakultät  
der Universität Passau

Erstgutachter: Prof. Dr. Jan H. Schumann  
Lehrstuhl für Betriebswirtschaftslehre mit Schwerpunkt  
Marketing und Innovation  
Universität Passau

Zweitgutachter: Prof. Dr. Dirk Totzek  
Lehrstuhl für Betriebswirtschaftslehre mit Schwerpunkt  
Marketing und Services  
Universität Passau



## Summary

The services industry has experienced tremendous growth over the last decades, which has led to new challenges for marketing research and practice. The emergence of the digital services industry and the rise of free e-services change central success factors for service firms as consumer perceptions of free services and attached nonmonetary costs have become more and more crucial. At the same time, customer needs in traditional, non-digital services are becoming increasingly heterogeneous. The challenge for the boundary-spanning role of frontline employees as well as a crucial factor for service firms' success is to act truly customer-oriented since customers expect their idiosyncratic needs to be served individually. This dissertation addresses these issues in three individual essays.

Study 1 focuses on new challenges of digital services and provides service scholars and managers with deeper insights into how consumers respond to free digital services. More specifically, it investigates why free e-services, i.e. digital services free of monetary charge, are so successful. Results of four experimental studies show that consumers' assessments of nonmonetary costs, such as attention to advertising, are central success factors as such perceptions can explain when and why consumers choose a free e-service.

Study 2 and 3 focus on traditional non-digital services. In such service environments, frontline employees are often the first contact a customer has with a service provider. At the same time, consumers display a growing heterogeneity of needs and expect frontline employees to individually satisfy these idiosyncratic needs. It is thus a crucial success factor for service firms to ensure that their frontline employees possess the ability to act customer oriented by accurately identifying and satisfying their individual customers' needs.

---

Study 2 examines the state of the art of empirical research on antecedents of frontline employees' customer orientation. It provides a comprehensive literature review, which first sheds light on the various existing understandings of customer orientation by structuring the fragmented literature. Second, the study provides an extensive overview of the antecedents of frontline employees' customer orientation by categorizing the influencing factors into four main areas. Third, on the basis of the literature review the study derives avenues for future research in the field. Finally, the literature review structures managers' starting points to enhance frontline employees' customer orientation.

Study 3 investigates the construct Customer Need Knowledge (CNK) which indicates how accurately a frontline employee is able to perceive an individual customer's hierarchy of needs. More specifically, the study investigates the influence of the customer on CNK. The results of the analysis of a large-scale dyadic customer- and advisor-level data set collected in the banking sector of three European countries show the direct influence of individual customer characteristics on CNK. Cross-level interaction effects further indicate that training of customer-oriented interaction behavior impacts the influences of customers' individual cultural values on CNK.

## Acknowledgments

This dissertation would not have been possible without many persons who supported me with expertise, inspiration, feedback, encouragement, and fun to push the project forward. First and foremost, I want to deeply thank my advisor Jan Schumann for his continuous encouragement, inspiration, and support. Thank you very much for teaching me everything about rigorous academic research and for introducing me to the academic community. I count myself incredibly lucky to have you as a mentor.

I want to thank my colleagues and friends in Passau who made my time in Passau so worthwhile, and writing this dissertation much more fun. A special thank you to Sebastian Schubach for being such a great office colleague from day one and to Nicole Heß for all the valuable insights during our discussions about the projects. Also, I want to express my gratitude to my co-authors Jan Schumann, Maura Scott, Martin Mende, Christian Wagner, Marion Büttgen, Zelal Ates, Marcin Komor, and Julian Volz for your fantastic feedback and work on the projects. It was a pleasure to work with you. A special thank you to Maura Scott and Martin Mende at Florida State University for teaching me everything about experimental research. Thank you that you gave me the opportunity to work with you at FSU, it was a pleasure and truly an inspiration to meet you. I also want to thank Dirk Totzek for the repeated input to the projects at the various presentations over the years.

And finally, a special thank you to my family, Mama, Papa, and Jan for pushing me to take on this challenge and for encouraging me to keep going over all the years. I know that you are the persons I can rely on – anytime.





**Short Table of Contents**

Summary .....	V
Acknowledgments.....	VII
Short Table of Contents .....	IX
Table of Contents .....	X
List of Figures .....	XIV
List of Tables .....	XV
List of Appendices .....	XVI
List of Abbreviations .....	XVII
1 Introduction.....	1
2 How Consumers Assess Free E-Services: The Role of Benefit-Inflation and Cost-Deflation Effects .....	17
3 A Comprehensive Review of Antecedents of Frontline Employees' Customer Orientation: The State of the Art.....	69
4 The Influence of Customer Characteristics On Frontline Employees' Customer Need Knowledge .....	116
5 Conclusion .....	157

**Table of Contents**

Summary .....	V
Acknowledgments.....	VII
Short Table of Contents .....	IX
Table of Contents .....	X
List of Figures .....	XIV
List of Tables .....	XV
List of Appendices .....	XVI
List of Abbreviations .....	XVII
1 Introduction.....	1
1.1 New Challenges for the Services Industry .....	1
1.1.1 The Growing Heterogeneity of Customers and the Diversity of Idiosyncratic Customer Demands and Needs.....	2
1.1.2 The Importance of Free Digital Services and the Role of Consumer Perceptions of Nonmonetary Costs .....	4
1.2 Research Scope .....	6
1.2.1 Study 1: How Consumers Assess Free E-Services: The Role of Benefit-Inflation and Cost-Deflation Effects .....	6
1.2.2 Study 2: A Comprehensive Review of Antecedents of Frontline Employees’ Customer Orientation: The State of the Art .....	8
1.2.3 Study 3: The Influence of Customer Characteristics on Frontline Employees’ Customer Need Knowledge.....	9
1.3 Structure of the Dissertation.....	10
1.4 References .....	11
2 How Consumers Assess Free E-Services: The Role of Benefit-Inflation and Cost-Deflation Effects .....	17
2.1 Introduction .....	18
2.2 The Zero-price Effect in the Context of Free E-Services.....	23
2.2.1 The Role of Consumer-Perceived NMCs.....	24
2.2.2 The Joint Effect of Inflated Benefits and Deflated NMCs.....	25
2.3 Study 1.....	27

---

2.3.1 Design, Participants, and Procedure.....	27
2.3.2 Results .....	28
2.3.3 Discussion.....	32
2.4 Study 2: Do Different Price Differentials Matter? .....	33
2.4.1 Design, Participants, and Procedure.....	34
2.4.2 Results .....	34
2.4.3 Discussion.....	37
2.5 Study 3: Can Consumer Naivety Explain the Cost-Deflation Effect? .....	38
2.5.1 Design, Participants, and Procedure.....	39
2.5.2 Results .....	40
2.5.3 Discussion.....	42
2.6 Study 4: Reciprocity and Acceptance as Possible Alternative Explanations for the Cost-Deflation Effect .....	43
2.6.1 Design, Participants, and Procedure.....	44
2.6.2 Results .....	45
2.6.3 Discussion.....	50
2.7 General Discussion.....	51
2.7.1 Theoretical Contributions and Implications .....	51
2.7.2 Managerial Implications.....	54
2.7.3 Limitations and Further Research .....	55
2.8 References .....	58
2.9 Appendices .....	66
3 A Comprehensive Review of Antecedents of Frontline Employees' Customer Orientation: The State of the Art.....	69
3.1 Introduction.....	70
3.2 Theoretical Background.....	71
3.2.1 Research Streams on FLEs' CO.....	71
3.2.2 Areas of Antecedents of FLEs' CO.....	73
3.3 Results.....	75
3.3.1 The Influence of the Organizational Environment on FLEs' CO .....	75
3.3.1.1 Behavioral Conceptualization .....	75

---

3.3.1.2 Surface Trait Conceptualization.....	82
3.3.1.3 Two-dimensional Conceptualization.....	83
3.3.2 The Influence of FLEs' Characteristics on FLEs' CO.....	84
3.3.2.1 Behavioral Conceptualization.....	84
3.3.2.2 Surface Trait Conceptualization.....	88
3.3.2.3 Two-dimensional Conceptualization.....	89
3.3.3 The Influence of the Relationship Between FLEs and Customers on FLEs' CO.....	90
3.3.3.1 Behavioral Conceptualization.....	90
3.3.3.2 Two-dimensional Conceptualization.....	91
3.3.4 The Influence of the Customer on FLEs' CO.....	91
3.3.4.1 Surface Trait Conceptualization.....	91
3.3.4.2 Two-dimensional Conceptualization.....	91
3.4 Discussion.....	92
3.4.1 Theoretical Implications.....	92
3.4.2 Managerial Implications.....	97
3.4.3 Need for Future Research.....	98
3.5 References.....	102
4 The Influence of Customer Characteristics On Frontline Employees' Customer Need Knowledge.....	116
4.1 Introduction.....	117
4.2 Theoretical Background.....	121
4.2.1 FLEs' Customer Orientation.....	121
4.2.2 CNK as an Objective Measure for FLEs' Ability to Act Customer Oriented.....	122
4.2.3 The Influence of Customer Characteristics on CNK.....	123
4.3 Methodology.....	130
4.3.1 Collection of Dyadic Data.....	130
4.3.2 Measures.....	131
4.3.3 Measurement Invariance.....	134
4.3.4 Analytical Approach.....	136
4.4 Results.....	137
4.5 Discussion.....	140

---

4.5.1 Theoretical Contributions.....	140
4.5.2 Managerial Implications.....	143
4.5.3 Limitations and Implications for Further Research.....	144
4.6 References.....	146
4.7 Appendix C: Measurement Items.....	155
5 Conclusion.....	157
5.1 Implications.....	157
5.2 Outlook.....	161
5.3 References.....	166

**List of Figures**

Figure 1 Structure of the Dissertation .....	10
Figure 2 Conceptual Framework .....	22
Figure 3 Study 1: The Effect of Zero-priced Offerings on Choice, Affect, Benefits, and NMC Perceptions.....	31
Figure 4 Study 2: The Effect of Zero-priced Offerings on Choice, Affect, Benefits, and NMC Perceptions (With Larger Differential Between Basic and Premium Offerings) ..	36
Figure 5 Study 3: The Effect of Zero-priced Offerings on the Estimation of Advertising Duration and Number of Advertising Breaks per Hour.....	41
Figure 6 Study 4: The Effect of Zero-priced Offerings on Choice, Affect, Benefits, NMCs, Reciprocity, and Acceptance .....	47
Figure 7 Study 4: Underlying Mediation Process.....	49
Figure 8 Antecedents of Frontline Employees' Customer Orientation .....	74
Figure 9 Conceptual Framework .....	130
Figure 10 The Moderating Role of Customer-Oriented Training on the Link Between Customer Cultural Values and CNK.....	139

**List of Tables**

Table 1 Existing Literature on Antecedents of Frontline Employees' Customer Orientation.....	93
Table 2 Psychometric Properties of Measures.....	133
Table 3 Correlations of Framework Variables.....	133
Table 4 Analysis of Measurement Invariance .....	134
Table 5 Estimated Path Coefficients for CNK Predictors .....	138

**List of Appendices**

Appendix A Scenario of Study 1 .....66  
Appendix B Measurement Items and Validity Assessment for Constructs in Studies 1-4.....67  
Appendix C Measurement Items .....155



**List of Abbreviations**

ANOVA	Analysis of Variance
AVE	Average Variance Extracted
B2B	Business-to-business
CA	Cronbach's Alpha
CFI	Comparative Fit Index
CI	Confidence Interval
CO	Customer Orientation
CNK	Customer Need Knowledge
CR	Composite Reliability
CV	Control Variable
FLE	Frontline Employee
GDP	Gross Domestic Product
HSC	Highest Squared Correlation
ICC	Intraclass Correlation Coefficient
M	Mean
NFI	Normed Fit Index
NMC	Nonmonetary Costs
N.S.	Non-significant
RMSEA	Root Mean Square Error of Approximation

SD            Standard Deviation

SE            Standard Error

US            United States



# 1 Introduction

## 1.1 New Challenges for the Services Industry

The services industry has grown tremendously over the last decades reaching, for instance, a share of 69% of the gross domestic product (GDP) of Germany in 2016 (Statista 2017a) and 79% of the GDP of the US in the same year (CIA 2017). In the US alone, more than 140 million citizens are expected to be employed in the services sector by 2024 (Henderson 2015). The reasons for this development are diverse, ranging from increased customer demand for services due to higher affluence, demographic developments, and trends towards more convenience, to market developments in favor of the services sector (Gummesson 2007; Ulaga and Reinartz 2011). For instance, nearly all modern corporations are adding value to their offerings by adding service components, leading to a “servitization of business” (Vandermerve and Rada 1988, p. 314). Moreover, technological developments, such as the ongoing digitalization, change the economic landscape and the characteristics of services offerings. Consequently, digitalization leads to a rise of the digital services sector such that the digital economy accounted for 5.3% of the GDP of the G-20 in 2016, a 10.8% rise from 2010 (BCG 2012). In this digital services industry, new business models emerged which have reshaped entire industries (Osterwalder and Pigneur 2010). For instance, business models that offer services free of monetary charge are spreading rapidly due to low marginal costs, high scalability, and technological advances (Bryce, Dyer, and Hatch 2011; Niemand et al. 2015). Moreover, the digital character of such services fundamentally changes the potential customer base for companies because digital services can provide value to customers independent of time and place via the Internet. Hence digital services have the potential to reach more and more customers, since the global Internet penetration is expected to reach 63.9% of the global population, and i.e.

4.1 billion human beings until 2021 (Statista 2017b). The ongoing growth of the services sector and its changing characteristics due to the emergence of digital services lead to new challenges for both traditional, non-digital services, as well as for the digital services sector, which we will delineate in the following subsections.

### **1.1.1 The Growing Heterogeneity of Customers and the Diversity of Idiosyncratic Customer Demands and Needs**

A central challenge for service companies is the fact that customers today are becoming increasingly heterogeneous and expect an individual treatment based on more and more diverse and variable idiosyncratic needs (Palmatier and Sridhar 2017; Ranasinha 2013). This increased heterogeneity can be attributed to central sources such as individual customer differences, customer life experiences, increasingly differing functional needs, increased need for self-identity and self-image, and increasing marketing activities of firms (Palmatier and Sridhar 2017). At the same time, among researchers and practitioners alike, the marketing concept is viewed almost globally as being central to the success of business organizations. The marketing concept is a management philosophy which puts the customer at the center of firms' management efforts (Kennedy, Lassk, and Goolsby 2002). It postulates that focusing on identifying and satisfying customer needs and wants represents a central pillar of a firms' success (Jaworki and Kohli 1993). However, the increasingly diverse customer needs make it harder for companies to satisfy these needs and display a high customer orientation (CO) (Palmatier and Sridhar 2017; Schoemaker 2013). Being able to display high CO has thus increased in importance as a central success factor for firms, as CO positively influences outcome variables such as customer satisfaction (Goff, Boles, Bellenger, and Stojack 1997; Hennig-Thurau 2004),

customer commitment (Hennig-Thurau 2004), business profitability (Narver and Slater 1990), and employee performance (Babakus, Yavas, and Ashill 2009). Consequently, CO has become a key construct in the marketing and sales literature (Homburg, Müller, and Klarmann 2011). In non-digital services environments, it is often the task of frontline employees (FLEs) who are in direct customer contact to identify and satisfy their customers' needs by displaying high CO (Saxe and Weitz 1982). Due to the boundary spanning role of FLEs, it is vital for service providers to understand the influencing factors which increase or decrease FLEs' CO. However, in the literature various understandings of CO co-exist that emphasize different influencing factors and use different measurement approaches to study FLEs' CO. The literature lacks a comprehensive literature review that structures and summarizes the empirical research on antecedents of FLEs' CO. Such a literature review however is crucial for service providers to get an overview of the possibilities and means to enhance FLEs' CO, as well as for researchers to identify avenues for future research in this field.

Moreover, despite the pivotal importance of FLEs' CO for company success and the increasingly crucial role of the increasingly heterogeneous customers (Palmatier and Sridhar 2017), research to date has neglected the influence of the customer on FLEs' ability to act in a customer-oriented manner. However, customers are a valuable interaction source for FLEs and display a high heterogeneity regarding their individual characteristics (Yoo and Arnold 2016). Such customer characteristics should thus influence the interaction between FLEs and customers. Hence, research is needed which investigates how customers' inherent skills, behaviors, and attitudes facilitate or inhibit the interaction between FLEs and customers and consequently FLEs' ability to act in a customer-oriented manner.

### **1.1.2 The Importance of Free Digital Services and the Role of Consumer Perceptions of Nonmonetary Costs**

The opportunities and challenges of the digital services industry have become a key focus of both the practice and academic research. For instance, the latest service research priorities stress the importance of more research on the impact of digital technology on the proliferation of services (Ostrom et al. 2015). The practical relevance becomes evident considering the fact that with the rise of the digital services industry, new business models have emerged which have reshaped entire industries (Hirt and Willmott 2014; Yoo, Boland, Lyytinen, and Majchrzak 2012). As an example, the traditional banking industry experiences threats of disruption by technology companies and Fintech start-ups, which enable pure digital banking; as a consequence around 40% of all banking transactions today are done via digital channels (Pearson 2016). Furthermore, digital platform businesses such as Uber or Airbnb fundamentally changed the taxi and hotel industry. Such platform business models create value by facilitating interactions between interdependent groups such as customers and providers. They serve as intermediaries in two- or multisided markets by enabling exchange between entities, which could otherwise not transact with each other (Gawer 2014). The rise of digital platform business models leads to new challenges for digital service providers, as customers online expect most services to be free of monetary charge (Dou 2004). Hence, in the digital services industry, business models which offer services free of monetary charge are spreading rapidly (Bryce, Dyer, and Hatch 2011; Niemand et al. 2015). Such digital services comprise offerings such as communication (e.g., Whatsapp), social networking (e.g., Instagram), search (e.g., Google Search), and entertainment (e.g., video streaming) (Anderl, März, and Schumann 2016). As part of the digital services sector, such offerings are a multibillion-dollar market, and even the

business models of two of the world's most valuable companies, Alphabet and Facebook, rest on offering free digital services to consumers (Anderson 2009). A central success factor for service firms offering digital services is thus to design successful free, i.e., zero-priced digital service offerings. However, despite not having to pay in monetary terms, consumers often contribute value to firms in nonmonetary ways (van Doorn et al. 2010). For instance, consumers spread positive word of mouth (Kumar et al. 2010; Libai, Muller, and Peres 2013) and provide value to firms through coproduction (Etgar 2008) or network effects (Vock, van Dolen, and de Ruyter 2013). Furthermore, in the context of digital services customers have to contribute value by giving attention to advertising or by providing personal data (e.g., names, e-mail addresses, sociodemographic information) (Anderl, März, and Schumann 2016). Research shows that consumers perceive these nonmonetary value contributions related to advertisements and data disclosure as nonmonetary costs (NMCs). For example, with regard to online advertising, consumers often feel interrupted and distracted from their browsing by ads but perceive this interruption as a form of payment (e.g., Acquisti and Spiekermann 2011; Cho and Cheon 2004; Prasad, Mahajan, and Bronnenberg 2003). Regarding data disclosure, consumers attach great importance to their privacy and they are willing to pay to protect otherwise public information (Acquisti, John, and Loewenstein 2013). At the same time, such nonmonetary value contributions are the two most important sources of revenue for providers of free digital services (IAB 2016; Rotella 2012). Despite this considerable economic importance, research on how consumers assess free online services and the role of the attached NMCs for consumers' perceptions of such services is limited (Schumann, von Wangenheim, and Groene 2014). While prior research helps explain the success of free products by discovering the irrationally high demand for free offerings when consumers choose between a free and a cost option (i.e. zero-



price effect) (Shampanier, Mazar, and Ariely 2007), such research does not account for the characteristic aspects of digital services such as the presence of NMCs. Hence, in order to design successful digital services, firms must understand how consumers perceive NMCs that are attached to free offerings and what role such costs play for customers' evaluation of a digital service and their decision making for or against its usage.

## **1.2 Research Scope**

This dissertation investigates major success factors of digital and non-digital services and addresses major challenges for marketing practitioners and marketing academia, which we outlined above, in three independent studies. The following subsection provides a brief overview of these studies and outlines the research scope.

### **1.2.1 Study 1: How Consumers Assess Free E-Services: The Role of Benefit-Inflation and Cost-Deflation Effects**

In recent years, free (i.e., zero-priced) offerings became more and more ubiquitous, particularly in the online sector (Bryce, Dyer, and Hatch 2011) in which free digital service offerings are a multibillion-dollar market (Anderson 2009). Despite this considerable economic importance, research on how consumers assess free online services is limited (Schumann, von Wangenheim, and Groene 2014). However, prior research helps explain the success of free products. Shampanier, Mazar, and Ariely (2007) discovered the 'zero-price effect' (ZPE), which describes the irrationally high demand for free offerings when consumers choose between a free and a cost option. According to the ZPE, free offerings imply only benefits but no downsides

(i.e., no costs), and Shampanier, Mazar, and Ariely (2007) suggest, but do not empirically test, that the free aspect of a product constitutes an additional benefit for consumers, which presumably drives the ZPE. However, prior research does not fully explain the mechanisms that drive the ZPE, particularly with regard to online service environments. This notion becomes evident when considering that free e-services often differ from goods due to the omnipresence of nonmonetary costs (NMCs) (e.g., related to advertising or the collection of personal data), which consumers must pay to receive a service offering, though it might be free of monetary charges. Because consumers indeed perceive such NMCs (e.g., Schumann, von Wangenheim, and Groene 2014), we propose that these costs need to be taken into account to provide a more complete picture of how consumers assess free service offerings. If consumers perceive such NMCs, free offerings—contrary to what prior research has presumed (Shampanier, Mazar, and Ariely 2007)—do have downsides and the ZPE for online services might not hold. In short, the ZPE remains a ‘black-box,’ and its inner workings are not well understood by services scholars and managers. Study 1 addresses this gap by investigating the following three research questions:

1. Does the context of online service offerings influence the ZPE?
2. Is the ZPE truly linked to an increase in perceived benefits related to a focal service offering?
3. How does a price of zero influence consumers’ perceptions of NMCs, over and above the effects related to perceived benefits?

## **1.2.2 Study 2: A Comprehensive Review of Antecedents of Frontline Employees' Customer**

### **Orientation: The State of the Art**

Study 2 investigates the state of the art of empirical research on antecedents of frontline employees' customer orientation (CO). Frontline employees (FLEs) are often the first contact a customer has with a service provider (Jones, Busch, and Dacin 2003). Due to this boundary-spanning role, it is often the task of FLEs to implement the marketing concept (Kohli and Jaworski 1990) by displaying a high degree of CO. CO has been shown to be a central success factor for service firms which positively influences outcome variables such as customer satisfaction, customer commitment, and business profitability (Hennig-Thurau 2004; Narver and Slater 1990). It is thus vital for service providers to understand the influencing factors which increase or decrease FLEs' CO. However, in the literature various understandings of CO co-exist which emphasize different influencing factors and use different measurement approaches to study FLEs' CO. The literature lacks a comprehensive literature review that structures and summarizes the empirical research on antecedents of FLEs' CO. This study closes this gap by providing a comprehensive literature review which first sheds light on the different existing understandings of CO and structures the fragmented literature. Second, the study provides an extensive overview of the antecedents of FLEs' CO by categorizing the influencing factors into four main areas. Third, on the basis of the literature review the study derives avenues for future research. Finally, the literature review structures managers' starting points to enhance FLEs' CO.

### **1.2.3 Study 3: The Influence of Customer Characteristics on Frontline Employees'**

#### **Customer Need Knowledge**

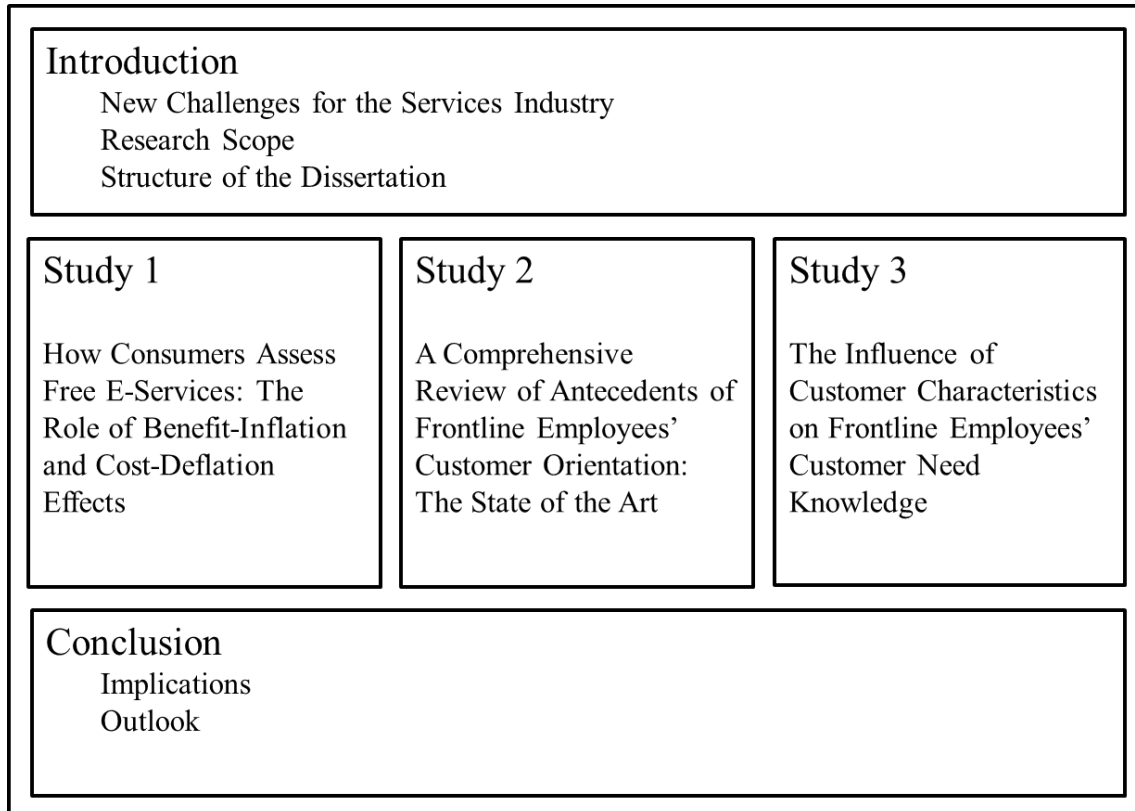
Study 3 addresses parts of the identified need for further research of Study 2 by investigating the influence of the customer on the construct Customer Need Knowledge (CNK) which indicates how accurately a FLE is able to perceive an individual customer's hierarchy of needs. In professional services, employees have to interact with heterogeneous customers who differ in individual characteristics such as their resources in abilities, skills and attitudes that they bring into the interaction process, as well as in individual cultural values. Such individual customer characteristics determine customers' interaction behavior with their respective employees and consequently should impact FLEs' ability to sense individual customer needs. It is thus crucial to understand and manage the influence of individual customer differences in order to enhance FLEs' CNK and thus their CO towards each individual customer. Research to date, however, has only examined employee characteristics and relational aspects between employee and customer as antecedents of CNK (Homburg et al. 2009) and neglected the influence of customer characteristics. Due to the lack of research on the influence of customer characteristics on FLEs' ability to accurately sense customer needs, Study 3 investigates the following research questions:

4. What influence do customer characteristics have on FLEs' CNK?
5. How can the influence of such customer characteristics be managed by FLEs?

### 1.3 Structure of the Dissertation

This dissertation proceeds as follows: After giving an overview of central challenges due to the growth of the services sector and its changing characteristics due to the emergence of digital services, we continue with Study 1 on how consumers assess free e-services in Chapter 2. In Chapter 3 we display Study 2 which provides a comprehensive literature review on antecedents of FLEs' customer orientation in non-digital services. Chapter 4 comprises Study 3 which addresses parts of the research avenues which are derived in Study 2 by showing the influence of the customer on FLEs' CNK. The dissertation closes with Chapter 5, in which we provide a summary of implications and an outlook for future research. Figure 1 displays the overall structure of this dissertation.

Figure 1. Structure of the Dissertation.



## 1.4 References

- Acquisti, A., John, L. K., & Loewenstein, G. (2013). What Is Privacy Worth? *The Journal of Legal Studies*, 42(2), 249–274.
- Acquisti, A., & Spiekermann, S. (2011). Do Interruptions Pay off? Effects of Interruptive Ads on Consumers' Willingness to Pay. *Journal of Interactive Marketing*, 25(4), 226–240.
- Anderl, E., März, A., & Schumann, J. H. (2016). Nonmonetary customer value contributions in free e-services. *Journal of Strategic Marketing*, 24(3-4), 175–189.
- Anderson, C. (2009). *Free: The future of a radical price* (1. ed.). New York: Hyperion.
- Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4), 480–492.
- BCG (2012). The Internet Economy in the G-20. Retrieved from <https://www.bcg.com/documents/file100409.pdf>.
- Bryce, D. J., Dyer, J. H., & Hatch, N. W. (2011). Competing Against Free. *Harvard Business Review*, 89 (June), 104-11.
- Cho, C., & Cheon, H. C. (2004). Why Do People Avoid Advertising on the Internet? *Journal of Advertising*, 33(4), 89–97.
- CIA (2017). The World Factbook: GDP - Composition, by Sector of Origin. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/fields/2012.html>.

- Dou, W. (2004). Will Internet Users Pay for Online Content? *Journal of Advertising Research*, 44(4), 349–359.
- Etgar, M. (2008). A descriptive model of the consumer co-production process. *Journal of the Academy of Marketing Science*, 36(1), 97–108.
- Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research Policy*, 43(7), 1239–1249.
- Goff, B. G., Boles, J. S., Bellenger, D. N., & Stojack, C. (1997). The Influence of Salesperson Selling Behaviors on Customer Satisfaction with Products. *Journal of Retailing*, 73(2), 171–183.
- Gummesson, E. (2007). Exit Services Marketing – Enter Service Marketing. *Journal of Customer Behaviour*, 6(2) 113–141.
- Henderson, R. (2015). Industry employment and output projections to 2024. *Monthly Labor Review*. Retrieved from <https://www.bls.gov/opub/mlr/2015/article/pdf/industry-employment-and-output-projections-to-2024.pdf>.
- Hennig-Thurau, T. (2004). Customer Orientation of Service Employees. *International Journal of Service Industry Management*, 15(5), 460–478.
- Hirt, M., & Willmott, P. (2014). Strategic principles for competing in the digital age. Retrieved from <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategic-principles-for-competing-in-the-digital-age>.

- Homburg, C., Müller, M., & Klarmann, M. (2011). When does salespeople's customer orientation lead to customer loyalty? The Differential Effects of Relational and Functional Customer Orientation. *Journal of the Academy of Marketing Science*, 39(6), 795–812.
- Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social Identity and the Service–Profit Chain. *Journal of marketing*, 73(2), 38–54.
- IAB (2016). IAB Internet Advertising Revenue Report. Retrieved from <https://www.iab.com/wp-content/uploads/2016/04/IAB-Internet-Advertising-Revenue-Report-FY-2015.pdf>.
- Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*, 57(July), 53-70.
- Jones, E., Busch, P., & Dacin, P. (2003). Firm market orientation and salesperson customer orientation: interpersonal and intrapersonal influences on customer service and retention in business-to-business buyer–seller relationships. *Journal of Business Research*, 56(4), 323-340.
- Kennedy, K. N., Lassk, F. G., & Goolsby, J. R. (2002). Customer mind-set of employees throughout the organization. *Journal of the Academy of Marketing Science*, 30(2), 159–171.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value. *Journal of Service Research*, 13(3), 297–310.



- Libai, B., Muller, E., & Peres, R. (2013). Decomposing the Value of Word-of-Mouth Seeding Programs: Acceleration Versus Expansion. *Journal of Marketing Research*, 50(2), 161–176.
- Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54(4), 20-34.
- Niemand, T., Tischer, S., Fritzsche, T., & Kraus, S. (2015). The Freemium Effect: Why Consumers Perceive More Value with Free than with Premium Offers. In *International Conference on Information Systems (ICIS 2015)*. December 13-16, 2015, Fort Worth.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Hoboken, NJ: Wiley.
- Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patrício, L., & Voss, C. A. (2015). Service Research Priorities in a Rapidly Changing Context. *Journal of Service Research*, 18(2), 127–159.
- Palmatier, R. W., & Sridhar, S. (2017). *Marketing strategy: Based on first principles and data analytics*. London: Palgrave.
- Pearson, M. (2016). European Financial Management Association: Innovation in Retail Banking. Retrieved from <https://www.edgeverve.com/wp-content/uploads/2016/12/efma-innovation-report-2016.pdf>.
- Prasad, A., Mahajan, V., & Bronnenberg, B. (2003). Advertising versus pay-per-view in electronic media. *International Journal of Research in Marketing*, 20(1), 13–30.

Ranasinha, G. (2013). Your Customers Are Evolving. How Are You Evolving With Them?

Retrieved from <https://kexino.com/marketing/customer-evolution/>.

Rotella, P. (2012). Is Data the New Oil? Retrieved from

<https://www.forbes.com/sites/perryrotella/2012/04/02/is-data-the-new-oil/#53e3f4487db3>.

Saxe, R., & Weitz, B. (1982). The SOCO Scale: A Measure of the Customer Orientation of

Salespeople. *Journal of Marketing Research*, 19(August), 343-351.

Shoemaker, P. (2013). 5 Ways to Know What Your Customers Want Before They Do. Retrieved

from <https://www.inc.com/paul-schoemaker/5-ways-to-know-what-your-customer-wants.html>.

Schumann, J. H., Wangenheim, F. von, & Groene, N. (2014). Targeted Online Advertising:

Using Reciprocity Appeals to Increase Acceptance Among Users of Free Web Services.

*Journal of Marketing*, 78(1), 59–75.

Shampanier, K., Mazar, N., & Ariely, D. (2007). Zero as a Special Price: The True Value of Free

Products. *Marketing Science*, 26(6), 742–757.

Statista (2017a). Germany: Share of economic sectors in gross domestic product (GDP) in 2016

Retrieved from <https://www.statista.com/statistics/295519/germany-share-of-economic-sectors-in-gross-domestic-product/>.

Statista (2017b). Digital Commerce. Retrieved from

<https://de.statista.com/outlook/330/100/digital-commerce/weltweit#takeaway>.

- Ulaga, W., & Reinartz, W. J. (2011). Hybrid Offerings: How Manufacturing Firms Combine Goods and Services Successfully. *Journal of Marketing*, 75(6), 5–23.
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, 13(3), 253–266.
- Vandermerwe, S., & Rada, J. (1988). Servitization of business: Adding value by adding services. *European Management Journal*, 6(4), 314–324.
- Vock, M., van Dolen, W., & Ruyter, K. d. (2013). Understanding Willingness to Pay for Social Network Sites. *Journal of Service Research*, 16(3), 311–325.
- Yoo, J. J. & Arnold, T. J. (2016). Frontline Employee Customer-Oriented Attitude in the Presence of Job Demands and Resources: The Influence Upon Deep and Surface Acting. *Journal of Service Research*, 19(1), 102-117.
- Yoo, Y., Boland Jr, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. *Organization Science*, 23(5), 1398–1408.

## 2 How Consumers Assess Free E-Services: The Role of Benefit-Inflation and Cost-Deflation Effects

Björn A. Hüttel, Jan H. Schumann, Martin Mende, Maura Scott, Christian Wagner

Under Review at the *Journal of Service Research*, 3<sup>rd</sup> Round, VHB Ranking: A

*Despite the ubiquity of free services in the marketplace (e.g., free music/video streaming services), little empirical research has examined how consumers assess free e-services. This research reveals the crucial role of consumer-perceived nonmonetary costs (e.g., related to advertising intrusiveness) to better explain the prominent zero-price effect (ZPE). Empirical research on the underlying processes of the ZPE is scarce, making it effectively a “black box.” Four experiments show that free e-services elicit positive affect in consumers, which leads to two distinct effects that drive the ZPE: a benefit-inflation effect, such that consumers overemphasize the benefits of free e-services, and a cost-deflation effect, such that they also judge the corresponding nonmonetary costs as lower. Further explaining why consumers assess free e-services in this unique manner, the authors uncover that the social norm of reciprocity increases consumers’ acceptance of nonmonetary costs. This research provides managerial guidance on how to better market free service offerings. Companies that consider providing basic and premium offerings, should include a free basic service option, which increases consumers’ benefit perceptions, lowers their perceptions of nonmonetary costs, and consequently increases demand for this service option. Furthermore, the findings help managers to model the trade-off between immediate additional revenue generated by the fees consumers pay for a premium option and the revenue stream that a free basic option generates (e.g., through higher advertising revenues). Finally, companies can further leverage the cost-deflation effect by triggering the norm of reciprocity to justify advertising as part of their free service offering.*

**Keywords:** zero-price effect, nonmonetary costs, nonmonetary value contributions, free e-services

*There is no such thing as a free lunch.*

—Anonymous

## 2.1 Introduction

Free (i.e., zero-priced) offerings are ubiquitous, particularly online where free services grow continuously because of low marginal costs, high scalability, and technological advances (Bryce, Dyer, and Hatch 2011; Niemand et al. 2015). Accordingly, free online service offerings are a multibillion-dollar market, and even the business models of two of the world's most valuable companies, Google and Facebook, rest on offering free e-services to consumers (Anderson 2009). Despite this considerable economic importance, research on how consumers assess free online services is limited (Schumann, von Wangenheim, and Groene 2014).

In parallel, prior research helps explain the success of free products. Shampanier, Mazar, and Ariely (2007) discovered the “zero-price effect” (ZPE), which describes the irrationally high demand for free offerings when consumers choose between a free and a cost option. According to the ZPE, free offerings imply only benefits but no downsides (i.e., no costs), which leads to an overly positive affective response; in turn, this positive affect drives consumers to choose the free option (Finucane et al. 2000; Shampanier, Mazar, and Ariely 2007). Consequently, the demand for the free product is greater than a standard cost–benefit analysis would predict, and Shampanier, Mazar, and Ariely (2007) suggest (but do not empirically test) that the free aspect of a product constitutes an additional benefit for consumers, which presumably drives the ZPE. Subsequent studies have examined the ZPE's neurological underpinnings (Votinov et al. 2016), have contrasted it with other psychological influences (e.g., relative vs. referent thinking; Nicolau 2012), and have tested price depiction (absolute vs. relative price differences; Baumbach 2016) and product type (hedonic vs. utilitarian; Hossain and Saini 2015) as boundary conditions.

Despite this considerable scholarly interest in consumer responses to free offerings, extant research does not fully explain the mechanisms that drive the ZPE. This notion is particularly important for *online service environments* because free e-services often differ from goods (i.e., tangible products) due to the omnipresence of nonmonetary costs (NMCs) (e.g., related to advertising or the collection of personal data); notably, consumers must pay these NMCs to receive a service offering, though it might be free of monetary charges. Because consumers indeed perceive such NMCs (e.g., Schumann, von Wangenheim, and Groene 2014), we propose that these costs need to be taken into account to provide a more complete picture of how consumers assess free service offerings. In short, the ZPE remains a “black-box,” and its inner workings are not well understood by services scholars and managers.

Against this background, our research focuses on the underlying processes driving the ZPE and proposes that NMCs play a systematic role in how consumers respond to free offerings (Cho and Cheon 2004; Schumann, von Wangenheim, and Groene 2014). Online, consumers face NMCs in (at least) two important ways: they are exposed to advertisements (Anderson 2009; Anderson and Gabszewicz 2006), and they disclose personal data (Acquisti, John, and Loewenstein 2013; Anderl, März, and Schumann 2016). For providers of free e-services, these nonmonetary value contributions by consumers are the two most important sources of revenue (IAB 2016; Rotella 2012). However, if consumers perceive such NMCs, free offerings—contrary to what prior research has presumed (Shampanier, Mazar, and Ariely 2007)—do have downsides, and the assumption of an overly positive affective response to free service offerings might not hold. Therefore, we investigate the following three research questions:

1. Does the context of online service offerings influence the ZPE?
2. Is the ZPE truly linked to an increase in perceived benefits related to a service offering?

3. How does a price of zero influence consumers' perceptions of NMCs, over and above the effects related to perceived benefits?

By answering these questions, our work makes four important contributions. First, we demonstrate that the ZPE generalizes to e-services. This finding is not trivial, because aspects of e-services, such as the omnipresence of NMCs, suggest that the ZPE may not emerge. Yet our results suggest that labeling e-services as “free” is a robust signal to consumers, with downstream consequences for their product assessment and choice, even in an online setting.

Second, we show that the ZPE is actually driven by two distinct effects: a *benefit-inflation effect*, such that consumers overemphasize the benefits of free service offerings, and a *cost-deflation effect*, such that they also judge the corresponding NMCs as lower. That is, we uncover a novel facet of the ZPE by showing that the affective reaction to free e-service offerings *deflates* consumers' judgments of NMCs (e.g., NMCs due to advertising). Notably, this cost-deflation effect is not merely a facet of consumer-perceived benefits; rather, it emerges over and above the positive effect related to an increase in benefits. By revealing this important role of NMCs in the context of free services, we contribute to research on nonmonetary value contributions by consumers (Anderson and Gabszewicz 2006) and customer engagement (Kumar et al. 2010). Furthermore, our results address recent calls for research by the Marketing Science Institute (MSI 2016) on the potential backlash of intrusion, by showing that for free e-services, consumers perceive intrusion by advertising as less severe than for cost offerings.

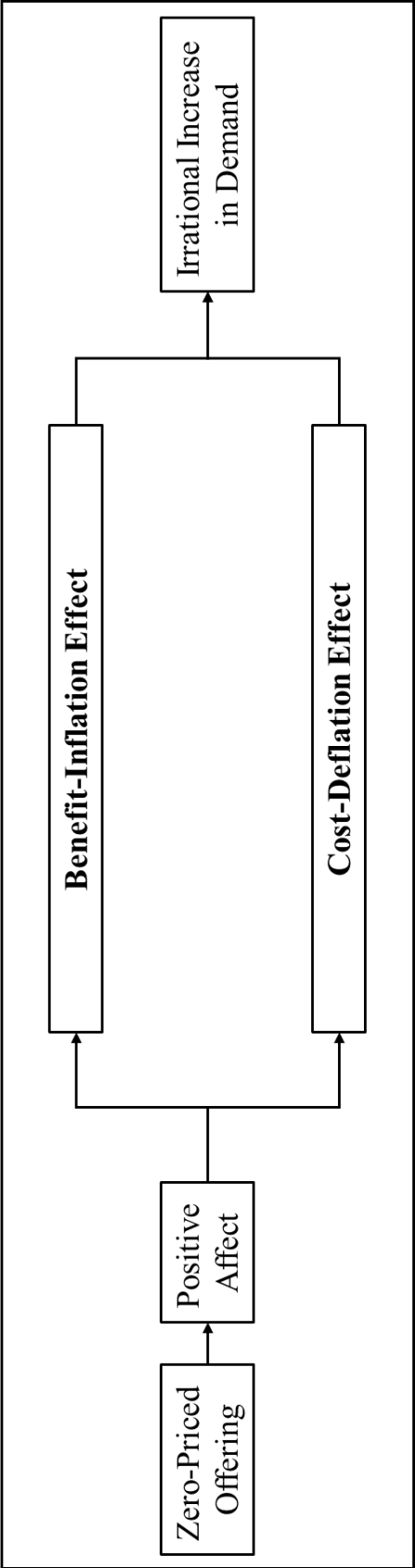
Third, our results deepen the scholarly understanding of *why* the cost-deflation effect emerges, by ruling out consumer naivety as a potential alternative explanation for this effect. We show that consumers *are aware* of the NMCs and *do not* naively overlook or ignore them, but rather judge their impact to be lower when they are associated with free services.

Fourth, we provide additional, novel insight into the mechanism of the ZPE by excluding consumer-perceived (1) reciprocity and (2) acceptance as alternative explanations for the cost-deflation effect. However, we show that reciprocity and acceptance link the two effects and are further underlying elements that explain *why* the cost-deflation effect occurs. Finally, our work has managerial implications, which we elaborate on in the “General Discussion” section.

Figure 2 provides an overview of our conceptual model. Four experiments test our theoretical predictions. Study 1 examines whether the ZPE holds for free online services, tests the assumption that free services result in additional customer-perceived benefits, and demonstrates the cost-deflation effect related to the NMCs of free services. Furthermore, this study reveals the serial mediation of affect, benefits, and NMCs as the underlying drivers of the ZPE. Because consumers might judge an identical offering differently when comparing it in terms of a high versus low reference price (Biswas et al. 1999; Jacowitz and Kahneman 1995), Study 2 then demonstrates the robustness of our focal effects by showing that the ZPE and its mechanisms hold even across different levels of price differentials (i.e., relatively lower and higher reference prices). Next, Study 3 considers (but rules out) the possibility that mere consumer naivety drives the cost-deflation effect, such that the overly positive affect elicited by free offerings might “blind” consumers to the respective NMCs. Study 4 examines additional process variables related to the cost-deflation effect; specifically, this study tests whether the social norm of reciprocity increases consumers’ acceptance of NMCs. In parallel, Study 4 rules out the alternative explanation that the cost-deflation effect is merely a consequence of the benefit-inflation effect. Together, these four studies provide service scholars and managers with deeper insights into how consumers respond to free online services.



Figure 2. Conceptual framework.



## 2.2 The Zero-Price Effect in the Context of Free E-Services

Shampanier, Mazar, and Ariely (2007) investigate the ZPE in terms of choices consumers make between a low-value and a high-value product, in which the low-value product either is free of charge (while the high-value product costs money) or must be paid for (both products cost money), with the same price differential between the two options as in the free condition.<sup>1</sup> The authors describe the ZPE as the combination of (1) an irrationally high shift in demand toward the free product and (2) a decrease in the proportion of consumers choosing the high-value product. This effect is driven by an overly positive affective response to free offerings because, according to the ZPE concept, consumers presumably perceive free offerings as only having benefits but no downsides (i.e., no costs) (Shampanier, Mazar, and Ariely 2007); consumers use this positive affective response as a decision-making cue and choose the free option (Finucane et al. 2000).

Our first goal is to test whether the ZPE, which is grounded in consumer preferences for free products, holds in the context of free e-services.<sup>2</sup> Notably, a corresponding prediction is *not* straightforward. On the one hand, at least three aspects might sabotage the ZPE in an online setting. First, there is a “free mentality” online, such that consumers are unwilling to pay for e-services because they believe that Internet services are supposed to be free (Dou 2004). Second, relative to physical products that can be transferred and/or traded, free e-services might present a lower utility because they are intangible and consumers only obtain access rights. Third, although there is no monetary charge, free e-services typically come with NMCs (e.g.,

---

<sup>1</sup> For example, Shampanier, Mazar, and Ariely (2007) offer two conditions: a *free* condition, which included a lower-value Hershey’s chocolate for free or a higher-value Lindt truffle for \$.13, and a *paid* condition, which included a lower-value Hershey’s chocolate for \$.01 or a higher-value Lindt truffle for \$.14; notably, the authors held the price differential (of \$.13) constant across the two conditions (free vs. paid).

<sup>2</sup> We examine the ZPE in the context of online services (i.e., a streaming video service similar to Netflix) because e-services are the predominant economic arena for free offerings to consumers (Anderson 2009).

interruption through advertisements, such as with the Pandora music service), which might mitigate the ZPE. These insights question whether consumers will show an overly positive affective response to zero-priced e-services. On the other hand, research on the influence of prices on consumer behavior shows substantial and robust signaling effects, such that price changes lead to strong affective reactions (Peine, Heitmann, and Herrmann 2009). Therefore, we expect that a price of zero should indeed elicit overly positive affect, with downstream effects on consumer choice, even for e-services.

### **2.2.1 The Role of Consumer-Perceived NMCs**

Consumers often contribute value to firms in nonmonetary ways (van Doorn et al. 2010). For example, consumers spread positive word of mouth (Kumar et al. 2010) and provide value to firms through coproduction (Etgar 2008) or network effects (Vock, van Dolen, and de Ruyter 2013). In the context of free e-services, consumers are usually exposed to advertisements (Anderson and Gabszewicz 2006) or they need to provide personal data (e.g., e-mail addresses, names, sociodemographic information) (Acquisti, John, and Loewenstein 2013). This insight is not trivial, because such nonmonetary value contributions are the two most important sources of revenue for providers of free e-services (IAB 2016; Rotella 2012). Importantly, research shows that consumers indeed perceive these nonmonetary value contributions related to advertisements and data disclosure as NMCs. For example, with regard to online advertising, consumers often feel interrupted and distracted from their browsing by ads but perceive this interruption as a form of payment (e.g., Acquisti and Spiekermann 2011; Cho and Cheon 2004). With regard to data disclosure, consumers attach great importance to their privacy and they are willing to pay to protect otherwise public information (Acquisti, John, and Loewenstein 2013).

## 2.2.2 The Joint Effect of Inflated Benefits and Deflated NMCs

Extant explanations for the ZPE state that the cost-free nature of free offerings elicits a positive affective reaction, which leads consumers to choose free products (Finucane et al. 2000; Shampanier, Mazar, and Ariely 2007; Slovic et al. 2002). We propose a more nuanced account for the ZPE, which goes beyond *affect* as a direct decision-making cue. Specifically, focusing on the downstream consequences of affect, we theorize that the positive affect induced by free offerings can systematically alter consumer perceptions of corresponding benefits and risks (e.g., NMCs resulting from data disclosure). Our theorizing draws on the following insights.

Consumers' risk perceptions are central to their evaluations, behaviors, and choices (Dowling and Staelin 1994). Risks and benefits can be positively correlated. For example, for financial stock options, high possible benefits tend to be positively correlated with high risks of losing money (Alhakami and Slovic 1994). However, risks and benefits are frequently *negatively related* in consumers' minds (Fischhoff et al. 1978; Slovic et al. 1991): the greater the perceived benefits, the lower the perceived risk, and vice versa (e.g., when perceived benefits of a vaccine are high, people tend to neglect the associated risks; Alhakami and Slovic 1994). Notably, the distance between perceived benefits and risks is particularly high when affect is involved (Alhakami and Slovic 1994). For example, when consumers enjoy an activity (e.g., cycling), they tend to judge the related risks as relatively low and the benefits as relatively high (Slovic et al. 2004). In particular, Peters and Slovic (1996) find that positive affect leads to greater acceptance of risks, which in turn is negatively related to risk perception (Dowling and Staelin 1994). In short, affect influences consumers' judgments of both risks and benefits (Finucane et al. 2000). Because consumers, in an online context, perceive advertising interruptions as a form

of payment (Acquisti and Spiekermann 2011; Cho and Cheon 2004), we expect that they assess these costs for free e-services in a manner similar to risks.

Therefore, we predict that the positive affect that free offerings presumably induce, will elicit *two* parallel downstream effects, which together explain the ZPE: an overly positive affective reaction to a free offer will lead not only to the attribution of (1) greater benefits, as assumed by Shampanier, Mazar, and Ariely (2007), but also (2) to a *lower judgment of NMCs* (*i.e., risks*). We hypothesize:

**Hypothesis 1:** There will be a *benefit-inflation effect* – mediated by positive affect – such that consumers attribute additional benefits to free offerings (relative to the benefits of cost offerings).

**Hypothesis 2:** There will be a *cost-deflation effect* – mediated by positive affect – such that consumers judge the NMCs of free offerings to be lower (relative to the NMCs of cost offerings).

Furthermore, in order to fully capture the comprehensive series of effects that free offers can trigger, we also consider consumer choice as the ultimate outcome variable: we expect that both the benefit-inflation effect as well as the cost-deflation effect influence consumer choice such that (1) positive affect (elicited by the free offering) influences the perceived benefits of the offering, which in turn influences choice, and (2) that, in parallel, affect (elicited by the free offering) influences perceived NMCs, which in turn influences choice. More formally:

**Hypothesis 3:** Both, a) the benefit-inflation effect and b) the cost-deflation effect mediate the influence of a free offer on consumer choice.

## 2.3 Study 1

The purpose of Study 1 is threefold. First, it tests whether the ZPE holds in an e-services context. Second, it examines the ZPE's underlying processes by testing the effect of zero-priced offerings on consumers' perceived benefits and perceived NMCs (testing H1 and H2). Third, the study investigates the mediating roles of affect, benefit, and NMCs in the relationship between free (vs. cost) offerings and the demand for the focal offering (testing H3).

### 2.3.1 Design, Participants, and Procedure

Study 1 employed a 2 (cost: free, paid)  $\times$  2 (offering type: basic, premium) mixed design; cost was a between-subjects factor, and offering type was a within-subjects factor (cf., Shampanier, Mazar, and Ariely 2007). We manipulated offering type by presenting participants with two service offerings, a basic offering and a premium offering, of a fictitious video streaming platform "Netstream" (see Appendix A). We chose this context because video streaming platforms are ubiquitous and consumers can often choose between a free and a paid version of the service (Statista 2015). The premium version provided more benefits (e.g., more movies, offline usage) than the basic version. Importantly, the offerings also differed such that the premium version had fewer NMCs (e.g., frequency and duration of commercial breaks, ads shown on the site), as is typical in the marketplace (e.g., Hulu streaming service). We focused on this type of NMCs because advertising is by far the most important revenue source for companies operating in the e-service arena.<sup>3</sup> We held the level of benefits and NMCs constant for both offerings (basic and premium) across the two cost groups (free vs. paid).

---

<sup>3</sup> For example, 90% of Google's 2015 revenue and 90% of Twitter's 2015 revenue came from advertising (Statista 2016a, 2016b).

We manipulated the monetary prices such that in the free condition, the basic offering was free and the premium offering was 7€; in the paid condition, the basic offering was 1€ and the premium was 8€. That is, the price differential between the offerings was the same for both conditions (free condition: 0€ vs. 7€; paid condition: 1€ vs. 8€). Given that our participants were representative of the users of video streaming services, we used prices consumers would experience in the marketplace. All other aspects were held constant within the corresponding basic or premium offerings.

Using an online panel of a market research firm, we recruited 187 participants ( $M_{\text{age}} = 23.7$ ; 51.9% female) and randomly assigned them to one of the two levels of the cost factor (free vs. paid). Participants read a scenario asking them to imagine they are interested in a video streaming service and find the focal offering, in which the basic and premium versions for the given cost condition were presented side-by-side. Next, participants chose either the basic or the premium offering, or neither of the two. Participants then reported their perceived affect, benefits, and NMCs for both the basic and premium offerings. We measured affect using Shampanier, Mazar, and Ariely's (2007) single-item 5-point scale and measured benefits using Voss, Spangenberg, and Grohmann's (2003) utilitarian benefit scale ( $\alpha = .90$ ). For NMCs, we used an advertising intrusiveness scale ( $\alpha = .93$ ) (Li, Edwards, and Lee 2002). We assessed discriminant validity for the constructs following Fornell and Larcker (1981). Appendix B reports all items and corresponding reliability and validity tests.

### 2.3.2 Results

*Choice.* Figure 3 (Panel A) shows the results and displays the robustness of the ZPE for free e-services, such that the demand for the basic offering is significantly greater in the free

condition than in the paid condition ( $M_{0e} = 62.0\%$  vs.  $M_{1e} = 32.6\%$ ;  $t(185) = 4.18, p < .001$ ). The demand for the two premium offerings was also significantly different ( $M_{7e} = 21.7\%$  vs.  $M_{8e} = 46.3\%$ ;  $t(185) = -3.65, p < .001$ ), while the proportion of consumers choosing neither of the two offerings was not different ( $M_{\text{FreeCondition}} = 16.3\%$  vs.  $M_{\text{PaidCondition}} = 21.1\%$ ;  $t(185) = -.83, p = .41$ ).

*Affect.* A mixed-design repeated measures analysis of variance (ANOVA) revealed the expected cost  $\times$  offering type interaction ( $F(1,185) = 15.77, p < .001$ ; see Figure 3, Panel B). The main effects were not significant ( $F_s < 1$ ). Planned contrasts showed that consumers reported more positive affect for the free basic offering than the paid basic offering ( $M_{0e} = 3.38$  vs.  $M_{1e} = 3.02$ ;  $t(185) = 2.74, p < .01$ ), while the two premium offerings marginally differed in the opposite direction ( $M_{7e} = 3.11$  vs.  $M_{8e} = 3.43$ ;  $t(185) = -1.97, p = .05$ ).

*Benefits.* A mixed ANOVA on benefits showed the expected cost  $\times$  offering type interaction ( $F(1,185) = 16.52, p < .001$ ; see Figure 3, Panel C). The main effects were not significant ( $F_s < 1$ ). Planned contrasts revealed that for the basic offerings, consumers perceived greater benefits with the free option ( $M_{0e} = 4.13, M_{1e} = 3.50$ ;  $t(185) = 3.15, p < .005$ ); there was no difference between the two premium offerings ( $M_{7e} = 3.75$  vs.  $M_{8e} = 4.03$ ;  $t(185) = -1.33, p = .19$ ). A mediation analysis (Hayes 2013, Model 4; 5000 resamples) showed that the positive affect for the free basic offering mediated the effect of cost (free vs. paid) on perceived benefits of the basic offering ( $b = -.32, 95\%$  confidence interval (CI):  $-.5695, -.0985$ ); that is, cost (free vs. paid)  $\rightarrow$  affect  $\rightarrow$  perceived benefits. These results support H1.

*NMCs.* The analysis of the NMCs revealed a significant cost  $\times$  offering type interaction ( $F(1,185) = 10.07, p < .005$ ; see Figure 3, Panel D). The main effects were not significant ( $F_s < 1$ ). For the basic offerings, consumers perceived the NMCs of the free offering as lower than



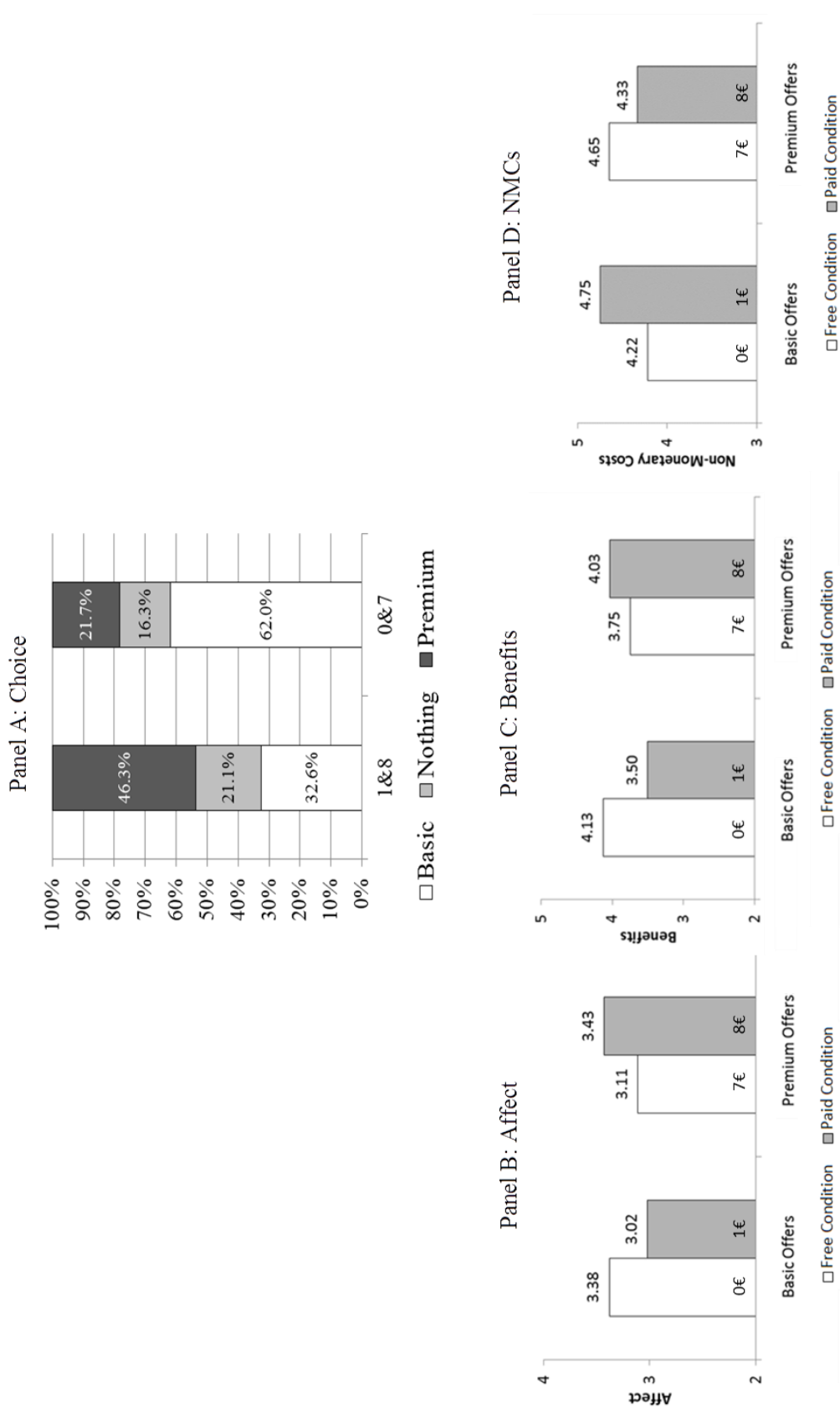
those for the paid offering ( $M_{0e} = 4.22$  vs.  $M_{1e} = 4.75$ ;  $t(185) = -2.31$ ,  $p < .05$ ); the two premium offerings were not different ( $M_{7e} = 4.65$  vs.  $M_{8e} = 4.33$ ;  $t(185) = 1.17$ ,  $p = .24$ ). In support of H2, the results of a mediation analysis (Hayes 2013, Model 4; 5000 resamples) showed that the positive affect for the free basic offering mediated the effect of cost (free vs. paid) on perceived NMCs of the basic offering ( $b = .25$ , 95% CI: .0784, .4916); that is, cost (free vs. paid)  $\rightarrow$  affect  $\rightarrow$  perceived NMC.

*Serial mediation model.* We conducted a serial mediation analysis in light of two insights. First, there was a within-subjects factor, such that participants saw both the basic and the premium offerings simultaneously when making their choice. Thus, following Montoya and Hayes (2016), we computed a difference score to capture the difference in the assessment between the basic and the premium offerings for affect, benefits, and NMCs. Second, our theorizing predicts that positive affect influences the perceived benefits of the offering, which in turn influences choice (H3a); and that, in parallel, positive affect toward the free basic offering influences perceived NMCs, which in turn influences choice (H3b). We therefore conducted a serial mediation model (Hayes 2013, Model 6; Montoya and Hayes 2016; 5000 resamples).

In the model (Montoya and Hayes 2016), the independent variable was cost (free vs. paid); the mediators were affect (basic/premium difference), benefits (basic/premium difference), and NMCs (basic/premium difference); the dependent variable was choice (basic = 1, other = 0). The serial mediation model enabled us to analyze the two parallel paths, the benefit and the NMC path; specifically, the benefit path was cost (free vs. paid)  $\rightarrow$  affect  $\rightarrow$  benefit  $\rightarrow$  choice, and the NMC path was cost (free vs. paid)  $\rightarrow$  affect  $\rightarrow$  NMCs  $\rightarrow$  choice.

The results support our theorizing. Specifically, in support of H3a, the mediation analysis reveals an indirect effect of cost (free = 0, paid = 1) through perceived affect and benefit on the

Figure 3. Study 1: The effect of zero-priced offerings on choice, affect, benefits, and NMC perceptions.



choice of the basic offering ( $b = -.29$ , 95% CI:  $-.6572, -.1078$ ). In support of H3b, results further show an indirect effect of cost through affect and NMCs on the choice of the basic offering ( $b = -.12$ , 95% CI:  $-.3584, -.0182$ ), which mediated the effect of cost condition on choice. Finally, in order to test whether one of the two effects is larger than the other, we conducted pairwise comparisons using PROCESS (Hayes 2013). Results showed that the two effects are not significantly different from each other ( $b = -.18$ , 95% CI:  $-.5424, .0371$ ).

### 2.3.3 Discussion

Study 1 extends prior research on the ZPE (Shampanier, Mazar, and Ariely 2007) in four important ways. First, it suggests that the ZPE generalizes to an e-service context: a price of zero elicits a robust signaling effect that influences consumer choice. In other words, consumers show an irrationally high demand when the monetary price is zero despite the free mentality online (Dou 2004), the presumably lower utility, and the NMCs linked to free e-services. Second, Study 1 provides the first empirical evidence for the heretofore presumed effect that consumers attribute additional benefits to free offerings. Third, derived from research on risk perception (Finucane et al. 2000; Slovic et al. 2004), we discover the cost-deflation effect as a new facet of the ZPE related to NMCs. Therefore, we show that the positive affective reaction to free service offerings (1) *increases* the attribution of benefits (benefit-inflation effect) and (2) separately *decreases* consumers' judgment of NMCs (cost-deflation effect). Fourth, this study contributes to the understanding of the ZPE by revealing the *serial mediation* that drives it: positive affect, induced by the free offering, leads to the benefit-inflation effect and the cost-deflation effect. Notably, the affect-induced perception of greater benefits and lower NMCs are *two separate* reasons for the irrational demand pattern of the ZPE. That is, the cost-deflation effect is not

absorbed into consumers' benefit-inflation effect; rather, it represents a distinct effect on consumer choice. Indeed, when evaluating the two effects using pairwise comparisons, we found that both effects did not differ in their contribution to consumers' demand pattern. In other words, both effects are important parallel drivers of the ZPE.

## 2.4 Study 2: Do Different Price Differentials Matter?

Study 1 examined the ZPE for service offerings with relatively small price differences. Study 2 now tests the robustness of our findings by exploring the influence of different price differentials, which is important because consumer judgment is generally comparative in nature and evaluations of a target are made from accessible information (Mussweiler 2003). When making decisions, consumers use such accessible information as anchors for their judgments, and any changes in those anchors can lead to inconsistencies in decision making (Tversky and Kahneman 1974; Wegener et al. 2010). Notably, *high versus low numerical anchors* can alter consumers' judgments when making decisions (Wegener et al. 2001); consequently, consumers judge an identical object differently when comparing it in terms of a high versus low numerical standard (Jacowitz and Kahneman 1995). This insight is consistent with research on reference prices, which shows that consumer judgments of an offering differ, depending on whether the offering's reference price is high or low. When the reference price is high, consumers judge the perceived value of the offering as higher, and they are more favorable toward the offering than when the reference price is low (Biswas et al. 1999). Thus, in the context of an e-service offering that consists of two options (i.e., a basic and a premium option), consumers should not judge both presented offerings in isolation but compare them on the basis of accessible information. When the price of the premium option is higher (constituting a higher reference price),

consumers might elevate the perceived value of the corresponding basic option (Biswas et al. 1999). In other words, when price differentials between the basic and the premium option increase, the perceived value of the basic option might be elevated not only in the free condition, due to the price of zero, but also in the paid condition, due to a higher reference price (than an offering with a lower price differential). Consequently, with a higher reference (premium) price for a cost offering, the unique influence of a price of zero might be reduced, which could mitigate the ZPE.

#### 2.4.1 Design, Participants, and Procedure

Study 2 had a similar design and procedure as Study 1, such that participants saw both a basic and a premium offering; however, the price differential between the basic and the premium offering was now higher (a difference of 12€ vs. a difference of 7€ in Study 1). We recruited 179 respondents via an online panel of a market research firm ( $M_{\text{age}} = 24.5$ ; 50.8% female) and randomly assigned them to one of the two levels of the cost factor (free: 0€ vs. 12€; paid: 2€ vs. 14€).

#### 2.4.2 Results

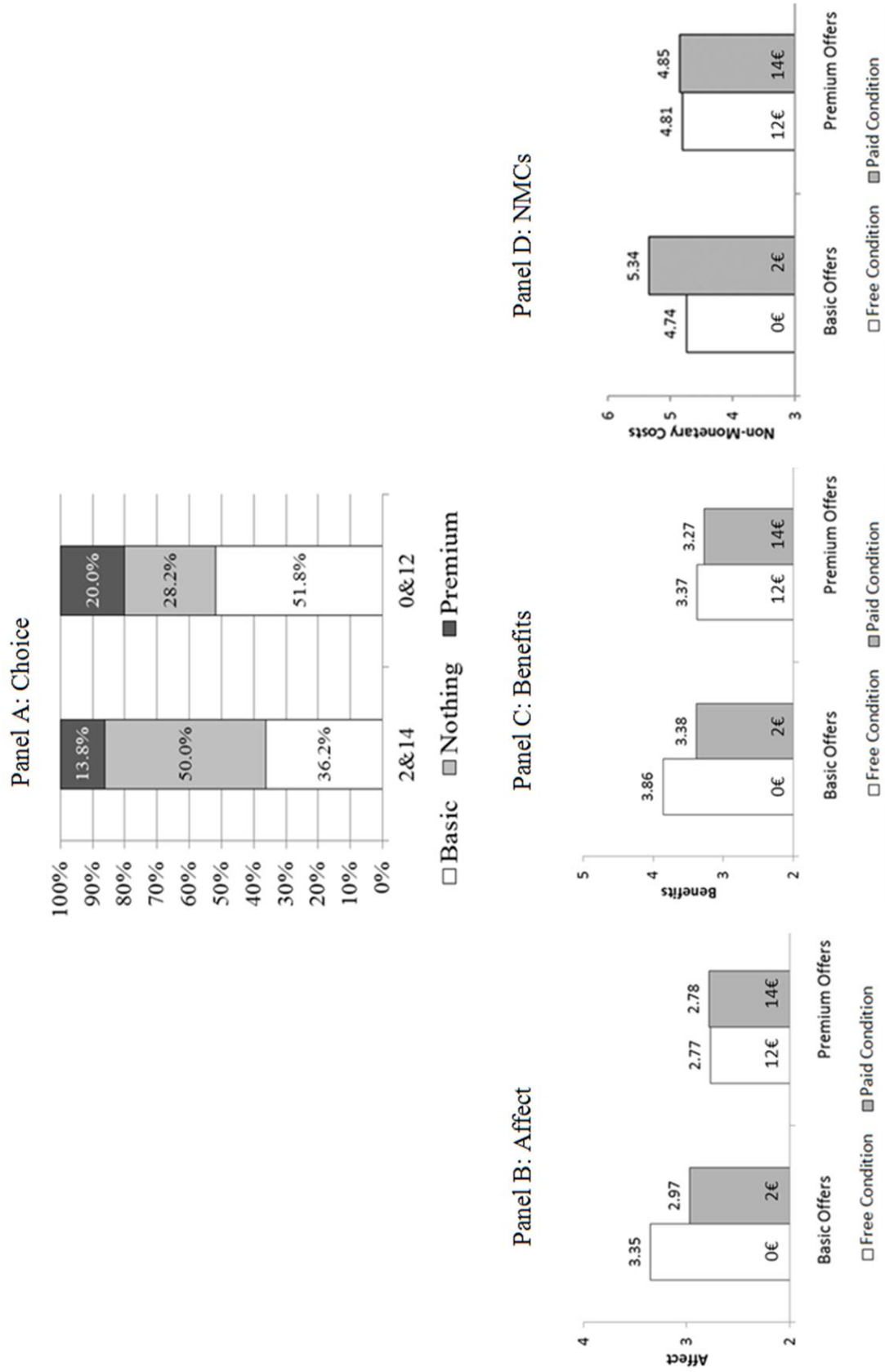
*Choice.* The demand for the basic offering was higher in the free condition than in the paid condition ( $M_{0€} = 51.8\%$  vs.  $M_{2€} = 36.2\%$ ;  $t(177) = 2.11$ ,  $p < .05$ ). However, demand for the premium offering was unaffected ( $M_{12€} = 20.0\%$  vs.  $M_{14€} = 13.8\%$ ;  $t(177) = 1.09$ ,  $p = .27$ ). In parallel, the proportion of participants choosing neither of the two offerings increased ( $M_{\text{FreeCondition}} = 28.2\%$  vs.  $M_{\text{PaidCondition}} = 50.0\%$ ;  $t(177) = -3.03$ ,  $p < .005$ ; see Figure 4, Panel A).

*Affect.* A mixed-design repeated measures ANOVA revealed the expected cost  $\times$  offering type interaction ( $F(1, 177) = 6.94, p < .01$ ). There was a main effect of offering type ( $F(1, 177) = 26.81, p < .001$ ); the main effect of cost was not significant ( $F(1, 177) = 2.27, p = .13$ ). Planned contrasts revealed a significant difference in affect between the free basic and paid basic offerings ( $M_{0\text{€}} = 3.35$  vs.  $M_{2\text{€}} = 2.97$ ;  $t(177) = 2.87, p = .01$ ), while there was no difference between the two premium offerings ( $M_{12\text{€}} = 2.77$  vs.  $M_{14\text{€}} = 2.78$ ;  $t(177) = -.07, p = .94$ ; see Figure 4, Panel B).

*Benefits.* The results revealed the expected cost  $\times$  offering type interaction ( $F(1, 177) = 4.05, p < .05$ ). There was a main effect of offering type ( $F(1, 177) = 10.83, p < .005$ ); the main effect of cost was not significant ( $F(1, 177) = 2.05, p = .15$ ). Contrasts revealed that consumers perceived greater benefits with the free basic offering (vs. the paid basic offering) ( $M_{0\text{€}} = 3.86$  vs.  $M_{2\text{€}} = 3.38$ ;  $t(177) = 2.21, p < .05$ ). For the premium offering, there was no difference ( $M_{12\text{€}} = 3.37$  vs.  $M_{14\text{€}} = 3.27$ ;  $t(177) = .46, p = .65$ ; see Figure 4, Panel C). In support of H1, a mediation analysis (Hayes 2013, Model 4) showed that the positive affect for the free basic offering mediated the effect of cost (free vs. paid) on perceived benefits of the basic offering ( $b = -.41, 95\% \text{ CI: } -.7234, -.1356$ ).

*NMCs.* The results showed the expected cost  $\times$  offering type interaction ( $F(1, 177) = 4.70, p < .05$ ). The main effects of cost ( $F(1, 177) = 1.97, p = .16$ ) and offering type ( $F(1, 177) = 2.57, p = .11$ ) were not significant. Planned contrasts revealed that the significant interaction effect was due to the lower judgment of NMCs for the free offering ( $M_{0\text{€}} = 4.74$  vs.  $M_{2\text{€}} = 5.34$ ;  $t(177) = -2.58, p < .05$ ), while for the premium offering, NMCs were not different ( $M_{12\text{€}} = 4.81$  vs.  $M_{14\text{€}} = 4.85$ ;  $t(177) = -.13, p = .90$ ; see Figure 4, Panel D). In support of H2, mediation

Figure 4. Study 2: The effect of zero-priced offerings on choice, affect, benefits and NMC perceptions (with a larger price differential between basic and premium offerings).



results showed that the positive affect for the free basic offering mediated the effect of cost (free vs. paid) on NMC of the basic offering ( $b = .31$ , 95% CI: .1166, .5514).

*Serial mediation model.* To examine the robustness of our findings in Study 1, we again conducted a serial mediation analysis. In the model (Montoya and Hayes 2016), the independent variable was cost (free vs. paid); the mediators were affect (basic/premium difference), benefits (basic/premium difference), and NMCs (basic/premium difference); the dependent variable was choice (basic = 1, other = 0). In support of H3a, the mediation analysis revealed an indirect effect of cost (free = 0, paid = 1) through affect and benefit on the choice of the basic offering ( $b = -.11$ , 95% CI:  $-.3374$ ,  $-.0041$ ). In support of H3b, results also showed an indirect effect of cost through affect and NMCs on the choice of the basic offering ( $b = -.04$ , 95% CI:  $-.1363$ ,  $-.0042$ ), which mediated the effect of cost condition on choice. Pairwise comparisons showed that the two effects were not statistically different from each other ( $b = -.07$ , 95% CI:  $-.2912$ ,  $.0488$ ).

### 2.4.3 Discussion

Study 2 further validates the results of Study 1 and offers support for our theorizing. Even when price differentials increase and consumers are therefore exposed to higher reference prices, the underlying processes of the ZPE still emerge. With regard to demand, we find that at higher price differentials, the presence of a free offering triggers a larger shift in demand toward free products. However, consumers do not switch to the premium version when prices change from zero to nonzero; instead, they choose neither option, likely because of the high price of the premium version. While this pattern is still consistent with the idea of the ZPE, it sparks the question whether an irrational demand shift between the two basic offerings toward the free offering is sufficient for the notion of the ZPE, because whether consumers switch to the



premium offering or choose nothing in the paid condition also depends on the price of the premium offering. Therefore, we propose that for the ZPE to occur, an irrational shift in demand toward the free offering alone is sufficient.

This research aims to open the black box related to the ZPE. In this regard, Studies 1 and 2 found consistent support for our hypotheses (H1-H3), such that the ZPE includes a benefit-inflation effect *and* a cost-deflation effect. Our results also reveal that both the benefit-inflation effect and the cost-deflation effect are driven by positive affect that free offerings induce. Because the cost-deflation effect is new to both services and marketing research, we aim to further examine its nuances in our two subsequent studies to provide service scholars and managers with a deeper understanding of this novel phenomenon. Accordingly, Study 3 considers an alternative explanation for why consumers deflate NMCs: consumer naivety.

## **2.5 Study 3: Can Consumer Naivety Explain the Cost-Deflation Effect?**

When experiencing positive affect, consumers might judge the NMCs associated with free service offerings to be lower, *because they naively underestimate* the scope of those NMCs. This alternative explanation is based on the following insights: consumers give disproportionate weight to information that is salient (Taylor and Fiske 1978); because such information is more available, it consequently exerts a stronger influence on consumer judgment (Kahneman and Miller 1986; Kahneman and Tversky 1982). In parallel, focusing on one input related to a judgment may cause an underweighting of other related inputs (e.g., the impact of negative information) (Wilson et al. 2000). In line with this rationale, Chandran and Morwitz (2006) find that free offerings are more salient to consumers, and as a consequence, consumers are distracted from *other negative attributes* associated with the free offering. Therefore, in our context of e-

services, the positive affect of free offerings might “blind” consumers to the respective NMCs. Thus far, our explanation for the cost-deflation effect suggests that consumers *are aware* of the attached NMCs but judge them to be lower in the presence of a free service offering. However, an alternative explanation might suggest that consumers *are not aware* and expect fewer NMCs for free offerings because their overly positive affective reaction to the free offering leads them to naively underestimate the scope of NMCs. Study 3 investigates this alternative explanation.

### 2.5.1 Design, Participants, and Procedure

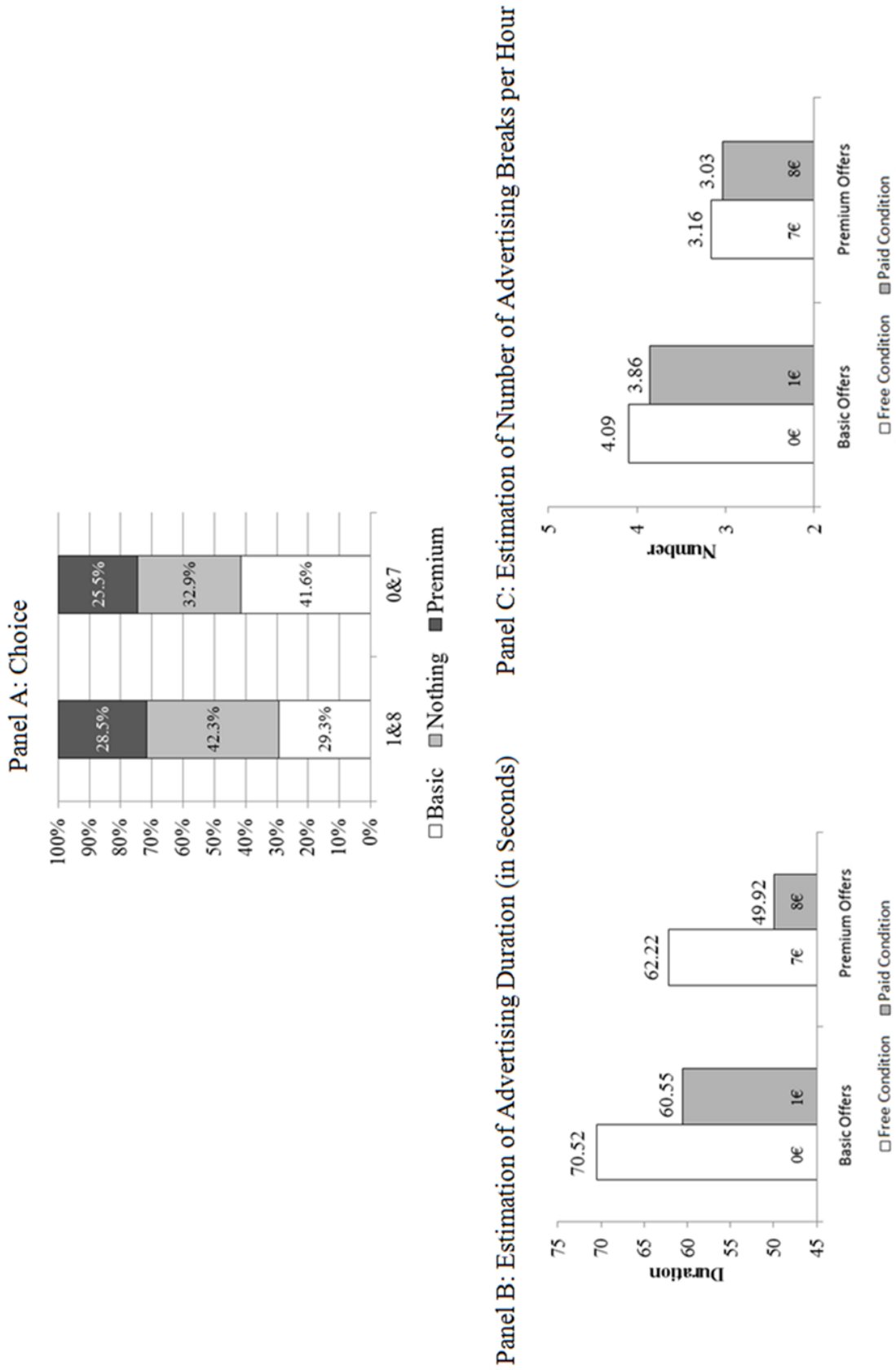
Study 3 used a design, manipulation, and procedure similar to those in Studies 1 and 2. We used the same prices as in Study 1 (free condition: 0€ vs. 7€; paid condition: 1€ vs. 8€) to mimic prices that consumers would experience in the marketplace. However, the design of Study 3 had one important difference: In this study, we did not specify the NMCs (e.g., there was no specific information about the duration or frequency of commercial breaks); rather, the stimuli only stated that there would be “advertisements during the movie,” and we asked participants to estimate the scope of this advertising. This statement was identical for both the basic and premium offerings. In addition, the basic offering included pop-up advertising and integrated banner advertising on the navigation site. After participants read about the two offerings, we asked them to make their choice (basic, premium, or neither). To examine the potential underestimation of the NMCs, participants estimated (1) the duration of a commercial break during a movie (in seconds) and (2) the number of commercial breaks per hour. We recruited 272 participants via social media ( $M_{\text{age}} = 28.5$  years; 75.4% female) and randomly assigned them to one of the two (free vs. paid) conditions.

## 2.5.2 Results

*Choice.* The demand for the basic offering was greater in the free (vs. paid) condition ( $M_{0\epsilon} = 41.6\%$  vs.  $M_{1\epsilon} = 29.3\%$ ;  $t(270) = 2.120$ ,  $p < .05$ ), while the demand for the premium offering was unaffected ( $M_{7\epsilon} = 25.5\%$  vs.  $M_{8\epsilon} = 28.5\%$ ;  $t(270) = -.55$ ,  $p = .59$ ); there was no significant difference in the proportion of participants who chose neither offering ( $M_{\text{FreeCondition}} = 32.9\%$  vs.  $M_{\text{PaidCondition}} = 42.3\%$ ;  $t(270) = -1.60$ ,  $p = .11$ ; see Figure 5, Panel A).

*Estimated advertising duration and frequency.* We used mixed-design ANOVAs to assess the estimated advertising duration per break and the estimated number of interruptions per hour. If consumers indeed underestimated the NMCs, there should be interaction effects such that they underestimate the duration and scope of advertising for the free basic offering. However, in line with our theorizing, the condition (free vs. paid)  $\times$  offering type (basic vs. premium) interaction effect did not emerge for either the duration of advertising ( $F(1, 270) = .26$ ,  $p = .61$ ) or the number of advertising breaks ( $F(1, 270) = .45$ ,  $p = .50$ ). As expected, the results revealed only (non-surprising) main effects of offering type, such that participants expected longer advertising breaks ( $M_{\text{Basic}} = 65.53$  vs.  $M_{\text{Premium}} = 56.07$ ;  $F(1, 270) = 16.92$ ,  $p < .001$ ) and more frequent interruptions ( $M_{\text{Basic}} = 3.98$  vs.  $M_{\text{Premium}} = 3.10$ ;  $F(1, 270) = 129.94$ ,  $p < .001$ ) for the basic offerings relative to the premium offerings (see Figure 5, Panels B and C).

Figure 5. Study 3: The effect of zero-priced offerings on the estimation of advertising duration and number of advertising breaks per hour.



### 2.5.3 Discussion

Study 3 rules out an alternative explanation for the cost-deflation effect—namely, that consumers' lower judgments might be due to their naive underestimation of the scope of NMCs of free service offerings (i.e., the price of zero might distract them from these negative attributes of the offering). Instead, we find that consumers do not display any such naive underestimation; they accurately estimate a *similar scope* of the NMCs between the cost conditions, but—in line with our conceptual rationale—the ZPE is driven by *differences in how consumers assess these NMCs*. This finding is consistent with the notion that consumers are aware of the NMCs of free offerings (e.g., Acquisti and Spiekermann 2011; Schumann, von Wangenheim, and Groene 2014), but it enriches prior research by showing that, unlike the assessment of NMCs, the *estimation of the scope* of the NMCs is largely unaffected by other cues (i.e., price).

Although Study 3 offers further insights into the ZPE, it also raises follow-up questions regarding the mechanism that drives the focal cost-deflation effect. Specifically, is positive affect the only reason consumers judge the NMCs of free offers to be lower, or might the cost-deflation effect include additional process variables? In investigating this question, we test whether the social norm of reciprocity might increase consumers' acceptance of NMCs.

## 2.6 Study 4: Reciprocity and Acceptance as Possible Alternative

### Explanations for the Cost-Deflation Effect

Our results thus far indicate that two separate paths drive the ZPE, the cost-deflation effect and the benefit-inflation effect. However, given that consumers inflate their perceptions of services' benefits when the service is free, a possible alternative explanation for the cost-deflation effect might be that the asymmetry of perceived NMCs is merely *a consequence* of the benefit-inflation effect. This notion draws on the concept of reciprocity as follows.

When people receive a benefit, the psychological state of indebtedness, defined as “a state of obligation to repay another” (Greenberg 1980, p. 4), is triggered; in turn, this state activates the norm of reciprocity, which refers to people's desire to “help those who have helped them” (Gouldner 1960, p. 171). The greater the received benefit, the greater is the feeling of indebtedness and the stronger is the norm of reciprocity, which elicits a desire to repay the favor (Greenberg 1980). Schumann, von Wangenheim, and Groene (2014) show that the norm of reciprocity is salient for free e-services and that it influences consumer perceptions of NMCs in an online setting. Therefore, reciprocity could be an alternative explanation for why consumers assess NMCs as lower with free offerings. Especially in exchange relationships, which imply the notion of *quid pro quo*, the motivation for giving a benefit is to get something in return (Aggarwal 2004). In the context of e-services, advertising represents a reciprocal exchange between a website that provides free content and its users who are exposed to the advertising. Positive affect induced by reciprocal exchanges has been shown to lead to a higher inclination to accept costly behaviors (Lawler 2001), such as risks (Peters and Slovic 1994). In parallel, greater risk acceptance is associated with lower risk perception (Dowling and Staelin 1994).

Drawing from these insights, we expect that the affect-induced benefit-inflation effect will activate the norm of reciprocity such that consumers feel obligated to “repay” the provider by tolerating the NMCs of the free offering. Consequently, consumers should accept NMCs of advertising to a greater extent in light of free (vs. cost) offerings and thus judge them to be lower. In contrast, the norm of reciprocity is mitigated when consumers pay a monetary fee for an e-service (Gneezy and Rustichini 2000); therefore, we do not expect the same series of effects for cost offerings. These insights notwithstanding, prior research has demonstrated (1) the strong influence of prices on affect (Peine, Heitmann, and Herrmann 2009) and (2) the considerable impact of affect on consumer perceptions of risk (Finucane et al. 2000). Thus, we predict that, despite the influence of the benefit-inflation effect on the cost-deflation effect through reciprocity and acceptance, the NMC path is meaningful over and above the benefit path; that is, the cost-deflation path should still hold even after we control for reciprocity and acceptance on consumers’ judgments of NMCs.

### **2.6.1 Design, Participants, and Procedure**

The design, manipulation, and procedure were similar to the previous studies, but Study 4 also includes the process measures of reciprocity and acceptance. We recruited 182 participants via an online panel of a market research firm ( $M_{\text{age}} = 25.2$ ; 50.6% female) and randomly assigned them to either the free condition or the paid condition. Participants chose between the basic and premium options, and then for both options, they indicated their affect, benefits, and NMCs. Next, we measured reciprocity ( $\alpha = .85$ ) (Schumann, von Wangenheim, and Groene 2014) and acceptance of NMCs ( $\alpha = .90$ ) (Haws and Bearden 2006); Appendix B reports the items and discriminant validity tests.

## 2.6.2 Results

*Choice.* The demand for the basic offering was higher in the free condition than in the paid condition ( $M_{0e} = 44.6\%$  vs.  $M_{1e} = 20.0\%$ ;  $t(180) = 3.65$ ,  $p < .001$ ). In parallel, demand for the premium offering was lower in the free condition than in the paid condition ( $M_{7e} = 38.0\%$  vs.  $M_{8e} = 57.8\%$ ;  $t(180) = -2.70$ ,  $p < .01$ ). There was no difference in the proportion of participants choosing neither offering ( $M_{\text{FreeCondition}} = 17.4\%$  vs.  $M_{\text{PaidCondition}} = 22.2\%$ ;  $t(180) = -.82$ ,  $p = .42$ ; see Figure 6, Panel A).

*Affect.* The mixed-design ANOVA of affect revealed the expected cost (free vs. paid)  $\times$  offering type (basic vs. premium) interaction ( $F(1, 180) = 4.04$ ,  $p < .05$ ); the main effects were not significant ( $F_s < 1$ ). Consumers reported more positive affect in response to the free basic offering (vs. the paid basic offering) ( $M_{0e} = 3.28$  vs.  $M_{1e} = 3.02$ ;  $t(180) = 1.99$ ,  $p < .05$ ). For the premium offering, there was no difference ( $M_{7e} = 3.19$  vs.  $M_{8e} = 3.30$ ;  $t(180) = -.72$ ,  $p = .47$ ; see Figure 6, Panel B).

*Benefits.* The results revealed the expected cost  $\times$  offering type interaction ( $F(1, 180) = 10.42$ ,  $p < .005$ ). There was a main effect of cost ( $F(1, 180) = 7.13$ ,  $p < .01$ ), while the main effect of offering type was not significant ( $F(1, 180) = 1.38$ ,  $p = .24$ ). For the basic offering, contrasts revealed that consumers perceived greater benefits with the free (vs. paid) offering ( $M_{0e} = 4.23$  vs.  $M_{1e} = 3.36$ ;  $t(180) = 4.17$ ,  $p < .001$ ). For the premium offering, there was no difference ( $M_{7e} = 3.98$  vs.  $M_{8e} = 3.89$ ;  $t(180) = .41$ ,  $p = .68$ ; see Figure 6, Panel C).

*NMCs.* The analysis showed the expected cost  $\times$  offering type interaction ( $F(1, 180) = 18.60$ ,  $p < .001$ ). There was a main effect of offering type ( $F(1, 180) = 9.99$ ,  $p < .005$ ), while the main effect of cost was not significant ( $F < 1$ ). Planned contrasts revealed that this interaction effect is due to the lower judgment of NMCs for the free offering ( $M_{0e} = 4.05$  vs.  $M_{1e} = 4.59$ ;

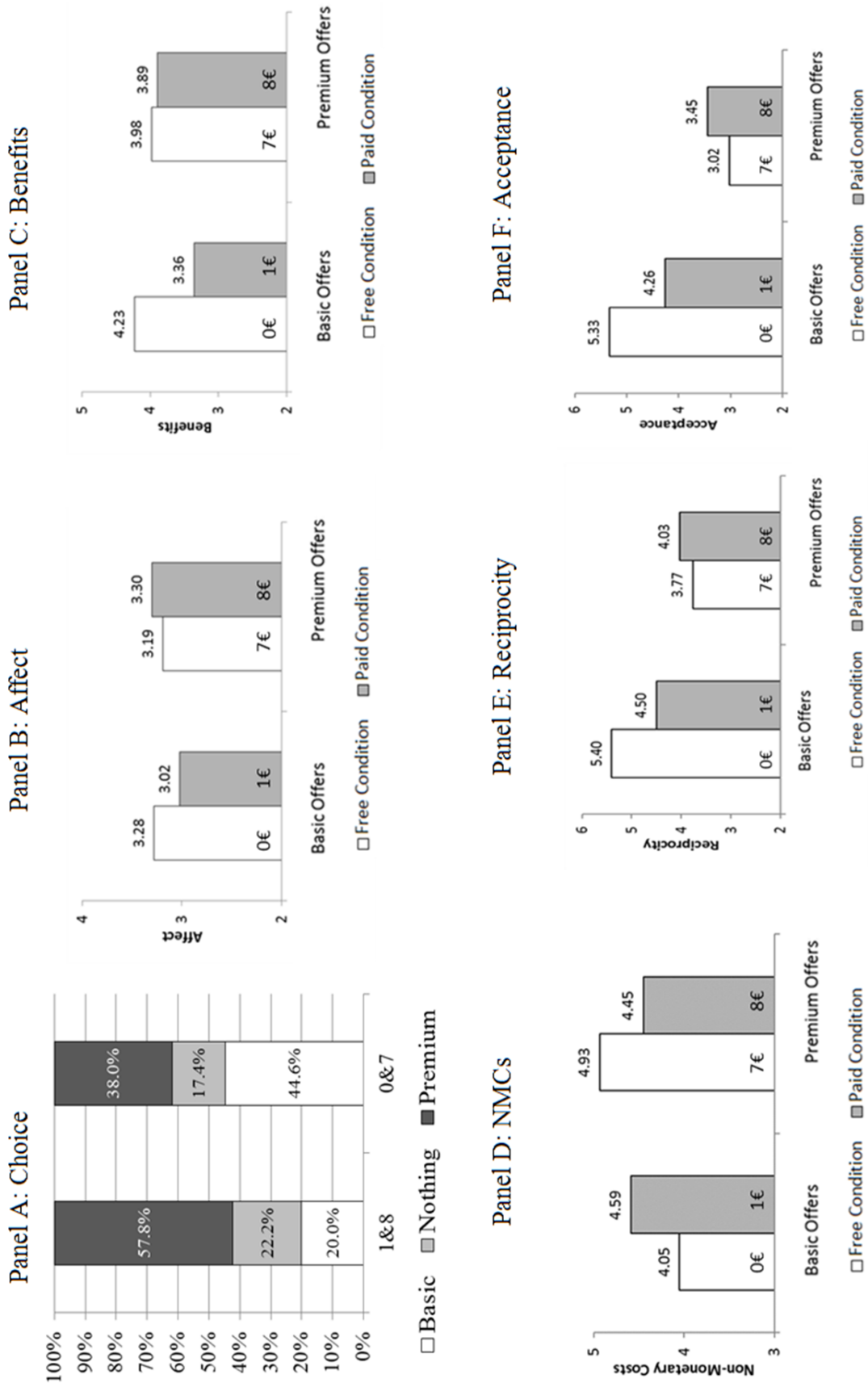


$t(180) = -2.08, p < .05$ ). For the premium offering, there was no difference ( $M_{7\epsilon} = 4.93$  vs.  $M_{8\epsilon} = 4.45$ ;  $t(180) = 1.63, p = .11$ ; see Figure 6, Panel D).

*Reciprocity.* The ANOVA revealed a significant cost  $\times$  offering type interaction ( $F(1,180) = 23.15, p < .001$ ), as well as main effects of offering type ( $F(1, 180) = 75.38, p < .001$ ) and cost ( $F(1, 180) = 2.75, p = .10$ ). As expected, contrasts showed that for the basic offering, the reciprocity norm was more prevalent with the free than the paid offering ( $M_{0\epsilon} = 5.40$  vs.  $M_{1\epsilon} = 4.50$ ;  $t(180) = 4.40, p < .001$ ). For the premium offering, there was no difference ( $M_{7\epsilon} = 3.77$  vs.  $M_{8\epsilon} = 4.03$ ;  $t(180) = -1.03, p = .30$ ; see Figure 6, Panel E).

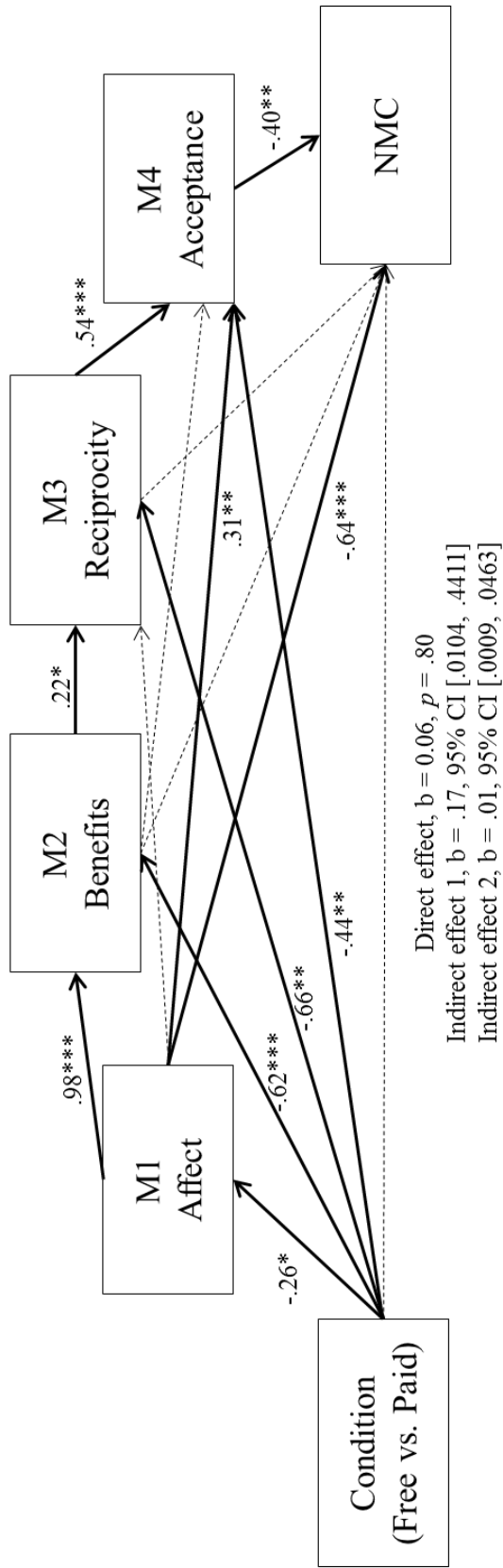
*Acceptance of NMCs.* With regard to the acceptance of NMCs, the analysis revealed a significant cost  $\times$  offering type interaction ( $F(1, 180) = 40.63, p < .001$ ), as well as main effects of offering type ( $F(1, 180) = 178.44, p < .001$ ) and cost ( $F(1, 180) = 3.55, p = .06$ ). Planned contrasts showed that the interaction effect is due to a higher willingness to accept advertising for the free basic offering than the paid basic offering ( $M_{0\epsilon} = 5.33$  vs.  $M_{1\epsilon} = 4.26$ ;  $t(180) = 5.53, p < .001$ ). For the premium offering, contrasts revealed a difference in the opposite direction ( $M_{7\epsilon} = 3.02$  vs.  $M_{8\epsilon} = 3.45$ ;  $t(180) = -1.95, p = .05$ ; see Figure 6, Panel F).

Figure 6. Study 4: The effect of zero-priced offerings on choice, affect, benefits, NMCs, reciprocity, and acceptance.



*Serial mediation analysis.* We conducted a serial mediation analysis using PROCESS (Hayes 2013, Model 6, 5000 bootstrapped samples). The independent variable was cost (free vs. paid), and the dependent variable was NMCs. In the model, consistent with our theorizing, we find support for the serial mediation paths: indirect effect 1: cost (free vs. paid) → affect → NMCs; and indirect effect 2: cost (free vs. paid) → affect → benefit → reciprocity → acceptance → NMCs. The results reveal an indirect effect of cost condition on NMCs of the basic offering through affect, benefit, reciprocity, and acceptance ( $b = .012$ , 95% CI: .0009, .0463). The analysis also shows the indirect effect of cost through affect on the judgment of NMCs of the free basic offering ( $b = .17$ , 95% CI: .0104, .4411). Pairwise comparisons conducted with PROCESS (Hayes 2013) show that the indirect effect 1 (via affect) is significantly stronger than the indirect effect 2 (via affect, benefit, reciprocity, and acceptance) ( $b = .15$ , 95% CI: .0086, .4263). Figure 7 illustrates the two serial mediation paths. The other links shown in Figure 7 are included for completeness.

Figure 7. Study 4: Underlying mediation process.



Notes:

Indirect effect 1: M1;

Indirect effect 2: M1 & M2 & M3 & M4;

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

→ Significant path

→ Non-significant path

### 2.6.3 Discussion

Study 4 examines (and rules out) the alternative explanation that consumers' biased perceptions of NMCs are merely a consequence of the affect-induced benefit-inflation effect. Although the results show that the benefit-inflation path and the cost-deflation path are connected, they also reveal that the NMC path is meaningful over and above the benefit path. Notably, while prior research (e.g., Shampanier, Mazar, and Ariely 2007) suggests that social norms do *not* influence the ZPE, our results indicate that in the focal context of e-services, the norm of reciprocity does play a role in consumers' acceptance of NMCs and, consequently, in the emergence of the ZPE. More specifically, our mediation analyses show that positive affect triggers greater perceived benefits, which activate the norm of reciprocity, which in turn leads to a higher willingness to accept NMCs and thereby influences consumers' judgments of NMCs (i.e., indirect effect 2). Importantly though, when we control for the influence of the benefit path on consumers' NMC perceptions through reciprocity and acceptance, the cost-deflation effect (i.e., indirect effect 1) still remains significant and is stronger than the indirect effect 2. In other words, consumers do not integrate lower perceived NMCs as a mere facet (or consequence) of perceived benefits. Therefore, investigating the ZPE with a sole focus on benefit-related mechanisms (without accounting for NMCs) does not provide a complete picture of how consumers respond to free offerings.

## 2.7 General Discussion

This research, grounded in the important work that uncovered the ZPE (Shampanier, Mazar, and Ariely 2007), offers deeper insight into consumers' cost–benefit considerations in light of free service offerings. Our work was inspired by the notion that though offerings might be free of monetary costs, NMCs might influence the appeal of free services, an aspect that prior research has widely overlooked.

### 2.7.1 Theoretical Contributions and Implications

*The ZPE generalizes to online services.* On a conceptual level, showing that the ZPE generalizes to e-services is not trivial, because various aspects of e-services might undermine the ZPE. For example, with the free mentality in e-services (Dou 2004) consumers often expect a free option (e.g., free e-mail accounts, free videos on YouTube). In addition, e-services merely provide intangible access rights rather than tangible possessions, which consumers may expect to be free. Yet, our results suggest that labeling e-services as “free” is a robust signal to consumers, with downstream effects on their product assessments and choices, even in an online setting.

*Opening the black box: benefit-inflation and cost-deflation drive the ZPE.* Prior research on the ZPE (Baumbach 2016; Nicolau 2012; Shampanier, Mazar, and Ariely 2007; Votinov et al. 2016) does not fully unearth the mechanisms that underlie the ZPE, particularly in service contexts in which consumers must pay NMCs to receive an offering free in monetary terms. Our research reveals that two distinct effects drive the ZPE: a benefit-inflation effect and a cost-deflation effect. Regarding the benefit-inflation effect, we provide the first empirical evidence of the idea that consumer-perceived benefits are boosted by the affect that zero-priced offerings

induce (e.g., Shampanier, Mazar, and Ariely 2007). More important, and contrary to prior research on the ZPE, we predicted that consumers would realize that “free” service offerings have downsides. Consistent with our theorizing, we find that NMCs are a fundamental facet of the ZPE. Building on research on risk perception (Finucane et al. 2000), we show that consumers judge NMCs related to advertising to be different when a service offering is free. Specifically, the affective reaction induced by the free offering triggers a cost-deflation effect, such that consumers judge NMCs to be lower when an offering is free (vs. not).

Regarding this cost-deflation effect, two additional insights are noteworthy. First, the cost-deflation effect emerges over and above the benefit-inflation effect. We show that these two paths are linked through an effect driven by the norm of reciprocity, which increases consumers’ willingness to accept NMCs (Study 4). However, the cost-deflation path persists even after we control for the influence of reciprocity and acceptance on perceived NMCs. This finding rules out that consumers simply perceive lower NMCs as a consequence of greater benefits. Second, we also rule out that the cost-deflation effect results from a mere (and naive) underestimation of the NMCs (Study 3). Our data suggest that, rather than being naive, consumers are aware of NMCs for free services, but they are more willing to accept those costs and perceive them as less disturbing when an offering is free (vs. not). With these findings, we help answer recent calls for research on the potential backlash to intrusion (e.g., MSI 2016) by showing that in the case of free services, consumers perceive intrusions by advertising as less severe than for cost offerings.

Assessing the robustness of our chain of effects, we find that the ZPE holds in the context of larger price differentials (Study 2). Notably, at higher price differentials, consumers do not switch to the available premium version when both offerings involve monetary costs; rather, they

tend not to choose either the basic or the premium offering, which might indicate a more nuanced redefinition of the ZPE (as noted in the discussion of Study 2).

*NMCs as a new facet of pricing research.* Although the marketing discipline has made significant contributions to pricing research, aspects related to free and/or “freemium” pricing (i.e., consumers can purchase a premium version of the free basic offering for a fee) are surprisingly underresearched (Leone et al. 2012). We demonstrate that NMCs influence consumer responses to free offerings, which are associated with distinct theoretical mechanisms (i.e., cost-deflation, reciprocity, and acceptance). In an economic landscape in which free or freemium offerings are increasingly important, services scholars can enrich pricing theory by incorporating NMCs into pricing research. Prior (services) marketing research has heavily focused on how monetary price promotions and tactics influence consumer decisions. Going forward, marketing theory needs to better explain how consumers respond to nonmonetary pricing tactics. (For example, how can NMCs be promoted, when and why are identical NMCs perceived as higher/lower, how do consumers trade off distinct types of NMC?). This research vision also requires a fresh theoretical perspective on established constructs (e.g., consumers’ willingness to-pay in terms of NMCs). Taken together, there is an urgent need for services marketing theory to investigate the extent to which extant pricing models (developed with a strong focus on monetary costs) apply in the emerging “freeconomy” (Anderson 2009).

*NMCs in customer engagement research.* In service-dominated economies, consumers are always cocreators of value (Lusch and Vargo 2006). In other words, consumers’ nonmonetary value contributions are essential for the success (and survival) of many service organizations. This insight helps explain why the notion of customer engagement has recently received considerable attention in marketing (Kumar et al. 2010; van Doorn et al. 2010; Verhoef,



Reinartz, and Krafft 2010). Although this literature offers valuable insights into why and how consumers become engaged by providing nonmonetary value contributions (e.g., word of mouth, network effects), it has paid little attention to the role of NMCs. This is surprising because it is likely that consumers' online engagement is influenced by distinct levels and types of NMCs (e.g., advertisements, the need to disclose personal data). Further integrating NMCs into conceptual models is an important next step for the area of customer engagement research.

### 2.7.2 Managerial Implications

NMCs in free e-services are fundamental sources of revenue for service providers (IAB 2016). Thus, we offer insights to companies to aid them in managing and pricing their offerings.

*Managers can leverage the ZPE in promoting e-services.* We demonstrate that managers can use the ZPE in promoting free e-services, despite consumers' free mentality online (Dou 2004). If managers intend to reach a high customer base, they should label their e-services as "free", which increases consumers' benefit perceptions, lowers their perceptions of corresponding NMCs, and consequently increases consumer demand.

*Trading off NMCs.* Managers should note that consumers account for NMCs when making their choice but they judge NMCs differently for free (vs. paid) services. Firms with free offerings can benefit from the cost-deflation effect, an insight with immediate implications for bundling free services with relatively more advertisements. Our findings regarding the mechanism that drives the cost-deflation provide further guidance to managers on how to frame their offerings. Specifically, companies might be able to further leverage the cost-deflation effect by referencing the norm of reciprocity when justifying advertising as part of their free offering (Schumann, von Wangenheim, and Groene 2014).

Finally, our research helps companies that promote freemium offerings (contrasting a free basic offering and a fee-based premium offering) in three important ways. First, when designing a basic and premium version, managers can use our findings to model the trade-off between immediate additional revenue generated by the fees consumers pay for a premium version and the revenue stream that the free basic version triggers through NMC-related sources. Second, as managers determine prices for a basic and a premium offering when moving from free to fee, they also should be cognizant that at higher price differentials between basic and premium offerings, firms risk losing revenue, because consumers tend to choose neither of the two offerings. While at large price differentials, a shift from free to fee does not affect the perception and demand of the premium offering, at smaller price differentials, a shift from free to fee leads to a significant increase in consumer demands for the premium offer. Third, firms that intend to switch from free to fee and offer e-services for very low prices (i.e., apps for \$.99) should realize that consumers will likely judge the associated NMCs as significantly higher (in the presence of the monetary fee), with downstream effects on demand. Therefore, it might be more effective to offer the service for free and benefit from the cost-deflation effect by selling more advertising.

### **2.7.3 Limitations and Further Research**

Limitations of our work offer opportunities for further research. First, while we examine the major type of NMCs in online settings (i.e., advertising), other forms of NMCs might influence the ZPE. Free service offerings of firms that collect and sell consumer data (e.g., e-mail addresses) might be assessed differently. In this respect, research could examine whether the cost-deflation effect still occurs for NMCs with different risk levels (e.g., data disclosure). How would the occurrence of such NMCs influence choice? Would consumer perceptions of

NMCs be reduced if a service requires NMCs to function (e.g., Google maps needs data on consumers' location to give directions)? Relatedly, going beyond our focus on e-services, further research could examine the interplay between the benefit-inflation and cost-deflation effect in *offline* environments. In this regard, the cost-deflation effect could influence other NMCs, such as consumer time requirements or difficult customer cocreation tasks (e.g., Mende et al. 2017). Second, with regard to the benefit-inflation effect, we only measured utilitarian benefits because prior research has shown that free offerings are primarily evaluated on these benefits (Chandon, Wansink, and Laurent 2000). Further research could examine if and how hedonic components of consumers' benefit perceptions are influenced by free offerings. Third, our results show that the benefit-inflation effect and the cost-deflation effect both contribute to consumers' demand pattern. However, the relative path strengths might vary as a function of how an offering is framed or configured (e.g., different levels of NMCs and benefits might change the effects). This question of how and why the relative strength of the two effects might vary requires more research. Fourth, a comparison of the demand patterns between Study 1 and Study 2 suggests that, in the presence of higher price differentials, providing a free basic offering does not lead to cannibalization with regard to the demand of the premium offer. In contrast, for smaller price differentials, providing a free basic offering significantly increases its demand, which however, comes at the expense of the demand for the premium offering. While such cannibalization effects are beyond the scope of our research, this issue deserves more scholarly attention. Fifth, recent research has found that product type (hedonic vs. utilitarian) is a boundary condition of the ZPE (Hossain and Saini 2015). More work is required to better understand the boundary conditions of the ZPE. Along these lines, scholars could examine how individual differences (e.g., frugality; Lastovicka et al. 1999) influence the ZPE. Finally, as mentioned above, our results can also

inspire research in the broader pricing literature. Specifically, consumers might respond to premium pricing with increased positive affect (recall that, in Study 1, consumers reported a marginally higher level of affect for the premium option, which was priced at 8€). Although a positive response to higher prices is consistent with insights on conspicuous consumption (Bagwell and Bernheim 1996), better understanding the role of affect in response to premium pricing in non-conspicuous service settings (e.g., streaming services) deserves more research.

## 2.8 References

- Acquisti, Alessandro, Leslie K. John, and George Loewenstein (2013), "What Is Privacy Worth?" *Journal of Legal Studies*, 42 (June), 249-74.
- and Sarah Spiekermann (2011), "Do Interruptions Pay Off? Effects of Interruptive Ads on Consumers' Willingness to Pay," *Journal of Interactive Marketing*, 25 (4), 1-15.
- Aggarwal, Pankaj (2004), "The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior," *Journal of Consumer Research*, 31 (June), 87-101.
- Alhakami, Ali S. and Paul Slovic (1994), "A Psychological Study of the Inverse Relationship Between Perceived Risk and Perceived Benefit," *Risk Analysis*, 14 (December), 1085-96.
- Anderl, Eva, Armin März, and Jan H. Schumann (2016), "Nonmonetary Customer Value Contributions in Free E-Services," *Journal of Strategic Marketing*, 24 (January), 175-89.
- Anderson, Chris (2009), *Free: The Future of a Radical Price*. New York: Hyperion.
- Anderson, Simon P. and Jean J. Gabszewicz (2006), "The Media and Advertising: A Tale of Two-Sided Markets," in *Handbook of the Economics of Art and Culture*, Victor A. Ginsburgh and David Throsby, eds. Amsterdam: Elsevier, 567-614.
- Bagwell, Laurie Simon and B. Douglas Bernheim (1996), "Veblen Effects in a Theory of Conspicuous Consumption," *American Economic Review*, 86 (3), 349-73.
- Baumbach, Elisa (2016), "The Zero-Price Effect in a Multicomponent Product Context," *International Journal of Research in Marketing*, 33 (3), 689-94.

- Biswas, Abhijit, Chris Pullig, Balaji C. Krishnan, and Scot Burton (1999), "Consumer Evaluation of Reference Price Advertisements: Effects of Other Brands' Prices and Semantic Cues," *Journal of Public Policy & Marketing*, 18 (Spring), 52-65.
- Bryce, David J., Jeffrey H. Dyer, and Nile W. Hatch (2011), "Competing Against Free," *Harvard Business Review*, 89 (June), 104-11.
- Chandon, Pierre, Brian Wansink, and Gilles Laurent (2000), "A Benefit Congruency Framework of Sales Promotion Effectiveness," *Journal of Marketing*, 64 (October), 65-81.
- Chandran, Sucharita and Vicky G. Morwitz (2006), "The Price of "Free"-dom: Consumer Sensitivity to Promotions with Negative Contextual Influences," *Journal of Consumer Research*, 33 (December), 384-92.
- Cho, Chang-Hoan and Hongsik J. Cheon (2004), "Why Do People Avoid Advertising on the Internet?" *Journal of Advertising*, 33 (Winter), 89-97.
- Dou, Wenyu (2004), "Will Internet Users Pay for Online Content?" *Journal of Advertising Research*, 44 (December), 349-59.
- Dowling, Grahame R. and Richard Staelin (1994), "A Model of Perceived Risk and Intended Risk-Handling Activity," *Journal of Consumer Research*, 21 (June), 119-34.
- Etgar, Michael (2008), "A Descriptive Model of the Consumer Co-Production Process," *Journal of the Academy of Marketing Science*, 36 (March), 97-108.

- Finucane, Melissa L., Ali Alhakami, Paul Slovic, and Stephen M. Johnson (2000), "The Affect Heuristic in Judgments of Risks and Benefits," *Journal of Behavioral Decision Making*, 13 (January), 1-17.
- Fischhoff, Baruch, Paul Slovic, Sarah Lichtenstein, Stephen Read, and Barbara Combs (1978), "How Safe is Safe Enough? A Psychometric Study of Attitudes Towards Technological Risks and Benefits," *Policy Sciences*, 9 (April), 127-52.
- Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (February), 39-50.
- Gneezy, Uri and Aldo Rustichini (2000), "Pay Enough or Don't Pay at All," *Quarterly Journal of Economics*, 115 (August), 791-810.
- Gouldner, Alvin W. (1960), "The Norm of Reciprocity: A Preliminary Statement," *American Sociological Review*, 25 (April), 161-78.
- Greenberg, Martin S. (1980), "A Theory of Indebtedness," in *Social Exchange: New Advances in Theory and Research*, Kenneth J. Gergen, Martin S. Greenberg, and Richard H. Willis, eds. New York: Plenum Press, 3-23.
- Haws, Kelly L. and William O. Bearden (2006), "Dynamic Pricing and Consumer Fairness Perceptions," *Journal of Consumer Research*, 33 (December), 304-11.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: The Guilford Press.

- Hossain, Mehdi T. and Ritesh Saini (2015), "Free Indulgences: Enhanced Zero-Price Effect for Hedonic Options," *International Journal of Research in Marketing*, 32 (4), 457-60.
- IAB (2016), "IAB Internet Advertising Revenue Report," (accessed November 15, 2016), [available at [http://www.iab.com/wp-content/uploads/2016/04/IAB\\_Internet\\_Advertising\\_Revenue\\_Report\\_FY\\_2015-final.pdf](http://www.iab.com/wp-content/uploads/2016/04/IAB_Internet_Advertising_Revenue_Report_FY_2015-final.pdf)].
- Jacowitz, Karen E. and Daniel Kahneman (1995), "Measures of Anchoring in Estimation Tasks," *Personality and Social Psychology Bulletin*, 21 (November), 1161-166.
- Kahneman, Daniel and Dale T. Miller (1986), "Norm Theory: Comparing Reality to Its Alternatives," *Psychological Review*, 93 (April), 136-53.
- and Amos Tversky (1982), "The Simulation Heuristic," in *Judgment Under Uncertainty: Heuristics and Biases*, Daniel Kahneman, Paul Slovic, and Amos Tversky, eds. New York: Cambridge University Press, 201–08.
- Kumar, V., Lerzan Aksoy, Bas Donkers, Rajkumar Venkatesan, Thorsten Wiesel, and Sebastian Tillmanns (2010), "Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value," *Journal of Service Research*, 13 (August), 297-310.
- Lastovicka, John L., Lance A. Bettencourt, Renée Shaw Hughner, and Ronald J. Kuntze (1999), "Lifestyle of the Tight and Frugal: Theory and Measurement," *Journal of Consumer Research*, 26 (June), 85-98.
- Lawler, Edward J. (2001), "An Affect Theory of Social Exchange," *American Journal of Sociology*, 107 (September), 321-52.



Leone, Robert P., Larry M. Robinson, Johanna Bragge, and Outi Somervuori (2012), "A Citation and Profiling Analysis of Pricing Research from 1980 to 2010," *Journal of Business Research*, 65 (July), 1010-24.

Li, Hairong, Steven M. Edwards, and Joo-Hyun Lee (2002), "Measuring the Intrusiveness of Advertisements: Scale Development and Validation," *Journal of Advertising*, 31 (Summer), 37-47.

Lusch, Robert F. and Stephen L. Vargo (2006), "Service Dominant Logic: Reactions, Reflections and Refinements," *Marketing Theory*, 6 (September), 281-88.

Mende, Martin, Maura L. Scott, Mary Jo Bitner, and Amy L. Ostrom (2017), "Activating Customers as Coproducers for Better Outcomes: The Interplay of Firm-Assigned Workload, Service Literacy, Eustress, and Organizational Support," *Journal of Public Policy & Marketing*, 36(1), 137-55.

Montoya, Amanda K. and Andrew F. Hayes (2016), "Two-Condition Within-Participant Statistical Mediation Analysis: A Path-Analytic Framework," *Psychological Methods*, <http://dx.doi.org/10.1037/met0000086>.

MSI (2016), "Research Priorities 2016-2018," (accessed December 12), [available at [http://www.msi.org/uploads/articles/MSI\\_RP16-18.pdf](http://www.msi.org/uploads/articles/MSI_RP16-18.pdf)].

Mussweiler, Thomas (2003), "Comparison Processes in Social Judgment: Mechanisms and Consequences," *Psychological Review*, 110 (July), 472-89.

Nicolau, Juan L. (2012), "Battle Royal: Zero-Price Effect vs Relative vs Referent Thinking," *Marketing Letters*, 23 (September), 661-69.

- Niemand, Thomas, Sebastian Tischer, Tina Fritzsche, and Sascha Kraus (2015), "The Freemium Effect: Why Consumers Perceive More Value with Free Than with Premium Offers," *International Conference on Information Systems*, 36, 1-20.
- Peine, Klaus, Mark Heitmann, and Andreas Herrmann (2009), "Getting a Feel for Price Affect: A Conceptual Framework and Empirical Investigation of Consumers' Emotional Responses to Price Information," *Psychology & Marketing*, 26 (January), 39-66.
- Peters, Ellen and Paul Slovic (1996), "The Role of Affect and Worldviews as Orienting Dispositions in the Perception and Acceptance of Nuclear Power," *Journal of Applied Social Psychology*, 26 (August), 1427-53.
- Rotella, Perry (2012), "Is Data the New Oil?" (accessed July 20, 2016), [available at <http://www.forbes.com/sites/perryrotella/2012/04/02/is-data-the-new-oil/>].
- Schumann, Jan H., Florian von Wangenheim, and Nicole Groene (2014), "Targeted Online Advertising: Using Reciprocity Appeals to Increase Acceptance Among Users of Free Web Services," *Journal of Marketing*, 78 (November), 59-75.
- Shampanier, Kristina, Nina Mazar, and Dan Ariely (2007), "Zero as a Special Price: The True Value of Free Products," *Marketing Science*, 26 (November/December), 742-57.
- Slovic, Paul, Melissa Finucane, Ellen Peters, and Donald G. MacGregor (2002), "Rational Actors or Rational Fools: Implications of the Affect Heuristic for Behavioral Economics," *Journal of Socio-Economics*, 31 (April), 329-42.
- \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ (2004), "Risk as Analysis and Risk as Feelings: Some Thoughts About Affect, Reason, Risk and Rationality," *Risk Analysis*, 24 (April), 311-22.

- , Mark Layman, Nancy Kraus, James Flynn, James Chalmers, and Gail Gesell (1991), “Perceived Risk, Stigma, and Potential Economic Impacts of a High-Level Nuclear Waste Repository in Nevada,” *Risk Analysis*, 11 (December), 683-96.
- Statista (2015), “Penetration Rates of Select Streaming Services in the U.S. 2015,” (accessed July 20, 2016), [available at <http://www.statista.com/statistics/274192/streaming-services-penetration-rates-in-the-us/>].
- (2016a), “Google's Ad Revenue from 2001 to 2015,” (accessed November 15, 2016), [available at <https://www.statista.com/statistics/266249/advertising-revenue-of-google/>].
- (2016b), “Twitter's Advertising Revenue Worldwide from 2014 to 2018,” (accessed November 15, 2016), [available at <https://www.statista.com/statistics/271337/twitters-advertising-revenue-worldwide/>].
- Taylor, Shelley E. and Susan T. Fiske (1978), “Salience, Attention, and Attribution: Top of the Head Phenomena,” *Advances in Experimental Social Psychology*, 11, 249-88.
- Tversky, Amos and Daniel Kahneman (1974), “Judgment Under Uncertainty: Heuristics and Biases,” *Science*, 185 (September), 1124-31.
- van Doorn, Jenny, Katherine N. Lemon, Vikas Mittal, Stephan Nass, Doreen Pick, Peter Pirner, and Peter C. Verhoef (2010), “Customer Engagement Behavior: Theoretical Foundations and Research Directions,” *Journal of Service Research*, 13 (August), 253-66.
- Verhoef, Peter C., Werner J. Reinartz, and Manfred Krafft (2010), “Customer Engagement as a New Perspective in Customer Management,” *Journal of Service Research*, 13 (August), 247-52.

Vock, Marlene, Willemijn van Dolen, and Ko de Ruyter (2013), "Understanding Willingness to Pay for Social Network Sites," *Journal of Service Research*, 16 (January), 311-25.

Voss, Kevin E., Eric R. Spangenberg, and Bianca Grohmann (2003), "Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude," *Journal of Marketing Research*, 40 (August), 310-20.

Votinov, Mikhail, Toshihiko Aso, Hidenao Fukuyama, and Tatsuya Mima (2016), "A Neural Mechanism of Preference Shifting Under Zero Price Condition," *Frontiers in Human Neuroscience*, 10 (April), 1-11.

Wegener, Duane T., Richard E. Petty, Kevin L. Blankenship, and Brian Detweiler-Bedell (2010), "Elaboration and Numerical Anchoring: Implications of Attitude Theories for Consumer Judgment and Decision Making," *Journal of Consumer Psychology*, 20 (January), 5-16.

———, ———, Brian Detweiler-Bedell, and W. Blair G. Jarvis (2001), "Implications of Attitude Change Theories for Numerical Anchoring: Anchor Plausibility and the Limits of Anchor Effectiveness," *Journal of Experimental Social Psychology*, 37 (January), 62-69.

Wilson, Timothy D., Thalia Wheatly, Jonathan M. Meyers, Daniel T. Gilbert, and Danny Axom (2000), "Focalism: A Source of Durability Bias in Affective Forecasting," *Journal of Personality and Social Psychology*, 78 (March), 821-36.

## 2.9 Appendices

### Appendix A. Scenario of Study 1.


Please imagine that you are interested in becoming a member of a video streaming platform. Imagine you find the video streaming platform Netstream online. In order to make it easier for you to imagine, you can see an exemplary screenshot below:



Netstream gives you the choice between Netstream Basic and Netstream Premium. In the following overview, you can see the scope of both offerings:

Netstream Basic	Netstream Premium
Sign up is free	Sign up for 7€ a month
Database of 5000 movies	Database of 50,000 movies
No storage of offline-usage of movies possible	Storage and offline-usage of movies possible during membership
	Access to various live-streams
	Access to latest series
Every 30 minutes commercial break of 2 minutes	Every 60 minutes commercial break of 1 minute
Site navigation includes animated banner ads	Site navigation includes nonanimated banner ads
Below the movie nonanimated banner ads are shown in regular intervals	

**Appendix B. Measurement Items and Validity Assessment for Constructs in Studies 1-4.**

<b>Construct</b>	<b>Study &amp; Statistics<sup>1</sup></b>	<b>Measurement Items<sup>2</sup></b>
<b>Affect</b> Shampanier, Mazar, and Ariely (2007)	Studies 1, 2, & 4	How do you feel with regard to [offering]? 
<b>Perceived Benefits</b> Voss, Spangenberg, and Grohmann (2003)	Studies 1, 2, & 4 $\alpha = .90$ , CR = .89, AVE = .68, HSC = .24	The use of [offering] for me is: Functional, Practical, Necessary, Helpful
<b>Ad Intrusiveness (NMC<sub>Ads</sub>)</b> Li, Edwards, and Lee (2002)	Studies 1, 2, & 4 $\alpha = .93$ , CR = .92, AVE = .73, HSC = .18	That [offering] involves advertising for me is: Distracting, Disturbing, Intrusive, Obtrusive
<b>Underestimation of NMCs from Ads</b>	Study 3	<ul style="list-style-type: none"> <li>On average, how many seconds of advertising do you think lasts one advertising break during a movie at the offering?</li> <li>How often per hour of film do you think will a movie be interrupted by an advertising break?</li> </ul>
<b>Reciprocity</b> Schumann, von Wangenheim, and Groene (2014)	Study 4 $\alpha = .89$ CR = .89 AVE = .73 HSC = .32	<ul style="list-style-type: none"> <li>It is fair to reward the provider for providing its content to me.</li> <li>It is okay that the provider shows advertising in exchange for the content.</li> <li>Providing the provider a benefit in return for its content is fair.</li> </ul>
<b>Acceptance</b> Adapted from Haws and Bearden (2006)	Study 4 $\alpha = .90$ , CR = .89, AVE = .64, HSC = .57	Including advertisements in the [offering] is: Acceptable, Harmless, Justified, Questionable (reversed), Reasonable, Unacceptable (reversed)

<sup>1</sup>  $\alpha$  = Cronbach's  $\alpha$ , CR = composite reliability, AVE = average variance extracted, HSC = highest squared correlation with other constructs. Values are for the first study in which the measure appears.

<sup>2</sup> For all items except the "Smiley" scale, participants indicated their responses to the items on 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*).



### 3 A Comprehensive Review of Antecedents of Frontline Employees' Customer Orientation: The State of the Art

Björn A. Hüttel

Under Review at the *Journal of Marketing Management*, 1<sup>st</sup> Round, VHB Ranking: C

*Due to the crucial role of frontline employees (FLEs) for implementing the marketing concept (i.e. a firm's focus on the customer and the satisfaction of the customer's needs) it is vital for service providers to understand the influencing factors which increase or decrease FLEs' customer orientation (CO). Consequently, CO has become a key construct in the marketing and sales literature. However, in the literature various understandings of CO co-exist, which put an emphasis on different influencing factors and use different measurement approaches to study FLEs' CO. The literature lacks a comprehensive literature review that structures and summarizes the fragmented empirical research on antecedents of FLEs' CO. This study closes this gap by providing an extensive literature review which first structures the different understandings of CO in the literature, and second presents a comprehensive overview of antecedents influencing FLEs' CO by categorizing the influencing factors into four main areas. Based on the literature review, the study identifies avenues for future research in the field. Finally, the literature review gives guidance to managers by structuring starting points to enhance FLEs' CO such as how to design an organizational environment which foster FLEs' CO.*

**Keywords:** Customer Orientation, Frontline Employees, Literature Review, State of the Art, Services



### 3.1 Introduction

According to the United States Department of Labor (2016), more than 14 million US citizens are employed in sales occupations that involve direct customer contact. These frontline employees (FLEs) are often the first contact a customer has with a service provider (Jones, Busch, and Dacin 2003). Due to this boundary-spanning role, it is often the task of FLEs to implement the marketing concept (Kohli and Jaworski 1990) by displaying a high degree of customer orientation (CO). With the growing emphasis on building relationships with customers and on creating customer value in marketing and sales practices (Ramani and Kumar 2008), CO has become essential for companies, and is a key construct in the marketing and sales literature (Homburg, Müller, and Klarmann 2011). CO has been shown to be a central success factor for service firms as it positively influences outcome variables such as customer satisfaction, customer commitment, and business profitability (Hennig-Thurau 2004; Narver and Slater 1990). Due to the crucial role of FLEs for implementing the marketing concept (i.e. a firm's focus on the customer and the satisfaction of the customer's needs) (Saxe and Weitz 1982), it is vital for service providers to understand the influencing factors which increase or decrease FLEs' CO. However, in the literature various understandings of CO co-exist, which put an emphasis on different influencing factors and use different measurement approaches to study FLEs' CO. The literature lacks a comprehensive literature review that structures and summarizes the empirical research on antecedents of FLEs' CO. Such a literature review, however, is crucial for service providers to get an overview of the possibilities and means to enhance FLEs' CO, as well as for researchers to identify avenues for future research in this field.

This study aims to close this gap by providing an extensive literature review which first structures the different understandings of CO in the literature, and second presents a comprehensive overview of antecedents influencing FLEs' CO. It contributes to the literature on CO (Brown, Mowen, Donavan, and Licata 2002; Saxe and Weitz 1982) in several ways. First, the study sheds light on the different understandings of CO and structures the fragmented literature. Second, the study provides an extensive overview of the antecedents of FLEs' CO by categorizing the factors that influence FLEs' CO into four main areas. Third, based on the literature review, the study identifies avenues for future research. Finally, the literature review structures managers' starting points to enhance FLEs' CO. The results give guidance to managers on how to design the organizational environment to facilitate a high CO of FLEs. Furthermore, the results give an overview of FLEs' traits and attitudes associated with high CO which managers can take into consideration when hiring and developing service personnel.

## **3.2 Theoretical Background**

### **3.2.1 Research Streams on FLEs' CO**

Research on CO broadly distinguishes between CO as an organizational-level construct (e.g., Homburg and Pflesser 2000; Jaworski and Kohli 1993) and CO as an individual-level construct (e.g., Brown et al. 2002; Saxe and Weitz 1982). CO as an organizational-level construct refers to the general market orientation of a company (Jaworski and Kohli 1993), and for example examines the influence of market orientation on business profitability (Narver and Slater 1990). Because it is often the task of FLEs in service environments to implement the marketing concept by displaying a high degree of CO (Liao and Chuang 2004), this literature

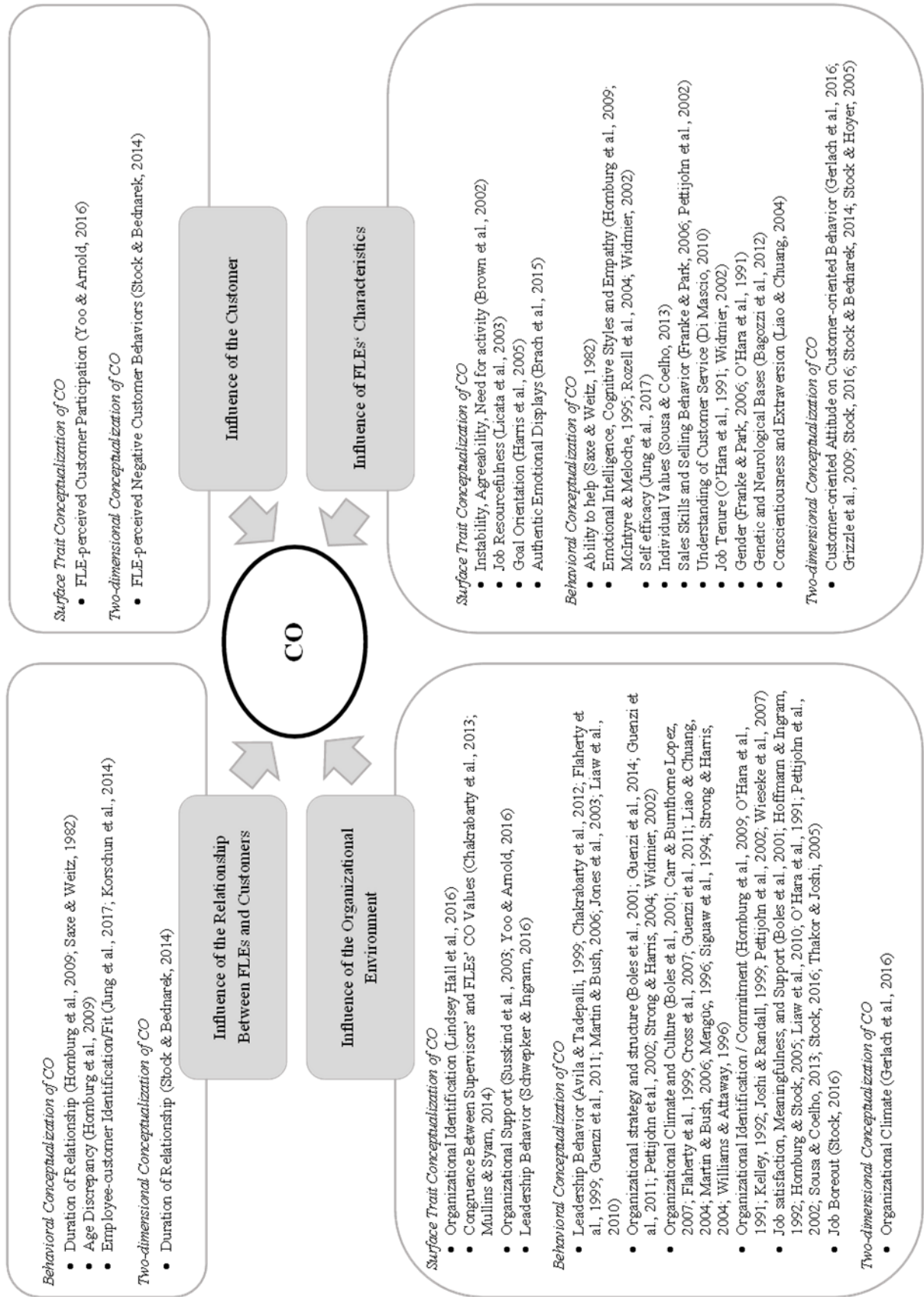
review focuses on CO as an individual-level construct and thus on the literature on factors which influence the CO of FLEs. The review of the existing literature reveals that research on CO as an individual-level construct can be divided into two conceptualizations (Korschun, Bhattacharya, and Swain 2014; Zablah, Franke, Brown, and Barth 2012). The first stream of research is based on a 'Surface Trait Conceptualization' of CO. Allport (1961) coined the term 'surface trait' to describe summaries of surface behaviors in contrast to specific focal behaviors. According to Mowen and Spears (1999), surface traits are contextual in that a person's disposition to act in a certain way may change in different aspects of life. They are classified as traits because they denote a lasting tendency to behave, though within particular situational contexts. Research on FLEs' CO conceptualized as a surface trait is grounded in the work of Brown et al. (2002). It takes a psychological perspective and understands FLEs' CO as a mindset, attitude, or surface trait, defined as "an employee's tendency or predisposition to meet customer needs in an on-the-job context" (p. 111). The conceptualization thus comprises a FLEs' tendency to try to meet customer needs rather than a measure of the FLEs' actual service actions or an evaluation of the FLEs' performance. This behavioral dimension is reflected in the second stream of research which is based on a 'Behavioral Conceptualization' of FLEs' CO which originates in Saxe and Weitz (1982)'s work. The conceptualization understands FLEs' CO as a behavioral phenomenon defined as "the practice of the marketing concept at the level of the individual salesperson and customer (Saxe and Weitz 1982, p. 343). It is conceptualized as a set of FLE-behaviors aimed at satisfying customer needs and engendering customer satisfaction (Zablah et al. 2012). Moreover, recent research (e.g., Gerlach, Rödiger, Stock and Zacharias 2016; Stock and Bednarek 2014) has combined both conceptualizations into a two-dimensional conceptualization which distinguishes between customer-oriented attitude and customer-oriented behavior as independent

constructs. In the following, the results of the literature review are structured along these conceptualizations of CO.

### **3.2.2 Areas of Antecedents of FLEs' CO**

The literature review reveals that the factors which influence FLEs' CO can be structured into four broad categories. First, influences on FLEs' CO that stem from the organizational environment. Research has shown that a firm's environment can significantly affect the job attitudes and job outcomes of FLEs (e.g., Singh 1993). This paper understands "influence of the organizational environment on FLEs' CO" as the influence of the organization in which FLEs are working, such as firm culture, supervisor behavior, or FLE-perceptions that stem from or are in connection to their work environment. Second, due to the FLEs' direct customer contact, their idiosyncratic characteristics exert an influence on their CO. In the category "influence of FLEs' characteristics on FLEs' CO", this paper subsumes FLE characteristics such as demographics, personality traits, attitudes, and behaviors which shape their CO. Third, the relationship between FLEs and customers influences the extent to which FLEs display CO; such influences are subsumed in the category "influence of the relationship between FLEs and customers on FLEs' CO". Fourth, given that FLEs interact closely with customers who depict a central interaction source for FLEs (Yoo and Arnold 2016), the customer itself exerts an influence on FLEs' CO. Research on the influence of the customer is subsumed in the category "influence of the customer on FLEs' CO". Figure 8 displays an overview of the influencing factors on FLEs' CO, structured by conceptualization and respective category. The results of the literature on each of the influencing factors are outlined in the following section.

Figure 8. Antecedents of Frontline Employees' Customer Orientation.



### 3.3 Results

#### 3.3.1 The Influence of the Organizational Environment on FLEs' CO

##### 3.3.1.1 Behavioral Conceptualization

*Leadership behavior.* Jones et al. (2003) examine the influence of FLEs' supervising managers on FLEs' CO. The authors show the positive influence of FLEs' managers' **organizational commitment**, i.e. the "strength of an individual's identification with and involvement in a particular organization" (Mowday, Steers, and Porter 1979, p. 226) on FLEs' CO. They argue that managers who display a high organizational commitment provide a service quality leadership and the needed resources which consequently enhance FLEs' CO.

Using manager-salesperson dyads, Martin and Bush (2006) investigate the influence of supervisors' **leadership style** on FLEs' CO. More specifically, the authors show that FLEs who are led by a transformational leadership style display higher CO. In a related study, Liaw, Chi, and Chuang (2010) confirm that transformational leadership not only directly increases FLEs' CO, but also increases employee-perceived supervisor support which in turn increases FLEs' CO. Also, Avila and Tadepalli (1999) examine the influence of supervisory behavior on FLEs' CO. They show that achievement-oriented supervisory behavior, i.e. behavior such as the setting of high goals and performance standards as well as emphasizing goal attainment and encouraging continuous improvement from subordinates (House and Mitchell 1974; Kohli 1985), positively influence FLEs' CO. On the other hand, arbitrary and punitive supervisory behavior, as well as contingent approving supervisory behavior negatively influence FLEs' CO. Arbitrary and punitive managers are autocratic, insist on the work approaches they favor, and try to increase performance through punishment (Schriesheim, House, and Kerr 1976).

Managers characterized by contingent approving behavior reward FLEs' effective effort and performance (Fulk and Wedler 1982). FLEs thus realize that they will be assessed based on meeting performance targets and put an emphasis on short-term goals which result in lower CO. Chakrabarty, Brown, and Widing (2012) show that if FLEs' managers display continuous emphasis to employees regarding the need for "ongoing tracking and responding to market developments" (Jaworski and Kohli 1993, p. 63), FLEs display higher CO.

A set of studies investigate how the clarity or ambiguity of roles that organizations assign to their FLEs influence FLEs' CO. Guenzi, de Luca, and Troilo (2011) find that FLEs' functional **role clarity**, i.e. "the extent to which the roles, goals, and responsibilities of the marketing and sales units are respectively clearly defined" (p. 274) positively influences FLEs' CO. Similarly, Flaherty, Dahlstrom, and Skinner (1999) show that FLEs who experience role conflicts or role ambiguity display lower CO.

*Organizational strategy and structure.* Widmier (2002) addresses the impact of **top level management** on FLEs' CO by investigating the direct effect of **incentives** on customer-oriented behaviors. The author investigates the influence of 'customer satisfaction incentives', i.e. rewards for the improvement of customer satisfaction, and 'sales-based incentives', i.e. rewards directed towards the sales volume a FLE is able to generate, on FLEs' CO. Results show that customer satisfaction incentives increase the CO of FLEs whereas sales-based incentives impede it. The author further examines the moderating role of cognitive and emotional empathy and show that cognitive empathy lowers; and emotional empathy increases the extent to which customer satisfaction incentives lead to higher levels of CO. Moreover, cognitive as well as emotional empathy decreases the negative effect of sales-based incentives on CO.

Strong and Harris (2004) examine the influence of **organizational tactics** on FLEs' CO. They show that the use of relational tactics, understood as "tactics which aim to achieve long-term reciprocal customer alliances" (p. 185), positively influences FLEs' CO. The authors furthermore show that the CO of FLEs who receive customer-focused training is higher compared to lowly trained employees, a finding which is supported by Pettijohn, Pettijohn, and Taylor (2002). Furthermore, Strong and Harris (2004) show that companies that use behavior-based systems, in which FLEs are compensated and evaluated by criteria such as commitment, friendliness, and/or the ability to solve customer problems (Hartline and Ferrell 1996), positively influence the CO of their FLEs. The authors furthermore show the positive influence of firms' procedural tactics on FLEs' CO, such that the implementation of a firms' customer focus strategy, as well as customer care and visiting procedures, have a positive impact on FLEs' CO.

Guenzi et al. (2011) examine the influence of **structure, strategy, and managerial processes** on FLEs' CO. In their study, the authors investigate the influence of an organization's sales force type, i.e. the degree of use of direct vs. independent salespeople, on FLEs' CO. Results show that a higher degree of use of direct salespeople positively influences FLEs' CO. This is because -- in comparison to independent salespeople -- such employees are less frequently paid on straight commission and thus are less likely to adopt hard-selling techniques which are more short-term focused and therefore less customer-oriented. The authors further find that a firm's long-term strategic orientation positively influences FLEs' CO. The results furthermore show that a high level of the sales department's influence over market-related decisions positively influence FLEs' CO, since this increases FLEs' job autonomy and empowerment which positively influence CO (e.g., Martin and Bush 2006). Furthermore, the authors show the positive influence of the use of interaction mechanisms between marketing and sales unit on



FLEs' CO. Interaction mechanisms are "processes aimed at facilitating cross-functional interaction, information flow and the generation of mutual understanding between members of the organization" (Guenzi et al. 2011, p. 274f.). Such mechanisms lead to the development of abilities such as market sensing and learning (Guenzi and Troilo 2006) which lead to more customer-oriented behavior.

Guenzi, Baldauf, and Panagopoulos (2014) investigate the influence of **organizational controls** on FLEs' CO. Results show that output controls, i.e. "formal mechanisms designed to monitor and evaluate the results of an individual's behaviors" (p. 790), as well as cultural controls, i.e., "the broader values or normative patterns that guide worker behavior within an entire organization" (Jaworski 1988, p. 27), positively influence FLEs' CO.

Boles, Babin, Brashear, and Brooks (2001) examine the influence of a firm's **centralization** on FLEs' CO. Results show that centralization, i.e. "the inverse of the amount of delegation of decision-making authority throughout the organization and the extent of participation by organizational members in decision-making" (Jaworski and Kohli 1993, p. 56), negatively influence FLEs' CO. This is because being customer-oriented often requires FLEs to be flexible and make decisions without consulting authorities, which is difficult in highly centralized workplaces.

*Organizational climate and culture.* Martin and Bush (2006) investigate the influence of **psychological climate and empowerment** on FLEs' CO. Psychological climate refers to an "enduring perceptual phenomenon which is widely shared by the members of a given organizational unit" (Koys and DeCotiis 1991, p. 266). The authors show that the more FLEs perceive a positive psychological climate, the higher their CO. The authors furthermore show that empowered FLEs display a higher CO, as they are able to respond more quickly to customer

needs. This finding is supported by Strong and Harris (2004) and Liao and Chuang (2004). Liao and Chuang (2004) investigate antecedents of FLEs' service performance, defined as "their behaviors of serving and helping customers" (p. 42). They find that a positive service climate positively influence FLEs' service performance, a finding which is supported by Kelley (1992).

In a B2B-setting, Williams and Attaway (1996) examine the influence of the **organizational culture** on FLEs' CO. A supportive organizational culture is characterized by a focus on the customer perspective, employee empowerment, and sincere respect for the members of the organization, as well as the customers (Parasuraman 1985). The authors show a positive influence of the seller's firm supportive organizational culture on FLEs' CO, whereas such an influence from the buyer's firm is not significant.

Siguaw, Brown, and Widing (1994) and Mengüç (1996) show the positive influence of the firm's **market orientation** on FLEs' CO. The authors argue that the more FLEs perceive that their firm practices and rewards the implementation of the marketing concept, the greater their focus on the needs of the customers. Similarly, Guenzi et al. (2011), and Cross et al. (2007) find that a firm's customer-oriented culture, i.e. a "set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise" (Despandé, Farley, and Webster 1993, p. 27), positively influences the firm's FLEs' CO. This finding is confirmed by Boles et al. (2001) and Carr and Burnthorne Lopez (2007). Also, Flaherty et al. (1999) show the positive influence of an FLE-perceived customer value orientation of the organization on FLEs' CO, whereas a financial orientation of the firm, i.e. a dominant focus on increasing sales and profits, and a prioritization of profits over people (Beatty 1988), negatively impacts FLEs' CO.

*Organizational Identification/Commitment.* Kelley (1992), Pettijohn et al. (2002), Joshi and Randall (2011), and O'Hara, Boles, and Johnston (1991) show the positive influence of FLEs' **organizational commitment** on their CO. Similarly, Wieseke, Ullrich, Christ, and van Dick (2007) examine the influence of FLEs' **organizational identification** on their CO. Organizational identification is understood as the extent to which a person's behavior is influenced by an organization's norms, values, and characteristics, which result in the internalization of the organization's identity (Haslam et al. 2003). The authors argue that FLEs who strongly identify with their organization tend to act according to the organization's identity. Results indeed show a positive influence of FLEs' organizational identification on their CO if their respective supervisors display high CO. Also, Homburg, Wieseke, and Hoyer (2009) confirm the positive impact of employee-company identification on CO measuring FLEs' CO from the customer's point of view.

*Job satisfaction, meaningfulness, and support.* Sousa and Coelho (2013) show a positive effect of FLEs' **job satisfaction** on CO. They argue that this positive influence is due to job satisfaction being associated with positive mood, which drives people to be more helpful (Rosenhan, Salovey, and Hargis 1981). This finding is confirmed by Hoffmann and Ingram (1992), Pettijohn et al. (2002), as well as Homburg and Stock (2005) who measure CO from the customer point of view. Thakor and Joshi (2005) show the positive effect of the experienced **meaningfulness** of an activity on FLEs' CO. Results indicate that FLEs who perceive their job as meaningful, tend to be more customer-oriented. The authors furthermore show that the two moderating variables 'organizational identification' and 'pay satisfaction' strengthen the positive relationship between experienced meaningfulness and CO. Boles et al. (2001), Liaw et al. (2010), and O'Hara et al. (1991) examine the influence of a **supportive work environment**, i.e. FLE-perceptions of

support from individuals in the organization on their CO. Results show a positive impact of support from other individuals -- co-workers as well as supervisors -- on FLEs' CO.

Stock (2016) examine the influence of **job boreout** on FLEs' CO. Boreout refers to “a negative psychological state of low work-related arousal” (Stock 2015, p. 574). The author subdivided job boreout into three dimensions; job boredom, crisis of growth at work, and crisis of meaning at work. Results show that all three dimensions of job boreout negatively affect customer-oriented behaviors of FLEs. Stock (2016) furthermore investigates the moderating effect of firm-induced job autonomy and customer-induced job autonomy. Firm-induced autonomy pertains to the extent to which a firm allows their FLEs to make their own decisions about their work activities (Baillien et al. 2011), whereas customer-induced job autonomy refers to the extent to which customers allow FLEs to make their own decisions about work, such as how to provide the service. Results show that contrary to Stock (2016)'s prediction, firm-induced job autonomy strengthens the negative effect of job boredom on FLEs' CO. Results further show that firm-induced job autonomy mitigates the negative effects of crisis of meaning at work and crisis of growth on FLEs' CO. Moreover, customer-induced job autonomy mitigates the negative influence of job boredom and crisis of growth on FLEs' CO. For her analysis, Stock (2016) used data measured from the FLE point of view. In a separate analysis, the author gathered supplementary data of customer perceptions of FLEs' CO and found a high correlation between FLE-perceived and customer-perceived CO of FLEs.

### 3.3.1.2 Surface Trait Conceptualization

Following Brown et al. (2002)'s understanding of CO as a surface trait, Mullins and Syam (2014) investigate the influence of a **subjective congruence** between FLEs' perception of their supervisors' CO values and their own CO values. Results show that if FLEs perceive their managers to be more customer-oriented than themselves, they will increase their own CO to achieve congruence and vice versa. This finding is confirmed by Chakrabarty, Brown and Widing (2013)

Schwepker and Ingram (2016) show the positive influence of FLEs' supervisors' **ethical leadership**, understood as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making" (Brown et al. 2005, p. 120), on FLEs' CO.

Susskind, Kacmar, and Borchgrevink (2003) investigate the influence of **standards for service delivery**, i.e. standards that "guide, direct, and monitor the service delivery behaviors of both management and line-level employees" (p. 180), on FLEs' CO. Results show that if a company implements high standards for service delivery, mutual coworker support, i.e. "the extent to which employees believe their coworkers are willing to provide them with work-related assistance" (p. 181) increases. In turn, results show that if FLEs perceive high co-worker support, they are more likely to develop high CO.

Yoo and Arnold (2016) show the positive influence of FLEs' perceived **organizational support**, i.e. FLEs' perception that their organization aims at developing and nurturing their

growth and job satisfaction (Piercy et al. 2006) on their CO. This however is only the case if FLEs perceive high job security.

Lindsey Hall, Baker, Andrews, Hunt, and Rapp (2016) investigate the influence of FLEs' **organizational identification** on their CO. The authors argue that if FLEs strongly identify with their organization which highly values CO, they internalize the attitudes and values of the organization and develop attitudes consistent with these values. Results show that a strong organizational identification indeed positively influences FLEs' CO. This positive relationship is moderated by leader-member exchange, understood as a relationship between supervisor and FLE which is composed of mutual appreciation, trust, and freedom of action (DeConinck 2011). Results show that a respectful and trusting relationship between supervisors and their subordinates enhances the positive effect of organizational identification on CO.

### 3.3.1.3 Two-dimensional Conceptualization

Gerlach et al. (2016) conceptualize FLEs' CO as two-dimensional and distinguish between customer-oriented attitude and customer-oriented behavior as independent constructs. Customer-oriented attitude refers to FLEs' affect, either for or against customers (Stock and Hoyer 2005). The authors' understanding of customer-oriented behavior follows Saxe and Weitz (1982) and refers to the degree to which FLEs display behaviors directed at helping customers to make decisions that satisfy their individual needs. The authors investigate the influence of an **organization's climate** on FLEs' CO. Results show that a climate characterized by high team-member exchange, i.e. a positive perception of the quality and effectiveness of FLEs' relationships with coworkers, leads to a higher customer-oriented attitude of a FLE. Moreover, an age-inclusive climate, i.e. a FLE's perception that employees of all ages are valued in the

organization, positively influences FLEs' customer-oriented attitude. Results further show that supervisor support positively influences customer-oriented behavior.

### 3.3.2 The Influence of FLEs' Characteristics on FLEs' CO

#### 3.3.2.1 Behavioral Conceptualization

*Abilities and skills.* Saxe and Weitz (1982) were among the first to study influencing factors on FLEs' CO by introducing the term 'salesperson customer orientation'. They show that FLEs with a high **ability to help**, which is the "ability of salespeople to help their customers satisfy their needs" (p. 348), display higher CO compared to FLEs with a low ability to help. In a correlational study, Rozell, Pettijohn, and Parker (2004) examine the association of FLEs' **emotional intelligence** with their respective CO. They define emotional intelligence as "the capacity to process emotional information accurately and efficiently, including that information relevant to the recognition, construction, and regulation of emotion in oneself and others" (Mayer and Salovey 1995, p. 197). Their results indicate a positive association of FLEs' emotional intelligence with their respective CO.

Pettijohn et al. (2002) show that FLEs' **sales skills**, defined as "the salesperson's capabilities regarding his or her sales presentations, need identification, suggestive selling, product knowledge, time allocations, and orientation toward assisting the customer" (p. 747), positively influence their CO. In their meta-analysis, Franke and Park (2006) investigate the relationship between FLEs' adaptive selling, i.e. "the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the

nature of the selling situation” (Weitz, Sujan, and Sujan 1986, p. 175) and CO. Results show that FLEs who engage in **adaptive selling** behavior are more likely to also display higher CO.

*Cognitions, attitudes and values.* McIntyre and Meloche (1995) examine the influences of FLEs' different **cognitive styles** on their customer-oriented behavior. The authors distinguish four different cognitive styles, i.e. sensory-thinker, intuitive-thinker, sensory-feeler, and intuitive-feeler. Results show that sensory-thinkers, who are characterized by an emphasis on certainty and a rather impersonal perspective, present significantly lower levels of CO than the other three types of cognitive styles. Contrary to their predictions, the authors find no differences between the other three cognitive styles. Widmier (2002) investigates the influence of FLEs' **cognitive and emotional empathy** on their CO. Results show that cognitive as well as emotional empathy have direct positive effects on FLEs' CO. Furthermore, Jung, Brown, and Zablah (2017) show that if FLEs display high **self-efficacy**, i.e., FLEs' beliefs to possess the capabilities necessary to help customers (Stajkovic 2006), positively influence FLEs' CO.

Homburg, Wieseke, and Bornemann (2009)'s article is among the first to study both the influence of FLEs' inclination to act customer-oriented and FLEs' actual ability to act customer-oriented. They argue that in order to implement the marketing concept, and i.e. act in a customer-oriented manner, “frontline employees must be able to form accurate perceptions of an individual customer's hierarchy of needs – that is, they need to develop a high degree of “customer need knowledge” (CNK)” (p. 64). **CNK** is defined as the “accurate perceptions of an individual customer's hierarchy of needs” (Homburg et al. 2009, p. 64). The construct is measured using a dual-perspective approach (Blackman and Funder 1998) and is calculated based on responses of both customers and employees, which are gathered independently from one another. Hence, instead of using self-rated subjective FLE-measures of their own CO, it serves as an objective



measure for FLEs' ability to act in a customer-oriented manner. The measure is furthermore able to trace FLEs' CO towards each customer given the dual nature of the measure. Instead of asking FLEs about their CO towards all their customers in general, the construct measures individual customer-employee dyads. Homburg et al. (2009) study antecedents of CNK and show that employees who are characterized by a high inclination to act in a customer-oriented manner and possess high cognitive empathy display higher CNK. The positive influence of employees' inclination to act in a customer-oriented way on CNK can further be enhanced by employee training of customer-oriented interaction behavior.

Sousa and Coelho (2013) examine the influence of FLEs' **individual values** on FLEs' customer-oriented behavior. The authors apply Schwartz (1992)'s model of four higher-order value domains consisting of two bipolar dimensions. FLEs high in 'resultant conservation' put an emphasis on conservation values and focus on collective interests, sharing, and keeping relationships with others (Yilmaz and Hunt 2001). The authors show that resultant conservation positively influences FLEs' CO if employees simultaneously display high job satisfaction. However, the influence of resultant conservation on CO is negative for FLEs who have high autonomy in their jobs. FLEs high in 'resultant self-enhancement' value personal success, social status, and control over people and resources. The authors show that FLEs high in resultant self-enhancement display lower CO. This is because such values induce the use of pressure and manipulative tactics and oppose listening carefully to customers. This main effect is strengthened for FLEs with high job autonomy. However, for FLEs' who display high job satisfaction the influence of resultant self-enhancement is reversed and thus positive.

Di Mascio (2010) examines the influence of FLEs' different **understandings of customer service** on FLEs' CO. The author distinguishes between the service understandings

'Means Service Model' and 'Win-Win Service Model'. The former understands customer service as "a means to accomplishing immediate objectives, such as sales quotas" (di Mascio 2010, p. 67), whereas the latter understands customer service as "the formation of mutually beneficial relationships with customers through problem solving" (di Mascio 2010, p. 67). Results show that FLEs who understand customer service as the Means Service Model display less CO. This holds true only for one of two samples of di Mascio (2010)'s study, as results were confirmed for salespersons but not for concierges. Results further show that FLEs who understand customer service as a 'Win-Win Service Model' in both samples display higher levels of CO.

Liao and Chuang (2004) find a positive influence of the personality traits **conscientiousness** and **extraversion** on FLEs' CO. They understand conscientious individuals as dependable, responsible, organized, hardworking, and achievement-oriented; and extraverted individuals as sociable, assertive, talkative, and active (Barrick and Mount 1991).

*Personal factors.* O'Hara et al. (1991) investigate FLEs' CO in two samples, namely FLEs of an advertising firm and FLEs working as exhibitors at an industry trade show. For the industrial context, they find that the higher the **job tenure** of FLEs, the lower their CO. The authors explain this finding with the possibility that more experienced salespeople become complacent in their position and thus do not focus on meeting customer needs as compared to newer salespeople. This result is also found by Widmier (2002). In the advertising context, O'Hara et al. (1991) show that **female** FLEs display higher CO compared to their male counterparts. The authors argue that this is because women focus more on the interpersonal and social components of their jobs than men do (Bartol and Butterfield 1976). The finding that female FLEs display higher CO is also supported by Franke and Park (2006)'s meta-analysis.

Bagozzi et al. (2012) investigate the **genetic and neurological bases** for FLEs' CO. They investigate the influence of the 7R variant of the DRD4 gene which is associated with the traits of novelty seeking, risk taking, and behavioral disinhibition. The results indicate that FLEs with the 7R variant score higher on CO than those without the 7R variant. Furthermore, the authors investigate the influence of the A1 variant of the DRD2 gene, which is associated with antisocial traits and seeking immediate gratification (Dreber et al. 2009). The authors argue that FLEs with the A1 variant should display a more selling-oriented behavior and lower CO. Results support this assumption and show that FLEs with the A1 variant display higher sales orientation than those without the A1 variant.

### 3.3.2.2 Surface Trait Conceptualization

In their seminal article on FLEs' CO conceptualized as a surface trait, Brown et al. (2002) show that the basic personality trait **instability** negatively influences FLEs' CO. Furthermore, they show that **agreeability** and **need for activity** positively influences FLEs' CO. Licata, Mowen, Harris, and Brown (2003) examine the influence of the surface trait '**job resourcefulness**' (JR) on CO, defined as an "enduring disposition to garner scarce resources and overcome obstacles in pursuit of job-related goals" (p. 256). The results show differences among service contexts, as results show a positive influence of JR on CO in the banking and health sector, whereas for the restaurant sector the influence of JR on CO is negative.

Harris, Mowen, and Brown (2005) examine the influence of FLEs' **goal orientations** on their respective CO. They understand goal orientations as "relatively stable traits" (p. 33) and distinguish between learning-orientation and performance-orientation. They show that highly learning-oriented salespeople, i.e. FLEs' who focus their effort on customer needs, display higher

CO, whereas performance-oriented salespeople, i.e. FLEs' who focus on short-term success, display higher selling orientation.

Brach et al. (2015) investigate the link between **FLEs' self-assessment of their CO and the customer's perception of FLEs' CO** by analyzing both customers and FLEs using dyadic data. They analyze the mediating role of authentic emotional displays, understood as FLEs' acting sincerely and expressing genuine emotions when interacting with customers. Results show that the higher FLEs self-assess their CO, the more their customers perceive them to be customer-oriented. This link can partially be explained by the mediating role of FLEs' authentic emotional displays. If FLEs perceive themselves as being customer-oriented, they tend to display authentic, customer-oriented emotions such as friendliness in their interactions with customers, which consequently positively influence customer perceptions of FLEs' CO.

### **3.3.2.3 Two-dimensional Conceptualization**

Stock and Hoyer (2005) conceptualize CO as a two-dimensional concept and distinguish between customer-oriented attitudes and customer-oriented behaviors. More specifically, they investigate the **effect of customer-oriented attitudes on customer-oriented behaviors** and the variables moderating this link. The authors measure FLEs' customer-oriented attitude from the FLEs' point of view and asked the customers about their perception of FLEs' customer-oriented behavior. The authors show that FLEs who perceive solid contact and a stable relationship with customers as important for themselves and the company's performance are more likely to behave in a customer-oriented manner. I.e. a FLE's customer-oriented attitude positively affects customer-oriented behavior as perceived by customers. Furthermore, the authors reveal factors moderating this positive link. They show that FLEs' empathy, expertise, and reliability enhance

this relationship. On the contrary, restriction in job autonomy, i.e. the extent to which FLEs feel they are unable to make own decisions and develop solutions for their customers, weakens it. Also, Stock and Bednarek (2014), Gerlach et al. (2016), and Stock (2016) confirm that FLEs' customer-oriented attitude positively affects FLEs' customer-oriented behavior. Grizzle et al. (2009) find no direct effect of customer-oriented attitude on customer-oriented behavior. However, they reveal that if the unit in which FLEs work displays a high customer-oriented climate, FLEs' customer-oriented attitude positively influences their customer-oriented behavior.

### **3.3.3 The Influence of the Relationship Between FLEs and Customers on FLEs' CO**

#### **3.3.3.1 Behavioral Conceptualization**

Saxe and Weitz (1982) examine the influence of the **relationship** between FLEs and customers, that is "the degree to which the customer-salesperson relationship is long-term and cooperative" (p. 348) and show that FLEs who indicate a long-term and cooperative relationship with their customers display higher CO. In their study on CNK, Homburg et al. (2009) support this finding and show that the longer the customer-employee dyad persists, the higher the FLEs' CNK. Furthermore, results show that the greater the employee-customer age discrepancy, the lower the CNK of FLEs.

Korschun et al. (2014) investigate the influence of **employee-customer identification** on FLEs' CO. Employee-customer identification is defined as the "extent to which an employee senses a sameness or oneness with the organization's customers" (p. 22). The authors argue that if FLEs perceive customers as being part of their in-group, they allocate more resources to them leading to a stronger desire to fulfill customer needs and consequently to higher CO. Results show that high employee-customer identification indeed positively affects FLEs' CO. In a related

study, Jung et al. (2017) show the positive influence of FLE-customer fit, i.e., the extent to which FLEs' interests match those of customers, on FLEs' CO which is further enhanced when FLEs' self-efficacy is low.

### 3.3.3.2 Two-dimensional Conceptualization

Contrary to the results of Saxe and Weitz (1982) and Homburg et al. (2009), Stock and Bednarek (2014) show that customers in longer relationships with their FLEs report lower evaluation of their FLEs' customer-oriented behavior.

### 3.3.4 The Influence of the Customer on FLEs' CO

#### 3.3.4.1 Surface Trait Conceptualization

Yoo und Arnold (2016) investigate the influence of **FLE-perceived customer participation** on their CO. Perceived customer participation is defined as "a frontline employee's subjective evaluation of the extent to which customers contribute valuable resources in the form of time and/or effort, information, and coproduction for product and service consumption" (p. 105). The results show that FLE-perceived customer participation positively influences FLEs' CO. This effect, however, is moderated by perceived crowding. Results show that if FLEs anticipate a large number of dyadic interactions with customers in a crowded environment, the positive effect of customer participation on CO is mitigated.

#### 3.3.4.2 Two-dimensional Conceptualization

Stock and Bednarek (2014) show that if FLEs perceive that customers express **negative behaviors** such as hostility or complaining about the FLE, their customer-oriented attitude is

lower due to FLEs' emotional exhaustion. This negative effect is buffered if FLEs perceive that they receive cognitive and emotional support from customers. FLEs' customer-oriented attitude is furthermore positively influenced by FLE-perceived **emotional and cognitive support** from customers. Moreover, the authors show that **older** customers report lower evaluation of FLEs' customer-oriented behavior.

## 3.4 Discussion

### 3.4.1 Theoretical Implications

Building on an extensive literature review, this study provides a comprehensive overview of the antecedents of FLEs' CO in service environments. The study contributes to the literature on CO (Brown et al. 2002; Saxe and Weitz 1982) in several ways. First, the study structures the literature according to the conceptualizations of CO, i.e. the surface trait conceptualization (Brown et al. 2002), the behavioral conceptualization (Saxe and Weitz 1982), and the two-dimensional conceptualization which combines both views (Stock and Hoyer 2005). As can be seen in Table 1, most studies have conceptualized CO as FLE-behavior, whereas fewer studies have conceptualized it as a surface trait, which conceptualizes CO as a customer-oriented mind-set or attitude. While there is still debate over whether CO is best conceptualized as a surface trait or a set of behaviors (Korschun et al. 2014), only four studies have conceptualized CO as two-dimensional, and investigate the relationship between customer-oriented behavior and attitude. It however is fruitful to investigate both dimensions of CO simultaneously given that research (e.g., Stock and Hoyer 2005) shows the mutual influence of the two dimensions on each other. Since to date only a few studies exist that conceptualize CO as two-dimensional, more research is needed which examine both dimensions simultaneously. More specifically, future research could

Table 1. Existing Literature on Antecedents of Frontline Employees' Customer Orientation.

Study	Area of Influence on FLEs' CO				Conceptualization			Measurement	
	Company Environment	FLE Customer Relationship	Customer	Customer	Surface trait	Behavioral	FLE Perspective	Customer Perspective	
Avila & Tadepalli (1999)	X					X		X	
Boles et al. (2001)	X					X		X	
Carr & Burnthorne Lopez (2007)	X					X		X	
Chakrabarty et al. (2013)	X				X			X	
Chakrabarty et al. (2012)	X					X		X	
Cross et al. (2007)	X					X		X	
Flaherty et al. (1999)	X					X		X	
Gerlach et al. (2016)	X				X			X	
Guenzi et al. (2014)	X					X		X	
Guenzi et al. (2011)	X					X		X	
Hoffman & Ingram (1992)	X					X		X	
Homburg & Stock (2005)	X					X			X
Homburg et al. (2009)	X					X			X
Jones et al. (2003)	X					X		X	
Joshi & Randall (2011)	X					X		X	
Kelley (1992)	X					X		X	
Liao & Chuang (2004)	X			X		X		X	
Lindsey Hall et al. (2016)	X				X			X	
Martin & Bush (2006)	X					X		X	
Mengüç (1996)	X					X		X	
Mullins & Syam (2014)	X				X			X	
O'Hara et al. (1991)	X			X		X		X	
Pettijohn et al. (2002)	X			X		X		X	
Schwepker & Ingram (2016)	X				X			X	
Siguaw et al. (1994)	X					X		X	



Study	Area of Influence on FLEs' CO				Conceptualization			Measurement	
	Company Environment	FLE	FLE-Customer Relationship		Surface trait	Behavioral	FLE Perspective	Customer Perspective	
			FLE-Customer Relationship	Customer					
Sousa & Coelho (2013)	X	X				X		X	
Stock (2016)	X					X		X	
Strong & Harris (2004)	X					X		X	
Susskind et al. (2003)	X			X				X	
Thakor & Joshi (2005)	X					X		X	
Widmier (2002)	X	X				X		X	
Wieseke et al. (2007)	X					X		X	
Williams & Attaway (1996)	X					X		X	
Yoo & Arnold (2016)	X		X		X			X	
Bagozzi et al. (2012)		X			X			X	
Brach et al. (2015)		X			X			X	
Brown et al. (2002)		X			X			X	
Di Mascio (2010)		X				X		X	
Franke & Park (2006)		X				X		X	
Grizzle et al. (2009)		X			X			X	
Harris et al. (2005)		X			X			X	
Homburg et al. (2009)		X	X			X		X	
Jung et al. (2017)		X	X			X		X	
Licata et al. (2003)		X			X			X	
McIntyre & Meloche (1995)		X				X		X	
Rozell et al. (2004)		X				X		X	
Saxe & Weitz (1982)		X	X			X		X	
Stock & Bednarek (2014)		X	X	X		X		X	
Stock & Hoyer (2005)		X		X		X		X	
Korschun et al. (2014)			X			X		X	

Note: Studies are ordered alphabetically according to the main focus of the study.

examine whether antecedents which were shown to influence CO when conceptualized as a surface trait also exert an influence on FLEs' CO when conceptualized as a behavioral construct and vice versa. Moreover, a closer examination is needed on how these antecedents interact to reveal under which conditions a customer-oriented attitude actually spills over to customer-oriented behavior.

Second, this study provides an extensive overview of the antecedents of FLEs' CO. The literature review reveals that the existing research can be categorized into four main areas of influences: First, influences that stem from the organizational environment; second, the influence of FLEs' characteristics; third, influences that stem from the FLE-customer relationship; and fourth, the influence of the customer. The essence of the results of these four areas can be summarized as follows:

A large amount of literature examines influences on FLEs' CO resulting from the organizational environment. Conceptualizing CO as a behavioral construct, one stream of research investigates the influence of leadership behavior on FLEs' CO (e.g., Chakrabarty et al. 2012). Furthermore, another stream of research investigates the influence of organizational strategy and structure (e.g., Strong and Harris 2004). Other authors investigate the influence of organizational climate and culture (e.g., Liao and Chuang 2004), organizational identification and commitment (e.g., Homburg et al. 2009), as well as job satisfaction, meaningfulness, and support (e.g., Sousa and Coelho 2013). Results of the literature which conceptualize CO as a surface trait show the influence of organizational identification (e.g., Lindsey Hall et al. 2016), congruence between supervisors' and FLEs' CO values (Mullins and Syam 2014), as well as organizational support (Yoo and Arnold 2016). The only study investigating the influence of the organizational

environment that conceptualizes CO as a two-dimensional construct shows the influence of the organizational climate (Gerlach et al. 2016).

The second main research stream investigates the influence of FLE-characteristics on FLEs' CO. Studies which conceptualize CO as a behavioral construct reveal the influence of FLEs' skills (e.g., Pettijohn et al. 2002), cognitive styles and empathy (e.g., Widmier 2002), individual values and understandings (e.g., Sousa and Coelho 2013), as well as conscientiousness and extraversion (Liao and Chuang 2004). Another stream of research investigates personal factors such as gender (e.g., Franke and Park 2006), job tenure (e.g., O'Hara et al. 1991), as well as genetic and neurological bases of CO (Bagozzi et al. 2012). Studies that conceptualize CO as a surface trait investigate the influence of FLEs' instability, agreeability, need for activity (Brown et al. 2002), JR (Licata et al. 2003), and goal orientation (Harris et al. 2005). The literature on CO as a two-dimensional conceptualization shows the influence of FLEs' customer-oriented attitude on customer-oriented behavior (e.g., Gerlach et al. 2016).

Research on the influence of the FLE-customer relationship on CO is sparse. To date, literature which conceptualizes CO as a behavioral construct investigates the influence of the duration of relationship (e.g., Saxe and Weitz 1982), age discrepancy (Homburg et al. 2009), and employee-customer identification (Korschun et al. 2014). Employing the two-dimensional conceptualization, Stock and Bednarek (2014) also investigate the influence of the duration of the relationship.

Only two studies investigate the influence of the customer on FLEs' CO. Building on the surface-trait conceptualization, Yoo and Arnold (2016) investigate the influence of FLE-perceived customer participation. Employing the two-dimensional conceptualization, Stock and Bednarek (2014) investigate the influence of FLE-perceived negative customer behaviors on CO.

### 3.4.2 Managerial Implications

This literature review gives guidance to managers on how to increase the CO of their FLEs. More specifically, the overview shows the different areas of starting points for managers if they intend to increase their FLEs' CO.

Regarding the organizational environment, managers should ensure that they provide a customer-oriented culture and climate in their firm. Moreover, organizations should foster the use of transformational leadership styles among their managers and assess the performance of FLEs based on criteria such as friendliness and ability to solve customer problems. If firms intend to implement reward systems and incentives, they should avoid rewarding their FLEs using sales-based incentives but use incentives which are based on customer satisfaction measures. Managers should further ensure that they themselves display high CO, as their subordinates will then strive to achieve congruence by displaying high customer-oriented behavior. It is furthermore fruitful for organizations to implement measures which enhance FLEs' identification and commitment with the firm such as establishing a challenging and supportive work environment, as well as the implementation of processes aimed at the generation of mutual understanding between FLEs and managers. Moreover managers should empower their employees and give them the freedom to respond to customer needs promptly and autonomously. Finally, managers should ensure that their FLEs are satisfied with their jobs and that the roles they assign to their employees are clearly defined.

Managers can take advantage of certain employee characteristics which were shown to increase CO. More specifically, managers should hire FLEs who are characterized by a high need for activity, ability to help, or emotional intelligence. In the recruiting process, managers should furthermore screen applicants for their conscientiousness and extraversion. When matching dyads

of FLEs and customers, managers should strive to maintain high FLE-customer identification. Managers should further monitor the CO of their employees who are in long-term relationships with their clients, since depending on the industry a longer relationship between FLE and customer can result in higher or lower CO.

### **3.4.3 Need for Future Research**

As outlined above and visualized in Table 1, the majority of studies has focused on investigating antecedents of CO that stem from the company environment and the influence of FLEs' characteristics. Only a few studies deal with the influence of the FLE-customer relationship which concentrate on directly observable characteristics such as duration of the relationship (e.g., Stock and Bednarek 2014) or the age discrepancy between the involved FLE and customer (Homburg et al. 2009). One exception is the study by Korschun et al. (2014) which examines the influence of FLE-customer identification. More studies are needed to clarify how mutual understandings or attitudes of FLEs and customers influence how they work together. For example, research in social psychology literature shows interpersonal relationship norms as an important factor for social interactions, which strongly shape a relationship in social contexts (Aggarwal 2004; Clark and Mills 1979). Future research could examine how such social norms exert an influence on FLEs' CO. Moreover, future research could examine how similarities or dissimilarities between FLEs and customers influence FLEs' CO. For instance, Homburg et al. (2009) show that the more FLE and customer are similar in age, the higher the FLE's CNK. This finding however could not be replicated by Gerlach et al. (2016) in their study on the influence of customer-oriented attitude on customer-oriented behavior. Future research could clarify this relationship and furthermore examine constructs beyond age difference such as if and how FLE-

customer similarities or dissimilarities regarding their personality or attitudes influence FLEs' CO.

Moreover, only two studies took the customer's influence on FLEs' CO into consideration. This is surprising given that customers are a valuable interaction source for FLEs and display a high heterogeneity regarding their individual characteristics, which should enhance or inhibit FLEs' CO (Yoo and Arnold 2016). Moreover, the studies on the customer's influence on FLEs' CO to date have only investigated subjective self-reports of FLEs about the perceived influence of their customers' behavior on their customer-oriented attitude (Stock and Bednarek 2014; Yoo and Arnold 2016). The influence of customer characteristics such as their personality traits or knowledge and skills has been neglected completely. This is surprising, given the strong influence of personality traits on how people interact (e.g., McCrae and John 1992). Research thus could examine how customers' personality traits such as their conscientiousness or neuroticism influence FLEs' CO. Moreover, especially in professional services contexts customers' knowledge and skills should influence FLEs' CO. For example, in the banking sector, interactions between bank advisors and their customers should be shaped by the level of their customers' financial literacy, experience, or attitudes such as risk aversion. Future research could thus examine the influences of customers' knowledge and skills on FLEs' CO. Regarding the influence of the behavior of customers, future research could further examine how different levels of customer coproduction influence FLEs' CO. For instance, depending on how responsible customers perceive to be for the outcome of a service – thus displaying higher or lower coproduction behavior – FLEs' ability and motivation to act in a customer-oriented manner could be influenced.

Furthermore, the literature review reveals that the influence of cultural values on FLEs' CO is neglected in the literature. However, research shows that cultural values shape the interaction between identities (Yoo et al. 2011). Apart from differences between cultures on a country level (Hofstede 2001), research shows that a high diversity of culture can be found among the members of any nation (Yoo et al. 2011). Hence it could be fruitful to investigate how cultural differences on the individual level influence FLEs' CO. Research could not only investigate how individual cultural values of FLEs shape their CO, but also how the cultural distance between FLE and customer and cultural values of the customers themselves influence FLEs' ability to act in a customer-oriented way.

The literature review further shows that FLEs' CO and the effects of its antecedents are context specific. For instance, Licata et al. (2003) find differences in FLEs' CO and its antecedents in the banking and the health care sector versus the restaurant sector. Similarly, O'Hara et al. (1991) find differences in the advertising industry versus the industrial sector. The same applies to Mascio (2010)'s study. Future research is therefore needed to clarify that findings in the literature can be replicated in different contexts and industries.

Moreover, the majority of studies have measured FLEs' CO as a self-reported measure from the employee perspective (see Table 1). Despite the results of Stock (2016), which show a high correlation between FLE-reported CO and customer-perceived CO, only measuring CO from the subjective FLE point of view is particularly problematic for self-reported customer-oriented behavior. If FLEs self-report a predisposition or attitude to be customer-oriented, or attribute high customer-oriented behavior to themselves, this does not mean that this is firstly, really the case and secondly, if customers really experience it that way. Exceptions are the studies by Brach et al. (2015), Homburg et al. (2009), Homburg and Stock (2005), Stock and Hoyer

(2005), and Stock and Bednarek (2014) in which customers assess the CO of their FLEs. More research on FLEs' CO as perceived by the customers is needed to ensure that it actually spills over from FLEs to customers and that FLEs indeed show an actual ability to act in a customer-oriented manner. One exception is the study by Homburg et al. (2009) who investigate the construct of CNK. CNK can be seen as an objective measure of FLEs' ability to act customer-oriented, given that it is measured independently using matched dyadic customer and FLE data. To date, research on CNK has shown the influence of employee characteristics and relational aspects between FLEs and customers. Hence further research is needed which addresses the influence of the company environment on CNK. Moreover, and even more urgent given the few studies on the influence of customers on FLEs' CO, research on the influence of the customer on FLEs' CNK is needed.



### 3.5 References

- Aggarwal, P. (2004). The Effects of Brand Relationship Norms on Consumer Attitudes and Behavior. *Journal of Consumer Research*, 31(1), 87–101. doi: 10.1086/383426
- Allport, G. W. (1961). *Pattern and Growth in Personality*. New York: Holt, Rinehart & Winston.
- Avila, R. A., & Tadepalli, R. (1999). Supervisory Antecedents to the Customer Orientation and Job Satisfaction of Salespeople: An Empirical Investigation. *The Journal of Marketing Management*, 9(2), 59-72.
- Bagozzi, R. P., Verbeke, Willem J. M. I., van den Berg, Wouter E., Rietdijk, Wim J. R., Dietvorst, R. C., & Worm, L. (2012). Genetic and neurological foundations of customer orientation: field and experimental evidence. *Journal of the Academy of Marketing Science*, 40(5), 639–658. doi: 10.1007/s11747-011-0271-4
- Baillien, E., Cuyper, N. de, & Witte, H. de. (2011). Job autonomy and workload as antecedents of workplace bullying: A two-wave test of Karasek's Job Demand Control Model for targets and perpetrators. *Journal of Occupational and Organizational Psychology*, 84(1), 191–208. doi: 10.1348/096317910X508371
- Barrick, M. R., & Mount, M. K. (1991). The Big Five Personality Dimensions And Job Performance: A Meta-Analysis. *Personnel Psychology*, 44(1), 1–26. doi: 10.1111/j.1744-6570.1991.tb00688.x
- Bartol, K. M., & Butterfield, D. A. (1976). Sex effects in evaluating leaders. *Journal of Applied Psychology*, 61(4), 446–454. doi: 10.5465/AMBPP.1974.17530791

- Beatty, S. E. (1988). An Exploratory Study of Organizational Values with a Focus on People Orientation. *Journal of Retailing*, 64(4), 405–425.
- Blackman, M. C., & Funder, D. C. (1998). The Effect of Information on Consensus and Accuracy in Personality Judgment. *Journal of Experimental Social Psychology*, 34(2), 164–181. doi: 10.1006/jesp.1997.1347
- Boles, J. S., Babin, B. J., Brashear, T. G., & Brooks, C. (2001). An Examination of the Relationships Between Retail Work Environments, Salesperson Selling Orientation-Customer Orientation and Job Performance. *Journal of Marketing Theory and Practice*, 9(3), 1-13. doi: 10.1080/10696679.2001.11501893
- Brach, S., Walsh, G., Hennig-Thurau, T., & Groth, M. (2015). A Dyadic Model of Customer Orientation: Mediation and Moderation Effects. *British Journal of Management*, 26(2), 292–309. doi: 10.1111/1467-8551.12049
- Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: a social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117-134. doi: 10.1016/j.obhdp.2005.03.002
- Brown, T. J., Mowen, J. C., Donavan, D. T., & Licata, J. W. (2002). The Customer Orientation of Service Workers: Personality Trait Effects on Self- and Supervisor Performance Ratings. *Journal of Marketing Research*, 39(1), 110-119. doi: 10.1509/jmkr.39.1.110.18928
- Carr, J. C., & Lopez, T. B. (2007). Examining Market Orientation as Both Culture and Conduct: Modeling The Relationships Between Market Orientation and Employee Responses. *Journal of Marketing Theory and Practice*, 15(2), 113–125. doi: 10.2753/MTP1069-6679150202

- Chakrabarty, S., Brown, G., & Widing II, R. E. (2013). Distinguishing between the Roles of Customer-Oriented Selling and Adaptive Selling in Managing Dysfunctional Conflict in Buyer-Seller Relationships. *Journal of Personal Selling and Sales Management*, 33(3), 245–260. doi: 10.2753/PSS0885-3134330301
- Chakrabarty, S., Brown, G., & Widing II, R. E. (2012). The Role of Top Management in Developing a Customer-Oriented Sales Force. *Journal of Personal Selling & Sales Management*, 32(4), 437-449. doi: 10.2753/PSS0885-3134320403
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37(1), 12–24. doi: 10.1037/0022-3514.37.1.12
- Cross, M. E., Brashear, T. G., Rigdon, E. E., & Bellenger, D. N. (2007). Customer orientation and salesperson performance. *European Journal of Marketing*, 41(7/8), 821-835. doi: 10.1108/03090560710752410
- DeConinck, J. B. (2011). The Effects of Ethical Climate on Organizational Identification, Supervisory Trust, and Turnover among Salespeople. *Journal of Business Research*, 64(6), 617-624. doi: 10.1016/j.jbusres.2010.06.014
- Deshpandé, R., Farley, J. U., & Webster, F. E. (1993). Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis. *Journal of Marketing*, 57(1), 23-27. doi: 10.2307/1252055
- Di Mascio, R. (2010). The Service Models of Frontline Employees. *Journal of Marketing*, 74(4), 63–80. doi: 10.1509/jmkg.74.4.63

- Dreber, A., Apicella, C. L., Eisenberg, D. T., Garcia, J. R., Zamore, R. S., Lum, J. K., & Campbell, B. (2009). The 7R polymorphism in the dopamine receptor D4 gene (DRD4) is associated with financial risk taking in men. *Evolution and Human Behavior*, *30*(2), 85–92. doi: 10.1016/j.evolhumbehav.2008.11.001
- Flaherty, T. B., Dahlstrom, R., & Skinner, S. J. (1999). Organizational Values and Role Stress as Determinants of Customer-Oriented Selling Performance. *Journal of Personal Selling & Sales Management*, *19*(2), 1-18. doi: 10.14257/astl.2014.57.09
- Franke, G. R., & Park, J.-E. (2006). Salesperson adaptive selling behavior and customer orientation: a meta-analysis. *Journal of Marketing Research*, *43*(4), 693. doi: 10.1509/jmkr.43.4.693
- Fulk, J., & Wendler, E. R. (1982). Dimensionality of leader—subordinate interactions: A path—goal investigation. *Organizational Behavior and Human Performance*, *30*(2), 241–264. doi: 10.1016/0030-5073(82)90220-3
- Gerlach, G. I., Rödiger, K., Stock, R. M., & Zacharias, N. A. (2016). Salespersons' empathy as a missing link in the customer orientation—loyalty chain: an investigation of drivers and age differences as a contingency. *Journal of Personal Selling & Sales Management*, *36*(3), 221-239. doi: 10.1080/08853134.2016.1205446
- Grizzle, J. W., Zablah, A. R., Brown, T. J., Mowen, J. C., & Lee, J. M. (2009). Employee customer orientation in context: How the environment moderates the influence of customer orientation on performance outcomes. *Journal of Applied Psychology*, *94*(5), 1227–1242. doi: 10.1037/a0016404

- Guenzi, P., De Luca, L. M., & Troilo, G. (2011). Organizational Drivers of Salespeople's Customer Orientation and Selling Orientation. *Journal of Personal Selling & Sales Management, 31*(3), 269-285. doi: 10.1037/a0016404
- Harris, E. G., Mowen, J. C., & Brown, T. J. (2005). Re-examining Salesperson Goal Orientations: Personality Influencers, Customer Orientation, and Work Satisfaction. *Journal of the Academy of Marketing Science, 33*(1), 19–35. doi: 10.1177/0092070304267927
- Hartline, M. D., & Ferrell, O. C. (1996). The Management of Customer-Contact Service Employees: An Empirical Investigation. *Journal of Marketing, 60*(October), 52-70. doi: 10.2307/1251901
- Haslam, S. A., Eggins, R. A., & Reynolds, K. J. (2003). The ASPIRe Model: Actualizing Social and Personal Identity Resources to enhance Organizational Outcomes. *Journal of Occupational and Organizational Psychology, 76*(1), 83–113. doi: 10.1348/096317903321208907
- Hennig-Thurau, T. (2004). Customer Orientation of Service Employees. *International Journal of Service Industry Management, 15*(5), 460–478. doi: 10.1108/09564230410564939
- Hoffman, K. D., & Ingram, T. N. (1992). Service Provider Job Satisfaction and Customer. *Journal of Services Marketing, 6*(2), 68–78. doi: 10.1108/08876049210035872
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (1st. ed.). Thousand Oaks: Sage Publ.
- Homburg, C., Müller, M., & Klarmann, M. (2011). When does salespeople's customer orientation lead to customer loyalty? The Differential Effects of Relational and Functional

Customer Orientation. *Journal of the Academy of Marketing Science*, 39(6), 795–812. doi: 10.1007/s11747-010-0220-7

Homburg, C., & Pflesser, C. (2000). A Multiple-Layer Model of Market-Oriented Organizational Culture: Measurement Issues and Performance Outcomes. *Journal of Marketing Research*, 37(4), 449–462. doi: 10.1509/jmkr.37.4.449.18786

Homburg, C., & Stock, R. M. (2005). Exploring the conditions under which salesperson work satisfaction can lead to customer satisfaction. *Psychology and Marketing*, 22(5), 393–420. doi: 10.1002/mar.20065

Homburg, C., Wieseke, J., & Bornemann, T. (2009). Implementing the Marketing Concept at the Employee? Customer Interface: The Role of Customer Need Knowledge. *Journal of marketing*, 73(4), 64–81. doi: 10.1509/jmkg.73.4.64

Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social Identity and the Service–Profit Chain. *Journal of Marketing*, 73(2), 38–54. doi: 10.1509/jmkg.73.2.38

House, R. J., & Mitchell, T. R. (1974). Path-Goal Theory of Leadership. *Journal of Contemporary Business*. (5), 81–94.

Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*, 57(July), 53–70. doi: 10.2307/1251854

Jones, E., Busch, P., & Dacin, P. (2003). Firm market orientation and salesperson customer orientation: interpersonal and intrapersonal influences on customer service and retention in business-to-business buyer–seller relationships. *Journal of Business Research*, 56(4), 323–340. doi: 10.1016/S0148-2963(02)00444-7

- Joshi, A. W., & Randall, S. (2001). The Indirect Effects of Organizational Controls on Salesperson Performance and Customer Orientation. *Journal of Business Research*, 54(1), 1–9. doi: 10.1016/S0148-2963(99)00119-8
- Kelley, S. W. (1992). Developing Customer Orientation Among Service Employees. *Journal of the Academy of Marketing Science*, 20(1), 27-36. doi: 10.1007/BF02723473
- Kohli, A. K. (1985). Some Unexplored Supervisory Behaviors and Their Influence on Salespeople's Role Clarity, Specific Self-Esteem, Job Satisfaction, and Motivation. *Journal of Marketing Research*, 22(4), 424–433. doi: 10.2307/3151587
- Korschun, D., Bhattacharya, C. B., & Swain, S. D. (2014). Corporate Social Responsibility, Customer Orientation, and the Job Performance of Frontline Employees. *Journal of Marketing*, 78(May), 20-37. doi: 10.1509/jm.11.0245
- Koys, D. J., & DeCotiis, T. A. (2016). Inductive Measures of Psychological Climate. *Human Relations*, 44(3), 265–285. doi: 10.1177/001872679104400304
- Liao, H., & Chuang, A. (2004). A Multilevel Investigation of Factors Influencing Employee Service Performance and Customer Outcomes. *The Academy of Management Journal*, 47(1), 41-58. doi: 10.2307/20159559
- Liaw, Y., Chi, N., & Chuang, A. (2010). Examining the Mechanisms Linking Transformational Leadership, Employee Customer Orientation, and Service Performance: The Mediating Roles of Perceived Supervisor and Coworker Support. *Journal of Business and Psychology*, 25(3), 477-492. doi: 10.1007/s10869-009-9145-x

- Licata, J. W., Mowen, J. C., Harris, E. G., & Brown, T. J. (2003). On the Trait Antecedents and Outcomes of Service Worker Job Resourcefulness: A Hierarchical Model Approach. *Journal of the Academy of Marketing Science*, 31(3), 256–271. doi: 10.1177/0092070303031003004
- Lindsey Hall, K. K., Baker, T. L., Andrews, M. C., Hunt, T. G., & Rapp, A. A. (2015). The Importance of Product/Service Quality for Frontline Marketing Employee Outcomes: The Moderating Effect of Leader-Member Exchange (LMX). *Journal of Marketing Theory and Practice*, 24(1), 23–41. doi: 10.1080/10696679.2016.1089762
- Martin, C.A., & Bush, A.J. (2006). Psychological Climate, Empowerment, Leadership Style, and Customer-Oriented Selling: An Analysis of the Sales Manager-Salesperson Dyad. *Journal of the Academy of Marketing Science*, 34(3), 419-438. doi: 10.1177/0092070306286205
- Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology*, 4, 197–208. doi: 10.1016/S0962-1849(05)80058-7
- McCrae, R. R., & John, O. P. (1992). An Introduction to the Five-Factor Model and Its Applications. *Journal of Personality*, 60(2), 175–215. doi: 10.1111/j.1467-6494.1992.tb00970.x
- McIntyre, R. P., & Meloche, M. S. (1995). Cognitive Style and Customer Orientation. *Journal of Business and Psychology*, 10(1), 75-86. doi: 10.1023/A:1007775208983
- Mengüç, B. (1996). The influence of the market orientation of the firm on sales force behavior and attitudes: Further empirical results. *International Journal of Research in Marketing*, 13(3), 277-291. doi: 10.1016/0167-8116(96)00011-0



- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The Measurement of Organizational Commitment. *Journal of vocational behavior, 14*(2), 224-247. doi: 10.1016/0001-8791(79)90072-1
- Mowen, J. C., & Spears, N. (1999). Understanding Compulsive Buying Among College Students: A Hierarchical Approach. *Journal of Consumer Psychology, 8*(4), 407–430. doi: 10.1207/s15327663jcp0804\_03
- Mullins, R., & Syam, N. (2014). Manager–salesperson congruence in customer orientation and job outcomes: The bright and dark sides of leadership in aligning values. *Journal of Personal Selling & Sales Management, 34*(3), 188–205. doi: 10.1080/08853134.2014.890905
- Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing, 54*(4), 20-34. doi: 10.4135/9781452231426.n3
- O'Hara, B. S., Boles, J. S., & Johnston, M. W. (1991). The influence of personal variables on salesperson selling orientation. *Journal of Personal Selling & Sales Management, 11*(1), 61-67. doi: 10.1080/08853134.1991.10753859
- 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. doi: 10.2307/1251430
- Pettijohn, C. E., Pettijohn, L. S., & Taylor, A. J. (2002). The Influence of Salesperson Skill, Motivation, and Training on the Practice of Customer-Oriented Selling. *Psychology and Marketing, 19*(9), 743-757. doi: 10.1002/mar.10033

- Piercy, N. F., Cravens, D. W., Lane, N., & Vorhies, D. W. (2006). Driving organizational citizenship behaviors and salesperson in-role behavior performance: The role of management control and perceived organizational support. *Journal of the Academy of Marketing Science*, 34(2), 244–262. doi: 10.1177/0092070305280532
- Ramani, G., & Kumar, V. (2008). Interaction Orientation and Firm Performance. *Journal of Marketing*, 72(1), 27–45. doi: 10.1509/jmkg.72.1.27
- Rosenhan, D. L., Salovey, P., & Hargis, K. (1981). The Joys of Helping: Focus of Attention Mediates the Impact of Positive Affect on Altruism. *Journal of Personality and Social Psychology*, 40(5), 899–905. doi: 10.1037/0022-3514.40.5.899
- Rozell, E. J., Pettijohn, C. E., & Parker, R. S. (2004). Customer-oriented selling: Exploring the roles of emotional intelligence and organizational commitment. *Psychology and Marketing*, 21(6), 405–424. doi: 10.1002/mar.20011
- Saxe, R., & Weitz, B. (1982). The SOCO Scale: A Measure of the Customer Orientation of Salespeople. *Journal of Marketing Research*, 19(August), 343–351. doi: 10.2307/3151568
- Schriesheim, C. A., House, R. J., & Kerr, S. (1976). Leader initiating structure: A reconciliation of discrepant research results and some empirical tests. *Organizational Behavior and Human Performance*, 15(2), 297–321. doi: 10.1016/0030-5073(76)90043-X
- Schwartz, S. H. (1992). Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries. In *Advances in Experimental Social Psychology*. *Advances in Experimental Social Psychology Volume 25* (pp. 1–65).

- Siguaw, J. A., Brown, G., & Widing, R. E. (1994). The Influence of the Market Orientation of the Firm on Sales Force Behavior and Attitudes. *Journal of Marketing Research*, 31(1), 106. doi: 10.2307/3151950
- Sousa, Carlos M. P., & Coelho, F. (2013). Exploring the relationship between individual values and the customer orientation of front-line employees. *Journal of Marketing Management*, 29(15-16), 1653–1679. doi: 10.1080/0267257X.2013.798674
- Spreng, R. A., & Singh, A. K. (1993). An Empirical Assessment of the SERVQUAL Scale and the Relationship between Service Quality and Satisfaction. *Enhancing knowledge development in marketing*, 4(1), 1–6.
- Stajkovic, A. D. (2006). Development of a core confidence-higher order construct. *Journal of Applied Psychology*, 91(6), 1208–1224. doi: 10.1037/0021-9010.91.6.1208
- Stock, R. M. (2015). Is Boreout a Threat to Frontline Employees' Innovative Work Behavior? *Journal of Product Innovation Management*, 32(4), 574–592. doi: 10.1111/jpim.12239
- Stock, R. M. (2016). Understanding the relationship between frontline employee boreout and customer orientation. *Journal of Business Research*, 69(10), 4259–4268. doi: 10.1016/j.jbusres.2016.02.037
- Stock, R. M., & Bednarek, M. (2014). As they sow, so shall they reap: customers' influence on customer satisfaction at the customer interface. *Journal of the Academy of Marketing Science*, 42, 400-414. doi: 10.1007/s11747-013-0355-4

Stock, R. M., & Hoyer, W. D. (2005). An Attitude-Behavior Model of Salespeople's Customer Orientation. *Journal of the Academy of Marketing Science*, 33(4), 536–552. doi:

10.1177/0092070305276368

Strong, C. A., & Harris, L. C. (2004). The drivers of customer orientation: an exploration of relational, human resource and procedural tactics. *Journal of Strategic Marketing*, 12(3), 183-

204. doi: 10.1080/0965254042000262904

Susskind, A. M., Michele Kacmar, K., & Borchgrevink, C. P. (2003). Customer service providers' attitudes relating to customer service and customer satisfaction in the customer-server exchange. *Journal of Applied Psychology*, 88(1), 179-187. doi: 10.1037/0021-

9010.88.1.179

Thakor, M. V., & Joshi, A. W. (2005). Motivating salesperson customer orientation: insights from the job characteristics model. *Journal of Business Research*, 58(5), 584–592. doi:

10.1016/j.jbusres.2003.10.002

United States Department of Labor (2016). *Occupational Employment and Wages, May 2016: 41-0000 Sales and Related Occupations (Major Group)*. Retrieved from:

<https://www.bls.gov/oes/current/oes410000.htm>.

Weitz, B., Sujan, H., & Sujan, M. (1986). Knowledge, Motivation, and Adaptive Behavior: A Framework for Improving Selling Effectiveness. *Journal of Marketing*, 50(4), 174-191. doi:

10.2307/1251294

Widmier, S. (2002). The Effects of Incentives and Personality on Salesperson's Customer Orientation. *Industrial Marketing Management*, 31(7), 609–615. doi: 10.1016/S0019-

8501(02)00181-5

- Wieseke, J., Ullrich, J., Christ, O., & van Dick, R. (2007). Organizational identification as a determinant of customer orientation in service organizations. *Marketing Letters*, *18*(4), 265–278. doi: 10.1007/s11002-007-9021-2
- Williams, M. R., & Attaway, J. S. (1996). Exploring Salespersons' Customer Orientation as a Mediator of Organizational Culture's Influence on Buyer-Seller Relationships. *Journal of Personal Selling & Sales Management*, *16*(4), 33-52. doi: 10.1080/08853134.1996.10754072
- Yilmaz, C., & Hunt, S. D. (2001). Salesperson Cooperation: The Influence of Relational, Task, Organizational, and Personal Factors. *Journal of the Academy of Marketing Science*, *29*(4), 335–357. doi: 10.1177/03079450094207
- Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of CVSCALE. *Journal of International Consumer Marketing*, *23*(3-4), 193–210. doi: 10.1080/08961530.2011.578059
- Yoo, J. J., & Arnold, T. J. (2016). Frontline Employee Customer-Oriented Attitude in the Presence of Job Demands and Resources: The Influence Upon Deep and Surface Acting. *Journal of Service Research*, *19*(1), 102-117. doi: 10.1177/1094670515589956
- Zablah, A. R., Franke, G. R., Brown, T. J., & Bartholomew, D. E. (2012). How and When Does Customer Orientation Influence Frontline Employee Job Outcomes? A Meta-Analytic Evaluation. *Journal of Marketing*, *76*(May), 21-40. doi: 10.1509/jm.10.0231



## 4 The Influence of Customer Characteristics on Frontline Employees' Customer Need Knowledge

Björn A. Hüttel, Jan H. Schumann, Marion Büttgen, Zelal Ates, Marcin Komor, Julian Volz

Under Review at the *Journal of Business Research*, 1<sup>st</sup> round, VHB-Ranking: B

*In professional services encounters such as in the banking industry, frontline employees have to interact with highly heterogeneous customers who expect an individual treatment based on their idiosyncratic needs. It has thus become increasingly important for frontline employees to accurately perceive the needs of each individual customer and thus develop a high degree of Customer Need Knowledge (CNK). At the same time, customers differ in individual characteristics which inhibit or enhance employees' ability to sense their customers' needs. Dyadic customer- and advisor-level data in the banking sector of three European countries show the influence of individual customer characteristics on CNK such that customers' financial experience and risk aversion positively influence CNK; and customer-perceived high responsibility for the service outcome negatively impacts CNK. Results further show the impact of individual customer cultural values on CNK which can be influenced by customer-oriented training of employees. Cross-level interaction effects indicate that training of customer-oriented interaction behavior can reverse negative influences of customers' high power distance and uncertainty avoidance on CNK whereas for customers characterized by high long-term orientation, training measures can backfire.*

**Keywords:** customer need knowledge, customer orientation, customer characteristics, individual customer cultural values

## 4.1 Introduction

Customer orientation (CO), i.e. the ability to accurately identify and satisfy customer needs, is crucial for implementing the marketing concept (Deshpande, Farley, and Webster 1993; Kohli and Jaworski 1990) and positively influences outcome variables such as customer satisfaction, customer commitment, and business profitability (Hennig-Thurau 2004; Narver and Slater 1990). Being able to accurately sense other people's preferences is particularly central for successful customer-employee dyads in professional services which involve advice from frontline employees (FLEs) and require social interactions between FLEs and customers (Funder 2003; Gwinner et al. 2005; Singh 2000). In such services, being able to accurately sense customer needs is often the task of FLEs, due to their direct customer contact.

In the literature, research on CO as an individual-level construct largely examines the influence of certain employee characteristics on the disposition of FLEs to act customer oriented by studying the broad, general behavior of employees towards the totality of their customers (e.g., Brown, Mowen, Donovan, and Licata 2002). However, in high-involvement environments, customers as well as their needs are becoming increasingly heterogeneous (Palmatier and Sridhar 2017) which leads to the necessity to not only examine FLEs' *disposition* to act customer oriented towards the totality of their customers, but to examine and measure FLEs' *actual ability* to act customer oriented with regard to every single customer. It is thus crucial to examine whether a FLE is *able* to correctly perceive the needs of each individual customer (van Dolen, Lemmink, de Ruyter, and de Jong 2002). This is vital because whether FLEs state to have the disposition to act customer oriented does not necessarily imply that they actually possess the skill to do so. We thus understand FLEs' ability to accurately sense each individual customer's needs as a precondition for FLEs' CO towards each individual customer. A construct which captures



this ability of FLEs to act customer oriented in employee-customer dyads is the Customer Need Knowledge (CNK) which indicates how accurately a FLE is able to perceive an individual customer's hierarchy of needs (Homburg, Wieseke, and Bornemann 2009). Earlier research on CNK has concentrated on the influence of certain employee characteristics such as cognitive empathy on FLEs' ability to sense their customers' needs (Homburg et al. 2009). However, in professional services, employees have to interact with heterogeneous customers who differ in individual characteristics such as their resources in abilities, skills, and attitudes that they bring into the interaction process, as well as in individual cultural values. Such individual customer characteristics determine customers' interaction behavior with their respective employees and consequently should impact FLEs' ability to sense individual customer needs. As Yoo and Arnold (2016) point out "customers are important interaction sources for frontline employees and may certainly aid or hinder job performance" (p. 105). Likewise, Stock and Bednarek (2014) show the influence of employee-perceived customer support on employees' self-reported customer-oriented attitude. In a similar vein, research in social psychology points out that accurate judgment "begins to be possible to the degree that the person in question emits relevant behavior" (Funder 2003, p. 129) and suggests that the 'judgeability' of individuals depends on the individuals' characteristics as they determine their behavior (e.g., Colvin 1993; Human and Biesanz 2011). Hence, we believe that individual customer characteristics should inhibit or enhance an employees' ability to sense individual customer needs and consequently inhibit or enhance the ability of frontline employees to be customer oriented towards each individual customer. In other words, FLEs can to a certain extent only be as customer oriented, as the customer allows them to be, dependent on the customer's individual characteristics which shape the interaction between FLE and customer. It is thus crucial to understand and manage the influence of individual customer differences in order to enhance the FLEs' CNK and thus the CO

towards each individual customer. Research to date however has only examined employee characteristics and relational aspects between employee and customer as antecedents of CNK (Homburg et al. 2009) and neglected the influence of customer characteristics.

One industry in which the influence of customer characteristics on CNK might be especially relevant is the banking context, a multi-billion dollar industry with global revenues of 4,780 billion US\$ in 2015 (McKinsey 2016). The industry is characterized by complex products, long-term return on investment and high uncertainty on the customer side (Eisingerich and Bell 2006; Schumann et al. 2010). The importance of investment decisions increases the need of advice from FLEs (Sabiote and Román 2009). Hence, an accurate perception of customers' needs in this industry is especially crucial to ensure high service quality. Moreover, in contrast to pseudo-relationships, in which different representatives perform the service from one incident to another, in the case of financial services, customers usually repeatedly interact with the same dedicated FLE (Guttek et al. 1999). The often close relationship between financial advisor and customer makes it particularly fruitful to strive for a high CNK in such a context, given that advisors can benefit from and use their high knowledge about customer needs repeatedly. In the banking industry, customers differ in characteristics like their risk taking behavior or financial literacy as well as individual cultural values which determine their behavior. In order to address such differences and to be able to segment customers using an individual-centered segmentation approach in the service process (Yoo et al. 2011), it is crucial to examine the influence of such characteristics on the CNK of FLEs. With regard to customer differences in individual cultural values, research shows that the influence of cultural values can be managed by trained service personnel (Black and Mendenhall 1990). Hence, it is vital to investigate the cross-level moderating role of employee training on the influence of individual customer cultural values on

CNK. Due to the lack of research on the influence of customer characteristics on FLEs' ability to accurately sense customer needs, we investigate the following research questions:

- (1) What influence do customer characteristics have on FLEs' CNK?
- (2) How can the influence of such customer characteristics be managed by FLEs?

By answering the above questions, our work expands marketing knowledge in at least three ways: First, we contribute to research on the antecedents of FLEs' CNK by examining the yet overlooked influence of individual customer characteristics on FLEs' ability to accurately sense the needs of their respective individual customers. Using hierarchical data involving customer level and bank advisor level in the banking sector of three European countries we show that in the professional services context of the banking industry the individual customer characteristics financial literacy and risk aversion positively impact CNK, whereas customers who are characterized by a high perceived responsibility for the service outcome negatively influence FLEs' CNK.

Second, we contribute to the literature on the importance of cultural values in service environments (Mattila 1999; Schumann et al. 2012) by showing the influence of individual customer cultural differences on FLEs' CNK. More specifically, we show that the impact of individual customer cultural values can be influenced by banks using training of customer-oriented interaction behavior. Cross-level interaction effects indicate that training of customer-oriented interaction behavior can reverse negative influences of customers' high power distance and uncertainty avoidance on CNK. However, managers have to be careful since for customers characterized by high long-term orientation, training of customer-oriented interaction behavior can backfire.

Third, we contribute to the literature on CO by revealing customer characteristics as a new area of antecedents influencing FLEs' ability to act customer oriented. Research to date has

concentrated on the influence of company environment factors (e.g., Liao and Chuang 2004) and employee characteristics (e.g., Brown et al. 2002) and only recently touched on the influence of the customer on FLEs' CO by revealing the influence of employee-perceived customer behavior (Stock and Bednarek 2014; Yoo and Arnold 2016). Research however has so far overlooked the influence of inherent customer characteristics. We close this research gap by revealing customer characteristics and individual customer cultural values as antecedents of FLEs' CNK. These findings show that not only certain employee-perceived customer behavior, but also inherent, observable -- and thus manageable -- customer characteristics influence FLEs' ability to act customer oriented.

## **4.2 Theoretical Background**

### **4.2.1 FLEs' Customer Orientation**

Research on CO broadly distinguishes between CO as an organizational-level construct (e.g., Homburg and Pflesser 2000; Jaworski and Kohli 1993) and CO as an individual-level construct (e.g., Brown, Mowen, Donavan, and Licata 2002; Saxe and Weitz 1982). CO as an organizational-level construct refers to the general market orientation of a company (Day 1994; Jaworski and Kohli 1993), and e.g. examines the influence of market orientation on business profitability (Narver and Slater 1990). In contrast, research on the understanding of CO as an individual-level construct reveals various influencing factors which determine the customer-oriented behavior of FLEs such as the influence of company environment factors like work climate (e.g., Kelley 1992; Liao and Chuang 2004) or work culture (e.g., Boles, Babin, Brashear, and Brooks 2001) as well as FLEs' displayed behavior such as ability to help (Saxe and Weitz 1982). The research stream furthermore reveals several employee characteristics which influence

CO, such as need for activity (e.g., Brown, Moven, Donavan, and Licata 2002) or goal orientation (Harris et al. 2005). Research on the influence of customers on the CO of FLEs is sparse. Stock and Bednarek (2014) measured the overall perceived customer support from the employee's point of view and find a positive influence of the support measures on employees' self-reported customer-oriented attitude. Yoo and Arnold (2016) show the positive influence of employee-perceived customer participation on their self-reported customer-oriented attitude. Despite this evidence for the influence of customer behavior on employees' customer-oriented attitude, the influence of inherent customer characteristics such as their cultural values or skills and attitudes on FLEs' ability to act customer oriented have not been investigated. Furthermore, the measurement approaches of research to date are characterized by general CO measures which refer to the totality of customers and use self-reported measures of FLEs who self-assess their *disposition* to act customer-oriented (e.g., Brown et al. 2002; Harris et al. 2005); as well as aggregated measures of customers who assess their respective employees (e.g., Stock 2016; Stock and Hoyer 2005). To date, only Homburg et al. (2009) measured FLEs' actual *ability* to act customer oriented towards each individual customer by introducing the CNK of FLEs, involving both the perceptions of employee and customer in one measure.

#### **4.2.2 CNK as an Objective Measure for FLEs' Ability to Act Customer Oriented**

CNK is defined as the "accurate perceptions of an individual customer's hierarchy of needs" (Homburg et al. 2009, p. 64). CNK serves as an objective measure for FLEs' ability to act customer oriented towards each individual customer given that the construct is measured using a dual-perspective approach (Blackman and Funder 1998) and is calculated based on responses of both customers and employees which are gathered independent from each other. We understand

this ability to accurately perceive each individual customer's needs as a precondition for FLEs' customer orientation towards each individual customer. Because if FLEs do not possess the *ability* to accurately sense customers' needs, their *disposition* or *intention* to act customer oriented is meaningless. Prior research has examined employee characteristics and relational aspects between employees and customers as predictors of CNK. Homburg et al. (2009) show that employees who are characterized by a high inclination to act customer oriented and possess high cognitive empathy display higher CNK. The positive influence of employees' inclination to act customer oriented on CNK can further be enhanced by employee training of customer-oriented interaction behavior. Moreover, Homburg et al. (2009) show that the longer the customer-employee dyad persists the higher-, and the greater the employee-customer age discrepancy the lower the CNK of FLEs.

#### **4.2.3 The Influence of Customer Characteristics on CNK**

Despite extant research on the determinants of FLEs' CO as an individual-level construct such as organizational determinants and the influence of employee characteristics (e.g., Brown et al. 2002; Homburg et al. 2009; Kelley 1992; Liao and Chuang 2004), the influence of individual customer characteristics on FLEs' ability to act customer oriented is yet overlooked. However, in service environments like the banking sector, which include intensive employee-customer interactions, employees have to interact with customers who are very heterogeneous in their individual characteristics. Following Yoo and Arnold (2016), we argue that given that customers are important interaction sources in service employees' boundary-spanning role, they should aid or hinder frontline employees job performance. In contrast to Yoo and Arnold (2016), who investigate employees' subjective evaluation of customer participation, we propose that

depending on customers' inherent skills, behaviors and attitudes, the interaction between employee and customer should be facilitated or inhibited. Hence we argue that a FLE can to a certain extent only be as customer oriented, as the customer's individual characteristics, which shape the interaction between FLE and customer, allow him or her to be. In this respect we examine the influence of customer characteristics with regard to their service-related resources customers bring into the interaction. We understand customers' service-related resources as the skills, abilities, and attitudes which customers can draw on and consequently determine their interaction process with FLEs. We further examine the influence of cultural values (Steenkamp, ter Hofstede, and Wedel 1999) which differ enormously among the members of any nation (Yoo et al. 2011). We thus consider the influence of cultural values on the individual level, which were shown to have a strong impact on the way consumers behave (Yoo et al. 2011). Hence for our conceptual framework, we distinguish between "customer resources effects" for which we expect direct influences on CNK, as well as "customer cultural values management effects" which refer to the influence of individual customer cultural values which we expect to interact with FLEs' training of customer-oriented interaction behavior.

*Customer resources effects.* A central construct in the banking context which influences customer behavior is the degree of risk aversion of a customer. The banking sector is characterized by high uncertainty and complex products (Eisingerich and Bell 2006). Customers who are particularly risk averse are less likely to take risks and are less likely to switch their usual behavior (Raju 1980). In this vein, research shows that the less individuals vary their behavior from one situation to the next, the easier they will be to judge (Colvin 1993). Hence we propose the more risk averse a customer is, the less variable are her or his preferences for banking products which should make it easier for bank advisors to know the customer's needs.

**H1:** The more risk averse a customer is, the higher is the FLE's CNK.

The financial experience of customers, i.e. their level of expertise with regard to financial products, constitutes a central resource customers can draw on in the interaction process with bank advisors (Auh et al. 2007), since the level of customer experience determines how able customers are to evaluate the various attributes of different service offerings (Moorthy et al. 1997). At the same time, research shows that a lot of customers in the banking sector lack the ability to judge and pick suitable financial products (Hadar, Sood, and Fox 2013) due to the highly complex and difficult to understand structure of such products (Crosby, Evans, and Cowles 1990; van Rooij, Lusardi, and Alessie 2011). Auh et al. (2007) show in the context of financial services, that client expertise has a significant positive association with coproduction behavior, such that customers are more inclined to closely work together with the service provider and actively provide service-relevant information. Eisingerich and Bell (2006) similarly show that higher financial competence leads to a higher customer valuation of the interaction process between customer and employee which consequently leads to an increase in customer-employee interactions. Moreover, expertise facilitates efficient and effective service transactions, given that experienced customers are better equipped to make valuable contributions to the production of a service and hence more likely to do so, resulting in the provision of more accurate information to advisors (Auh et al. 2007; Kelley et al. 1990).

**H2:** The more financially experienced a customer is, the higher is the FLE's CNK.

Accuracy research suggests that when two entities interact, they try to attain certain goals which can be divided into speed goals and accuracy goals (Fiske 1992; Gill and Swann 2004). Speed goals are characterized by rather simple information gathering which focus on immediate goal attainment, whereas accuracy goals require the gathering of information about the entity that are relevant to the goal of the interaction (Fiske 1992). At the same time, research shows that the



communication between two entities is determined by the extent to which the entities feel responsible for the outcome of the communication. Customers who show increased feelings of personal causation make choices on their own and do not let choices be externally dictated (de Charms 1968). Relatedly, O'Connor and Siomkos (2011) suggest that customers with a high need to control the service outcome are less willing to cede power in a service relationship and will give detailed instructions to the employee in the service delivery process, leaving the employee with just following the orders of the customer. In such an instance, the employees' speed goals are activated since the employee does not have to put much effort into the interaction process given that the customer feels responsible and makes decisions by him or herself. As Gill, Swann, and Williams (2004) put it, the employee achieves 'pragmatic accuracy' such that the knowledge satisfies the relationship-specific interaction goal of serving the customer, but without the need to actually knowing the target from an objective point of view, thus leading to lower CNK. As the other extreme, a customer with low perceived responsibility for the service outcome just approaches the employee with a problem and asks the employee to solve it as best as he or she can (O'Connor and Siomkos 2011). This activates accuracy goals of the employee and requires the employee to actively strive to get to know the customer and his or her needs in order to being able to do so, leading to higher CNK.

**H3:** The higher the customer-perceived responsibility for the service outcome, the lower is the FLE's CNK.

*Customer cultural values management effects.* Cultural values have a strong impact on the way consumers behave (Steenkamp et al. 1999; Yoo et al. 2011). In the service context, e.g. Donthu and Yoo (1998) found that cultural orientations of customers affect their service quality

expectations; and Schumann et al. (2010) show that cultural values of customers influence the development of trust towards the service provider in a banking context.

Among the members of any nation an enormous diversity of culture can be found, which calls for the consideration of cultural differences at the individual level, e.g. for being able to perform individual level cultural market segmentation (Yoo et al. 2011). Research shows that individual cultural differences shape the way customers and employees interact in sales dyads (Kale and Barnes 1992). At the same time, the influence of cultural value-induced behavior can be managed by trained service personnel (Black and Mendenhall 1990). Training is an integral part of internal marketing efforts (Berry and Parasuraman 1992). Following Homburg et al. (2009) we understand training in terms of the extent to which FLEs are trained by their bank in acting customer oriented in their interactions with their clients. Extant literature shows that training has a positive influence on individuals' ability to correctly perceive consumers who are characterized by different cultural values (Black and Mendenhall 1990). At the same time, research shows that training in terms of customer-oriented interaction behavior has a positive influence on FLEs' customer orientation (Homburg et al. 2009; Liu and Comer 2007; Pettijohn, Pettijohn, and Taylor 2002). Hence we expect cross-level interaction effects such that training moderates the relationship between individual customer cultural values and the FLE's CNK.

Interactions in the banking context are characterized by information asymmetries in favor of FLEs. At the same time, important decisions have to be made under high uncertainty (Ostrom and Iacobucci 1995; Schumann et al. 2010). Due to these characteristics of the banking context, individual customer differences in the cultural values uncertainty avoidance, long-term orientation, and power distance should be particularly crucial, hence we focus on these three individual cultural values.

Consumers high in *uncertainty avoidance* value law, order and rules as well as structured situations (Hofstede 2001; Yoo et al. 2011). At the same time, Schumann, Wunderlich, and Zimmer (2012) show that in the banking context highly uncertainty avoidant customers are reluctant to provide information. Training of customer-oriented interaction behavior should guide employees in how to advise the customers and communicate with them in a structured and profound way which should increase the customers' predictability of the FLE. Schumann et al. (2010) show that the predictability of a service provider, in interaction with high uncertainty avoidance, increases trust in the service provider. Hence the more employees are trained, the higher should be their predictability by the customer. Consequently the trust of high uncertainty avoidant customers in the employee should increase, leading to a reduction in their hesitation to provide information and consequently to an increase in the CNK of the FLE.

**H4:** Training of customer-oriented interaction behavior moderates the relationship between uncertainty avoidance and CNK such that training reduces the negative effect of uncertainty avoidance on CNK.

Consumers high in *power distance* tend to accept power gaps in relationships and tolerate that people in higher positions avoid interactions with people in lower positions (Yoo et al. 2011). At the same time highly power distant customers tend to seek advice from experienced authorities and rely on the advice of service providers (Schumann et al. 2010). Hence customers high in power distance could experience an intimidation effect and consequently simply follow the suggestions of the FLE. Thus the employee does not have to actively remember the individual needs of the customer as his or her speed goals are sufficient for immediate goal attainment (Fiske 1992). Hence the influence of power distance on CNK should be negative. However, if employees are trained in customer-oriented interaction behavior they are able to work against this

effect and encourage customers to share insights into their needs which should increase the CNK of the FLE.

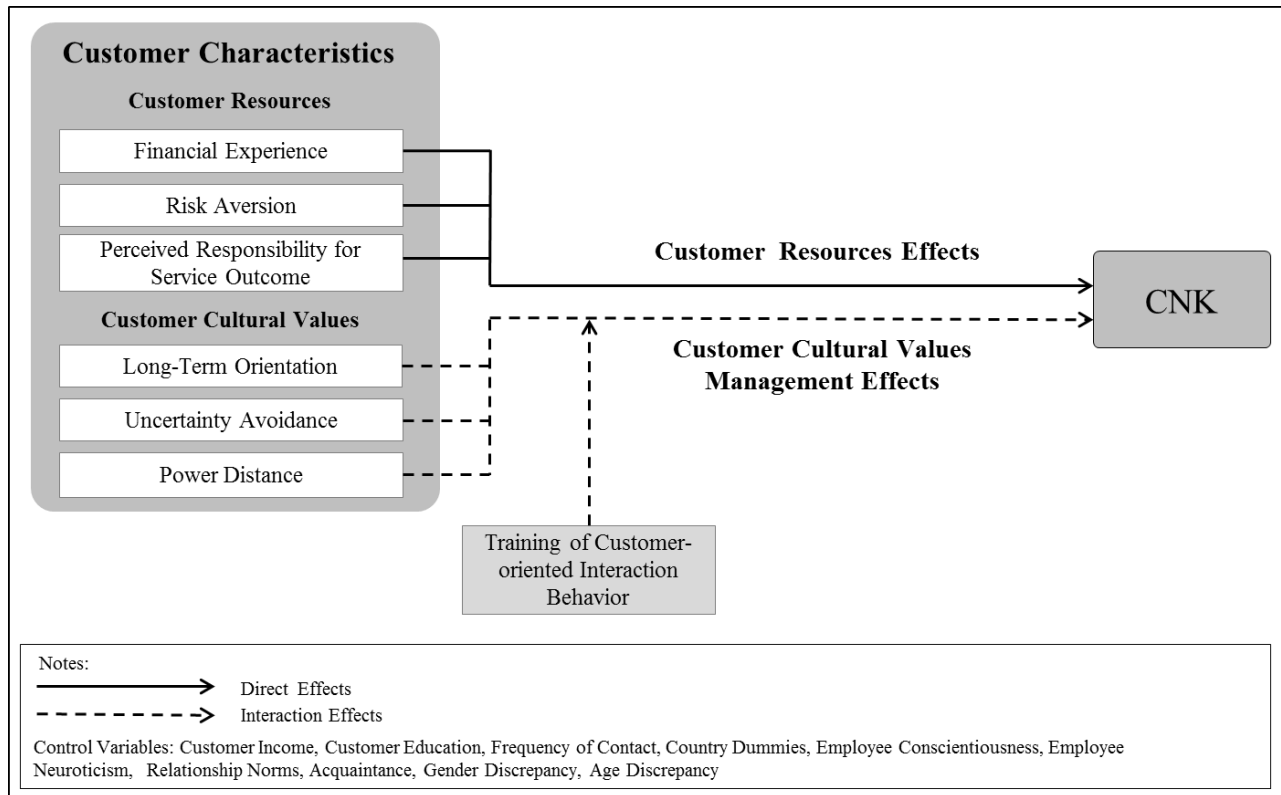
**H5:** Training of customer-oriented interaction behavior moderates the relationship between power distance and CNK such that training reduces the negative effect of power distance on CNK.

Consumers high in *long-term orientation* tend to think future-oriented and want to make enduring profit. They avoid improper behaviors, are concerned about careful management of their money and strive for success for the future generation (Yoo et al. 2011). Consumers high in long-term orientation should be prone to intensively discuss their needs with the employee in order to ensure a proper management of their money. This consequently should increase the CNK of the FLE. If consumers high in long-term orientation interact with a trained FLE, such employees might encourage the customers to share information and implement selling techniques. Pushing long-term oriented customers into sharing information might raise the suspicion that the employee just wants to take advantage of the customer. This might lead long-term oriented customers to share less information and thus should decrease the CNK of the FLE.

**H6:** Training of customer-oriented interaction behavior moderates the relationship between long-term orientation and CNK such that training reduces the positive effect of long-term orientation on CNK.

Figure 9 provides an overview of our conceptual model.

Figure 9. Conceptual Framework.



### 4.3 Methodology

#### 4.3.1 Collection of Dyadic Data

In order to test our hypotheses, we conducted a large-scale field study in retail banks in Germany, France and Poland. We conducted our study using customer-employee dyads in bank advisory processes, thus examining a service characterized by rather long-term, grown relationships. We chose the banking industry because this sector is characterized by close customer-employee interactions which involve important investment decisions, complex products and high uncertainty on the customer side, leading to a high need for advice from FLEs (Sabiote

and Román 2009). The use of three European countries enabled us to control for potential external effects resulting from a clustered sample.

We gathered data from customers right after they finished their advisory interaction with a FLE. In this questionnaire, customers had to answer questions about themselves and their relationship to the employee and the bank. At the same time, we handed two questionnaires to the FLE whose customer just left the interaction and asked him or her to fill in one questionnaire about him or herself as well as one questionnaire which included questions about the customer who just left the interaction. Measuring CNK requires a link of customer responses to the employee; hence the data from the two levels were matched using code numbers. The final matched sample consisted of 1166 customers and 332 employees. The customers were 18 to 87 years old ( $M = 44.5$ ,  $SD = 14.8$ ), 46% female. The employees were 20 to 63 years old ( $M = 37.5$ ,  $SD = 9.8$ ), 75% female. The data was gathered in 6 different banks. On average, each employee was matched to 3.51 customers, with a range from 1 to 12 customers. Our approach ensured a high heterogeneity of our participants, in terms of different countries, regions within countries, as well as different organizational climates in different banks.

#### **4.3.2 Measures**

We measured CNK following Homburg et al. (2009) and compared an employee's assumed customer hierarchy of needs with that customer's actual self-rated hierarchy of needs. We asked customers to rank five banking product characteristics according to their personal importance (good price/performance ratio; high revenue probability; high security of the investment; high comprehensibility and transparency of the investment; quick availability of the invested money). We then asked the employees to indicate what hierarchy of needs the customer

who just left the interaction has due to their perception and to rank the bank service needs in the same way as the customer. Following Homburg et al. (2009) and other previous research that has used dyadic difference scores (e.g., Wanous and Youtz 1986) we then operationalize CNK as the sum of the absolute differences between customer and employee rankings multiplied by -1 such that higher values represent smaller discrepancy and thus higher CNK. The range of CNK thus is from -12 (no match at all) to 0 (the exact same ranking as the customer).

Appendix C displays a complete list of all used constructs and items. For most measures, we adapted scales from earlier research. When not indicated otherwise, all items were evaluated using 7-point scales ranging from *strongly disagree* to *strongly agree*. To measure customers' risk aversion, we directly asked customers for their risk affinity on a ten-point scale ranging from *profit oriented* to *security oriented*. We directly asked for customers' financial experience on a ten-point scale ranging from *Beginner* to *Expert*. We self-developed the customer-perceived responsibility for the service outcome scale. The individual customer cultural values were measured using the uncertainty avoidance, power distance, and long-term orientation scales by Yoo et al. (2011). Our training measure referred to the extent to which FLEs perceive being trained by their bank in acting customer oriented in their interactions with customers. To measure the employee-perceived customer-oriented training, we used the scale by Homburg et al. (2009). Table 2 provides the psychometric properties of the measures; Table 3 shows the correlations between the framework variables. As displayed in Table 2, Cronbach's alpha, composite reliability, and average variance extracted indicate satisfactory reliability and convergent validity. All coefficient alpha values and composite reliabilities exceed the recommended thresholds (Bagozzi and Yi 2012). Furthermore, the scales show discriminant validity by passing the criterion proposed by Fornell and Larcker (1981). In order to exclude multicollinearity problems, we examined the variance inflation factors. The variables show values between 1.0 and 1.3,

Table 2. Psychometric Properties of Measures.

Variables	M	SD	CA	CR	AVE
<b>1. CNK</b>	-4.82	3.42	—	—	—
<b>2. Responsibility</b>	3.80	1.64	.91	.91	.72
<b>3. Financial Experience</b>	5.00	2.40	—	—	—
<b>4. Risk Aversion</b>	6.73	2.48	—	—	—
<b>5. Power Distance</b>	2.95	1.55	.85	.86	.60
<b>6. Uncertainty Avoidance</b>	5.47	1.27	.92	.92	.74
<b>7. Long-term Orientation</b>	5.68	1.11	.86	.86	.62
<b>8. Customer-Oriented Training</b>	5.73	1.18	.90	.90	.70

Notes: CA = Chronbach's Alpha; CR = Composite Reliability; AVE = Average Variance Extracted.

Table 3. Correlations of Framework Variables.

Variables	1	2	3	4	5	6	7
<b>1. CNK</b>							
<b>2. Responsibility</b>	-.10**						
<b>3. Financial Experience</b>	.04	.09**					
<b>4. Risk Aversion</b>	.06	.08**	-.08**				
<b>5. Power Distance</b>	-.02	.03	.10**	-.12**			
<b>6. Uncertainty Avoidance</b>	.09**	.12**	.07*	-.01	.10**		
<b>7. Long-term Orientation</b>	.02	.08**	.03	.02	-.00	.40**	
<b>8. Customer-Oriented Training</b>	.07*	.02	.03	-.02	.03	.11**	.10**

\* $p < .05$  (two-tailed); \*\* $p < .01$  (two-tailed).



indicating no problems with multicollinearity (Kleinbaum et al. 1998).

We controlled for several factors which are not part of our framework but might influence CNK. We included country dummies, the frequency of employee-customer contact, customer education, as well as customer income. We furthermore included the relationship variables acquaintance, gender discrepancy as well as age discrepancy of Homburg et al. (2009). We also controlled for relational variables and employee characteristics which have not been investigated by earlier research, given that this research's focus is on the influence of customer characteristics: Research in social psychology literature shows interpersonal relationship norms as an important factor for social interactions, which strongly shape a relationship in social contexts (Aggarwal 2004; Clark and Mills 1979). Controlling for the influence of relationship norms thus is crucial for teasing out the unique influence of customer characteristics on the CNK of FLEs. Hence we included relationship norms as control variables using the exchange and communal relationship scales from Aggarwal (2004). Furthermore, in a meta-analysis, Frei and McDaniel (1998) find that the employee personality traits emotional stability and conscientiousness are predictive of FLEs' job performance, hence we included these employee personality traits in our analysis as control variables, measured using the HEXACO-PI-R\_self 100 scale (Lee and Ashton 2016).

Since our study is cross-national, the questionnaires were translated into German, French and Polish using the back-translation method (Brislin 1970), in order to avoid translation-based biases.

### **4.3.3 Measurement Invariance**

In order to verify cross-national validity of our constructs, we tested for measurement invariance following the procedure of Steenkamp and Baumgartner (1998). We tested for

configural invariance to assure that our measures exhibit the same configuration of salient and non-salient factor loadings across different countries. We furthermore tested for metric invariance, to examine whether our measurements possess equal scale intervals across countries. We did not test for scalar invariance given that we do not compare means between countries. Since measurement invariance cannot be tested for single-item measures and ranking-based measures, we excluded the financial experience, risk aversion as well as CNK scales from the analyses.

Table 4. Analysis of Measurement Invariance.

Scale	Model				Fit Indices		
	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$	RMSEA	NFI	CFI
<i>Power Distance</i>							
Configural Invar.	29.01	6			.06	.99	.99
Full Metric Invar.	45.97	12	16.96	6 ***	.05	.98	.98
Partial Metric Invar.	37.52	10	8.51	4 n.s.	.05	.98	.99
<i>Uncertainty Avoidance</i>							
Configural Invar.	156.49	6			.15	.96	.96
Full Metric Invar.	162.80	12	6.31	6 n.s.	.10	.95	.96
<i>Long-Term Orientation</i>							
Configural Invar.	27.94	6			.06	.99	.99
Full Metric Invar.	42.83	12	14.89	6 *	.05	.98	.99
Partial Metric Invar.	34.42	10	6.48	4 n.s.	.05	.99	.99
<i>Responsibility for the Service Outcome</i>							
Configural Invar.	40.20	6			.07	.99	.99
Full Metric Invar.	52.11	12	11.91	6 n.s.	.05	.98	.99
<i>Customer-Oriented Training</i>							
Configural Invar.	56.40	6			.08	.98	.98
Full Metric Invar.	110.39	12	53.99	6 ***	.08	.96	.97
Partial Metric Invar.	57.45	8	1.05	2 n.s.	.07	.98	.98

\*  $p < .05$ ; \*\*\*  $p < .001$ ; n.s. = non-significant; RMSEA = Root Mean Square Error of Approximation; NFI = Normed Fit Index; CFI = Comparative Fit Index.

As Table 4 displays, the configural invariance models show excellent fit; the fit indices meet the recommended thresholds (Bentler and Bonett 1980; Browne and Cudeck 1993; Homburg and Baumgartner 1998). Only the RMSEA fit index of the uncertainty avoidance scale exceeds the recommended threshold of .08 (Browne and Cudeck 1993). However, as Kenny, Kaniskan, and McCoach (2015) point out, RMSEA too often falsely indicates a poor fitting for models with small degrees of freedom. Since NFI and CFI fit indices show excellent fit, we conclude configural invariance for the uncertainty avoidance measure. All scales show at least partial metric invariance (Byrne, Shavelson, and Murthén 1989), the responsibility for the service outcome scale as well as the uncertainty avoidance scale even show full metric invariance.

#### **4.3.4 Analytical Approach**

The data structure underlying our study is hierarchical, with customers (Level 1) nested with employees (Level 2). To account for this nested structure we employed hierarchical linear modeling (e.g., Raudenbush and Bryk 2002) using the HLM software (e.g., Garson 2013). The intraclass correlation coefficient (ICC) of the data is 0.18 and significant, which indicates the necessity of hierarchical linear modeling (Lee 2000). Following Homburg et al. (2009) we centered all predictor variables on their grand mean.

As depicted in Table 5, we applied a stepwise approach in our analyses. We first entered employee-level predictors, relational aspects between employees and customers, along with control variables into the model, serving as a baseline model. Second, in order to display the influence of customer characteristics on CNK, we entered the customer characteristics into the model. Finally, in the third model, we included the cross-level interactions.

## 4.4 Results

The results are displayed in Table 5. In line with H1, the risk aversion of customers significantly increases the CNK of FLEs ( $b = .085$ ,  $SE = .04$ ,  $p < .05$ ). In accordance with H2, customers' financial experience has a significant positive effect on CNK ( $b = .075$ ,  $SE = .04$ ,  $p < .10$ ). H3 is supported, results indicate a significant negative effect of customers' perceived responsibility for the service outcome on CNK ( $b = -.235$ ,  $SE = .07$ ,  $p < .001$ ). Table 5 furthermore shows that customer characteristics significantly contribute to explaining variance in the CNK of FLEs as adding the customer characteristics significantly increases the model fit compared to the baseline model,  $\Delta\chi^2 = 22.97$  (d.f. = 8),  $p < .01$ .

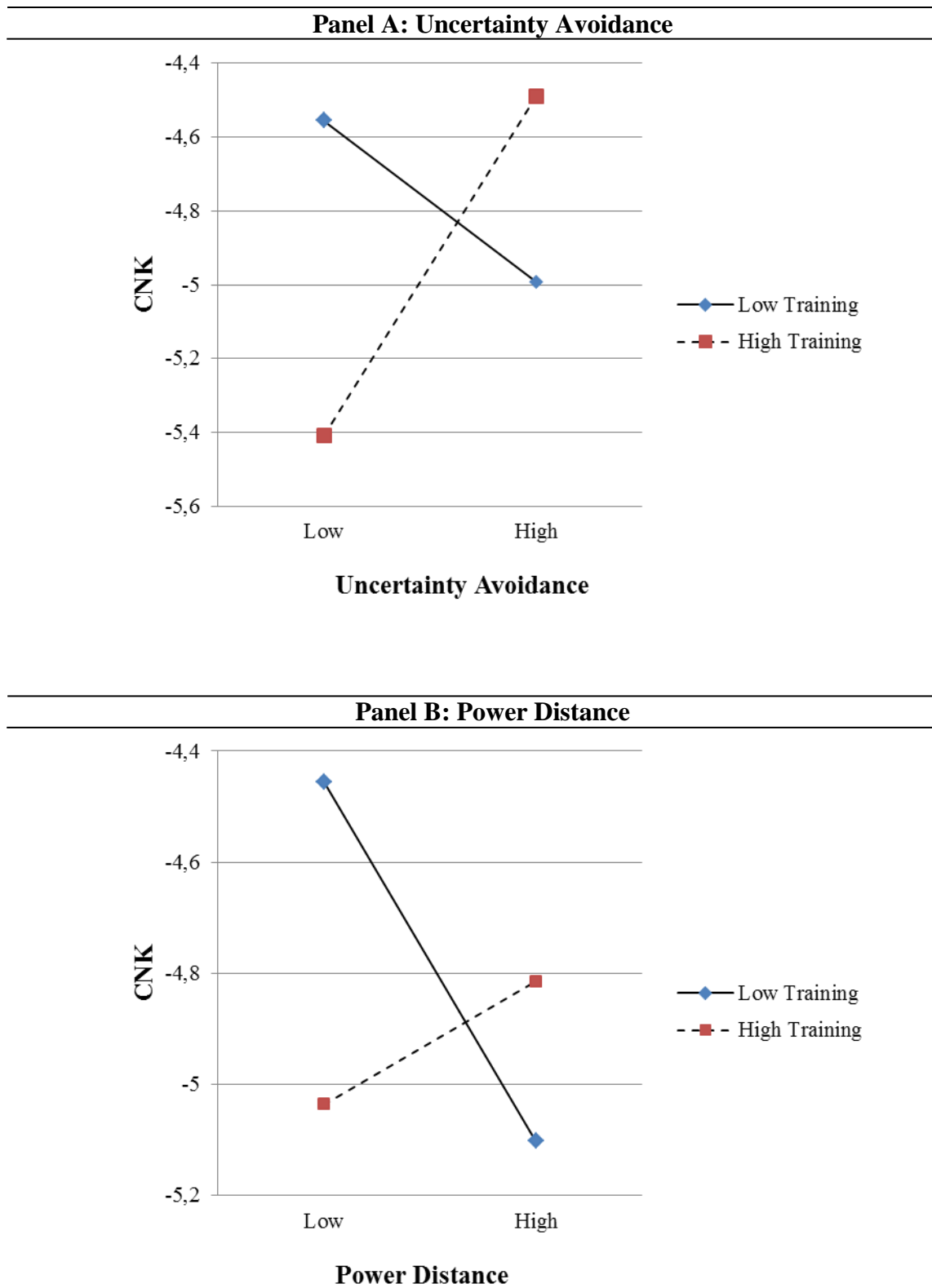
The results regarding the proposed cross-level interactions show evidence for a cross-level interaction effect between customers' uncertainty avoidance and employee training of customer-oriented interaction behavior, in support of H4 ( $b = .226$ ,  $SE = .07$ ,  $p < .01$ ). As Figure 10 Panel A shows, the effect of uncertainty avoidance on CNK is negative for lowly trained employees whereas for highly trained employees, the relationship is positive. With regard to the influence of customers' power distance on CNK, results show evidence for a cross-level interaction effect between customers' power distance and employee training, in support of H5 ( $b = .108$ ,  $SE = .05$ ,  $p < .05$ ). As Figure 10 Panel B indicates, the effect of power distance on CNK is negative for lowly trained employees whereas for highly trained employees, the relationship is positive. In support of H6, results show evidence for a cross-level interaction effect between customers' long-term orientation and employee training of customer-oriented interaction behavior ( $b = -.200$ ,  $SE = .08$ ,  $p < .05$ ).

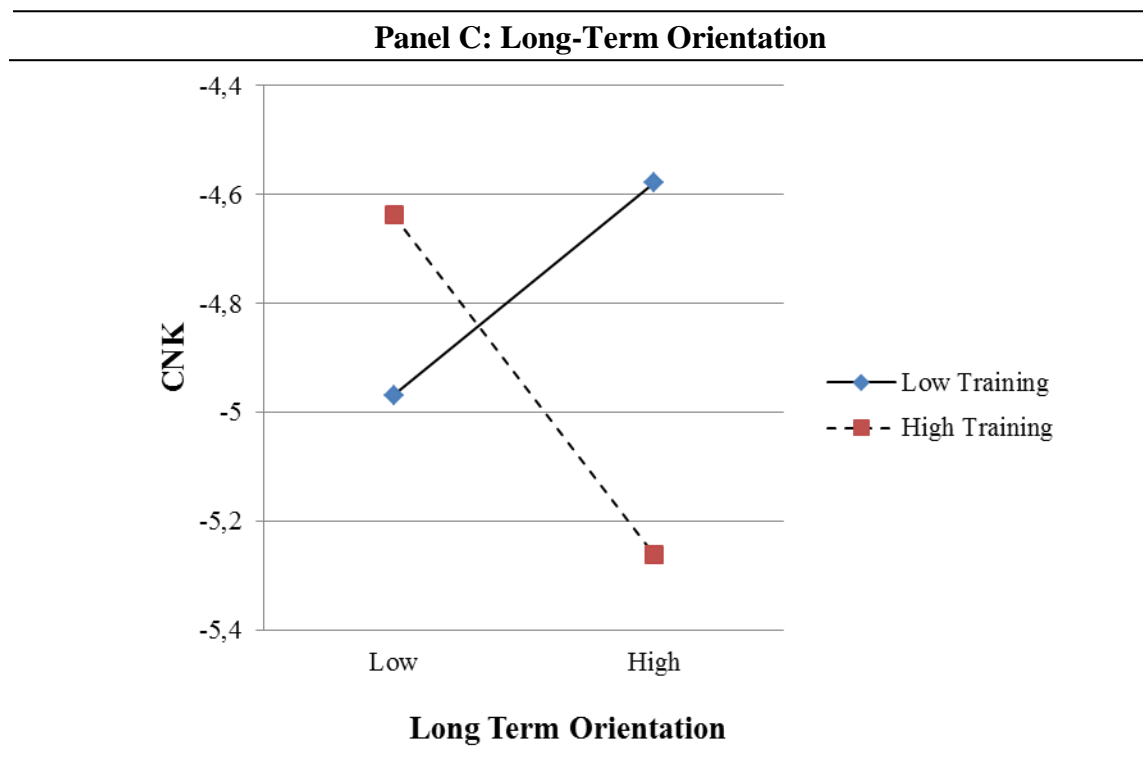
Table 5. Estimated Path Coefficients for CNK Predictors.

	Unstandardized Coefficient (SE)		
<b>Intercept</b>	-5.313 (.30)***	-5.184 (.31)***	-5.258 (.30)***
<b>Control Variables</b>			
Customer Income	-.512 (.23)**	-.557 (.23)**	-.578 (.23)**
Customer Education	.108 (.21)	.052 (.21)	.020 (.21)
Frequency of Contact	.097 (.12)	.092 (.11)	.100 (.11)
Country Dummy France	-.059 (.36)	-.003 (.36)	.084 (.36)
Country Dummy Poland	1.119 (.33)***	1.028 (.35)***	1.118 (.34)***
<b>Employee-level Predictors</b>			
Conscientiousness (CV)	.448 (.16)***	.430 (.16)***	.464 (.15)***
Neuroticism (CV)	-.268 (.12)**	-.294 (.11)**	-.297 (.11)***
Customer-Oriented Training	-.044 (.11)	-.036 (.11)	-.074 (.10)
<b>Relationship Predictors</b>			
Communal Relationship (CV)	.244 (.08)***	.284 (.09)***	.294 (.09)***
Exchange Relationship (CV)	-.145 (.07)**	-.110 (.07)	-.118 (.07)*
Acquaintance (CV)	.004 (.00)**	.004 (.00)**	.004 (.00)**
Gender Discrepancy (CV)	.292 (.19)	.244 (.19)	.264 (.19)
Age Discrepancy (CV)	.005 (.01)	.005 (.01)	.005 (.00)
<b>Customer-Level Predictors</b>			
Risk Aversion		.089 (.04)**	.085 (.04)**
Financial Experience		.074 (.04)*	.075 (.04)*
Responsibility for Service Outcome		-.237 (.07)***	-.235 (.07)***
Long-term Orientation		-.071 (.10)	-.053 (.10)
Uncertainty Avoidance		.118 (.09)	.095 (.09)
Power Distance		-.051 (.07)	-.060 (.07)
<b>Cross-Level Interactions</b>			
Uncertainty Avoidance × Customer-Oriented Training			.226 (.07)***
Power distance × Customer- Oriented Training			.108 (.05)**
Long-term Orientation × Customer-Oriented Training			-.200 (.08)**
<b>Increase in Model Fit</b>		$\Delta\chi^2 = 22.970$ (d.f. = 8)***	$\Delta\chi^2 = 17.202$ (d.f. = 3)***

Notes: ICC = .181; \* p < .10; \*\* p < .05; \*\*\* p < .01; CV = Control Variable.

Figure 10. The Moderating Role of Customer-Oriented Training on the Link Between Customer Cultural Values and CNK.





As Figure 10 Panel C shows, the effect of long-term orientation on CNK is positive for lowly trained employees whereas for highly trained employees, the relationship is negative. Table 5 furthermore shows that the cross-level interactions significantly contribute to explaining variance in the CNK of FLEs as adding cross-level interactions significantly increases the model fit compared to the customer characteristics model,  $\Delta\chi^2 = 17.20$  (d.f. = 3),  $p < .001$ .

## 4.5 Discussion

### 4.5.1 Theoretical Contributions

This study expands marketing knowledge in at least four ways: First, the study contributes to the literature on the importance of FLEs' ability to understand customer needs in order to successfully implement the marketing concept (Homburg et al. 2009; van Dolen et al. 2002).

While earlier research has shown the influence of employee characteristics on FLEs' ability to accurately sense their customer needs (Homburg et al. 2009), the influence of customer characteristics is yet overlooked. This is surprising, given that in professional services, FLEs have to interact with highly heterogeneous customers, with diverse characteristics which should aid or hinder FLEs' ability to accurately judge them. This research closes this research gap and extends the research of Homburg et al. (2009) on the CNK of FLEs by showing the influence of customer characteristics on FLEs' ability to accurately sense their customer needs. Using data of banks in three European countries, our findings show customer resources effects which indicate that individual customer characteristics have a significant direct effect on FLEs' CNK. The more financially experienced as well as risk averse a customer, the higher the FLEs' CNK; the more the customer feels responsible for the service outcome, the lower the FLEs' CNK. Moreover, Homburg et al. (2009) show the important impact of CNK in the travel industry business for dyads between employees and customers in travel agencies which are usually characterized by short-term and rather loose relationships. In this study, we examine antecedents of CNK in the banking sector, a context characterized by often very long-term oriented, close relationships between FLEs and customers. In this industry it is particularly fruitful for bank advisors to strive for a high CNK given that they can exploit the once established high CNK on a repeated basis. Hence it is of particular interest for bank advisors to know the antecedents of a high CNK in such a context.

Second, we contribute to the literature on the importance of cultural values in service environments (Mattila 1999; Schumann et al. 2012). In line with calls for research on the influence of culture at the individual level (e.g., Yoo et al. 2011), we show the important influence of individual customer cultural differences on FLEs' CNK. Our results indicate that not only the resources of customers which they developed over time such as financial experience



influence FLEs' ability to predict their customers' needs, but also inherent, rather steady customer characteristics such as individual cultural values. This finding is important because, contrary to characteristics like financial literacy, inherent cultural values of customers can hardly be changed by bank advisors. However, we reveal that managers can influence customer cultural values effects on CNK by implementing customer-oriented interaction training. Our results show that training of customer-oriented interaction behavior can reverse negative influences of customers' high power-distance and uncertainty avoidance on CNK. However, managers have to be careful since for customers characterized by high long-term orientation, training of customer-oriented interaction behavior can backfire.

Third, this research provides insights into the interface between customers and frontline employees by showing that the influence of relationship variables between FLEs and customers on CNK changes in different industries. We included the relationship variables acquaintance and age discrepancy of Homburg et al. (2009) in our models as control variables. Our results confirm the finding that a longer relationship leads to higher CNK. However, contrary to Homburg et al. (2009)'s results, our study does not show any influence of age discrepancy. This might be due to the context of the study. In travel agencies, a higher age discrepancy might indicate a higher lifestyle distance between employee and customer with implications for the CNK in such a context. In the professional services context of banking however, such age difference does not affect the mutual understanding of employee and customer and thus does not impact FLEs' CNK.

Fourth, we contribute to the literature on CO by revealing customer characteristics as a new area of antecedents influencing FLEs' ability to act customer oriented. Research to date has concentrated on the influence of company environment factors (e.g., Liao and Chuang 2004) and employee characteristics (e.g., Brown et al. 2002) and only recently touched on the influence of the customer on FLEs' CO by revealing the influence of certain employee-perceived customer

behavior such as perceived support (Stock and Bednarek 2014) and perceived participation behavior (Yoo and Arnold 2016). Research on the influence of inherent customer characteristics however is yet overlooked. We close this research gap by revealing that customer resources and individual customer cultural values influence FLEs' ability to accurately sense their customers' needs and consequently FLEs' ability to act customer oriented towards their individual customers. These findings show that not only certain employee-perceived customer behavior, but also inherent, observable -- and thus manageable -- customer characteristics influence FLEs' ability to act customer oriented.

#### **4.5.2 Managerial Implications**

The results indicate that managers should educate their employees with regard to being aware that for financially inexperienced customers, high risk-taking customers as well as for customers who feel highly responsible for the outcome of the advisory process, they should increase their effort of actually finding out the needs of their customers in order to work against a lower CNK for such customers due to the activation of simple speed goals (Fiske 1992). Banks should furthermore try to increase the financial literacy of their customers by providing more educating information about banking products and banking mechanisms. In a similar vein banks should assure customers that they as customers are not the ones responsible for the outcome of the service but that they can freely and actively work together with their bank advisor without an implicit feeling of being responsible for the outcome.

The increased heterogeneity of customers, both in terms of heterogeneity of needs as well as in terms of individual characteristics and cultural values, increases the importance of successfully integrating each individual customer into the service interaction process (van Dolen

et al. 2002). Our results give guidance to managers in how to segment customers using an individual-centered segmentation approach (Yoo et al. 2011). Companies should measure their customers' characteristics in terms of individual customer resources as well as individual customer cultural values in an early stage of the employee-customer relationship. Knowing these characteristics allows bank managers to match their employees to suitable customers. For example, highly trained employees should be matched with a customer segment of high uncertainty avoidant, high power distant, or short-term oriented customers, whereas lowly trained employees should be matched with low uncertainty avoidant, low power distant, or long-term oriented customers in order to ensure high CNK.

#### **4.5.3 Limitations and Implications for Further Research**

Limitations of our work offer opportunities for further research. Due to the distinct characteristics of the banking industry as context of our study, such as information asymmetries in favor of FLEs, the importance of decisions and an environment of uncertainty (Ostrom and Iacobucci 1995; Schumann et al. 2010), we focus on the three cultural values which are particularly crucial in such an environment (i.e., uncertainty avoidance, long-term orientation, and power distance). However, future research could examine whether the other common cultural values (i.e., collectivism/individualism and masculinity/femininity) might exert an influence on CNK.

We included measures for relationship norms as control variables in our analyses, as these variables were not part of our framework but were shown to strongly shape relationships in social contexts (Aggarwal 2004). Results indicate the influence of relationship norms on CNK. Relationships which are characterized by a communal norm display higher CNK compared to

relationships characterized by an exchange relationship norm. These results point to the need for a closer examination of the influence of variables which determine the interplay between employee and customer as antecedents of CNK, such as the influence of relationship norms and conventions.

Finally, we examined the influence of customer characteristics on CNK in Germany, France and Poland. While these European countries are distinct with regard to their predominant cultural values (Hofstede 2001) and major economic European players, it would be interesting to assess the influence of customer characteristics on CNK in further cultures, such as China and the USA.

## 4.6 References

- Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research*, 31(1), 87–101.
- Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, 83(3), 359–370.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, Evaluation, and Interpretation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 40(1), 8–34.
- Bentler, P. M., & Bonett, D. G. (1980). Significance Tests and Goodness of Fit in the Analysis of Covariance Structures. *Psychological Bulletin*, 88(November), 588-606.
- Berry, L. L., & Parasuraman, A. (1992). Prescriptions for a service quality revolution in America. *Organizational Dynamics*, 20(4), 5–15.
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management Review*, 15(1), 113–136.
- Blackman, M. C., & Funder, D. C. (1998). The Effect of Information on Consensus and Accuracy in Personality Judgment. *Journal of Experimental Social Psychology*, 34(2), 164-81.
- Boles, J. S., Babin, B. J., Brashear, T. G., & Brooks, C. (2001). An examination of the relationships between retail work environments, salesperson selling orientation-customer orientation and job performance. *Journal of Marketing Theory and Practice*, 9(3), 1-13.

- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185–216.
- Brown, T. J., Mowen, J. C., Donavan, D. T., & Licata, J. W. (2002). The customer orientation of service workers: Personality trait effects on self- and supervisor performance ratings. *Journal of Marketing Research, 39*(1), 110–119.
- Browne, M. W., & Cudeck, R. (1993). Alternative Ways of Assessing Model Fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing Structural Equation Models*, (pp. 136-162). Newbury Park: Sage Publications.
- Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the Equivalence of Factor Covariance and Mean Structures: The Issue of Partial Measurement Invariance. *Psychological Bulletin, 105*(3), 456-466.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology, 37*(1), 12–24.
- Colvin, C. R. (1993). “Judgable” people: Personality, behavior, and competing explanations. *Journal of Personality and Social Psychology, 64*(5), 861–873.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing, 54*(3), 68–81.
- Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing, 58*(4), 37-52.
- de Charms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.

- Deshpande, R., Farley, J. U., & Webster, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing*, 57(1), 23-37.
- Donthu, N., & Yoo, B. (1998). Cultural influences on service quality expectations. *Journal of Service Research*, 1(2), 178-186.
- Eisingerich, A. B., & Bell, S. J. (2006). Relationship marketing in the financial services industry: The importance of customer education, participation and problem management for customer loyalty. *Journal of Financial Services Marketing*, 10(4), 86-97.
- Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. *Journal of Personality and Social Psychology*, 63(6), 877-889.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388.
- Frei, R. L., & McDaniel, M. A. (1998). Validity of customer service measures in personnel selection: A review of criterion and construct evidence. *Human Performance*, 11(1), 1-27.
- Funder, D. C. (2003). Toward a social psychology of person judgments: Implications for person perception accuracy and self-knowledge. In J. P. Forgas, K. D. Williams & W. von Hippel (Eds.), *Social Judgments: Implicit and Explicit Processes* (pp. 115-130). Cambridge: Cambridge University Press.
- Garson, G. D. (2013). *Hierarchical linear modeling: Guide and applications*. Thousand Oaks: Sage Publications.

- Gill, M. J., & Swann, W. B., Jr. (2004). On what it means to know someone: A matter of pragmatics. *Journal of Personality and Social Psychology*, 86(3), 405–418.
- Gutek, B. A., Bhappu, A. D., Liao-Troth, M. A., & Cherry, B. (1999). Distinguishing Between Service Relationships and Encounters. *Journal of Applied Psychology*, 84(2), 218-233.
- Gwinner, K. P., Bitner, M. J., Brown, S. W., & Kumar, A. (2005). Service customization through employee adaptiveness. *Journal of Service Research*, 8(2), 131–148.
- Hadar, L., Sood, S., & Fox, C. R. (2013). Subjective knowledge in consumer financial decisions. *Journal of Marketing Research*, 50(3), 303–316.
- Harris, E. G., Mowen, J. C., & Brown T. J. (2005). Re-examining salesperson goal orientations: Personality influencers, customer orientation, and work satisfaction. *Journal of the Academy of Marketing Science*, 33(1), 19-35.
- Hennig-Thurau, T. (2004). Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. *International Journal of Service Industry Management*, 15(5), 460-478.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks: Sage Publications.
- Homburg, C., & Baumgartner, H. (1995). Beurteilung von Kausalmodellen. *Marketing – Zeitschrift für Forschung und Praxis*, 3(3), 162-176.
- Homburg, C., & Pflesser, C. (2000). A Multiple-Layer Model of Market-Oriented Organizational Culture: Measurement Issues and Performance Outcomes. *Journal of Marketing Research*, 37(November), 449-462.



- Homburg, C., Wieseke, J., & Bornemann, T. (2009). Implementing the marketing concept at the employee–customer interface: The role of customer need knowledge. *Journal of Marketing*, 73(4), 64–81.
- Human, L. J., & Biesanz, J. C. (2011). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality and Social Psychology*, 101(1), 202–216.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53-70.
- Kale, S. H., & Barnes, J. W. (1992). Understanding the domain of cross-national buyer-seller interactions. *Journal of International Business Studies*, 23(1), 101-132.
- Kelley, S. W, Donnelly, J. H., Jr., & Skinner, S. J. (1990). Customer participation in service production and delivery. *Journal of Retailing*, 66(3), 315-335.
- Kelley, S. W. (1992). Developing customer orientation among service employees. *Journal of the Academy of Marketing Science*, 20(1), 27-36.
- Kenny, D. A., Kaniskan, B., & McCoach D. B. (2015). The Performance of RMSEA in Models With Small Degrees of Freedom. *Sociological Methods & Research*, 44(3), 486-507.
- Kleinbaum, D. G., Kupper L. L., Muller, K. E., & Nizam, A. (1998). *Applied regression analysis and multivariable methods*. Pacific Grove: Duxbury Press.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.

- Lee, K., & Ashton, M. C. (2016). Psychometric Properties of the HEXACO-100. *Assessment*, 1-15.
- Lee, V. E. (2000). Using hierarchical linear modeling to study social contexts: The case of school effects. *Educational Psychologist*, 35(2), 125–141.
- Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1), 41-58.
- Liu, S. S., & Comer, L. B. (2007). Salespeople as information gatherers: Associated success factors. *Industrial Marketing Management*, 36(5), 565-574.
- Mattila, A. S. (1999). The Role of Culture in the Service Evaluation Process. *Journal of Service Research*, 1(3), 250-261.
- McKinsey (2016). A Brave New World for Global Baking. Mc Kinsey Global Banking Annual Review 2016.
- Moorthy, S., Ratchford, B. T., & Talukdar, D. (1997). Consumer Information Search Revisited: Theory and Empirical Analysis. *Journal of Consumer Research*, 23(4), 263-277.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20-35.
- O'Connor, G. C., & Siomkos, G. J. (2011). The Need for Control In The Service Sector. *Journal of Applied Business Research*, 10(3), 105-112.
- Ostrom, A., & Iacobucci, D. (1995). Consumer trade-offs and the evaluation of services. *Journal of Marketing*, 59(1), 17-28.

- Palmatier, R. W., & Sridhar, S. (2017). *Marketing strategy: Based on first principles and data analytics*. London: Palgrave.
- Pettijohn, C. E., Pettijohn, L. S., & Taylor, A. J. (2002). The influence of salesperson skill, motivation, and training on the practice of customer-oriented selling. *Psychology and Marketing, 19*(9), 743-757.
- Raju, P. S. (1980). Optimum stimulation level: Its relationship to personality, demographics, and exploratory behavior. *Journal of Consumer Research, 7*(3), 272–282.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks: Sage Publications.
- Sabiote, E. F., & Román, S. (2009). The influence of social regard on the customer–service firm relationship: The moderating role of length of relationship. *Journal of Business and Psychology, 24*(4), 441–453.
- Saxe, R., & Weitz, B. A. (1982). The SOCO scale: A measure of the customer orientation of salespeople. *Journal of Marketing Research, 19*(3), 343–351.
- Schumann, J. H., v. Wangenheim, F., Stringfellow, A., Yang, Z., Praxmarer, S., Jimenez, F. R., Blazevic, V., Shannon, R. M., Shainesh, G., & Komor, M. (2010). Drivers of trust in relational service exchange: Understanding the importance of cross-cultural differences. *Journal of Service Research, 13*(4), 453–468.
- Schumann, J. H., Wunderlich, N. V., & Zimmer, M. S. (2012). Culture's impact on customer motivation to engage in professional service enactments. *Schmalenbach Business Review, 64*(April), 141–165.

- Singh, J. (2000). Performance productivity and quality of FLEs in service organizations. *Journal of Marketing*, 64(2), 15-34.
- Steenkamp, J. E. M., & Baumgartner, H. (1998). Assessing Measurement Invariance in Cross-National Consumer Research. *Journal of Consumer Research*, 25(June), 78-90.
- Steenkamp, J. E. M., ter Hofstede, F., & Wedel, M. (1999). A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *Journal of Marketing*, 63(2), 55-69.
- Stock, R. M. (2016). Understanding the relationship between frontline employee boreout and customer orientation. *Journal of Business Research*, 33(10), 4259-4268.
- Stock, R.M., & Bednarek, M. (2014). As They Sow, so Shall They Reap: Customers' Influence on Customer Satisfaction at the Customer Interface. *Journal of the Academy of Marketing Science*, 42(4), 400-414.
- Stock, R. M., & Hoyer, W. D. (2005). An Attitude-Behavior Model of Salespeople's Customer Orientation. *Journal of the Academy of Marketing Science*, 33, 536-552.
- van Dolen, W., Lemmink, J., de Ruyter, K., & de Jong, A. (2002). Customer-sales employee encounters: A dyadic perspective. *Journal of Retailing*, 78(4), 265-279.
- van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449-472.
- Wanous, J. P., & Youtz, M. A. (1986). Solution Diversity and the Quality of Groups Decisions. *Academy of Management Journal*, 29(1), 149-159.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, 23(3), 193-210.

Yoo, J., & Arnold, T. J. (2016). FLE customer-oriented attitude in the presence of job demands and resources: The influence upon deep and surface acting. *Journal of Service Research*, 19(1), 102–117.

## 4.7 Appendix C: Measurement Items

Construct	Measurement Items <sup>1</sup>
<b>Customer Need Knowledge</b> Adapted from Homburg, Wieseke, and Bornemann (2009)	<p>Customers: We are interested in how far the following factors are comparably the most important for you with respect to banking products.</p> <p>Employees: Please consider the last customer interaction. Which factors do you think are the most important for this customer with respect to banking products?</p> <p>Customers and Employees: Please rank the factors by allocating rank "1" for the most important factor, rank "2" for the second most important factor, and so forth.</p> <ul style="list-style-type: none"> <li>• Good price/performance ratio</li> <li>• High revenue probability</li> <li>• High security of the investment</li> <li>• High comprehensibility and transparency of the investment</li> <li>• Quick availability of the invested money</li> </ul>
<b>Responsibility for Service Outcome</b> Self-developed	<ul style="list-style-type: none"> <li>• I feel responsible for the result of the advisory process.</li> <li>• I am aware of my responsibility for the success of the advisory process.</li> <li>• If the result of the advisory process is negative, this is also on me.</li> <li>• I take responsibility for the result of the advisory process.</li> </ul>
<b>Financial Experience</b> Self-developed	I am... Beginner ... Expert (10-point Scale)
<b>Risk Aversion</b> Self-developed	I am... Profit oriented ... Security oriented (10-point Scale)
<b>Power Distance</b> Adapted from Yoo, Donthu, and Lenartowic (2011)	<ul style="list-style-type: none"> <li>• People in higher positions should make most decisions without consulting people in lower positions.</li> <li>• People in lower positions should not disagree with decisions by people in higher positions.</li> <li>• People in higher positions should not ask the opinions of people in lower positions too frequently.</li> <li>• People in higher positions should avoid social interaction with people in lower positions.</li> </ul>
<b>Uncertainty Avoidance</b> Adapted from Yoo, Donthu, and Lenartowic (2011)	<ul style="list-style-type: none"> <li>• It is important to closely follow instructions and procedures.</li> <li>• Rules and regulations are important because they inform me of what is expected of me.</li> <li>• Standardized work procedures are helpful.</li> <li>• Instructions for operations are important.</li> </ul>
<b>Long-Term Orientation</b> Adapted from Yoo, Donthu, and Lenartowic (2011)	<ul style="list-style-type: none"> <li>• Long-term planning is important.</li> <li>• Working hard for success in the future is important.</li> <li>• Going on resolutely in spite of opposition is important.</li> <li>• Personal steadiness and stability are important.</li> </ul>
<b>Customer-Oriented Training</b> Adapted from Homburg, Wieseke, and Bornemann (2009)	<ul style="list-style-type: none"> <li>• My bank thoroughly trained me in consulting aimed at discerning customer needs.</li> <li>• My bank thoroughly trained me in consulting aimed at selling my customers appropriate investment products.</li> <li>• My bank gives me regularly hints and advice regarding customer-oriented consulting.</li> <li>• In summary, I was thoroughly trained in consulting my customers.</li> </ul>

<sup>1</sup> For all items except the "CNK", "Financial Experience", and "Risk Aversion" scales, participants indicated their responses to the items on seven-point Likert scales (1 = "strongly disagree," and 7 = "strongly agree")



## **5 Conclusion**

This dissertation addresses major marketing challenges which are a result of the growing services industry. First, the emergence of the digital services industry in general and the proliferation of free e-services in particular increase the importance of nonmonetary costs (NMCs), which consumers have to pay even though an offering is free of monetary charge, as a central success factor for digital service offerings. The role and importance of consumer perceptions of NMCs of free digital services are investigated in Study 1. Second, customer needs in traditional, non-digital services become increasingly heterogeneous. The challenge for the boundary-spanning role of frontline employees (FLEs) and a crucial success factor for service firms is to act truly customer-oriented since customers expect that their idiosyncratic needs are served individually. The importance of customer orientation (CO) for company success and the role of the customer for FLEs' ability to act in a customer-oriented manner are investigated in Study 2 and Study 3.

### **5.1 Implications**

The three studies presented in this dissertation contribute to marketing theory and practice in several ways. Study 1 answers calls for research of the latest service research priorities on the impact of digital technology on the proliferation of services (Ostrom et al. 2015) by investigating how the context of online service offerings influences the ZPE. More specifically, it provides service scholars and managers with deeper insights into how consumers respond to free digital services by examining the influence of consumer perceptions of benefits and NMCs on the demand of digital services. The study contributes to the literature on consumer perceptions of free offerings (Shampanier, Mazar, and Ariely 2007) by showing that the ZPE generalizes to digital



services despite the predominant free mentality online (Dou 2004) and the presence of NMCs. It furthermore contributes to the literature on the ZPE (Baumbach 2016; Nicolau 2012; Shampanier, Mazar, and Ariely 2007; Votinov et al. 2016) by revealing two distinct underlying effects which drive the ZPE. Consumers opt for free service offerings due to a two-fold bias, namely a benefit-inflation effect and a cost-deflation effect. By revealing the benefit-inflation effect, we provide empirical evidence that consumer-perceived benefits are boosted by a zero-priced offering. By unearthing the cost-deflation effect, we reveal that consumers judge NMCs related to advertising to be lower when an offering is free (vs. not). We show that these two underlying effects are linked through an effect driven by the norm of reciprocity, which increases consumers' willingness to accept NMCs. However, the cost-deflation route persists even after we control for the influence of reciprocity and acceptance on perceived NMCs. This finding rules out that consumers simply perceive lower NMCs as a mere consequence of greater benefits. With these findings, our research helps answer recent calls for research on the potential backlash to intrusion (e.g., MSI 2016) by showing that in the case of free services, consumers perceive intrusions by advertising as less severe than for cost offerings. By demonstrating the impact of NMCs on the choice behavior of consumers, our study provides a new research vision for pricing research. Services scholars can enrich pricing theory by incorporating NMCs into pricing research, which requires a fresh theoretical perspective on established constructs (e.g., consumers' willingness to pay in terms of NMCs).

In Study 2, we investigate the antecedents of FLEs' CO, which constitutes a major success factor for firms given the impact of CO on outcome variables such as customer satisfaction and commitment (Goff, Boles, Bellenger, and Stojack 1997; Hennig-Thurau 2004), employee performance (Babakus, Yavas, and Ashill 2009), or business profitability (Narver and

Slater 1990). Various understandings of CO co-exist in the literature, which emphasize various influencing factors and use different measurement approaches to study FLEs' CO. The literature lacks a comprehensive literature review that structures and summarizes the empirical research on antecedents of FLEs' CO. This study closes this gap by providing a comprehensive overview of the antecedents of FLEs' CO in service environments and contributes to the literature on CO (Brown et al. 2002; Saxe and Weitz 1982) in several ways. First, the study structures the literature according to the conceptualizations of CO, i.e. the surface trait conceptualization (Brown et al. 2002), the behavioral conceptualization (Saxe and Weitz 1982), and the two-dimensional conceptualization which combines both views (Stock and Hoyer 2005). Second, the study provides an extensive overview of the antecedents of FLEs' CO and categorizes the influencing factors of FLEs' CO into four main areas. It reveals that a broad range of studies extensively examined the influence of the organizational environment as well as the influence of FLEs' characteristics on their respective CO. There is less research that investigates the role of the FLE-customer relationship, as well as the customers' influence. Third, based on the literature review, the study identifies avenues for future research, such as the need for incorporating customer influences into the research on FLEs' CO. Finally, the literature review structures managers' starting points to enhance FLEs' CO, such as how to design the organizational environment to facilitate a high CO of FLEs.

In Study 3, we address the challenge for the boundary-spanning role of FLEs to act truly customer-oriented, despite increasingly heterogeneous customer needs and increased customer expectations for their idiosyncratic needs to be served individually (Palmatier and Sridhar 2017). More specifically, we investigate the construct CNK that serves as an objective measure for FLEs' ability to act customer oriented towards each individual customer. This is because the

construct is measured using a dual-perspective approach (Blackman and Funder 1998) and is calculated based on responses of both customers and employees, which are gathered independently from each other. In Study 3, we address parts of the in Study 2 identified need for future research by showing the important role of customer characteristics on FLEs' ability to act in a customer-oriented way. Furthermore, we answer the calls for research of Study 2 with regard to future research on the influence of individual cultural values on FLEs' CO. Thus, in Study 3 we first, contribute to research on the antecedents of FLEs' CNK by showing the yet overlooked influence of individual customer characteristics on FLEs' ability to accurately sense the needs of their respective individual customers. Second, we contribute to the literature on the importance of cultural values in service environments (Mattila 1999; Schumann et al. 2012) by showing the influence of individual customer cultural differences on FLEs' CNK which can be influenced by banks using trainings of customer-oriented interaction behavior. Third, we contribute to the literature on CO by revealing customer characteristics as a new area of antecedents influencing FLEs' ability to act customer oriented. Research to date has concentrated on the influence of company environment factors (e.g., Liao and Chuang 2004) and employee characteristics (e.g., Brown et al. 2002), and has only recently touched on the influence of the customer on FLEs' CO by revealing the influence of employee-perceived customer behavior (Stock and Bednarek 2014; Yoo and Arnold 2016). Research, however, has so far overlooked the influence of inherent customer characteristics. Study 3 closes this research gap by revealing customer characteristics and individual customer cultural values as antecedents of FLEs' CNK. These findings show that not only certain employee-perceived customer behavior, but also inherent, observable -- and thus manageable -- customer characteristics influence FLEs' ability to act customer oriented.

## 5.2 Outlook

Looking ahead, this dissertation identifies several promising future research avenues which we outline in the following section. First, this section briefly recapitulates the central avenues for future research as identified by the studies. After that, this section takes a broader perspective and derives implications and avenues for future research resulting from the implications of the dissertation as a whole, in the form of a synthesis of the three studies.

In Study 1 we examine one of the major types of NMCs in online settings, namely consumers' attention to advertising. However, other forms of NMCs might influence how consumers perceive digital services. For instance, free service offerings collect and sell consumer data (e.g., e-mail addresses) which might be assessed differently. This is particularly crucial with regard to increased customer privacy concerns (Martin and Murphy 2017). In this respect, research could examine whether the cost-deflation effect still occurs for NMCs with different risk levels (e.g., data disclosure) and how the occurrence of such NMCs influences consumer demand. Relatedly, going beyond our focus on e-services, further research could examine the interplay between the benefit-inflation and cost-deflation effect in offline environments. In this regard, the cost-deflation effect could influence other NMCs, such as consumer time requirements or complex and difficult customer cocreation tasks. Moreover, Study 1 investigates the ZPE and its underlying processes as self-reported intentions. As a next step, researchers could examine the ZPE by tracking consumers' actual buying behavior and use longitudinal designs to analyze how consumer responses to free offerings and their perceptions of attached NMCs develop and evolve over time. Finally, scholars could examine how individual differences or contextual variations can influence the ZPE; for example, it seems likely that traits such as consumer frugality (Lastovicka et al. 1999) influence how consumers respond to free offerings. Furthermore, Study 1

reveals future research avenues for pricing research. More specifically, future research on services marketing theory could investigate to what extent existing pricing models (developed with a strong focus on monetary costs) apply in the emerging “freeconomy” (Anderson 2009). Moreover, Study 1 unearths opportunities for future research with regard to the influence of NMCs for customer engagement (Kumar et al. 2010; van Doorn et al. 2010; Verhoef, Reinartz, and Krafft 2010). More specifically, future research could integrate NMCs into conceptual models in customer engagement research and investigate the role and consequences of customer-perceived NMCs on customer engagement. In this vein, future research could, for example, examine the influence of distinct levels and types of NMCs (e.g., advertisements, data disclosure) on consumers’ online engagement.

In a comprehensive literature review, Study 2 reveals that a broad range of studies extensively examined the influence of the organizational environment as well as the influence of FLEs’ characteristics on their respective CO. However, Study 2 unearths that the current literature lacks research on the influence of the customer on FLEs’ CO. Such customer characteristics comprise characteristics such as their personality traits, as well as customers’ knowledge and skills. Furthermore, Study 2 reveals a lack of research on the influence of individual cultural values on FLEs’ CO. With regard to the measurement approaches used in the existing literature, Study 2 reveals that most studies use subjective, self-reported measures of FLEs who self-assess their CO. Hence, future research is needed which examines customer perceptions of FLEs’ CO in order to avoid biases in the results. The literature review further shows that FLEs’ CO and the effects of its antecedents are context specific. Future research is therefore needed to clarify that findings in the literature can be replicated in different contexts and industries.

Study 3 answers parts of the calls for research of Study 2 by investigating the influence of a) customer characteristics and b) cultural values on FLEs' CNK. However, Study 3 investigates the influence of customer characteristics with regard to their knowledge and skills which are particularly important in the banking industry. Hence, future research could extend research on the influence of customer characteristics by investigating broader characteristics such as customer personality traits. Moreover, future research could examine how FLE-customer similarities or dissimilarities regarding their personality or attitudes influence FLEs' CNK. With regard to the influence of individual customer cultural values, Study 3 focuses on the three cultural values which are particularly crucial in a banking context (i.e., uncertainty avoidance, long-term orientation, and power distance). However, future research could examine whether the other common cultural values (i.e., collectivism/individualism and masculinity/femininity) might exert an influence on CNK.

Taking a broader perspective, future research avenues can be derived when considering the results and implications of Studies 1, 2, and 3 simultaneously.

For instance, Study 1 shows the important role of consumer-perceived NMCs for the assessment of digital services. When traditional offline services providers, such as banks, follow the trend towards more digitalization and offer digital businesses as Fintechs, for instance, do, they have to consider the influence of NMCs on consumer perceptions of their offerings. Future research could investigate how consumers perceive NMCs for digital services which are perceived by customers as being more risky, such as digital banking. It could thus be that for such riskier digital services, the ZPE does not necessarily persist and consumers are willing to pay a premium in order to actually, or seemingly, receive greater security. This might be due to the fact that for such services, the cost-deflation effect does not occur.

Due to the ongoing digitalization, companies add digital offerings to their portfolio or even shift their focus from being a producer of products to being a provider of services in order to create value for their customers (Füllemann and Salmerón 2016). This becomes evident in trends such as companies cutting employment in traditional jobs while adding employees to their digital business (Hirt and Willmott 2014). This ongoing digitalization might lead to changes in consumer perceptions of companies. For instance, for traditional non-digital services such as banks, for which a lot of customers expect and demand a close company-customer interaction as well as individual support and advice, a change towards more digitalization might change customer perceptions of central success factors such as the CO of a firm. This could be due to a higher perceived distance between the customer and the company. Such a development might furthermore have downstream consequences on variables such as customer loyalty and company image. Future research could hence investigate questions such as: How do customer perceptions of central success factors such as CO perceptions change when companies transform their business models from traditional non-digital services into the digital services context?

At the same time, customer needs' heterogeneity and the importance of satisfying idiosyncratic customer needs also play a crucial role in a digital environment (Sousa, Yeung, and Cheng 2008). However, online marketers have many more tools at hand to identify and individually target customers, such as through the use of big data (Chen, Chiang, and Storey 2012; Verhoef, Kooge, and Walk 2016). With regard to research on CNK, future research could examine how in a digital environment, CNK can be improved by the support of the use of big data to create value for both the customer and the firm.

When having a look at the literature in the field of services research, this dissertation indicates that a large body of research has examined service firms' challenges such as CO of

FLEs in traditional, non-digital services environments. This is the result of decades of research efforts investigating such traditional services environments since the field began to emerge in the early 1980s (Bitner 2017). Whereas also a lot of research has already investigated challenges of the digital services sector, this field of research offers more opportunities for future research. First and foremost this is due to the fact that this field of research is much younger, only starting at the end of the 1990's with the diffusion of online services (Hilbert and López 2011) and the appearance of the role of the Internet for marketing as a high-priority topic of the Marketing Science Institute's research priorities for 1998-2000 (MSI 1998). Second, a lot of opportunities for future research arise due to the rapid development and technological evolution of the digital services environment. This development leads to new evolving digital business models and whole new business fields due to the rapidly spreading digitalization visible in developments such as the Internet of Things (IoT) (Nguyen and Simkin 2017). Moreover, digitalization leads to more opportunities to analyze and exploit big data via business intelligence and analytics (Verhoef, Kooge, and Walk 2016). These developments lead to future research opportunities on questions such as: How do consumer perceptions of a firm's CO change if the firm is present inside the houses of consumers permanently via IoT-Technologies? Does this omnipresence increase consumer perceptions of companies' CO? And what is the role of NMCs in this development? Do attached NMCs such as privacy concerns mitigate such possible positive effects?

In summary, the developments of the digitalization bear a lot of opportunities for future research as digitalization will not only change how services are delivered and performed in practice, but will also impact established marketing theory. Future research could thus examine the potential and the impact of the ongoing digitalization of the services sector to change and challenge established frameworks, theories, and models.



### 5.3 References

Anderson, C. (2009). *Free: The future of a radical price* (1. ed.). New York: Hyperion.

Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4), 480–492.

Baumbach, E. (2016). The Zero-Price Effect in a Multicomponent Product Context. *International Journal of Research in Marketing*, 33(3), 689–694.

Bitner, M. J. (2017). Service Research: Rigor, Relevance, Community. *Journal of Service Research*, 20(2), 103–104.

Blackman, M. C., & Funder, D. C. (1998). The Effect of Information on Consensus and Accuracy in Personality Judgment. *Journal of Experimental Social Psychology*, 34(2), 164–181.

Brown, T. J., Mowen, J. C., Donovan, D. T., & Licata, J. W. (2002). The Customer Orientation of Service Workers: Personality Trait Effects on Self- and Supervisor Performance Ratings. *Journal of Marketing Research*, 39(1), 110-119.

Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. *MIS Quarterly: Management Information Systems*, 36(4), 1165-1188.

Dou, W. (2004). Will Internet Users Pay for Online Content? *Journal of Advertising Research*, 44(4), 349–359.

Fülleman, M., & Salmerón, F. (2016). Changing the Game in Industrial Goods Through Digital Services. Retrieved from <https://www.bcgperspectives.com/content/articles/engineered->

products-project-business-automotive-changing-game-industrial-goods-through-digital-services/#chapter1.

Goff, B. G., Boles, J. S., Bellenger, D. N., & Stojack, C. (1997). The influence of salesperson selling behaviors on customer satisfaction with products. *Journal of Retailing*, 73(2), 171–183.

Hennig-Thurau, T. (2004). Customer Orientation of Service Employees. *International Journal of Service Industry Management*, 15(5), 460–478.

Hilbert, M., & López, P. (2011). The world's technological capacity to store, communicate, and compute information. *Science (New York, N.Y.)*, 332(6025), 60–65.

Hirt, M., & Willmott, P. (2014). Strategic principles for competing in the digital age. Retrieved from <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategic-principles-for-competing-in-the-digital-age>.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value. *Journal of Service Research*, 13(3), 297–310.

Lastovicka, J. L., Bettencourt, L. A., Hughner, R. S., & Kuntze, R. J. (1999). Lifestyle of the Tight and Frugal: Theory and Measurement. *Journal of Consumer Research*, 26(1), 85–98.

Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1), 41–58.

- Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science*, 45(2), 135–155.
- Mattila, A. S. (1999). The Role of Culture in the Service Evaluation Process. *Journal of Service Research*, 1(3), 250–261.
- MSI (2016). Research Priorities 2016-2018. Retrieved from [http://www.msi.org/uploads/articles/MSI\\_RP16-18.pdf](http://www.msi.org/uploads/articles/MSI_RP16-18.pdf).
- MSI (1998). *Research Priorities 1998-2000*. Cambridge, MA: Marketing Science Institute.
- Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54(4), 20-34.
- Nguyen, B., & Simkin, L. (2017). The Internet of Things (IoT) and marketing: The state of play, future trends and the implications for marketing. *Journal of Marketing Management*, 33(1-2), 1–6.
- Nicolau, J. L. (2012). Battle royal: Zero-price effect vs relative vs referent thinking. *Marketing Letters*, 23(3), 661–669.
- Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patrício, L., & Voss, C. A. (2015). Service Research Priorities in a Rapidly Changing Context. *Journal of Service Research*, 18(2), 127–159.
- Saxe, R., & Weitz, B. (1982). The SOCO Scale: A Measure of the Customer Orientation of Salespeople. *Journal of Marketing Research*, 19(August), 343-351.

- Schumann, J. H., Wunderlich, N. V., & Zimmer, M. S. (2012). Culture's Impact on Customer Motivation to Engage in Professional Service Enactments. *Schmalenbach Business Review*, 64(April), 141–165.
- Shampanier, K., Mazar, N., & Ariely, D. (2007). Zero as a Special Price: The True Value of Free Products. *Marketing Science*, 26(6), 742–757.
- Sousa, R., Yeung, A. C., & Cheng, T. (2008). Customer heterogeneity in operational e-service design attributes. *International Journal of Operations & Production Management*, 28(7), 592–614.
- Stock, R.M., & Bednarek, M. (2014). As they sow, so shall they reap: customers' influence on customer satisfaction at the customer interface. *Journal of the Academy of Marketing Science*, 42, 400-414.
- Stock, R. M., & Hoyer, W. D. (2005). An Attitude-Behavior Model of Salespeople's Customer Orientation. *Journal of the Academy of Marketing Science*, 33(4), 536–552.
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, 13(3), 253–266.
- Verhoef, P. C., Kooge, E., & Walk, N. (2016). *Creating value with big data analytics: Making smarter marketing decisions*. London, New York: Routledge.
- Verhoef, P. C., Reinartz, W. J., & Krafft, M. (2010). Customer Engagement as a New Perspective in Customer Management. *Journal of Service Research*, 13(3), 247–252.

---

Votinov, M., Aso, T., Fukuyama, H., & Mima, T. (2016). A Neural Mechanism of Preference Shifting Under Zero Price Condition. *Frontiers in human neuroscience, 10*, 177.

Yoo, J. J., & Arnold, T. J. (2016). Frontline Employee Customer-Oriented Attitude in the Presence of Job Demands and Resources: The Influence Upon Deep and Surface Acting. *Journal of Service Research, 19*(1), 102-117.

